



Available online at www.jlls.org

JOURNAL OF LANGUAGE AND LINGUISTIC STUDIES

ISSN: 1305-578X

Journal of Language and Linguistic Studies, 18(1), 1109-1116; 2022

Implementation Of Metacognitive Strategies In CLIL Classrooms Among The First Year Engineering Students – A Study

R. Gomathy ^{a 1} , Dr.V.Radhakrishnan ^b 

^a Ph.D. Research Scholar (Part Time), Department of English, K.S. Rangasamy College of Arts and Science, Thiruchengode, Tamil Nadu, India

^b Principal, K.S. Rangasamy College of Arts and Science, Thiruchengode, Tamil Nadu, India

APA Citation:

Gomathy, R., & Radhakrishnan, V. (2022). Implementation of Metacognitive Strategies in CLIL Classrooms Among The First Year Engineering Students – A Study, *Journal of Language and Linguistic Studies*, 18(1), 1109-1116.

Submission Date: 11/12/2021

Acceptance Date: 01/03/2022

Abstract

Vast research is being made to identify the reading strategies among the L2 learners as reading is given much importance for the L2 learners to gather information from any source available. There are various reading strategies like skimming, scanning etc. among which metacognition (Flavell, 1985) means thinking about thinking or becoming aware of the thinking process during the reading activity. This strategy helps the L2 learners to become conscious of their thoughts which will help them to enhance their understanding level. This strategy can be implemented in the Content and Language Integrated Learning (CLIL) (David Marsh, 1994) classes as this is one of the methodologies used for the learning of both the language and the content which would help the L2 learners to enhance both their language proficiency and their thinking skills. Therefore, the researchers have made an attempt to collect the information about the strategies that the L2 learners use during their reading. From the survey made among the first year Engineering College Students researchers are able to understand the difficulties faced by the L2 learners and how they feel bore about their monotonous or prolonged reading. In the proposed research paper, the researchers have made an attempt to use the MARSQI questionnaire (Kouider Mokhtari and Carla Reichard, 2002) to create an awareness among the L2 learners about the Metacognitive Strategy which can be used in the CLIL Classrooms. An analysis is also made from the data collected with the help of the questionnaire used for the survey.

© 2020 JLLS and the Authors - Published by JLLS.

Keywords: Metacognition; Reading Strategies; MARSQI Questionnaire, CLIL;

¹ Corresponding author.

E-mail address: nrgomathy@gmail.com

1. Introduction

Here Vast research is being made to identify the reading strategies among the L2 learners as reading is given much importance for the L2 learners to gather information from any source available. There are various reading strategies like skimming, scanning etc. among which metacognition (Flavell, 1985) means thinking about thinking or becoming aware of the thinking process during the reading activity. This strategy helps the L2 learners to become conscious of their thoughts which will help them to enhance their understanding level. This strategy can be implemented in the Content and Language Integrated Learning (CLIL) (David Marsh, 1994) classes as this is one of the methodologies used for the learning of both the language and the content which would help the L2 learners to enhance both their language proficiency and their thinking skills. Therefore, the researchers have made an attempt to collect the information about the strategies that the L2 learners use during their reading. From the survey made among the first year Engineering College Students researchers are able to understand the difficulties faced by the L2 learners and how they feel bore about their monotonous or prolonged reading. In the proposed research paper, the researchers have made an attempt to use the MARS questionnaire (Kouider Mokhtari and Carla Reichard, 2002) to create an awareness among the L2 learners about the Metacognitive Strategy which can be used in the CLIL Classrooms. An analysis is also made from the data collected with the help of the questionnaire used for the survey.

2. Literature Review

Metacognition is becoming aware of one's own thinking which means thinking about thinking and becoming conscious about the cognitive experience that is accomplished and pertained with any intellectual initiative (Flavell, 1979). Apart from learning the range of approaches that are obtainable to them, readers must also be mindful of their own understanding processes in order to read tactically (Carrell, Gajdusek and Wise, 1998). This metacognitive responsiveness is observed as one of the most significant mechanisms in the reading procedure (Anderson, 1999; Carrell 1998). Afflerbach et al. (2008) stated that in the beginning the learner who asks him or herself introspect to verify his or her comprehension of sequence material completes a careful metacognitive act of self-questioning that aids the learner's goal of monitoring and structuring better comprehension. The association between metacognitive awareness, the use of strategies and reading comprehension has been analysed by several specialists (Dhie-Henia 2003; Kusiak 2001; Malcolm 2009; Salatachi and Akyel 2002; Zenotz 2012; Zhang 2001).

