

Exploring the Role of EFL Teachers as a Motivating Factor Towards Developing Students' Critical Thinking Within the Classroom Environment

Samira EL-Asri

Faculty of Letters and Human Sciences, Dhar Al Mahraz, Sidi Mohammed Ben Abdelah University, Fez, Morocco

E-mail address: elasrisamiraa@gmail.com

Abstract— *A teacher's have a great influence on students' overall learning experience and development of several transversal competencies, including critical thinking. The purpose of the current study was to explore this role in developing students' critical thinking through investigating the extent to which a teacher can influence this development, the teacher's characteristics that contribute to this development, and the impact of those characteristics in fostering this ability among students. The significance of this study lies in its contribution to the growing body of literature on the influence of classroom EFL environment led by the teacher in developing critical thinking. Hence, applying mixed-methods practical action research design, a class of 14 students was recruited to participate in a four-stage action research cycle for one school year. Then, they were asked to complete an online survey, and six of them were randomly selected to take part in in-depth semi-structured interviews. The findings revealed that students were largely and positively influenced by the teacher who from the students' point of view possessed certain personality-related teacher qualities (e.g., motivation and communication) and exhibited certain teaching performance-related features (e.g., content knowledge and instructional methods). Moreover, this influence had a good impact on students' learning experience in general and critical thinking learning experience in particular.'*

Keywords— *Critical thinking; classroom environment; EFL teachers; transversal competences; mixed-methods action research.*

I. INTRODUCTION

A teacher's impact on students plays a major role in influencing students' learning and growth in the classroom and beyond. This role can be manifested in the way teachers work on creating a supportive motivating classroom environment that aims at including students in the process of learning and guiding them to develop their abilities and skills. In this regard, Smith (2002) argues that in a classroom which is "full of lively activities, interested and positive oriented children who achieve high standards. There will be low stress and little tension." Such a learning environment can also increase students' tendency to think critically especially if the teacher has a 'correct understanding of appropriate teaching methods' (Karami et al., 2012, p. 3267).

Students' critical thinking in the classroom as Mathews and Lowe (2011) have advanced earlier is influenced by the relationship between the teacher and students, the nature of the content taught in class, the interaction among students, and the tasks assigned to students. The previously mentioned factors clearly position the teacher in the heart of an effective

classroom environment. In this regard, Cheng and Wan (2017) point out that "teachers are expected to establish a classroom learning environment to encourage different views and even conflicting opinions among students" to foster students' critical thinking use (p. 153) because they have "the ability to offer students the conditions for a critical, provocative and impartial way of thinking belongs directly to teachers" (Mihail, 2022, p. 508).

Research, however, on the influence of classroom environment in developing students' critical thinking prowess is scarce (Cheng and Wan, 2017, p. 153) as well as the role of teachers as a motivating factor in this environment, especially taking into consideration that the quality of education can also be influenced by the coordination of the classroom environment (Wali et al., 2019, p. 49). The current study aims to investigate and highlight this role adding, therefore, to the literature on the effectiveness of classroom environment embodied by the teacher in the development of students' soft skills and transversal competencies, namely, critical thinking.

II. LITERATURE REVIEW

A. Classroom Environment

Classroom environment in the 21st century has been set to foster self-direction and to enable the learner to become "adept at learning from each other and at helping each other learn in problem-solving groups" (Mezirow, 1997, p. 11). In order to do so, Martin (2002) puts forward that the classroom should be viewed as a system and should be dealt with accordingly (p. 139). He further adds that "the learning environment can be a powerful teaching instrument at the disposal of the teacher" (p. 140). In this respect, Wali et al., (2019) argue that "a well-designed classroom will not only help to achieve the expected learning outcomes of education but also ensures cordial student-teacher relationship" (p. 49). According to Taylor et al. (1997), there are five dimensions of the classroom learning environment which are personal relevance, uncertainty, critical voice, shared control, and student negotiation (as cited in Cheng & Wan, 2017) which are all dimensions that foster critical thinking among students.

