

Reading Skill as a Receptor of Language Acquisition Tool among the Technical Engineering Students of India: A Strategic Study and Model with Multi-Attribute Decision-Making

Velmurugan, K.^{1*}, Smrutisikta Mishra¹, V. Jeyasakthi¹, G. S. Mahapatra²

¹ Department of Humanities and Social Sciences, National Institute of Technology Puducherry, Karaikal-609609. ORCID: <https://orcid.org/0000-0003-4067-6745>

² Department of Mathematics, National Institute of Technology Puducherry, Karaikal-609609

*Corresponding Author

Abstract

Everyone in the classroom, not mainly focus on achieving the grade alone but also how far the students come out with their natural skills that are hidden among each and every one to face the task in acquiring the strategies that are applicable in a real-life situation to overcome the task in language learning. This study is based on the reading strategies taken away from their practice in the classroom by the technical students of various technical institutions. Nearly 240 Engineering students responded from various technical institutions, including private colleges, government colleges, and central technical institutions. All the questionnaires were direct in the form to respond. As per the primary aim, the study investigated the reading strategies handled by the technical students in comprehending a text for the betterment of acquiring reading skills. The study's second aim was determined particularly the importance of language tasks specifically to improvise the different strategies they have and to narrow down to specific strategies to obtain reading skills without consuming time. The study is interpreted mathematically by using Multi-Attribute Decision Making. The study results reveal that engineering students primarily need to narrow down their reading strategies from various to specific strategies to obtain the language skills rather than taking much time while reading a text.

Keywords: General strategies, reading skills, positive percentage, technical students, improvisation, typographical, L2.

1. Introduction

Language of the technical students, their age, the tradition they live with the society to communicate, gender by birth, ability to learn the unlearn, disability in certain circumstances, interest to enhance their skills in learning any language, the talent they obtain by practice, the heritage of their ancestral, and religion for the sake of society are in need just to prove that they acquire and inculcate more related certain language skills which they find to learn the unlearn concepts in this diverse world. The enlightenment of active personality sometimes exposes not limited in particular surrounding rather than occupying with what they have within them as we see diverse society anywhere now in the nook and corner of the communication and information dominated

world which is replicated in the four walls in the educational institution especially in the technical institutions.

Everyone in the classroom, not in particularly focusing on achieving the grade alone but also how far the students come out with their natural skills that are hidden among each and everyone to face the task in acquiring the strategies that are applicable in a real-life situation to overcome the task in language learning. Anyhow today's classroom can be well-defined in the form of heterogeneous class where the pupils are grouped under the category prior knowledge, merits and demerits of the opportunity provided in the society, and the daily desired activities which help the students to fulfil their quenched practising their daily routine so these practices sometimes turn to be challenging task for the

students besides it is also a burden for the teachers. For instance, a classroom activity may differ with their range in their performance. Irrespective of the individual differences, pupils are predicted to improvise the slow reading concepts in a careful manner, translating from L1 to L2, read with purpose, cognise about the text, take enough to think from time to time.

The recent trend in the development of language teaching is that the conventional approach for developing curriculum was “an undifferentiated linguistic among the learner’s nourishment regardless of their communication needs” (Nunan, 1999). For instance, students’ learning skills may vary from higher to lower in the classroom. Consistently, individual students’ indifferences are in the motive to be well planned in their concepts, theories, and skills. The four walls in an educational institution are compared to a bus station. Students as passengers attain a mixture of background knowledge, and they are required to achieve different needs.

The teaching challenge is viewed in a wide range of abilities which would be hard enough to face the task without the monitoring of teachers. The innovative ideas in how learning can be improvised are the opportunities for the technical students in acquiring any language skills. The recent educational systems in this modern society may have different learning opportunities and problems among the teachers and learners in any type of educational institution. Thus, teachers, especially in technical institutions, may have the skill to diverse the plan and execute the instructions along with the required materials towards students’ abilities to progress for their learning skills, welfares, and strategies in a classroom. This helps the students mostly from the technical side to enroll themselves for the self-reading without any monitoring by the teachers.