CLIL is one of the methods which make language learning eloquent at the same time it brings best linguistic education (Wiwczaroski, Zita & Ildiko, 2010). It is a twin focused style in which both the content and the language is learnt concurrently. CLIL classrooms are not characteristic verbal classrooms due to the fact that language is the intermediate through which content is elated (Papaja, 2012). Among the four skills, extensive study has been made on reading by the experts and has resulting various theories in which metacognitive theory plays its role to understand the textual information processing. The schema theory is closely related to the Cognitive theory which represents the inborn capacity of mind. Metacognition is based on the belief that every act of comprehension involves one's knowledge of the world as well (Anderson et al. in Carrell and Eisterhold 1983). Thus, the readers bring out the interpretation of the text coherently by having the interaction with the text material and also with the data a reader brings to the text (Widdowson in Grabe 1988).

Metacognitive Awareness Reading Strategy Inventory (MARSİ):

The Meta-cognitive Awareness Reading Strategy Inventory (MARSİ; Mokhtari & Reichard, 2002) is created to analyse the variety and the degree of reading strategies among the learners especially how they perceive the academic materials provided in English for reading. It has 30 items which measure in three different categories like Global Reading Strategies which has 13 items, next is Problem-Solving Strategies which has 8 items and the third one is the Supporting Reading Strategies which has 9 items.

The first category the global factor echoes the methods related to the analysis of the text done globally. The second category problem-solving factor reflects the strategies help the learners to mend their challenges faced during their reading. Then the third category the support factor reflects the usage of various methods like taking notes or the usage of dictionary. The questionnaire is designed in such a way that any individual can use it or it can be used by a group and it can be used from the 5th grade to the collegiate level. The main use of the MARSİ is to develop the awareness of the learners, to the classroom instructions and also for the research which can be made inside the classroom or clinic. (Kouider Mokhtari and Carla Reichard © 2002)

3. Purpose of the Study

The main objective of this paper is to help the learners to become conscious of their own thinking while reading and also to facilitate them to acquire the content and language proficiency individually.

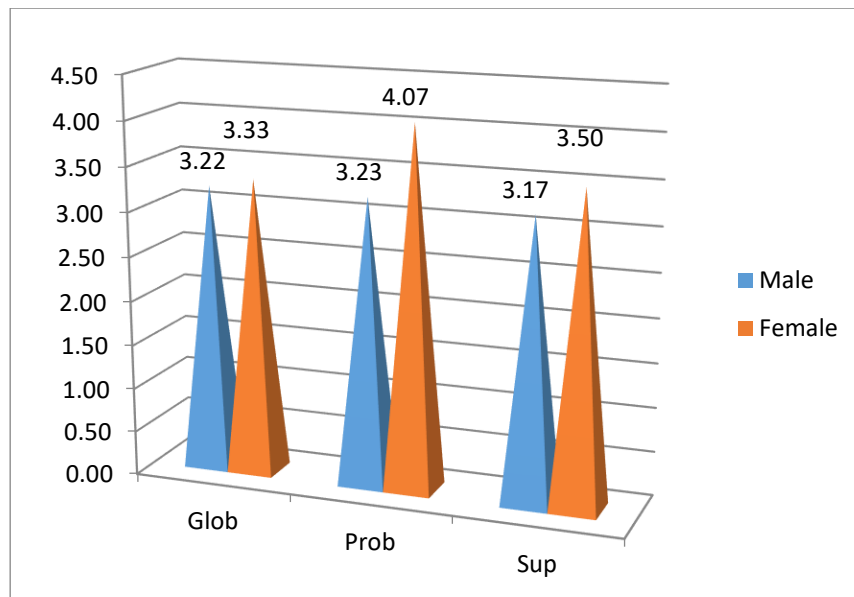
4. Methodology

The Metacognitive Awareness Reading Strategy Inventory (MARSİ) questionnaire is provided for 228 learners who belong to first year engineering students from various branches like Electronics and Communication Engineering, Chemical Engineering and Mechatronics Engineering Students. With the survey made an analysis is being made to understand the L2 learners' awareness of reading strategies. Then the strategy of implementing metacognition in the CLIL classroom is also discussed to help the L2 learners to have the autonomy in acquiring knowledge and language.