B. Critical Thinking in the Context of Classroom Environment

Critical thinking is not only a required skill nowadays, but it is also "essential feature for achieving progress and success in the 21st century" (Mihail, 2022, p. 502). In the context of classroom environment, critical thinking does not only enable

students to become independent reasonable thinkers, but it also enhances their language skills as well as their presentation skills (Muhammadiyah et al., 2020, p. 63). Hence, Critical thinking can be viewed both as an educational goal and a tool that sharpen students' skills and dispositions (Mihail, 2022, p. 502). In this regard, Stapleton (2011) argues that in order to fulfil set pedagogical goals, the conception of critical thinking must contain its dual dimensionality which includes both skills and dispositions.

However, Stapleton have further advanced that "the use of the term is widespread, and its meaning is seldom questioned when packaged as one of a set of goals within an educational system" (Stapleton, 2011, p. 16) which shows that critical thinking in the classroom environment is usually blended in within the subject matter. According to Mihail (2022), "critical thinking transforms the process of acquiring knowledge, from an inert process to a mental exercise, which results in a better improvement of the content of knowledge and a deeper understanding of this content" (p. 500). There are many strategies that teachers can make use of to develop their students' critical thinking such as engaging them in controversial discussions and adopting appropriate questioning that triggers their thinking (Zhang, 2022, p. 1480).

C. The Role of the EFL Teacher in Implementing Critical Thinking in the Classroom Environment

According to Martin (2002), "the teacher, as much as children, has to accommodate and adapt to the environment but the teacher's role requires that he/she manipulates the environment for others" (p. 140). The teacher is also required to train his cognitive skills and master them in so as to teach them to students as "he must "infiltrate" critical thinking skills in all aspects of preparation of courses and learn to apply, together with students, models of effective thinking strategies" (Mihail, 2022, p. 508). In this respect, according to Karami et al (2012), the teacher is required to be knowledgeable about the methods and factors that contribute positively to promoting students' critical thinking.

However, EFL teachers have more responsibility though as helping students foster their critical thinking will in turn help them improve their communicative skills (Idris et al., 2021, p. 279). Hence, EFL teachers must adopt the view that critical thinking and the English as the subject matter are complementary rather than exclusive (Uribe-Enciso, 2017, p. 87) and that "developing critical thinking is essential in language learning" (Li, 2023, p. 18). Alongside these conditions, the teacher has to also create learning conditions within 'an architectural facility' in which involvement is reciprocated (Martin, 2002) as well as the physical environment in which the classroom setup is properly arranged (Loughlin & Suina, 1982 as cited in Li, 2023). This physical classroom setting has been significantly known for influencing academic achievement of the students because it is adequate and sufficient it results in an "instructional process more effective and establishes an optimum atmosphere for both learners and the teachers" (Wali et al., 2019, p. 49).

III. METHOD

A. Research Questions

The current study aims to investigate the role of teachers as a motivating factor in the development of critical thinking within the classroom environment through investigating the extent to which a teacher can influence this development, and the teacher's characteristics that contribute to this development. The study also aims to investigate the impact of those characteristics on developing students' critical thinking. To achieve these objectives, the study focuses on the following questions:

- To what extent does a teacher influence students' critical thinking development?
- What are the teacher's characteristics that contribute to the development of students' critical thinking?
- What is the impact of those teacher's characteristics on students' critical thinking development?

Hence, in this study, a hypothesis is put forward stipulating that the positive influence of teacher-related and teaching performance-related characteristics leads to positive impact on students' critical thinking development.

B. Participants

The participants in this study were 14 public high school physics sciences stream students belonging to the same class. They were in their final year of high school. The classroom size and the number of participants were ideal for the purposes of the study as it is mixed-method action research which is a type of research that does not require a large sample population. The participants were 8 female students and six male students. They ranged in age from 16-18 (71.4%) to 18-20 (28.6%). More than half of them had been students in the same teacher's class for two consecutive years (64.3%), 28.6% of them for one year, and 7.1% of them for more than one year.