2. Language background

Learning English as a L2 plays a vital portion as it is being played in the main domain of communication for everyone in their routine life. This domain of language moves horizontally, interrupting any discipline viz, education, science, commerce, history, geography, politics, trade, and technology. Pupil’s practice taking away their own strategies according to the

circumstances for the betterment of fluency. It may allow any number of strategies in English teaching as a second language. Till there found to be some challenges that are viewed as active in the form of anxiety both for learners and teachers. Therefore, there is a need for a blend of all general strategies that activate the skilled personality of language acquisition within the learners and teachers to achieve our aim of learning and teaching without taking much time in the acquisition.

Mishra (2014) pointed out that the main aim of English language acquisition by technical education is to render that the graduates with the qualified skill to be proficient in profession across the country and internationally anywhere they’ll be able in sense of rapid and stake their knowledge, concepts, and views efficiently for the mutual assistance in the communal instruction, to enhance a drip on a positive educational progress in their career, to link a far better understanding in thought and harmony also to keep a track in a higher level of studies, to protect a better level of situation within the associated professions, and to competently add multilingual values and globalised to sharpen performance, writing, conciliation, intrapersonal skills. As pupils are familiar, all the language skills are viz, listening, speaking, reading, and writing (LSRW). They are integrated among themselves and also play a important part in knowledge and education to augment a language skill. The students used to cognise that would help for the betterment of reading skills which creates the ability to clear understanding of language. Reading is the activity learners from their childhood in maximum point. Learning to read and teaching reading is also an important skill that everyone must enhance in their daily routine work. The demonstration explains the sturdy relationship between reading comprehension skills and academic accomplishment at the end of their course. In the L2, Hosenfeld (1976) used a think-aloud technique to classify relations between certain types of reading strategies of effective and ineffective L2 reading. He too observed efficacious and ineffective readers to discover what kinds of reasoning processes they practised to read a text. Ericsson and Simon (1980) opined that people are conscious and can state around the mechanisms of high-level mental processes, like the sequence of steps that leads to the solution of a problem in reading. “The

reasonable aim is to determine whether there were any effects in improving the teachers' knowledge in reading strategies and skills that helps to bring out about changes to their practice among the student" (Motilal and Fleisch, 2020).

The reading comprehension process is the progressive form of the learners in acquiring the language skills. It drives towards fulfilling the need in the strategy they use in comprehending a text by the learner and teacher without much time consumption whenever a reading is required to accomplish the project or course. "Learning new vocabulary words and testing the readers on them along with the involvement of structure centred attention could be a target-hunting observance, whereas comfortable observance can involve simply holding by ourselves while browsing and reveal in reading where it is not stressed" (Velmurugan and Mishra, 2021). "Teachers can never make any students learn without their lively partaking and commitment to the learning course. Every child is unique and to be reached individually in an amicable manner to remove their aversion and inhibition towards learning. Learning a language is not just learning a theoretical subject, rather it is learning to live a new life, and a novel life cannot be bound to the four walls of the classroom." (Mishra et al. 2021).

3. Prerequisite of 10th and 12th Students in Language Acquisition

The prerequisite of language acquisition addresses the students' linguistic, intellectual, social and psychological aspects in learning a language. This provides the knowledge, attitudes, and skills to enforce the opportunities and development in need to manage the complexity and responsible for the further development in acquisition. This also impacts among the students for further education, the workplace they are going, and a lifelong learning skills which inculcates the learners to describe themselves as interest in learning languages further. The second language acquisition tends to encourage the students to expand the competence level in addition with long-term goal of learning multiple languages. The students are enhanced with an efficient selection of strategies in reading to enable themselves to match their language learning tasks respective to the strategies applied while reading. The encouragement of students to induce involvement in group activities prefers

them to act in their interest reading and scaffolding reading activities for students would stimulate them to be energetic in reading (Velmurugan and Smrutisikta, 2022). This creates the students with an understanding and aware of the people's perspective from different culture which equip the students with respective language skills required for further language learning. This prerequisite of students helps with language acquisition to accomplish their goals in higher education to achieve the target level of B2 and C1 of Common European Framework of Reference for Languages (CERF) in reading skills. As the students are in the basic user of English as second language, they are intended to achieve the proficient user or level to move ahead for their higher studies in abroad and also for career inside the country or start their career in abroad.

