

Development of Critical Thinking Skills: An Analysis of English Curriculum Grades I-XII (2019)

Dr. Muhammad Jamil

Lecturer, Department of Education,
GC Women University Sialkot, Pakistan
m.jamil@gcwus.edu.pk

Wahid Mehmood

PhD Scholar (Education),
Northern University Nowshera, Pakistan
captainwahid@gmail.com

Mahwish Aziz

Masters in EPM,
Allama Iqbal Open University Islamabad,
Pakistan
mahwishaziz39@gmail.com

Received: 25-Apr-2024

Accepted: 15-May-2024

Abstract

Introduction: This qualitative study analysed the English Language Curriculum for Grades I-XII (2019) to assess how well it promotes critical thinking among secondary school students. The study aimed to determine the extent to which the curriculum facilitates the development of critical thinking skills.

Methodology: The curriculum document was selected through purposeful sampling and analyzed using qualitative content analysis with NVivo 12 software. This method enabled a detailed examination of the curriculum content to identify elements related to critical thinking.

Results/Findings: The analysis confirmed that critical thinking is deeply embedded in the curriculum through the integration of critical thinking skills with language skills, particularly reading and writing. Using Bloom's Taxonomy, the curriculum

emphasizes activities designed to develop higher-level thinking skills. Additionally, well-structured assessments require students to answer analytical and evaluative questions, aligning with the objectives of fostering critical thinking.

Future Direction: *For the curriculum's potential to be fully realized, teachers must thoroughly understand its objectives and effectively implement the prescribed strategies. Continuous professional development and support for teachers are crucial to ensure the successful integration of critical thinking skills in teaching practices.*

Keywords: Critical thinking skills, English language curriculum, secondary education, content analysis, NVivo

Introduction and Literature Review

Critical thinking skills (CTS) are of great importance for students to achieve their best in their academic and professional life as well. Such skills help people evaluate information logically, choose correct alternatives, contribute to decision-making, and present their opinions most understandably. Within the linguistic learning process, critical thinking is pivotal in terms of allowing learners to go beyond a literal meaning and involve them in the texts at a deeper level. Nowadays various educational systems all over the world have developed special programs and curricula that include critical thinking exercises among others (Ahmad, et al., 2024).

The idea of critical thinking has been described in different terms but usually, it means the ability to undertake the situation of analysing, evaluating, and synthesizing data. These components have to be thought of during the resolution of problems to achieve a good perspective of the situation (Facione et al., 2020). Critical thinking is a core of the knowledge students obtain during their study. Its importance is concerned with their successful performance both as a college student and as a professional (Imran & Akhtar, 2023).

According to Bloom's Taxonomy, it has been argued that this should not only be used for constructing the major interpretations of the matters to be learned but also the desire to incorporate the intellectual demands that orient at the various complex cognitive levels. The taxonomy categorizes learning objectives into six levels from knowledge to evaluation and revised from remembering to creating (Ahmad, Bibi, & Imran, 2023). The main thing is teachers need to concentrate on higher classes where they can make use of the levels from the taxonomy to bring

students to the point where they can think critically and show a deeper engagement with the material.

Several studies have surveyed the purpose of the inclusion of critical thinking skills in language learning. Therefore, English as a foreign language context uses a content-based approach to develop students' critical thinking competencies (Ali, et al., 2023). The conducting of the research showed that by involving students in the study of the language in the context of life and through various higher order thinking activities they could enhance their skills in the language as well as develop critical thinking. Shirkhani and Fahim (2011) assessed the correlation between critical thinking and reading mastery among Iranian English as a foreign language (EFL) learners. Results showed that students who are good at critically analyzing information were able to score higher scores in reading comprehension and passing tests. Studies with the same phenomenon were also conducted in an international context (Ridzal & Haswan, 2023; Sari & Prasetyo, 2021; Silalahi et al., 2022).

There are other different studies related to critical thinking development in the context of English. In a study by Bağ and Gürsoy (2021), the effect of critical thinking was explored in English course design for the improvement of critical thinking skills among secondary-level students. In the same way, new approaches were explored to teach CTS through the EFL curriculum in a study (Itmeizeh & Hassan, 2020). In a study conducted by Cáceres et al. (2020), teachers' perspectives were explored regarding critical thinking in the classroom. Liang and Fung (2021) explored challenges and opportunities in developing critical thinking in English as a second language. The impact of collaborative learning was explored on developing critical thinking skills (Warsah et al., 2021).