C. Research Approach

The current study is a part of a mixed-method action research design that aimed to implement and investigate effective critical thinking based instructional strategies that can be used by teachers to promote critical thinking in the EFL classroom. Choosing this type of design is most suitable for the purposes laid out for this study and the selected sample population. This type of research is also known for integrating quantitative and qualitative methods with the aim of investigating an issue from different angles in order to provide comprehensive answers for the guiding research questions (Johnson & Onwuegbuzie, 2004 as cited in Ivankova & Wingo, 2018).

Within this research design, the teacher played a central role in orchestrating those strategies, because as a practitioner who is personally engaged and familiar with their context, the teacher is able to "carry out their investigations systematically, reflectively, and critically using strategies that are appropriate for their practice" in a subjective and direct manner (Efron & Ravid, 2013). More importantly, Oranga and Gisore (2023) highlight a major importance of this type of research design which serves a great educational purpose that involves sharing findings and reflections of the teacher and students who are the

main audience and recipient with secondary audiences inside and outside the school.

D. Data Collection Procedures

The first data collection used in this study is practical action research which included four moments or stages cycle. This cycle as displayed in Figure 1 was developed based on Kemmis and McTaggart (1988) model to investigate the study’s objectives.

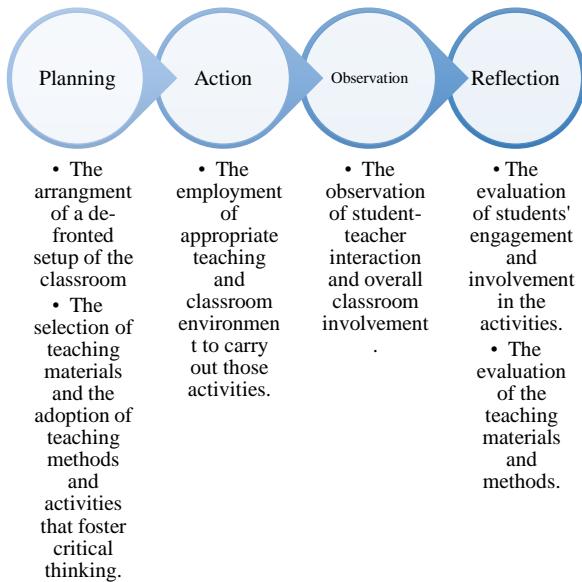


Fig. 1. The Four Stages of the Practical Action Research Cycle

Following the implementation of the practical action research cycle, an online questionnaire was sent to the 14 students to complete. The questionnaire investigated different aspects of the study and included a part that targeted the influence of a teacher on the development of students’ critical thinking, and the characteristics that helped in this development from the students’ point of view. Then, six students were randomly selected to take part in more detailed semi-structured interviews in which they were asked different questions that aimed to elicit insights and reflections on their overall experience in the classroom in general and their development of critical thinking in particular as well as the impact of teacher’s personality and performance on this development.

E. Data Analysis

Concerning data analysis, data from the action research cycle was recorded manually in a reflection logbook that kept track of the all the four stages (planning, implementation, observation and reflection) separately throughout the duration of the cycle. As to the quantitative data gathered from the online survey, it was computed and analyzed using the Statistics Package for the Social Science (SPSS) version 27.0 and Microsoft Excel. Finally, data from the semi-structured interviews was transcribed and themed according to the guiding questions.

IV. RESULTS AND DISCUSSION

A. Findings from the Action Research

The action research cycle as shown previously in Figure One begins with establishing elements that increase the effectiveness of the classroom and learning environment during the planning and action stages including selecting appropriate teaching materials and methods and adopting and adapting activities that foster critical thinking. The third and fourth stages were reserved for observing the overall classroom environment and evaluating the teaching materials and methods as well as students' engagement and involvement in the activities.

During those final stages, students’ involvement in the different activities aimed at promoting their critical thinking (e.g. classroom discussions, debates, oral presentations, etc.) and interactions were observed. Moreover, the activities and teaching methods were evaluated to maximize students’ involvement and interaction, improve their learning experience, and enhance their critical thinking. The teacher noticed a significant interest and engagement on the part of students when they were given the choice to select the topics to be discussed in class, encouraged to ask questions, and given enough time to reflect and speak. The students’ motivation also often mirrored that of the teacher, which resulted in more participation and engagement. Consequently, more opportunities to practice and improve students’ critical thinking were provided by this kind of learning environment designed by the teacher.