5. Results and Analysis

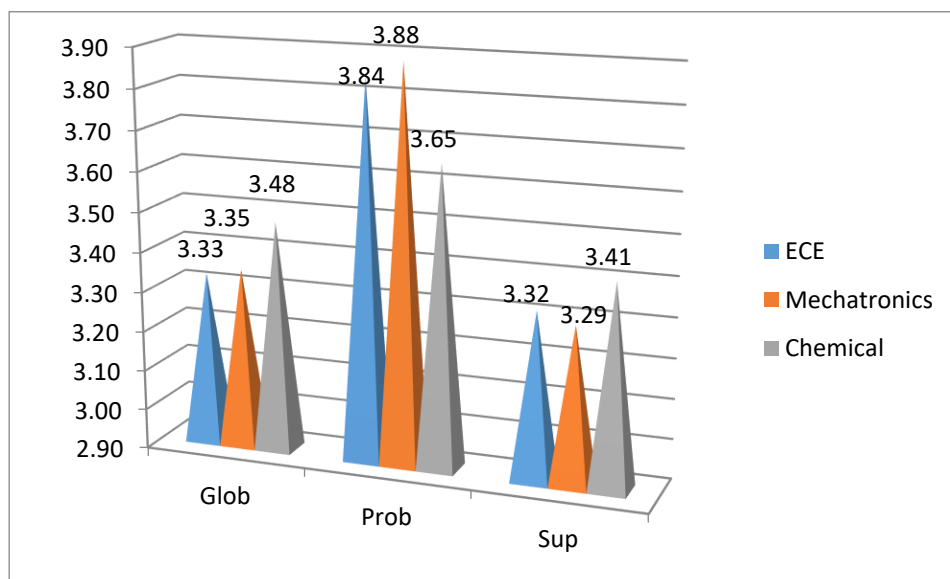
MARSİ questionnaire is used to understand the level of awareness that the L2 learners possess. The analysis has been in various aspects like comparing male and female, then made the comparisons between branches and also made comparisons between the medium of instructions.

In the given questionnaire the metacognitive awareness the analysis has been made on three different parameters like global reading, problem solving and support reading strategies. In the analysis made between the male learners and female learners, the Graph: 1 clearly indicates that the female learners are better in all the three parameters than the male learners.



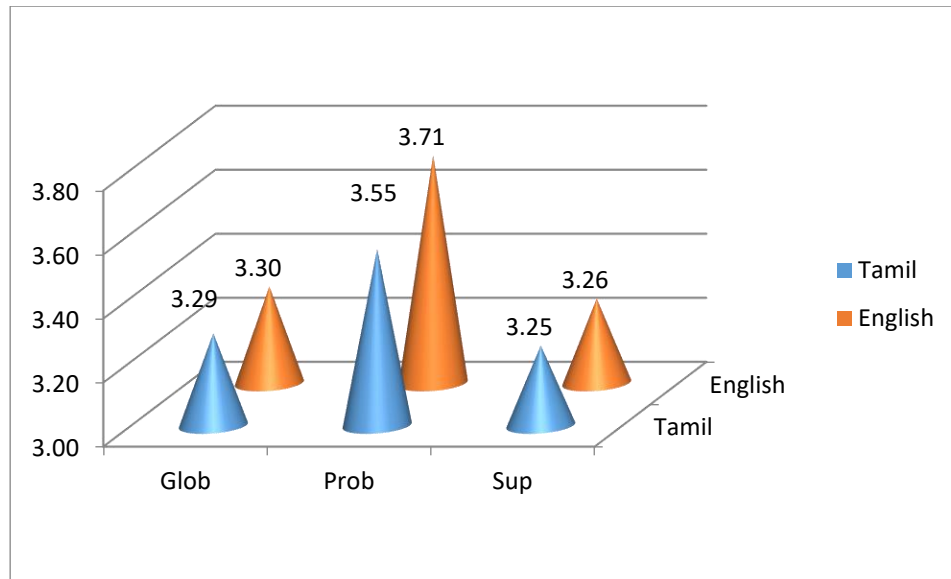
Graph: 1

In the Graph: 2, the comparisons are made between the branches to study the metacognitive awareness among the learners. The graph clearly indicates that the score of the learners from various branches vary from each branch for each parameter. The learners from Mechatronics branch shows the maximum score in the problem solving strategies whereas the learners from the Chemical Engineering branch shows the maximum in the Global Learning and Support Reading strategies, but Electronics and Communication Engineering learners show the average in all the three parameters.



Graph: 2

In the Graph: 3, the comparison is made between the Tamil medium learners and English medium learners. When the parameters are compared, English medium learners are scoring the maximum in the problem solving strategies, whereas in the global reading and the support reading strategies there is only minimum difference between the both. This indicates that medium of instruction also plays an important role in the enhancing the comprehensive level of the learners.