In the Pakistani context, different studies have been conducted regarding this aspect. A study was conducted to evaluate university students' CT abilities with reflection on their reading skills at the bachelor level (Din, 2020). A positive attitude toward CTS was found by the students in their critical reading skills. Zamir et al. (2021) studied teaching methods to be used to learn CT in higher education. Three methods, lecture, discussion, and storytelling were explored in the findings. In a recent study, CT was explored to be developed in an English classroom (Jamil, Anwar, et al., 2024).

There are several studies in the Pakistani context regarding other subjects and the context

of critical thinking. In a study by Ali et al. (2017), general science textbooks for grades 6-8 were found to be lacking regarding higher-order thinking questioning with activities. In the same way, several studies on relevant phenomena with different dimensions like policy and curriculum analysis and science teachers' practices for the development of critical thinking (Jamil, 2021); curriculum analysis for the subjects of physics, chemistry, biology, and mathematics curriculum (Jamil, Bokhari, & Iqbal, 2024; Jamil, Bokhari, & Rafiq, 2024; Jamil, Bokhari, & Zia, 2024; Jamil, Hafeez, et al., 2024). Similarly, analysis of textbooks for CT skills development with physics textbooks (grade IX) (Jamil, Bokhari, & Ahmad, 2024), grade IX and X Chemistry textbooks (Jamil, Mehmood, et al., 2024; Shahzadi, 2024); CTS development in social studies single national curriculum (Jamil, Aslam, et al., 2024); policy and curriculum documents analysis for CT skills development (Jamil et al., 2020), and analysis for CTS for Pakistan studies (Naseer et al., 2022). All these studies focus on CTS development due to its importance as a soft skill for twenty-first-century learners.

Objectives of the Study

Objectives of the study were as follows:

- How does the English Language Curriculum for Grades I-XII (2019) in Pakistan integrate critical thinking skills with language skills?
- In what ways does the English Language Curriculum for Grades I-XII (2019) incorporate Bloom's Taxonomy to promote higher-order thinking skills?

Research Methodology

This study was done based on a qualitative content analysis to analyze the English Language Curriculum for Grades I-XII (2019) in Pakistan. Qualitative content analysis has been established as a reliable tool that can help reveal key ideas deep in large text data by way of discerning main points, and patterns of ideas, and providing a general sense (Kyngäs, 2020). This approach is accorded primary importance, especially when analyzing educational materials like textbooks, where it is possible to obtain information from the content analyzed and draw conclusions concerning learning outcomes (Mayring, 2014).

The English Language Curriculum for Grades I-XII (2019) was selected following purposive sampling, which is the process of choosing a sample that conforms with specific criteria and features of researchers' objectives. The curriculum document was obtained from the official website of the Ministry of Federal Education and Professional Training, Pakistan

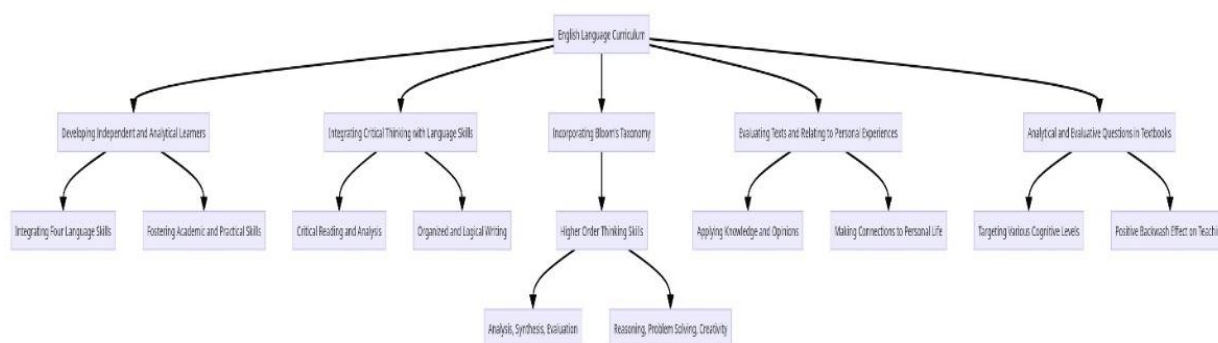
(<http://mofept.gov.pk>). The qualitative analysis was conducted by NVivo 12, an analytic software used by many researchers in the terminology of “qualitative data analysis” (Jackson et al., 2019). NVivo 12 empowers researchers to accurately handle unstructured text data in a timely and independent manner. Data is coded, and categorized and patterns are identified simultaneously (Silver & Woolf, 2018). The analysis process started with a full reading of this curriculum document that was aimed at concrete ideas about the material of the document and its structure. Coded data were analyzed in-depth to establish evidentiary patterns, associative relationships, and recurring themes which indicate necessary skillsets for critical thinking in the curriculum.