B. Findings from the Questionnaire and Interviews

To answer the first guiding question guiding this research paper which aims to identify the influence of a teacher on the development of students’ critical thinking. Students taking part in the study were asked to what extent they believed that the teacher influenced their critical thinking development. Figure Two shows that a great majority of 85.7% believed that the teacher had a large influence on the development of their critical thinking followed by 14.3% who believed that it had some influence.

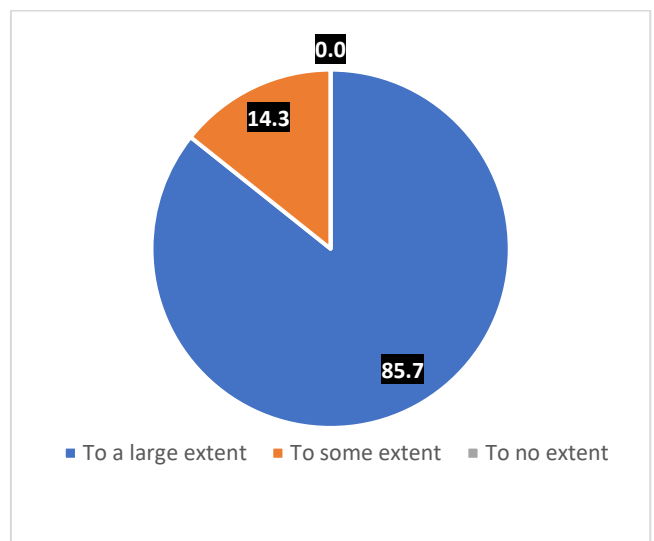


Fig. 2. The extent to which students believe that a teacher influences their critical thinking development

To answer the second guiding question of this study, students were given a set of teacher’s characteristics in the form of affirmative statements that targeted different aspects of the teacher’s personality and the teacher’s performance and were asked to report on how those characteristics contributed to developing their critical thinking. The results, as shown in Figure Three, indicate that students had positive perceptions of all the seven characteristics listed. For instance, all students strongly agreed (100%) that the teacher was very motivating and enthusiastic, had good communication skills, and had a good mastery of the subject matter. As to other characteristics, especially those related to the teaching performance, a great majority of 92.9% strongly agreed that the teacher’s methods were engaging and the activities used were also engaging and thought-provoking whereas 85.7% of students strongly agreed that the teacher had a good topical knowledge about the topics discussed in class. Finally, 78.6% strongly agreed that the overall teaching environment in the class helped in better learning, 14.3% agreed, and 7.1% strongly disagreed.

As for the testimonies made during the interviews concerning the influence of teacher and the characteristics that helped most in developing students’ critical thinking, the interviewed students highlighted different features. For instance, Interviewee One, spoke about the type of activities and methods of teaching used in the classroom which were simple yet engaging and motivating; she stated, “Learning in the English class was very different from previous years, through the simplified way of explaining the lessons, and the activities that the teacher was doing with us, which helped us increase our love of the subject and the desire to learn more.” When asked to further elaborate on the activities used to promote critical thinking, she added, “Activities such as discussion between two or more parties, giving arguments, and defending your idea which were useful in terms of diversity of ideas, discussion, and finding arguments.” Similarly, Interviewee Five spoke about how the learning experience was different due to the use of engaging activities and the integration of ICT as well; he stated, “The learning experience in the English class has been different from previous years. The use of interactive activities and technology has increased, making the class more engaging.”

As for Interviewee Three, she believed that the teacher had a great role in promoting her critical thinking and highlighted the teacher’s qualities that she thought were more helpful to her when she stated, “The teacher is the most important factor that helped in enhancing this ability because she had a good mastery of the subject matter and a good energy.” Interviewee Four also pointed out to the characteristics he thought were more distinguishing of the teacher such as the communication skill as well as the healthy classroom environment; he stated, “What I appreciated is the wonderful treatment by the teacher, she also gave us enough time to express our opinions and ask questions and she answered all our questions, and there was also equality between everyone in the class which gave us an opportunity to express what is inside us and to think in more logical ways.” He also added how his critical thinking skills were improved thanks to the activities used in class; he said, “The activities have enhanced my thinking skills by encouraging critical analysis of

texts, fostering creativity in writing, and promoting effective communication.”