Graph: 3

5.1 Content and Language Integrated Learning (CLIL) Classroom

The L2 learners have the difficulty in understanding the meaning of the text. So, they fail to develop the reading skills which in the other way get declined in their intellectual quotient. The L2 learners need to be helped to identify easy strategies to motivate themselves to enhance reading skills. So here a trial has been made to identify a way to help the L2 learners with the approach of CLIL. The first paragraph of George Orwell's Reflections on Gandhi is taken to explore the various aspects of CLIL - content, cognition and communication. In the given reading task, the L2 learners can look for its content, cognition and culture which will help them to understand the content of the passage in detail and create awareness about the thoughts that occur during reading in the further studies. The CLIL reading task is given below for the study.

Saints should always be judged guilty until they are proved innocent, but the tests that have to be applied to them are not, of course, the same in all cases. In Gandhi's case, the questions on feels inclined to ask are: to what extent was Gandhi moved by vanity – by the consciousness of himself as a humble naked old man, sitting on a praying mat and shaking empires by sheer spiritual power – and to what extent did he compromise his own principles by entering politics, which of their nature are inseparable from coercion and fraud? To give a definite answer one would have to study Gandhi's acts and writing in immense detail, for his whole life was a sort of pilgrimage in which every act was significant. But this partial autobiography, which ends in the nineteen-twenties, is strong evidence in his favor, all the more because it covers what he would have called the unregenerate part of his life and reminds one that inside the saint, or near-saint, there was a very shrewd, able person who could, if he had chosen, have been a brilliant success as a lawyer, an administrator or perhaps even a businessman.

(http://www.orwell.ru/library/reviews/gandhi/english/e_gandhi)

The content of CLIL reading task:

- In the beginning of the paragraph the author starts with a strong suggestion that all the saints judged guilty must be proved innocent.
- The author wonders at the behavior of Mahatma Gandhi like his humbleness, simplicity, tolerance, acceptance, etc.

- The author in the last part of the paragraph suggests the readers to read Gandhi's book in which he has registered the incidents in detail.
- The author concludes that whether Gandhi is a saint or near-saint but still his shrewdness would have lead him to be a successful lawyer, administrator or a business man if he opted for it.

The cognition of CLIL reading task:

- The author makes the readers to look at Gandhi at different perspective.
- The author wonders how Gandhi could be consciously humble.
- And how Gandhi could shake empires just with the help of spiritual power.
- How far Gandhi compromised himself to enter into politics which he very well knows that the nature of politics is fraud.
- The author tries to understand and wonders at, the meaning of saint.
- But finally, the author accepts that Gandhi's shrewdness though he could not completely identify the meaning of saint.

The culture through CLIL reading task:

- The learner can understand the value of humbleness, simplicity, non-violence, spirituality.
- The principles of Gandhi reflect the culture of whole nation which had forsaken the whole world.
- Gandhi represented the remained assertive in following the culture of the country and succeeded in it.

The reading task is given to the SL learners and they are guided to contemplate the meaning to acquire knowledge for learning the cultural background of the text. This would help the SL learners to draw an outline of the text and it can also be reinforced by testing them in the aspects of CLIL. Therefore, the aspects of CLIL can be tested by asking the learners,

- To give a small write-up about his/her understanding of the paragraph,
- To identify the topic sentence of the passage,
- To describe the author's perspectives about Gandhi,
- To identify the words that supports Gandhi's principles
- To identify the words that stimulates cognition
- To identify the words that describes Gandhi
- To identify the sentences that reflects the culture of the country
- To frame sentences on their own with the words they find it new

5.2 Implementation of Metacognition

The answers generated for the above activities will help the learners to comprehend the meaning thoroughly. The answers provided will remain in the mind of the learners and act as schema for the next study. These activities will help the learners to reduce the reading problems. Most of the time the problems may arise because of lack of metacognition, so pre-reading activities like prompts and the brief summary of the reading task, posting of questions, circulating the text in the previous class and introducing the learners for the key words of the reading task will help them to have a ground preparation to understand the text. It will also help to develop analytical skills and to look at the problems or issues faced in different perspectives as the author tends the readers of the essay to look at Gandhi's principle from the perspective of an English man.