Findings of the Study

The curriculum document for English Language Grades I-XII extensively covers the development of critical thinking skills among students. The following figure represents the findings of the current study at a glance

Figure 1

Findings of the study



Further explanation for each aspect is described as under:

Developing independent, self-directed, and analytical learners

The curriculum aims to foster learners who can think critically and independently. By integrating the four language skills (reading, listening, speaking, and writing), students are encouraged to become self-directed learners capable of analyzing information, forming opinions, and expressing themselves effectively. This approach prepares them for higher studies and future careers by providing essential academic and practical skills. It has been described in the following way:

"The overall aims of the course are: ... c) to develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking and Writing." (Page 7)

"The curriculum has been revised to promote the academic and employment language needs for learners who wish to pursue their higher studies. Consequently, it aims at offering academic and practical skills that learners can use to complete their studies or build their careers after leaving the school." (Page 2)

Integrating critical thinking with language skills

Critical thinking is not taught as a separate skill but is integrated with reading and writing. As students engage with various texts, they are encouraged to analyze, interpret, and evaluate the information presented. Writing tasks require students to organize their ideas logically, support their arguments, and revise their work for clarity and coherence. This integration allows students to develop critical thinking skills while simultaneously improving their language proficiency. In the textbook, it has been discussed in the following way:

"The reading component serves as a springboard for the development of integrated language skills, and for enhancing cognitive and affective domains, enabling the students to think critically and creatively." (Page 12).

"Draft and revise writing to ensure that it: ... has an organizational pattern that reflects a clear overall progression of ideas through proper use of signal and reference words." (Page 247)

Incorporating Bloom's Taxonomy:

The curriculum incorporates Bloom's Taxonomy, a framework that categorizes learning objectives into different levels of complexity. By designing activities that target higher order thinking skills such as analysis, synthesis, and evaluation, students are challenged to move beyond simple comprehension and knowledge recall. This approach nurtures their ability to reason, solve problems, think critically, and be creative in their language use. This aspect is narrated in the document in the following manner.

"Contexts should be so devised so as to build a wide range of reading experiences that have literary, informational, persuasive, analytical and practical purposes." (Page 34)

"Such activities are to be incorporated at each grade that cater for progressive cognitive development from lower level intellectual skills of simple knowledge and comprehension to higher order skills of analysis, synthesis and evaluation to nurture the ability of reasoning, problem solving, critical thinking and creativity." (Page 3)

Evaluating texts and relating to personal experiences

Students are encouraged to use critical thinking when responding to texts they read. It involves applying their knowledge, feelings, and opinions to the material, as well as making connections between the text and their personal lives. By relating to characters, events, and themes in the texts, students develop a deeper understanding and appreciation of the material, enhancing their critical thinking skills. The following are a few examples of this aspect discussed in the curriculum document.

"Use critical thinking to respond to the text (post-reading): • apply world knowledge and own feelings /opinion to the text read." (Page 83)

"Read a text to: • make connections between their own lives and the characters, events, motives and causes of conflict in texts." (Pages 193, 218)

Incorporating analytical and evaluative questions in textbooks

The curriculum emphasizes the importance of well-designed tests and assessments in guiding teaching and learning. Textbooks should include questions that target various cognitive levels, from basic comprehension to higher order thinking skills. By incorporating analytical and evaluative questions, textbooks can have a positive backwash effect, encouraging teachers to focus on developing students' critical thinking skills in line with the curriculum objectives. This aspect has been pointed out in the document in the following words:

"Testing is closely related to teaching. A good test can have a beneficial backwash effect in terms of focusing the teaching curriculum objectives (SLOs)." (Page 300)

Conclusion and Discussion

Discussion

The analysis of the curriculum document indicates that critical thinking is a substantial component of the secondary-level students' learning agenda in the subject. The curriculum is consistently put forward as a critical thinking transferring point and language learning is identified for academic and personal growth and thus a vital tool for students. The discovery supports the recent research concerning the inclusion of critical thinking as a relevant structural element of the educational program (Facione et al., 2020; Liaw, 2007).