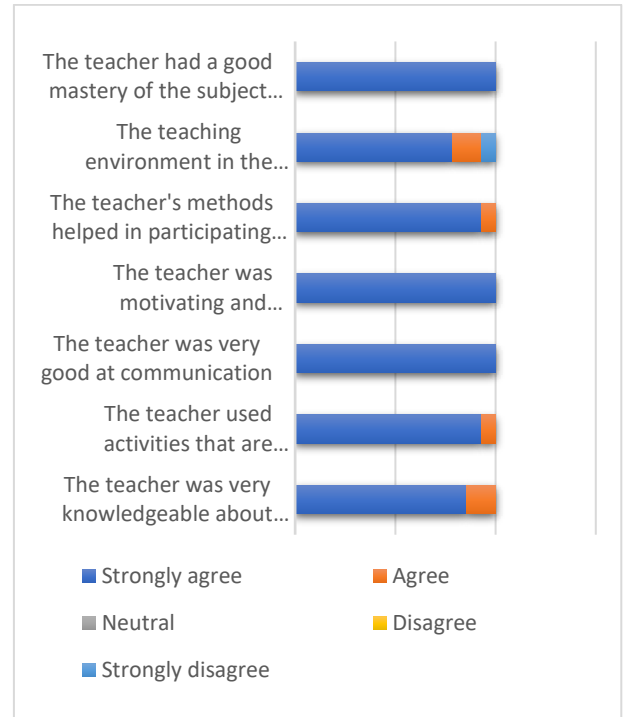


Fig. 3. The teacher’s characteristics that contributed to the development of students’ critical thinking

As for the third guiding question, qualitative data from the interviews further explored this influence and those teacher’s distinguishing characteristics in more detail to identify the impact they had on students’ critical thinking development. The testimonies of the interviewed students reported a significant positive impact when asked about how different and effective their learning experience had been; for instance, Interviewee Three, shared at length how her learning experience of English in general and of critical thinking in particular has been more beneficial and impactful, she stated, “I think that my experience of learning English has developed ever since last year, I learned a lot of new things and words, also the way our teacher teaches us is very nice and effective,” she added “the learning experience in the English class has been useful to develop my thinking skills because learning new things made my brain work hard.” Likewise, Interviewee Two, expressed how her learning experience was impactful as well, she said, “The learning experience in the English language classroom had a significant impact on the development of my thinking skills, thanks to the meaningful and logical discussions and dialogues that I had in the classroom with my classmates and teacher.” Similarly, Interviewee Five reported, “My experience in the English class has enhanced my critical thinking ability by engage me with different viewpoints and articulate my thoughts effectively through engaging discussions and receiving feedback.”

In summary, the previously presented quantitative and qualitative findings revealed that a teacher’s influence on the development of critical thinking is positively perceived by

students. Such a positive influence is attainable when certain teacher-related characteristics are exhibited and manifested by the teacher who becomes an active factor in creating and establishing a supportive classroom environment that fosters critical thinking. Those characteristics either relate to a teacher's personality (e.g., motivation and communication) or to teaching performance (e.g., content knowledge and instructional methods) highly contributed and to close degrees in involving students in the activities designated to integrate critical thinking (See EL-Asri, S., & El Karfa, 2024 for a full investigation of these activities) which was further supported by qualitative data from the interviews that also revealed how impactful the role of a teacher in developing this ability among students. Such findings, therefore, confirm the previously stipulated hypothesis that indeed the positive influence of teacher-related and teaching performance-related characteristics lead to positive impact on students' critical thinking development. The findings also align with the body of previous studies that shed light on the role of teachers in improving a student's learning experience and performance through improving the teaching environment (e.g., Martin, 2002; Angeli & Valanides, 2009; Suleman & Hussain, 2014; Larasati et al., 2019). Furthermore, the findings add to the effectiveness of practical action research in enhancing students' learning and teachers' practice (e.g., Seider & Lemma, 2004; Manfra, 2019).