4. Applications of General strategies of reading in Classroom Settings

The style and improvement of instruction in the language classroom as a model start to have a demo in the technical classroom among technical students. The application began for the benefit of the student's practice termed to be gifted and instill not satisfactorily taken into account for the challenging task by the technical students. The improvisation among the students with their general strategies would make them more time-consuming to finish a text at any time without interest. In this way, the students tend to participate and practice narrowing down the specific strategies from general strategies.

From the teacher's point of view, it is also viewed to specialise the strategies to improvise the reading skills in a time period rather than taking much time to obtain the skills in a time period. They try to adapt the practices slowly from general strategies to specific strategies so that they could make a sign of diverse strategies to alter the challenging situation in the classroom. The teachers could come out with much more creative and innovative ideas from different strategies that practiced in the school among the students. Students categories that embrace period by separating for reading voluntarily within the sort of nonstop silent reading ensure higher than those in comparable categories while not nonstop silent reading on tests of comprehending a text, vocabulary, script, and descriptive linguistics. First and second language studies hold youngsters,

teenagers, and college students often (Krashen and Mason, 2017).

Recently, most of the text with different notions that focus on strategies to improvise the language skills among the technical students. Most illustrations of different strategies to be applied by the students while reading a text with recent trends that address the issue of application among the college levels. Although present literature may not make a direct impact on the application of general strategies, the principles of narrowing down and recommended consistent practice to specific strategies would claim to achieve the targeted goals that the technical students to overcome the challenges he/she faces while reading a text which would also make proficient in language skills that are necessary to qualify their course and prosper in choosing the text to show their proficiency. Taraban et al. (2004) opined out that the metacognitive reader devices the task in reading task that displays whether a coherent representation of the text is being maintained and adopts different processing strategies related to the goals and outcomes of ongoing reading. Text comprehension involves the incremental construction and updating of a mental representation of the situation described in the text (Kintsch, 1998). “Specifically, teacher explanations and teacher questions seemed to improve reading performance, but student talk and big-picture communicating did not, although we emphasise quality may be more important than quantity. Also, students and observers have important lenses to consider as they noted different components of talk that linked differently to different measures of reading achievement” (Goodwin, 2021).

5. Multi-Attribute Decision Making

“Multiple-Attribute Decision Making (MADM) methods have been extensively applied to various areas, such as society, management

science, economics, military research and public administration” (Cavallaro, 2010). “The most MADM methods focus on decision-making problems at the same period with interval-valued, intuitionistic, fuzzy numbers” (Chen and Li, 2011). “It is necessary to develop some dynamic decision-making models to deal with these multi-period and multi-attribute decision-making problems (also known as Dynamic Multi-Attribute, Decision Making (DMADM) problems” (Xu, 2008).

6. Problem statement

The problem addressed here in this study is that students from various Engineering colleges try to focus on the strategies to have some interventions in their reading process. They are in a position by challenging tasks to acquire the efficiency in comprehending a text.

A. How far reading slowly and carefully helps to enhance the readers to interact with the purposeful text manner?

B. Is it required to translate the context from English to Mother tongue to clearly understand the text?

C. At what rate of timing or the pauses required for the readers to stop from time to time to think?

D. They require alteration of speed in reading conferring to ease for making it without consuming time for comprehending a text by deciding what to read and ignore.

E. Traditions focus on text with an appropriate strategy to the picture and visualise information and concentrate on typographical features viz. fonts, boldface and italics help me to identify key.

7. Findings

Abbreviations used in table in Likert Scale 1 to 5:

Table 1: Response of Technical students on the general reading strategies

S. No.	Questionnaire	SA	A	D	SD	CS
1	Reading slowly and carefully makes me sure to understand.	108	112	11	2	7

2	I understand the text by translating it from English into my native language.	50	105	43	21	21
3	I read the text with a purpose in mind.	42	150	23	0	25
4	I look into an overall text which is viewed as what it is about before reading it.	56	146	29	2	7
5	I pause from time to time to reason about what I am reading.	40	125	48	9	18
6	I mark by underlining or circling the information in the text to help me remember it in the future.	80	110	33	10	7
7	I first by noting its characteristics like length and organisation by analysing the text.	23	133	52	10	22
8	I crosscheck to understand if my presumptions about the text are accurate or erroneous.	46	164	17	1	12
9	I try to use the picture and visualize information to help me remember what I read.	77	141	9	1	12
Weights Taken		+60%	+40%	-40%	-60%	NA

(Strongly Agree= SA, agree=A, disagree=D, strongly disagree=SD, can't say= CS)

The agreed and strongly agreed strategies were marked + along with percentage as +40% and +60% respectively whereas disagreed and strongly disagreed were marked – along with percentage as -40% and -60% respectively. These positive percentages represent the agree and strongly agree, whereas negative percentages represent the disagree and strongly disagree.