Critical thinking skills have a multi-faceted nature because they combine different learning tools. One of the most effective methods the academic training involves the integration of critical thinking and language (speaking, reading, and writing) skills. The curriculum encourages

individuals to interact with the text through a series of actions, which include analysis, interpretation, and judgment. This is pertinent as such previous research has consistently come out with evidence supporting content-based instruction as a remedy for promoting critical thinking (Liaw, 2007; Shirkhani & Fahim, 2011). Studies show that by administering a variety of contemporary and challenging texts and thereby making students write critical reflections the teacher eventually aims at developing their language skills and intellectual abilities from a higher level.

Bloom's Taxonomy presents implementation in the progression of the curriculum as the next aspect that fosters critical thinking skills. The learning objectives and activities included in the curriculum should be designed in a way that can provide learners with the skills for higher order thinking, e.g. analytical skills, synthesis skills, and evaluation skills. This approach is consistent with what educational researchers stated should be core to the success of student critical thinking (Mohamed et al., 2021). Using situations that scholars understand and remember, the course asks for more than just memorization and recall of information. Towards this end, the curriculum thrives on the engagement of students in more and deeper kinds of learning experiences that are purposeful, and goal-driven.

The other significant factor is in the curriculum design; it specifically focuses on the students' engagement and emotional connection to the learning material, and this further aids in critical thinking skills. Over and over, the document emphasizes that students should be able to link concepts to their life situations, analyze and relate their minds and ideas to the subject, and study issues from different perspectives. By linking the curriculum process to the life of the student, the curriculum can aim at more meaningful and helpful academic learning (Martinez, 2022).

With the curriculum considering critical thinking skills development of paramount importance, it is equally significant to keep in mind the possible obstacles to its implementation. Large class sizes, limited resources, and particular attention given to memorizing are factors that directly influence the way critical thinking should be developed and understood (Boso et al., 2021; Polat & Aydın, 2020). To achieve the alignment of curricula aims with qualitative teaching practices, teachers must receive proper training, backup, and facilities. The training would provide teachers with the tools to use critical thinking techniques in teaching.

It is thus imperative that teacher workshops concentrate on the development of the proper instructional skills and address the strategies for putting in place of critical thinking inside classrooms. It deals with the guidance in using methodologies of inquiry, developing tasks appropriate for students, and creating papers with a view to the final objectives of the study. Therefore, making the teaching materials and resources, which need to stimulate learners' critical thinking, available to the teachers can promote the execution of the curriculum.

Conclusion

Of the greatest significance in the education system of today is the development of critical thinking skills among students, as with these skills learners can analyze, evaluate, and synthesize educated outcomes from the information they acquire. Language learning and critical thinking a phenomenal powers, that help learners decipher texts coherently, construct knowledge, and propel communication. In keeping with the significance of these abilities, the English Language Curriculum, Grades I to XII (2019) in Pakistan, already, has given critical thought a great space in the field of education. The style of learning to have a balanced and integrated critical reasoning with the language skills, the adoption of Bloom's Taxonomy in the making learning objectives and activities, the emphasis on the student engagements and connection of the learner with the learning material, and the inclusion of the analytical questions and evaluations in the assessment.

The main objective of the curriculum is to show students how they can be active readers, involved with texts, analyze the information given, and be critical about this process, to develop their language skills and higher thinking. Referring to Bloom's Taxonomy in the process of curriculum design finally highlights the purpose of developing critical thinking cognition. Through the implementation of a curriculum that focuses on higher-order cognitive complexities, namely analysis, synthesis, and evaluation, students are pushed to supersede the comprehension and memorization-only levels by being challenged more cognitively. Furthermore, the training course focuses on not only the skilling of the student but also the attachment of the students to learning material is a very important reason to help to develop students' critical thinking skills. By bringing up a link between the information and their past experiences, using the appropriate information to speak out, and having an argument and reflection on multiple sides of the issue, the curriculum made significant progress in a better and longer-lasting learning process.

One of the desirable facets is the incorporation of analytical and evaluative questions into the assessment strategies because there is now a check on students' ability to critically think about

problems and situations. The curriculum allows for smart assessments to be emphasized so that there is a link between teaching and learning hence at the end of it all the critical thinking skills are not only taught but also tested accurately. Nevertheless, it is the key point that the assignments to stimulate the critical thinking levels among the students hinge on school teachers being equipped with both skills and support by the school management. Those inquiry-based strategies and cultural factors that can influence the education system's orientation to critical thinking in Pakistan have been brought up by previous studies.

