P-ISSN 2656-9094
E-ISSN 2721-9011

ASSESSING THE MANIFESTATION OF CRITICAL THINKING IN ACADEMIC SPEAKING AMONG EFL UNIVERSITY STUDENTS: A STUDY OF CURRENT PRACTICES IN THE AI ERA

Samira El-Asri
Chouaib Doukkali University, Morocco
Email: elasrisamiraa@gmail.com

First Received: February 2026 Final Proof Received: March 2026

ABSTRACT

In an era marked by an unprecedent advancement of digital technologies, cultivating critical thinking as a core soft skill among students remain a persistent challenge, and does its assessment. In this regard, this study explores the current and most common practices used by university professors to assess EFL students' manifestation of critical thinking in speaking in order to evaluate and adjust them according to the present context. Using a concurrent mixed-methods research design, the study recruited a sample of 364 EFL university students belonging to the same Department of English to collect quantitative data. Then, 18 of them were invited to take part in semi-structured interviews. The findings of the study revealed that the predominant type of examination students were generally accustomed to is the formal written exam. The findings also confirmed that most of the exams students previously had, both oral and written, put more focus on retention and memorization on the expense of inquisitiveness and examination of students' higher order thinking cognitive abilities. Evidence from this study demonstrates the need for adopting and integrating alternative practices that target the assessment of critical thinking in speaking within EFL contexts and higher education as a whole.

Keywords: *Academic speaking, critical thinking, EFL higher education, EFL university students, soft skills.*

INTRODUCTION

The cultivation of critical thinking remains a fundamental aspect of personal, academic, and professional development in an ever-changing global and digital landscape. This does not only hold true because of the significant role it has as a crucial life skill to succeed in the 21st century, but also as an indispensable cognitive ability to navigate an era marked by the accelerated advancement of AI technologies. Academically speaking, critical thinking has been embedded across different disciplines and levels, especially at the level of higher education (Zeng & Ravindran, 2025). However, despite the long-standing interest and research into critical thinking, it is still considered by most educators and researchers as a convoluted skill in terms of its definition and teachability (Liu et al., 2014; Oroujlou & Sadeghi, 2022; Payan-Carreira et al., 2022). On that account, its assessment continues to be a challenge, as well (Bensley & Murtagh, 2011; Liu et al., 2014; Oroujlou & Sadeghi, 2022; Zeng & Ravindran, 2025).

That being said, given the ongoing advancement of AI which is changing higher education substantially at a rapid pace (Salido et al., 2025), it has become imperative to evaluate and optimize current practices related to the implementation, teaching, and assessment of critical

P-ISSN 2656-9094
E-ISSN 2721-9011

thinking. In this regard, Hursen (2023) argues that educators are required "to be prepared for the responsibilities of the education of the new generation in terms of change, fluency, and flexibility." In other words, as Saildo et al. (2025) put it "there is a need for adaptable and context-sensitive educational frameworks" that are compatible with the demands of today's digital landscape. In EFL education, such a context is even more challenging since the focus is on helping learners become proficient English language speakers while promoting their critical thinking ability (Vdovina & Gaibisso 2013; Liu, 2018). This juncture imposes further responsibilities in terms of the implementation of effective critical thinking-based instruction and assessment practices.

In this context, the purpose of this paper is to explore current practices related to the assessment of critical thinking in speaking so as to have deeper insights into the prevailing context in EFL education based on actual students' experiences, especially since the data obtained from assessment is known to greatly inform, reevaluate and adjust teaching practices to cater for students' needs. Through doing so, the study seeks to extend on the scarce existing research and literature on the assessment of critical thinking in EFL higher education both nationally and internationally. Thus, the current paper aims to investigate the practices that target the assessment of the manifestation of critical thinking in academic speaking among EFL higher education students, i.e., What are the assessment practices used to assess the manifestation of critical thinking in speaking. In addition, it also contributes to the practical educational discussion on how to effectively implement and assess critical thinking in speaking in the present AI landscape.

LITERATURE REVIEW

Definition of Critical Thinking

Defining critical thinking is a crucial 'task' because "as one defines it, so (presumably) will one teach and test for it" (Johnson & Hamby, 2015). Similarly, Mohammadi et al. (2022) put forward that defining the construct of critical thinking is a crucial step for its evaluation. From an educational perspective, critical thinking is often conceptualized as "an individual's logical and reasoning ability which can be developed with undergraduates and graduates in academic institutions" (Wang, 2017). Facione (2020) also believes that critical thinking is the ability to use logical thinking as a way to learn new concepts, make decisions, and solve problems. Piaw (2004) also points out that critical thinking pedagogy in education refers to Bloom's theory since it develops students' lower levels of thinking skills before introducing them to higher order thinking skills. Bloom's theory has underpinned his most oft-cited taxonomy which established one of the earliest frameworks that related educational objectives to critical thinking (Beyer, 1987). His taxonomy includes six skills in total, knowledge, comprehension, application, analysis, synthesis, and evaluation. Based on the literature, those sub-skills make up the Skill of critical thinking are essential as they help students better integrate in today's job market (Payan-Carreira et al., 2022). More importantly, there is a wide agreement that "reflecting, incorporating, fostering and evaluating critical thinking can strengthen students' fluency meaningfully in order to reach higher levels of proficiency in L1 and L2" (Marin & Pava, 2017, p. 82). This largely explains the increasing demand on possessing this skill (Saleh, 2019; Hursen, 2023; Lawasi et al., 2024) and sustaining its development in an educational context dominated by the increased use of AI tools and applications (Jose et al., 2024; Salido et al., 2025).