From the above response by the technical students given in table 1. It is conferred that the students of technical institutions are in a position to read slowly to comprehend the meaning. The involvement of students in acquiring the reading skills through the above response with the general strategies, they could come across challenges, also try to overcome those challenges they face in a different set of reading a text, maintain the common strategies for the improvement in understanding the passage, and try to find out any other novel strategies for improvising their efficacy in acquiring the

reading skills as part their learning language skills in the technical part of their study or course.

This doesn't only follow the general passage they come across but also for the diligent work in their technical subjects as well. Ajideh (2003) says that focusing on the reading process in language learning and teaching might help expand learners' ability in reading. The current study also anticipates to gain perceptions of students into the L2 reading process of technical students. It was sensed that analysis into students' reading process might provide enlarged visions into the generous of strategies used by them while reading. Examining the process of reading also gives evidence on the difficulties and solution to those tasks they face while reading a text. "The focus of the instrument is on the role of the EFL teacher who helps students to move from learning to read to reading to learn in English" (Smit et al., 2017).

8. Analysis

The analysis part represents the response received from the technical students on general strategies used while reading a text for

improving their proficiency in reading and also to be progressive in their language skills that motivates them to gain more knowledge in their life to be successful in their career or for their higher studies in abroad.

Table 2: Performance Score of Strategies Based on Students Weightage of Parameters

	SA	A	D	SD	CS	Performance Score
S1	0.6	0.273171	0.84615	0.057143	0.056	0.731412
S2	0.277778	0.256098	0.330769	0.6	0.168	-0.39689
S3	0.233333	0.365854	0.176923	0	0.2	0.422264
S4	0.311111	0.356098	0.223077	0.057143	0.056	0.386989
S5	0.222222	0.304878	0.369231	0.257143	0.144	-0.09927
S6	0.444444	0.268293	0.253846	0.285714	0.056	0.173177
S7	0.127778	0.32439	0.4	0.285714	0.176	-0.23355
S8	0.255556	0.4	0.130769	0.028571	0.096	0.496215
S9	0.427778	0.343902	0.069231	0.028571	0.096	0.673878

(Strongly Agree= SA, agree=A, disagree=D, strongly disagree=SD, can't say= CS)

Therefore, based on the performance score the strategies are given on the following order S1>S9>S8>S3>S4>S6>S5>S7>S2.

From the table 2, it is being found that the generalised strategies are categorised accordingly in order that are used by the technical students while reading a text. First and foremost, the S1 with performance score 0.73 represents that students reading the text slowly and carefully would make them understand the text. S9 with score 0.67 stands second that denotes students could remember or recall the concepts by trying to use visuals such as pictures, diagrams, tables, etc. S8 with a score of 0.49 shows how far the students crosscheck whether their students crosscheck inference is correct or erroneous for interpreting the concepts. "Students of L2 report that devoting the major expanse of classroom time to vocabulary-related activities whereas the smallest amounts of time were allotted to teaching phonemic awareness and word reading" (Vaisman and Kahn-Horwitz,2020). Next, S3 with a performance score 0.42 represents that one fulfils the objective or purpose of reading a text after crosschecking

with what they inferred. "The objective is to assess students' sense of competence and task value as mediators linking teaching practices to student engagement and achievement" (Olivier et al., 2020). S4 with score 0.38 represents the skimming of the text by the readers so that they can have over all idea about the text while interacting the classroom with their peer groups. Eye movement measures are believed to elect the repair processes (Frazier & Rayner,1982; Hyönä, Lorch, & Rinck, 2003; Rayner, 1998; Vauras, Hyönä, & Niemi, 1992; Wiley & Rayner, 2000), that might suppose readers to adopt in provision for endeavoring to resolve a difference. To summarise, readers appear to selectively recycle the two contrary intentions in an effort to generate coherence. Next, S6 with 0.173 represent the highlighting of important words or phrases by underlining and circling the key points that helps them for their future reference and understanding at the examination time or to recollect it in future. S5 with score -0.099 represent the time taken by the readers to think about the concepts through what his / her reading is about. S7 length and organisation of the concepts with -0.233 represent the student's

ability to analyse for understanding the information provided in the text.

