



Full Length Research Paper

Investigating Students’ Meta-Cognitive Strategy and its Influence on their Writing Achievement: The Case of Grade 10 Students of Two Selected Secondary Schools in Shebedino Woreda

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Abstract

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The purpose of this study was to Investigate Students’ Meta-cognitive Strategy and its Influence on their Writing Achievement in the case of grade 10 students in the two selected secondary schools in Shebedino Woreda which are found in Sidama Region of Ethiopia. More specifically, to assess the extent of application of meta-cognitive strategies used in writing achievement; to identify how meta-cognitive influences on the students’ writing achievement and challenges of using metacognitive skills were the major ones. Descriptive survey research design was used in this study. To gather pertinent data from the sample participants, questionnaire and interview were used as data collection instruments. The researchers also used the simple random sampling technique to select 100 students from 1000 total population of the study in the two selected schools for questionnaire. On the other hand, 22 English language teachers were also taken with comprehensive sampling technique for the study. Both qualitative and quantitative data analysis methods were applied. Thus, the results of the study indicated that by practicing and applying meta-cognitive skills, students will become good writers, capable of handling different texts across a curriculum. Furthermore, there is a lack of attention to this aspect by teachers in the sample schools classroom. Hence, it is recommended that the effort should be geared to encourage English language teachers to consider the 'meta-cognitive reflection' activities in the classroom. They should also give due emphasis in assisting students to develop their meta-cognitive strategies in their writing activities.



1. Introduction

Background of the Study

Language teaching and learning needs the efforts of the teachers, students and the relevance of teaching materials used for achieving this objectives. Specially, teaching English as a foreign language is quite different from teaching English as a second language and mother tongue. In the contexts of teaching English as a foreign language the methodology of teaching, the specific strategies to be applied for macro and micro language skills, students learning preferences and other a lot of variables have significance impact on the overall competence of the students in using spoken and written medium in different contexts effectively and efficiently.

Meta-cognition is a broadly defined concept incorporating any knowledge or cognitive process that refers to monitors or controls any aspect of cognition. Flavell (1976) defines Meta-cognition as one's knowledge concerning one's own cognitive processes and products or anything related to them. Meta-cognitive skills refer among other things, to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear. High degrees of meta-cognitive knowledge helps learners to be better at processing and storing new information, practice and reinforce what they

have learned and plays an important role in enhancing thinking and comprehension.

Meta-cognition is cognition that goes beyond ordinary thinking. Meta-cognitive skills has a number of concrete and important effects on learning which plays an important role in oral comprehension, reading comprehension, problem solving, attention, memory, social cognition, personality development, communication and various types of self-control and self-instruction which are key concerns for school. Meta-cognition becomes essential when tasks are more challenging (Dutke, Barenberg and Leopold 2010; Farahian 2015; Kostons and Werf 2015; Phelps, Ellis and Hase 2001). Researchers found that meta-cognitive ability tends to associate positively with academic attainment of high school pupils. By practicing and applying meta-cognitive skills, students will become good readers, capable of handling any text across a curriculum.

According to Lai (2011), Meta-cognition consists of two components: regulation and knowledge. First, Meta-cognitive regulation is the monitoring of one's cognition and includes planning activities, awareness of comprehension and task performance, and evaluation of the efficacy of monitoring processes and strategies. Second, Meta-cognitive knowledge includes knowledge about one-

self as a learner and the factors that might influence performance, knowledge about strategies, and knowledge about when and why to use strategies. This form of knowledge is a prerequisite for independent learning strategies. Learning strategies are actions directed at acquiring information or skill that involve agency, purpose (goals), and instrumentality self-perceptions by a learner.

O'Malley and Chamot (1990) classified meta-cognitive strategies into three categories: (1) planning, (2) monitoring, (3) evaluation. According to the definitions and classifications of metacognitive strategies listed above, it is clear that O'Malley and Chamot's definition and classifications are more accurate and more widely accepted. They held that "planning" is a procedure for conflict resolution among competing action statements that applies to the conditional clause in the production system. In other words, "planning" involves in directing the course of language reception and production. "Planning" includes five strategies: (a) Advance organizers; (b) Directed attention; (c) Selective attention; (d) Self-management; (f) Functional planning. "Monitoring" is a response to ambiguity in comprehending language where an individual selects a best guess of the message's

meaning based on available meaning. "Monitoring" can also be described as being aware of what one is doing. There is only one strategy in this subcategory: (g) Self-monitoring. "Evaluation" is mental process conscious inspection of learning outcomes, one's own progress in the new language. This category consists of only one strategy: (h) Self-evaluation.