6. Conclusions

As far as the analysis is concerned, the distinction is clearly seen in all the three comparisons made between male and female learners, between the various branches and the medium of instructions within all the three parameters global reading, problem solving and support reading strategies. This also clearly indicates that MARSI questionnaire would help the learners to become aware of their reading skills and it would also help them to derive their own strategies to enhance their reading skills. Hence, the most appropriate text must be selected for the learners and they should be guided to integrate content for language learning. This would definitely create background knowledge for the further study i.e. it would activate metacognitive awareness in the minds of the learners. The continuous practice of such activities will definitely reduce the gap between the learners and reading. Provided with the awareness of the metacognition of any subject will help them to gain confidence on any subject they prefer to deal with.

References

- Amritavalli, R. (2007) *English in Deprived Circumstances: Maximising Learner Autonomy*. Department of Linguistics, The English and Foreign Languages University, University Publishing Online: Foundation Books.
- Afflerbach, P., Pearson, P.D., & Paris, S.G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61, 364-373.
- Anderson, N.J. 1999. *Exploring Second Language Reading: Issues and Strategies*. Toronto: Heinle & Heinle.
- Carrell, P.L., L. Gajalusek and T. Wise, 1998. Metacognition and EFL/ESL reading. *Instructional Science*. 26: 97-112.
- Carrell, P.L. 1998. Introduction. In *Interactive Approaches to Second Language Reading*, ed. P.L. Carrell, J. Devine and D.E. Heskey, 1-5 Cambridge: Cambridge University Press.
- CCN (2010): *Talking the Future 2010 – 2020*. CCN Foresight Think Tank. Languages in Education. University of Jyväskylä: Finland: CLIL Cascade Network (CCN).
- Chamot, A., Barnhardt, S, El-Dinary, P. & Robbins, J. (1999). *The Learning Strategies Handbook*. New York: Pearson Education. Longman.
- Council of Local Authorities for International Relations (CLAIR) (2009) *JET Programme the Japan Exchange and Teaching Programme* [online]. CLAIR, Tokyo, Japan. Available from <http://www.jetprogramme.org/e/introduction/index.html> [Accessed 1st September 2009].
- Eurydice (2006): *Content and Language Integrated Learning (CLIL) at School in Europe*. Brussels: Eurydice.
- Flavell, J.H. (1979) Metacognition and cognitive monitoring: a new area of cognitive developmental inquiry. *American Psychologist*, 34, 906-911.
- Grabe, W. (1988) "Reassessing the Term Interactive", in Carrell, P.L., Devine, J. and Eskey, D.E. (eds) (1988) *Interactive Approaches to Second Language Reading* Cambridge: CUP.

Hajduzita Wiwczaroski & Ildiko (2010) CLIL: Preparing for Central Asian Students to Study Animal Husbandry in English., English for Specific Purposes World, Volume 9, Issue 29. Available at http://www.esp-orld.info/Articles_29/WiwczaroskiCLIL2010.pdf

Hajduzita Wiwczaroski & Ildiko (2010) CLIL: Preparing for Central Asian Students to Study Animal Husbandry in English., English for Specific Purposes World, Volume 9, Issue 29. Available at http://www.esp-orld.info/Articles_29/WiwczaroskiCLIL2010.pdf

Mason, B. 1997. Tadoku program at International Buddhist University, Osaka. *The Language Teacher* 21/5: 27—30.

Web references

<https://www.nwfsc.edu/wp-content/uploads/2017/10/Marsi-test.pdf>

https://www.researchgate.net/publication/326152721_Revising_the_Metacognitive_Awareness_of_Reading_Strategies_Inventory_MARSI_and_testing_for_factorial_invariance

http://www.orwell.ru/library/reviews/gandhi/english/e_gandhi

AUTHOR BIODATA

Ms. R. GOMATHY is working as an Assistant Professor of English at Kongu Engineering College since 2011. She has completed her UG and PG degrees in English Language and Literature from Bharathiar University, Coimbatore, Tamil Nadu, India. She has 16 years of total experience. She has published her 10 research papers in the both national and international journals which include the reading comprehension methods and reading strategies. She has organized various workshops and FDPs, and has acted as resource persons for various programs. She also has attended various conferences, workshops and FDPs. She is pursuing her Ph.D in English Language Teaching as a part-time scholar of Periyar University. She is the person who shows commitment towards her responsibilities and a hard-working person.

Dr. V. Radhakrishnan has more than 25 years of experience in teaching and research related English Language and Literature. He has guided many M.Phil & Ph.D. scholars in the same. Now he is working as a Principal of K.S. Rangasamy College of Arts and Science, Thiruchengode, Tamil Nadu, India.