“This practice draws on a number of disciplines in order to help students read in ways that help them see the structural and personal in the judgments they make with and in language as they read” (Inoue, 2020). This is why the strategy S2 stands with least score -0.39 strategy of translating the ideas from L2 to L1, where a smaller number of students find or take help of their first language or mother tongue to translate from L1 to L2 to understand the meaning and the interaction within oneself helps him / her to analyse. “The intervention included strategies

designed to help learners understand individual problem words and monitor their understanding of the text” (Graham et al., 2020). Altogether, these possessions are reliable with the study from the response received from the technical students that signify the content and concept-based differences where the readers’ get influence moment-by-moment in reading and recognise the contexts (Albrecht & O’Brien, 1993; Baker & Anderson, 1982; Cook & Myers, 2004; Hakala & O’Brien, 1995; O’Brien & Albrecht, 1992; O’Brien & Myers, 1985; Rinck et al. 2003; Tapiero & Otero, 1999).

Table 3: Performance Score of Strategies Based on Agree and Disagree Weightage of Parameters

	SA	A	D	SD	CS	Performance Score
S1	0.278112	0.192275	0.018884	0.00515	0.006009	0.446352
S2	0.136986	0.191781	0.078539	0.057534	0.019178	0.192694
S3	0.117209	0.27907	0.042791	0	0.023256	0.353488
S4	0.144206	0.250644	0.049785	0.00515	0.006009	0.339914
S5	0.108108	0.225225	0.086486	0.024324	0.016216	0.222523
S6	0.206009	0.188841	0.056652	0.025751	0.006009	0.312446
S7	0.063303	0.244037	0.095413	0.027523	0.020183	0.184404
S8	0.121053	0.287719	0.029825	0.002632	0.010526	0.376316
S9	0.202632	0.247368	0.015789	0.002632	0.010526	0.431579

(Strongly Agree= SA, agree=A, disagree=D, strongly disagree=SD, can't say= CS)

Therefore, based on the performance score the strategies are given on the following order S1>S9>S8>S3>S4>S6>S5>S2>S7.

From the table 3, it is found that the generalised strategies are categorised according to the weightage given to both parameters of ‘Agree’ and ‘Disagree’ which are used by the technical students while reading a text. First and foremost, the S1 with performance score 0.44 represents that students reading the text slowly and carefully would make them understand the text. S9 with score 0.43 stands second which denotes students could remember or recall the concepts by trying to use the visuals such as pictures, diagrams, tables, etc. S8 with score 0.37 shows how far the students crosscheck whether their inference is correct or erroneous for

interpreting the concepts. Next S3 with performance score 0.35 represent that one fulfils the objective or purpose of reading a text after crosschecking with what they inferred. S4 with score 0.33 represents the skimming of the text by the readers to have overall idea about the text while interacting the classroom with their peer groups. Next, S6 with 0.31 represent the highlighting of important words or phrases by underlining and circling the key points that helps them for their future reference and understanding at the examination time or to recollect it in future. S5 with score 0.22 represent the time taken by the readers to think about the concepts through what his / her reading is about. The strategy S2 stands with score 0.19 strategy of translating the ideas from L2 to L1, where a smaller number of students

find or take help of their first language or mother tongue to translate from L1 to L2 to understand the meaning and the interaction within oneself helps him/her to analyse. The strategy S7 length and organisation of the concepts with least score 0.18 represent the student's ability to analyse for understanding the information provided in the

text. Here in this table 3, it is depicted that there is slight variation in the order of categorisation. The last two strategies gets interchanged accordingly compared to the parameters of students weightage which represents the S2 - translation from L2 to L1 is depicted as important than S7 - organisation of the concepts.