Recommendations

Based on the findings, and conclusions, the following recommendations are proposed:

- Develop a teacher training module and a future program to serve as a channel for equipping educators with the right skills, teaching strategies, and entire resources in preparation for the integration of critical thinking in their language teaching practice.
- Do more research to change the curriculum to see the effects on the students' critical thinking development through class observations, teacher and student interviews, and by measuring students' abilities, students' critical thinking is influenced by future curriculum changes and developments.
- Support teamwork and collaborative learning among administrators, educators, policy decision-makers, and researchers inside Pakistan as well as in other countries to cultivate critical thinking skills in the education systems, which over time will form a global culture that emphasizes critical thinking in education.

References

- Ali, I., Akhter, N., & Nawaz, M. (2017). Critical analysis of general science textbooks for inclusion of the nature of science used at elementary level in Khyber Pakhtunkhwa. *Journal of Educational Research*, 20(1), 113-131.
- Ahmad, N., Bibi, N., & Imran, M. (2023). Effects of teacher's motivation on students' academic performance at public secondary schools in Karachi Pakistan. *AITU Scientific Research Journal*, 1(2), 20-32.
- Ahmad, N., Iqbal, S., Ali, Z., Jabeen, R., & Imran, M., (2024). Bridging the Gap: Secondary School Teachers' Perspectives on Behavioral Barriers to Academic Success. *Al-Qanṭara* 10(2), 144-162.

- Ali, Z., Ullah, N., Ahmad, N., Yaqoob, N., & Saba, F. (2023). Teachers' Perceptions of Curriculum Change and the Need of Professional Development for Effective Teaching Practices. *Multicultural Education, 9*(1), 83-90
- Bağ, H. K., & Gürsoy, E. (2021). The effect of critical thinking embedded English course design to the improvement of critical thinking skills of secondary school learners☆. *Thinking Skills and Creativity, 41*, 100910.
- Boso, C. M., van der Merwe, A. S., & Gross, J. (2021). Students' and educators' experiences with instructional activities towards critical thinking skills acquisition in a nursing school. *International Journal of Africa Nursing Sciences, 14*, 100293.
- Cáceres, M., Nussbaum, M., & Ortiz, J. (2020). Integrating critical thinking into the classroom: A teacher's perspective. *Thinking Skills and Creativity, 37*, 100674.
- Din, M. (2020). Evaluating university students' critical thinking ability as reflected in their critical reading skill: A study at bachelor level in Pakistan. *Thinking Skills and Creativity, 35*, 100627.
- Facione, P. A., Facione, N. C., & Gittens, C. A. (2020). What the data tell us about human reasoning. In *Critical Thinking and Reasoning* (pp. 272-297). Brill.
- Imran, M., & Akhtar, N. (2023). Impact of Ethical Leadership Practices on Teachers' Psychological Safety and Performance: A Case of Primary School Heads in Karachi-Pakistan. *Academy of Education and Social Sciences Review, 3*(2), 172-181. <https://doi.org/10.48112/aessr.v3i2.505>
- Itmeizeh, M., & Hassan, A. (2020). New approaches to teaching critical thinking skills through a new EFL curriculum. *International Journal of Psychosocial Rehabilitation, 24*(07), 8864-8880.
- Jackson, K., Bazeley, P., & Bazeley, P. (2019). *Qualitative data analysis with NVivo*. Sage.
- Jamil, M. (2021). *An analysis of education policy and science teachers' practices for developing critical thinking skills in secondary school students, [PhD dissertation, University of Management and Technology, Lahore, Pakistan]*.
- Jamil, M., Anwar, M., & Ali, M. J. (2024). Developing critical thinking skills in English classrooms at the secondary level: Teachers' perspective. *Journal of Social Sciences Development, 3*(1), 76-85.