Self-regulation includes planning, monitoring and evaluation. Planning involves goal setting, activating relevant background knowledge, and budgeting time. Monitoring includes the self-testing skills necessary to control learning. Expert learners monitor at both the local level, such as an individual test items, and the global level, such as all items on a test (overall performance). Evaluation refers to appraising the products and a regulatory process of one's learning. Typical examples include re-evaluating one's goals, revising predictions, and consolidating intellectual gains (Ku and Ho 2010; Magno 2010).

According to Leutwyler (2009:113)

...self-regulated learning is a pro-active, intentional, and reflexive form of learning that is based on a sense of personal responsibility for learning. Self-regulated learning occurs when the learner possesses a repertoire of strategies that can be employed adaptively and used intentionally and include cognitive, behavioral and motivational strategies. Cognitive

strategies that students use to learn, remember and understand the concepts taught include, rehearsal, elaboration, and organizational strategies.

Psychological and educational research literature over the past two decades consider metacognition to be key to deeper, more durable and more transferable learning. Researchers suggested that Students with good meta-cognitive skills would be able to learn effectively (Bartan and Tormala 2014; Dutke, Barenberg and Leopold 2010; Phelps, Ellis and Hase 2001). Thus, promoting meta-cognitive development in the classroom helps students to become efficient learners. Thus, there is much promise that interventions aimed at enhancing student meta-cognition might lead to corresponding improvements in conceptual understanding of curricula content.

Many researchers (Dutke, Barenberg and Leopold 2010; Huff and Nietfeld 2009; Karpicke and Roediger 2009), believe that meta cognitive skills holds great deal of promise for helping students do better. Meta-cognition becomes essential when tasks are more challenging. They found that meta-cognitive ability tends to associate positively with academic attainment of high school students. By practicing and applying meta-cognitive skills, students become good writers, capable of explaining about any idea across a curriculum. There was a lack of attention to this aspect by teachers in the classroom. Hence, the

effort should be geared to encourage teachers and students to consider the students 'metacognitive strategy' and its influence in their writing achievement in the classroom. Doing this assists student to become reflective, adaptive and able to cope with writing achievement effectively.

There is growing evidence of the link between meta-cognition and academic achievement, even though the assessment of meta-cognition is fraught with problems. In higher education, studies have shown that high-achieving students are both more aware of cognitive strategies and are able to use this knowledge in a more strategic way and more frequently to achieve a goal and to make learning more meaningful (Romainville, 1994; Cornford, 2002; Prins et al., 2006; Sangster and White 2010; Van der Stel and Veenman, 2010).

As Grabe and Kaplan (1996: 5) contend: “Unlike that of *speaking*, *writing is only learnt. From this, we recognize that learning to write is subject to formal instruction as opposed to speaking which has more chance than writing out of the formal learning situation. Writing is also technology, a set of skills which must be practiced through experience.*” Other scholars (Byrne 1988; Hedge 1988 and Heaton 1988) attribute the difficult nature of writing to three factors: cognitive, linguistic and psychological. With regard to

the cognitive aspect, writers are expected to think and process what they want to put down on paper because writing requires much more care and thinking than speaking as the audience is not present at the time of writing like that of speaking. The linguistic factor is related to the need to consider the accuracy of the linguistic elements in the writing activity. The psychological factor is concerned with the production of writing solitarily which may cause anxiety. Thus, compared to speaking, writing requires much more care, patience, skill and co-operation in its learning.

Writing is more of individual activity that requires students' effort and commitment to master. So understanding this fact assist students to devote much on them to utilize the inner potential they have as much as possible. On the other hand, since the study of the meta-cognitive aspects of students does not cover at all levels with appropriate depth and coverage it motivates the researchers to address the observed gap.

Hence, the purpose of this research was to Investigate Students Meta-cognitive Strategy and its Influence on their Writing Achievement in the case of Grade 10 students of two Selected Secondary Schools which are found in Shebedino Woreda of Sidama Region of Ethiopia.

2. Objectives of the Study

The main objective of this study was to investigate Students Meta-cognitive Strategy and its Influence on their Writing Achievement in the Case of Grade 10 Students in Two Selected Secondary Schools in Shebedino Woreda, which are found in Sidama Region of Ethiopia.

To achieve the general objective the following specific objectives were designed. These are:

1. Assess the extent of application of meta-cognitive strategies in writing achievement;
2. Identify how meta-cognitive strategies influences on the students writing achievement;
3. Examine the major challenges in using meta-cognitive strategies in writing achievement.