Table 4: Performance Score of Strategies Based on Equal Weightage of Parameters

	SA	A	D	SD	CS	Performance Score
S1	0.2	0.136585	0.042308	0.019048	0.056	0.453941
S2	0.092593	0.128049	0.165385	0.2	0.168	0.754026
S3	0.077778	0.182927	0.088462	0	0.2	0.549166
S4	0.103704	0.178049	0.111538	0.019048	0.056	0.468339
S5	0.074074	0.152439	0.184615	0.085714	0.144	0.640843
S6	0.148148	0.134146	0.126923	0.095238	0.056	0.560456
S7	0.042593	0.162195	0.2	0.095238	0.176	0.676026
S8	0.085185	0.2	0.065385	0.009524	0.096	0.456094
S9	0.142593	0.171951	0.034615	0.009524	0.096	0.454683

(Strongly Agree= SA, agree=A, disagree=D, strongly disagree=SD, can't say= CS)

Therefore, based on the performance score the strategies are given on the following order S2>S7>S5>S6>S3>S4>S8>S9>S1.

From the table 4, it is found that the generalised strategies are categorised according to the equal weightage given to all the parameters, which are used by the technical students while reading a text. The first and foremost is the strategy S2 stands with a score of 0.75 strategies of translating the ideas from L2 to L1, where a smaller number of students find or take help of their first language or mother tongue to translate from L1 to L2 to understand the meaning and the interaction within oneself helps them to analyse. The strategy S7 length and organisation of the concepts with 0.67 represent the student's ability to analyse for understanding the information provided in the text. S5 with score 0.64 represent the time taken by the readers to think about the concepts through what his / her reading is about. Next, S6 with 0.56 represents highlighting important words or phrases by underlining and

circling the key points that help them for their future reference and understanding at the examination time or to recollect it in the future. Next, S3 with a performance score of 0.54 represent that one fulfils the objective or purpose of reading a text after crosschecking with what they inferred. S4 with score 0.46 represents the skimming of the text by the readers to have overall idea about the text while interacting the classroom with their peer groups. S8, with score 0.456 shows how far the students crosscheck whether their inference is correct or erroneous for interpreting the concepts. S9 with score 0.454 stands second that denotes students could remember or recall the concepts by trying to make use of the visuals such as pictures, diagrams, tables etc., S1 with least performance score 0.453 represent that student reading the text slowly and carefully would make them understand the text.

From the above table 4, it is also inferred that the equal weightage to all the strategies and

parameters would help both the teachers and also technical students to overcome the difficulties faced by the students while reading technical or general passage and for the teachers while teaching the reading skills in their language classroom under technical curriculum.

So, it is inferred through the generalised strategies students can overcome the generalised difficulties one faces while reading a text and improve oneself to be proficient readers for progressive manner in higher studies and achieve success in their dream job in their life. The study strengthens the place of learner strategies analytically within instructions of self-guideline (Zimmerman, 2013): Strategies, developed through instruction that encourages learners to evaluate their effectiveness and to view them as tools to achieve better outcomes, are an important predictor of effectiveness, as they may increase learner activity and intellectual control. The interventionists should practice the same goal line situation and intervention assessment actions for L2 students that are used in the general population. Relatively, as dropping the prospects for reading advancement, instructors should boost potency of involvement when L2 are not meeting growth goals (Richardson, 2020).

9. Conclusion

It is observed from the conclusions the students in the study appeared to selectively source documents in accord with the text representation model that helps to considerate the study grounded on the understanding of numerous documents (Perfetti et al., 1999; Rouet, Britt, Mason, & Perfetti, 1996; Stromso et al., 2010; Wiley et al., 2009). Investigators with the focus to find any indication on signifying that upright the understanding of multiple contradictory texts contains a better contemplation of their basis on structures. Nevertheless, the strategies have operated the inconsistencies and furthermore, observed from the evidence that updated and demonstrated a correlation of understanding of the text, source contemplation, and assessment in terms of the materials used for reading (i.e., suggested prior reading to comprehend the text).

The current effort of general strategies on reading among technical students not only extends the students on the comprehension of a

text but also helps to materials entrenched within a text, and which also delivers a procedure that understand the previous experiential sustenance for reading that correlates the better comprehension and the materials instructed by the teachers for better improvement in language acquisition.