- Jamil, M., Aslam, M., & Ali, S. (2024). Single national curriculum (SNC) for social studies (2020): Document analysis for development of critical thinking skills at the primary level. *Pakistan Journal of Law, Analysis and Wisdom*, 3(2), 67-74.
- Jamil, M., Bokhari, T. B., & Ahmad, D. (2024). Evaluation of Critical Thinking Elements: A Qualitative Content Analysis of Physics Textbook Grade IX. *Qlantic Journal of Social Sciences*, 5(1), 344-350.
- Jamil, M., Bokhari, T. B., & Iqbal, J. (2024). Incorporation of critical thinking skills development: A case of mathematics curriculum for grades I-XII. *Journal of Asian Development Studies*, 13(1), 375-382.
- Jamil, M., Bokhari, T. B., & Rafiq, M. (2024). Critical thinking skills development for 21st century: An analysis of Biology curriculum (2006). *Voyage Journal of Educational Studies*, 4(1), 127-138.
- Jamil, M., Bokhari, T. B., & Zia, Q. (2024). Qualitative Content Analysis for Critical Thinking and Skill Development: A Case of Chemistry Curriculum. *Journal of Asian Development Studies*, 13(1), 147-155.
- Jamil, M., Hafeez, F., Abdul, & Muhammad, N. (2024). Critical thinking development for 21st century: Analysis of Physics curriculum. *Journal of Social & Organizational Matters*, 3(1), 1-10.
- Jamil, M., Mehmood, W., & Shah, F. u. H. (2024). Development of critical thinking skills among secondary school science students: An analysis of Chemistry textbook grade IX (2020). *Global Educational Studies Review*, 9(1), 13-20.
- Jamil, M., Muhammad, Y., Masood, S., & Habib, Z. (2020). Critical thinking: A qualitative content analysis of education policy and secondary school science curriculum documents. *Journal of Research and Reflections in Education*, 14(2), 249-258.
- Kyngäs, H. (2020). Qualitative research and content analysis. In *The application of content analysis in nursing science research* (pp. 3-11). https://doi.org/10.1007/978-3-030-30199-6_1.
- Liang, W., & Fung, D. (2021). Fostering critical thinking in English-as-a-second-language classrooms: Challenges and opportunities. *Thinking Skills and Creativity*, 39, 100769.
- Liaw, M.-L. (2007). Content-based reading and writing for critical thinking skills in an EFL context. *English Teaching and Learning*, 31(2), 45-87.

- Martinez, C. (2022). Developing 21st century teaching skills: A case study of teaching and learning through project-based curriculum. *Cogent Education*, 9(1), 2024936.
- Mayring, P. (2014). Qualitative content analysis: Theoretical foundation, basic procedures and software solution. In *Approaches to qualitative research in mathematics education* (pp. 365–380). Springer. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395173>
- Mohamed, R. A. K., Ali, A. H., & Nasir, M. (2021). Anderson & Krahthwohl Cognitive Applications in Teaching and Learning Pantun in Elementary Schools. *Journal of Humanities and Social Sciences (JHASS)*, 3(3), 110-118.
- Naseer, H., Muhammad, Y., & Jamil, M. (2022). Critical thinking skills in Pakistan studies textbook: Qualitative content analysis. *Pakistan Journal of Social Research*, 4(3), 744-755.
- Polat, Ö., & Aydın, E. (2020). The effect of mind mapping on young children's critical thinking skills. *Thinking Skills and Creativity*, 38, 100743.
- Ridzal, D. A., & Haswan, H. (2023). Analysis of the correlation between science literacy and critical thinking of grade eight students in the circulatory system. *Jurnal Pijar Mipa*, 18(1), 1-5.
- Sari, D. M. M., & Prasetyo, Y. (2021). Project-based-learning on critical reading course to enhance critical thinking skills. *Studies in English Language and Education*, 8(2), 442-456.
- Shahzadi, M. J. T. B. U. (2024). Critical thinking skills development among secondary school students: An analysis of Chemistry textbook grade X (2020). *Research Journal for Societal Issues*, 6(2), 1-11.
- Shirkhani, S., & Fahim, M. (2011). Enhancing critical thinking in foreign language learners. *Procedia-Social and Behavioral Sciences*, 29, 111-115.
- Silalahi, D. E., Herman, H., Sihombing, P. S. R., Damanik, A. S., & Purba, L. (2022). An Analysis of students' achievement in reading comprehension through higher order thinking skills (HOTS). *Al-Ishlah: Jurnal Pendidikan*, 14(2), 1853-1868.
- Silver, C., & Woolf, N. H. (2018). From guided-instruction to facilitation of learning: the development of Five-level QDA as a CAQDAS pedagogy that explicates the practices of expert users. In *The Teaching and Learning of Social Research Methods* (pp. 83-100). Routledge.

- Warsah, I., Morganna, R., Uyun, M., Afandi, M., & Hamengkubuwono, H. (2021). The impact of collaborative learning on learners' critical thinking skills. *International Journal of Instruction*, 14(2), 443-460.
- Zamir, S., Yang, Z., Sarwar, U., Maqbool, S., Fazal, K., Ihsan, H., & Arif, A. (2021). Teaching methodologies used for learning critical thinking in higher education: Pakistani teachers' perceptions. *Int. Trans. J. Eng. Manag. Appl. Sci. Technol*, 12, 1-10.