Significance of the Study

The researchers strongly believe that the result of the study can provide information to English language teachers, learners, curriculum designers, materials writers, and researchers. Therefore, the research findings have multi-dimensional significance to serve as an input to the decisions that practitioners and material writers make to address the

needs of meta-cognitive effects on the students writing achievement in EFL classroom. The study will help teachers, directors to create awareness on the existing strengths and weaknesses in applying the students' meta-cognitive strategies in writing. The study may also help teachers to think and plan for proper implementation of meta-cognitive awareness in writing strategies.

3. Materials and Methods

The materials used in this study and methods followed to accomplish the whole work was discussed in detail. Research Design is a plan of the researcher which determines what is going to be observed and analyzed and why and how it going on. Descriptive survey research design was used in this study. Cohen, Manion and Marrison (2007) describe that many scientific disciplines, especially social science and education, and cross-sectional descriptive survey design are chosen. Similarly, this design was useful to obtain information concerning the current Investigation of the Students' Meta-cognitive Strategy and its Influence on their Writing Achievement and help to assess the extent of application of metacognitive strategies in writing achievement; Identify the contributing meta-cognitive strategies in the students writing achievement; assess the major challenges in using meta-cognitive strategies in writing achievement; and draw valid general conclusions, because of the easiness and directness

of the apparent design.

In this study both concurrent qualitative and quantitative approach were used in collecting and analyzing data. There were some rationales to use quantitative and qualitative methods approach for this study. First, using such method was advantageous to examine the same phenomenon from multiple perspectives (Cohen, Manion and Marrison, 2007). Second, both quantitative and qualitative approaches were important to build upon the strength that existed between quantitative and qualitative methods in order to understand a given phenomenon than was using either quantitative or qualitative methods alone (Creswell, 2003; Dornyei, 2007).

Population and Sampling Techniques

The population of the study is grade 10 students and English language teachers in the two selected secondary schools in Shebedino Woreda, namely, Dila Aferara Secondary School and Tumano Secondary School, which are found in Sidama Region of Ethiopia.

One hundred students and twenty-two teachers were included in the study with simple random sampling and comprehensive sampling techniques respectively. Two instruments namely, questionnaire

both for students and teachers; whereas interview only for teachers in order to collect pertinent information from the respondents. 25 items for teachers and 22 items for students were included in the questionnaire in the form of five scales rating from strongly agree to strongly disagree to the presented points.

On the other hand, semi-structured in depth interview was conducted with the selected English language teachers of the two sample secondary schools.

Thus, the questionnaire for both sample English Language Teachers and students assist the researchers to collect relevant and pertinent information in order to address the objectives of the study. The semi-structured interview with the selected teachers also open the way to gather addition points which may not sufficiently covered by teachers and students questionnaire.

4. Results and Discussion

In this study two different tools were used. They were questionnaire both for teachers and students, and interview for teachers. The data collected through these two tools were discussed and analysis in line with the research objectives stated earlier.

Hence, the most pertinent discussion and core findings are addressed under the three research objectives one after the other as follows.

Findings on Application of Meta-cognitive Strategy on Writing Achievement

The majority of English language teachers have less understanding as the prior knowledge is the biggest contributor towards learning capacities of the students during learning writing skills in EFL classes. In addition, they did not have clear image on the issue that when student develops meta-cognitive and critical thinking skills, becomes active creators of information; and they did not also possess the required awareness on the issue that meta-cognitive knowledge helps learners to be better at processing and storing new information.

But according to Davidson (2007) writing is the activity of creating one's own texts which are based on their previously learned skills. So teachers should assist their students as much as possible in order to use their prior knowledge and meta-cognitive strategies in performing their academic writing activities.

Sampled English language teachers rarely apply different meta-cognitive strategies from which the students benefited largely as the collected data indicated. Clear awareness and proper use of various meta-cognitive strategies are mandatory. According to Crandall (1998), Crinon and Marin (2010) and Davidson (2007) that peer collaboration leads to an enhancement of students' strategic understanding and an overall development of their writing strategies. And teachers

should enhance this by planning, monitoring and evaluating the overall teaching-learning process.

The application of Meta-cognitive strategies help children of all ages to develop highly critical cognitive functioning ability, which results in deep understanding and develop problem solving skills. Furthermore, proficient language learners take conscious steps to understand what they are doing by using a wider range of strategies. This intern assists the learners to be competent and proficient in their language usage.