References

- [1] Albrecht, J. E., & O'Brien, E. J. (1993). Updating a mental model: Maintaining both local and global coherence. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19, 1061–1070. <http://dx.doi.org/10.1037/0278-7393.19.5.1061>
- [2] Ajideh, P. (2003). Schema theory-based pre-reading tasks: A neglected essential in the ESL reading class. *The Reading Matrix*, 3(1), 1-14.
- [3] Baker, L., & Anderson, R. I. (1982). Effects of inconsistent information on text processing: Evidence for comprehension monitoring. *Reading Research Quarterly*, 17, 281–294. <http://dx.doi.org/10.2307/747487>
- [4] Cavallaro, F. (2010). Fuzzy TOPSIS approach for assessing thermal-energy storage in concentrated solar power (CSP) systems. *Applied Energy*, 87(2), 496–503.
- [5] Chen, Y. and Li, B. (2011). Dynamic multi-attribute decision making model based on triangular intuitionistic fuzzy numbers. *Scientia Iranica*, 18(2), 268-274. <http://dx.doi.org/10.1016/j.scient.2011.03.022>
- [6] Cook, A. E., & Myers, J. L. (2004). Processing discourse roles in scripted narratives: The influences of context and world knowledge. *Journal of Memory and Language*, 50, 268–288. <http://dx.doi.org/10.1016/j.jml.2003.11.003>
- [7] Ericsson, K., & Simon, H. J. (1980). Verbal reports as data. *Psychological Review*, 87, 215-251.
- [8] Frazier, L., & Rayner, K. (1982). Making and correcting errors during sentence comprehension: Eye movements in the analysis of structurally ambiguous sentences. *Cognitive Psychology*, 14, 178–

210. [http://dx.doi.org/10.1016/0010-0285\(82\)90008-1](http://dx.doi.org/10.1016/0010-0285(82)90008-1)
- [9] Goodwin, A.P., Cho, S.-J., Reynolds, D., Silverman, R., Nunn, S. (2021). Explorations of classroom talk and links to reading achievement in upper elementary classrooms. *Journal of Educational Psychology*, 113(1), 27-48. <http://dx.doi.org/10.1037/edu0000462>
- [10] Graham, S., Woore, R., Porter, A., Courtney, L., Savory, C. (2020). Navigating the Challenges of L2 Reading: Self-Efficacy, Self-Regulatory Reading Strategies, and Learner Profiles. *Modern Language Journal*, 104(4), 693-714. <https://doi.org/10.1111/modl.12670>
- [11] Hakala, C. M., & O'Brien, E. J. (1995). Strategies for resolving coherence breaks in reading. *Discourse Processes*, 20, 167-185. doi:[10.1080/01638539509544936](https://doi.org/10.1080/01638539509544936)
- [12] Hosenfeld, C. (1976). Learning about learning: Discovering our students' strategies. *Foreign Language Annals*, 9, 117-129.
- [13] Hyönä, J., Lorch, R. F., Jr., & Rinck, M. (2003). Eye movement measures to study global text processing. In J. Hyönä, R. Radach, & H. Deubel (Eds.), *The mind's eye: Cognitive and applied aspect of eye movement research* (pp. 313-334). Amsterdam, The Netherlands: Elsevier Science BV
- [14] Inoue, A. B. (2020). Teaching Antiracist Reading. *Journal of College Reading and Learning*, 50(3), 134-156. <https://doi.org/10.1080/10790195.2020.1787079>
- [15] Krashen, S. & Mason, B. (2017). Sustained Silent Reading in Foreign Language Education: An Update. *Turkish Online Journal of English Language Teaching (TOJELT)*, 2(2), 70-73.
- [16] Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. New York: Cambridge University Press.
- [17] McLaughlin, B. (1984). *Second-Language Acquisition in Childhood*. Psychology Press.
- [18] Mishra, S. (2014). Role and Need of ESP in Engineering Education: A Case Study of Status in Odisha, India. *Asian Journal of Social Sciences & Humanities*, 3(3), 195-196.
- [19] Mishra, S., Jeyasakthi, V. and Velmurugan, K. (2021). The Intervention of Physical Games in Teaching English Grammar to Secondary School Students: A Review with Special Reference to the Secondary School Pupil in Puducherry, India. *Psychology and Education Journal*, 58(2), 176-185. <https://doi.org/10.17762/pae.v58i2.1547>
- [20] Motilal, G.B. and Fleisch, B. (2020). The triple cocktail programme to improve the teaching of reading: Types of engagement. *South African Journal of Childhood Education*, 10 (1), art. no. a709, 1-13.
- [21] Nunan, D. (1999). *Second Language Teaching and Learning*. Boston: Heinle & Heinle Publishers.
- [22] Olivier, E., Galand, B., Hospel, and V., Dellisse, S. (2020). Understanding behavioural engagement and achievement: The roles of teaching practices and student sense of competence and task value. *British Journal of Educational Psychology*, 90(4), 887-909. <https://doi.org/10.1111/bjep.12342>
- [23] Perfetti, C. A., Rouet, J. -F., and Britt, M. A. (1999). Toward a theory of documents representation. In H. van Oostendrop & S. R. Goldman (Eds.), *The construction of mental representations during reading*. Mahwah, NJ: Lawrence Erlbaum Associates. <https://doi.org/10.4324/9781410603050>
- [24] Rayner, K. (1998). Eye movements in reading and information processing: 20 years of research. *Psychological Bulletin*, 124, 372-422. <http://dx.doi.org/10.1037/0033-2909.124.3.372>
- [25] Richardson, R.D., Rocconi, L.M., Crewdson, M.A. (2020). Evaluating English Learner Progress in Reading: How Much Growth Can We Expect? *School Psychology Review*, 49(4), 480-492.
- [26] Rinck, M., Gámez, E., Díaz, J. M., & de Vega, M. (2003). Processing of temporal information: Evidence from eye movements. *Memory & Cognition*, 31, 77-86. <http://dx.doi.org/10.3758/BF03196084>
- [27] Rouet, J.-F., Britt, M. A., Mason, R. A., & Perfetti, C. A. (1996). Using multiple sources of evidence to reason about