V. LIMITATIONS AND RECOMMENDATIONS

Notwithstanding the generalizability limitation that is often associated with action research, the findings of the current study make a noteworthy contribution to the body of literature on the development of critical thinking in the EFL classroom. This limitation was also mitigated by adopting a mixed-method approach to consolidate the findings. However, future research direction should reconfirm these findings by conducting larger-scale studies. Also, the study participants might have been subject to the Hawthorne effect after feeling that they were under observation. An effect which has been mostly minimized by relying on the good rapport between the teacher and students as well as designing activities and choosing topics that they can relate to. Furthermore, the focus of the current study was on investigating the role of teachers-related characteristics in developing students' critical thinking from the students' point of view; hence, future research may investigate teachers' views as well.

VI. CONCLUSION

The present study was an attempt to explore the significant role of teachers as a motivating factor in the development of students critical thinking within the classroom EFL environment. In other words, the study aimed to study the influence of teachers in developing this ability and the teacher characteristics that contributed to this development. Consequently, the main conclusion of this study was that students were largely and positively influenced by the teacher who possessed certain personality-related teacher qualities (e.g., motivation and communication) and exhibited certain teaching performance-related features (e.g., content knowledge

and instructional methods). Moreover, this influence had a good impact on students' learning experience in general and critical thinking learning experience in particular. Thus, the findings of this study contribute to the scarce literature on the influence of classroom environment with the teacher as a primary motivating factor in developing students' critical thinking as most of the previous studies on this front were conducted with the teacher as one of many factors (e.g., Utami et., 2021).

REFERENCES

- [1]. C. Angeli and N. Valanides. "Instructional effects on critical thinking: Performance on ill-defined issues," *Learning and Instruction*, vol. 19, issue 4, pp. 322–334, 2009. doi:10.1016/j.learninstruc.2008.06.010
- [2]. M. H. Cheng and Z. H. Wan. "Exploring the effects of classroom learning environment on Critical Thinking Skills and Disposition: A Study of Hong Kong 12th graders in liberal studies," *Thinking Skills and Creativity*, vol. 24, pp. 152–163. 2017 <https://doi.org/10.1016/j.tsc.2017.03.001>
- [3]. S. EL-Asri and A. El Karfa. "A Mixed-Method Action Research on Promoting Critical Thinking in the Classroom: Implications for EFL Teachers," *Arab World English Journal*, vol. 15, issue 2, pp. 288–304. 2024. Doi: <https://dx.doi.org/10.24093/awej/vol15no2.18>
- [4]. W. Idris, S. Ahmad, and M. Balango. "Developing students' critical thinking in English speaking skill by using problem-based learning method. *Normalita*, vol. 9, issue 2, 279–291. 2021
- [5]. Q. Irah Larasati, A. Cahyaningtyas, A. Mangzila, A. Agus Firawati, S. Munirotul Yuanita, and I. Lesmana. "The role and function of teachers in improving effective learning in classes," in *Proceedings of the 4th International Conference on Education and Management (COEMA 2019)*, vol. 381. 2019. <https://doi.org/10.2991/coema-19.2019.4>
- [6]. N. Ivankova and N. Wingo. "Applying Mixed Methods in Action Research: Methodological Potentials and Advantages.," *American Behavioral Scientist*, vol. 62, issue 7, pp. 978–997. 2018. doi:10.1177/0002764218772673
- [7]. M. Karami, H. Pakmehr, and A. Aghili. "Another view to importance of teaching methods in curriculum: Collaborative Learning and Students' Critical Thinking Disposition," *Procedia - Social and Behavioral Sciences*, vol. 46, pp. 3266–3270. 2012. <https://doi.org/10.1016/j.sbspro.2012.06.048>
- [8]. S. Kemmis and R. McTaggart. (1988). *The Action Research Reader*. Third edition. Deakin University Press, Victoria. 1988
- [9]. L. Li. "Critical thinking from the ground up: Teachers' conceptions and practice in EFL classrooms," *Teachers and Teaching*, pp. 1–23. 2023 <https://doi.org/10.1080/13540602.2023.2191182>
- [10]. M. M. Manfra. "Action research and systematic, intentional change in teaching practice," *Review of Research in Education*, vol. 43, issue 1, pp. 163–196. 2019. <https://doi.org/10.3102/0091732x18821132>
- [11]. S. H. Martin. "The classroom environment and its effects on the practice of teachers," *Journal of Environmental Psychology*, vol. 22, issue 1–2, pp. 139–156. 2002. <https://doi.org/10.1006/jevp.2001.0239>
- [12]. S. R. Mathews and K. Lowe. "Classroom environments that foster a disposition for critical thinking," *Learning Environments Research*, vol. 14, issue 1, pp. 59–73. 2011. <https://doi.org/10.1007/s10984-011-9082-2>
- [13]. J. Mezirow. "Transformative Learning: Theory to Practice," *New Directions for Adult and Continuing Education*, vol. 74, pp. 5–12. 1997. essay, Jossey-Bass Publishers.
- [14]. R. Mihail. "The Relevance of Critical Thinking from the Perspective of Professional Training," *Postmodern Openings*, vol. 13, issue 2, pp. 499–513. 2022. <https://doi.org/10.18662/po/13.2/468>
- [15]. H. Muhammadiyeva, D. Mahkamova, Sh. Valiyeva, and I. Tojiboyev, I. "The role of critical thinking in developing speaking skills," *International Journal on Integrated Education*, vol 3, issue 1, pp. 62–64. 2020. <https://doi.org/10.31149/ijie.v3i1.273>
- [16]. J. Oranga and B. Gisore, B. "Action research in education," *Open Access Library Journal*, vol. 10, pp. 1–10. 2023. Doi: 10.4236/oalib.1110306
- [17]. S. N. Seider and P. Lemma. "Perceived effects of action research on teachers' professional efficacy, inquiry mindsets and the support they received while conducting projects to intervene into student learning," *Educational Action Research*, vol. 12, issue 2, pp. 219–238. 2004. <https://doi.org/10.1080/09650790400200246>