According to Boughey (1997), Costa (2001), Davidson (2007), Donker et al (2014), Durkin (1987) and Eppley and Eppley (1997) that the role of the teacher is significant and it takes the form of guided teaching and modeled writing while peer interaction is another type of scaffolding in the writing process. But as the data collected both from teachers and students through questionnaire indicated much more is expected from them to handle the writing activities properly. In other words, teachers do not increase students' participation and motivation; yet the students do not have confidence in improving their self-responsibility and self-esteem in writing achievement.

But as research findings by O'Malley and

Chamot's (2001) indicated that metacognitive strategies involve thinking about the learning process, planning for learning, and self-evaluation after the learning activity has been completed. This is what the students should do in their day-to-day activities as the literature in the area approved.

In general, the evidence from the existing data in this study showed that the majority of teachers did not select familiar and authentic topics for the writing lessons. The study also showed that teachers did not present their writing lesson in the way it influences on the students writing performance which has positive effects in the students writing achievement.

Findings on Extents of Using Meta-cognitive Strategies during Writing Lesson

The evidence from the existing data showed that the majority of the students did not write what they were thinking about and express their ideas in a well-organized way in English while writing. They fell to remember the meanings of words or the patterns of sentences to apply certain rules, and write a message to their friends in English.

The students did not choose their own topic to improve their writing skill; they did not rewrite their composition by correcting the mistakes that they noticed; they rarely ask

their friends or their teachers to correct their writing. Their teachers did not preview the story of the writing topics, ask the students' to write their own text, and justify when their teachers ask them to guess the meaning of unfamiliar words. This showed that the students' did not use meta-cognitive strategies frequently, and their teachers also did not support them as it is expected.

Findings on Major Challenges in Using Meta-cognitive Strategies in Writing Lessons

Obviously, teaching English as a foreign language is a challenging activity since the students do not get chance to practice the language outside the classroom. Moreover, practicing writing skill using appropriate grammar, vocabulary, organization, mechanics, etc are more challenging than other skills as a number of authors approved. The use of meta-cognitive strategies by thinking, planning, monitoring and self-evaluating one's own work also need careful and hardworking effort to manage it properly. Literature in the area also asserted as meta-cognitive knowledge helps learners to be better at processing and storing new information in the teaching-learning process in general and in writing skills in particular.

As the data from the study indicated teachers and students did not use their knowledge and skills exhaustively regarding the application

of meta-cognitive strategies to boost students' writing skill. On the other hand, although the teachers faced certain challenges, their effort to create conducive atmosphere for the students' better learning is less. The students are also less committed to learn from teachers, peers and written materials, As a result the students are not confident enough in organizing meaningful sentences that can be develop into well-organized paragraphs and various types of essays to communicate with readers without difficulties.

Teachers' full commitment in assisting the students to use their meta-cognitive strategies that enhance the writing achievements at different stages is negligible, in a similar way, students risk taking for their learning and the application of writing and rewriting process to reach reasonable degree of proficiency in writing is weak.

It is true that Meta-cognition based practice improves students' self-responsibility, self-esteem and motivation whatever challenges we face. The learners are also active in constructing their learning, rather than being told what they must learn by the teacher. Students need to know or identify what they already know to bring their own experience and background knowledge to the learning situation.

5. Conclusion and Recommendations

Conclusion

Based on the findings of the current study, the following conclusions are drawn. From the above mentioned findings, it can be concluded as follows.

The findings of the present study revealed that the participants from sampled secondary schools (English language teachers and grade 10 students) indicated as the use of meta-cognitive strategy has influence on the students' writing achievement. The study tried to evaluate the extent of application of meta-cognitive strategies in writing achievement, identify the techniques to be used to enhance students' meta-cognitive skills development, and examine the practical uses of meta-cognitive strategies in writing achievement.

The study focused only on 100 grade 10 students and 22 English language teachers selected in simple random sampling and purposive sampling techniques respectively. Three different data collection instruments, namely, questionnaire both for teachers and students, interview for teachers, and document analysis were used in this study.

From the major findings presented above we can conclude that:

1. The effort of English language teachers in assisting students to use their meta-cognitive strategies is very poor. Besides, the students do not

give due emphasis to their meta-cognitive strategies in order to manage their writing skills and boost their writing achievement.

2. English language teachers also lack the required knowledge and skills to lead the students in the right track. This has its own great impact on the development of students' meta-cognitive strategies to organize their ideas through writing.
3. Finally, as there is no proper commitment both from English language teachers and students' the writing activities cannot be addressed in the sampled schools. Hence, it more challenging and tiresome task for both English language teachers and students.