- history. *Journal of Educational Psychology*, 88, 478–493.
- [28] Smit, N., van de Grift, W., de Bot, K., Jansen, E. (2017). A classroom observation tool for scaffolding reading comprehension. *System*, 65, 117–129. <https://doi.org/10.1016/j.system.2016.12.014>
- [29] Strømsø, H. I., Bråten, I., & Britt, M. A. (2010). Reading multiple texts about climate change: The relationship between memory for sources and text comprehension. *Learning and Instruction*, 20, 192–204.
- [30] Tapiero, I., & Otero, J. (1999). Distinguishing between text base and situation model in the processing of inconsistent information. In H. van Oostendorp & S. R. Goldman (Eds.), *The construction of mental representations during reading* (pp. 341–365). Mahwah, NJ: Erlbaum.
- [31] Taraban, R., Kerr, M., & Ryneearson, K. (2004). Analytic and pragmatic factors in college students' metacognitive reading strategies. *Reading Psychology*, 25, 67–81.
- [32] Vaisman, E.E. and Kahn-Horwitz, J. (2020). English foreign language teachers' linguistic knowledge, beliefs, and reported practices regarding reading and spelling instruction. *Dyslexia*, 26 (3), 305–322. <https://doi.org/10.1002/dys.1608>
- [33] Vauras, M., Hyönä, J., & Niemi, P. (1992). Comprehending coherent and incoherent texts: Evidence from eye movement patterns and recall performance. *Journal of Research in Reading*, 15, 39–54.
- [34] Velmurugan, K. and Smrutisikta Mishra. (2021). Enhancing the Reading Skills of the Technical Students Through Mental Modelling. *Psychology and Education Journal*, 58(3), 1302–1312. <https://doi.org/10.17762/pae.v58i3.3862>
- [35] Velmurugan, K. and Smrutisikta Mishra. (2022). An Amalgamation of the Etymological Skills for Acquiring Competence and Enhancing Performance in English. *IMPACT: International Journal of Research in Humanities, Arts, and Literature*, 10(2) 5–12
- [36] Wiley, J., & Rayner, K. (2000). Effects of titles on the processing of text and lexically ambiguous words: Evidence from eye movements. *Memory & Cognition*, 28, 1011–1021.
- [37] Xu, Z.S. (2008). On multi-period, multi-attribute decision making. *Knowledge Based Systems*, 21(2), 164–171.
- [38] Zimmerman, B. J. (2013). From cognitive modeling to self-regulation: A social cognitive career path. *Educational Psychologist*, 48, 135–147.