- [18]. R. Smith. *Effective primary school a guide for school leaders and teachers*. London: Kogan Page Limited. 2002.
- [19]. P. Stapleton. "A survey of attitudes towards critical thinking among Hong Kong secondary school teachers: Implications for policy change," *Thinking Skills and Creativity*, vol. 6, issue 1, pp. 14–23. 2011. doi:10.1016/j.tsc.2010.11.002
- [20]. Q. Suleman, D. Danial, and I. I. Hussain. "Effects of classroom physical environment on the academic achievement scores of secondary school students in Kohat Division, Pakistan," *International Journal of Learning and Development*, vol. 4, issue 1, pp. 71–82. 2014. <https://doi.org/10.5296/ijld.v4i1.5174>
- [21]. O. Uribe-Enciso, D. Uribe-Enciso, and M. Vargas-Daza. "Critical Thinking and its Importance in Education: Some Reflections," *Rastros*, vol. 19, issue 34, pp. 78–88. 2017 <https://doi.org/10.16925/ra.v19i34.2144>
- [22]. R. T. Utami, M. Saleh, Warsono, and R. Hartono. "Factors affecting students' critical thinking development in EFL classroom," *Advances in Social Science, Education and Humanities Research*, vol. 535, pp. 212–223. 2021 <https://doi.org/10.2991/assehr.k.210304.046>
- [23]. Y. Wali, F. A. Abulfathi, and M. A. Mustapha. "Impact of classroom environment on students' performance in English language," *Journal of Education and Practice*, vol. 10, issue 17, pp. 49–52. 2019. <https://doi.org/10.7176/jep/10-17-07>
- [24]. Y. M. Zhang. "The Research on Critical Thinking Teaching Strategies in College English Classroom," *Creative Education*, vol. 13, pp. 1469-1485. 2022. <https://doi.org/10.4236/ce.2022.134090>