Recommendations

Based on the above findings and conclusions the following core points of action are recommended.

1. English language teachers should increase their awareness on how to assist students in order to use their meta-cognitive strategies properly in their writing activities. Furthermore, English language teachers should exchange their experiences with their colleagues through workshops and conferences at least in their cluster centers. Teacher Training Institution

and Ministry of Education should help English language teachers through pre-service and on-job training in order to fill the observed skill gaps.

2. Although students expected to develop problem-solving activity skills and bearing responsibility for their own learning, teachers should play the role of guiding and coaching students' writing achievements. Students should also work in pair and small group besides the support of the teacher to develop all rounded personality in general and their writing achievement in particular.
3. English language teachers and students are advised to change all the challenges they face into opportunities as much as possible in the teaching-learning process. This can easily lead them into utilizing students' meta-cognitive strategies for better performance in writing activities.

References

- Barden, J., Tormala, Z., L. (2014). *The new Meta-cognitive Perspective: Social and Personality Psychology*.
- Boughey, C. (1997). "Learning to Write by Writing to Learn: A Group Work Approach" *ELT Journal*. 51/2. pp. 126-134.
- Byrne, D. (1988). *Teaching writing skills*. (New ed.). Longman.
- Costa, A. L. (Ed.) (2001). *Developing Minds: A Resource Book for Teaching Thinking* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Crandall, J. (1998). "Collaborative and Cooperative Teacher Education for Integrating Language and Content Instruction" *English Teaching Forum*. 36/1. pp. 2-9.
- Creswell, W.J. (2003). *Research Design: Qualitative, Quantitative and Mixed Method Approaches*. (2nd ed.) London: Sage Publications.
- Davidson, C. (2007). 'Independent Writing in Current Approaches to Writing Instruction: What have we overlooked?' *English Teaching: Practice and Critique*, [e-journal] 6 (1), pp. 11-24.
- Donker, A. S., De Boer, H., Kostons, D., van Ewijk, C. D., & Van der Werf, M. P. C. (2014). *Effectiveness of Learning Strategy Instruction on Academic Performance: Meta Analysis Educational Research Review*.
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford: Oxford University Press.
- Durkin, D. B. (1987). *Writing in the Disciplines*. New York: Random House.
- Dutke, S., Barenberg, J. & Leopold, C.

- (2010). Learning from Context: knowing the test format enhanced metacognitive monitoring, *Metacognition Learning*, 5, 195-206.
- Eppley, G. and Eppley, A. D. (1997). *Building Bridges to Academic Writing*. London: Mayfield Publishing Company.
- Farahian, M. (2015). Assessing EFL Learners' Writing Meta-cognitive Awareness. *Journal of Language and Linguistic Studies*, 11 (2), 39-51.
- Flavell, J. H. (1976). Metacognitive aspects of problem solving. In L. B. Resnick (Ed.), *The nature of intelligence* (pp. 231-235). Hillsdale, NJ: Lawrence Erlbaum.
- Grabe, W. and Kaplan, R.B. (1996) *Theory and Practice of Writing: An Applied Linguistic Perspective*. Longman, New York.
- Hoffmann, K. F., Huff, J. D., Patterson, A. S., & Nietfeld, J. L. (2009). Elementary teachers' use and perception of rewards in the classroom. *Teaching and Teacher Education*, 25(6), 843–849. <https://doi.org/10.1016/j.tate.2008.12.004>
- Karpicke, Butler & Roediger III. (2009). Metacognitive Strategies in Student Learning: Do students practice trivial when they study on their own?
- Kostons, D., & Werf, G. (2015). The Effects of Activating prior Topic and Metacognitive. Knowledge on Text Comprehension Scores. *British Journal of Educational Psychology*.
- Ku, K. Y. L., & Ho, I. T. (2010). Metacognitive strategies that enhance critical thinking. *Metacognition and learning*, 5.3, 251-. 267. 1174.
- Lai, E. R. (2011). *Metacognition: A Literature Review*. Pearson Assessments Research Reports.
- Leutwyler, B. (2009). Metacognitive learning strategies: Differential development patterns in high school. *Metacognition and Learning*, 4(2), 111–123.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge, UK Cambridge University Press.
- Romainville, M. (1994). Awareness of cognitive strategies: The relation between university students' metacognition and their performance. *Studies in Higher Education*, 19(3), 359-366.
- Sangster Jokic, C., & White Bread, D. (2010). The Role of Self-Regulatory and Metacognitive Competence: A Theoretical and Empirical Review, *Educational Psychology Review*.