P-ISSN 2656-9094
E-ISSN 2721-9011

Assessment of Critical Thinking

For assessment in general, it traditionally includes formative, summative, and standardized tests (Meylani, 2024). Formative assessment is designed and carried out continuously to provide feedback for instructional improvements, whereas summative assessment is designed and carried out at the end of the course to provide data on the overall outcome (AL-Selwi, 2021; Meylani, 2024). As for standardized tests, they are used to compare students against uniform standards (Meylani, 2024). Most educators opt for those tests because they are highly beneficial in assessing students' overall achievement in a certain course or program (Al-Selwi, 2021), especially when they have to cover a large body of content within a limited period (Snyder & Snyder, 2008). However, though the data obtained from those tests provide quantitative results that help evaluate and enhance teaching and learning methods, they are often criticized for their limited capacity of measuring students' understanding and competencies given that they maintain the traditional practice teaching only for the sake of the exam (Meylani, 2024).

This poses several challenges at the level of assessing critical thinking among students and makes many educators reluctant to assess it (Bensley & Murtagh, 2011). Disagreements at the level of critical thinking conceptualization have also proposed a serious challenge to its assessment (Halonen, 1995 as cited in Bensley & Murtagh, 2011). This has been pointed to early on by Ennis (1993) who advised education experts to focus more on the way critical thinking is defined so as to have a clear idea about what is to be assessed. According to Bensley and Murtagh (2011) two main reasons behind this are the multidimensional nature of critical thinking and limitedness of assessment instruments. Yet, based on the literature, there are some common types of assessment instruments that can be used to assess critical thinking skills as they can be largely identified and assessed through the four language skills (speaking, writing, listening and reading) unlike critical thinking dispositions (Ennis, 1996). Alias et al. (2022) highlights four main instruments which are paper tests, rubrics, observation sheets, and questionnaires. They further advance that the best instrument among those four instruments are rubrics, because of their flexibility in measuring different classroom activities such as group work, role-play, and student process skills. Also, Ennis (1993) have emphasized on the need for having and setting clear purposes to carry out critical thinking-based assessment. Those purposes should align with the course objectives (Bensley et al., 2010; Tiruneh et al., 2014). On the grounds of this, educators with the support of rubrics are advised to identify both an elaborated definition of critical thinking along with a list of possible purposes in order to design an assessment that is compatible with the course requirements and students' needs.

The Assessment of Critical Thinking in Speaking

In general terms, speaking is a way of orally exchanging and communicating ideas and thoughts (Leong & Ahmadi, 2017). Meanwhile, academically speaking, Luoma (2004) distinguishes between two types of speech: planned speech and unplanned speech. The latter is more common in informal situations as it is instantaneous and reactive in nature and characterized by 'oral-like' language and the use of short phrases and turns between speakers. As for the former type, it is more formal and more common in academic settings, because it resembles 'written-like' language as speakers take time to reflect and share their ideas and points of views. To assess critical thinking in speaking, there are various rubrics. For instance, Coster and Ledovski (2005) have advanced the use of three main rubric sections to classify critical thinking skills into either lower-order thinking skills or higher ones which are: students' contribution to the discussion, students' points of view about the issue, and assessment of the quality of those points of view. As to the desired outcomes, construct validity and construct reliability are two essential criteria that should be taken into consideration when designing

P-ISSN 2656-9094
E-ISSN 2721-9011

instruments that assess critical thinking in speaking; construct validity refers to "ensuring that the right thing is being assessed" while construct reliability refers to "making sure that the test gives consistent and dependable results" (Luoma, 2004). Additionally, assessment should either cover subject-specific critical thinking-based tests or general-content critical thinking-based tests. The former assesses critical thinking "within one standard subject matter area," while the latter makes use of "content from a variety of areas with which test takers are presumed to be already familiar" (Ennis, 1993).

Previous Research of the Assessment of Critical Thinking in Speaking in Moroccan Higher Education

In regard to research on critical thinking in general, Ouahani and Hiba's (2023) systematic review on critical thinking in Moroccan EFL higher education revealed that this area of research is under-researched, and a recent endeavor in Moroccan academia. Previous research was found to largely focus on the development, manifestation and assessment of critical thinking in either writing or reading with special focus on analyzing, summarizing and argumentation skills (e.g., Bouanani, 2015; Belghiti et al., 2016; Hellalet, 2021; Beniche et al., 2021; Ouahani and Hiba, 2023). Many studies focused on the challenges that face university professors teaching critical thinking classes were students-related challenges (i.e., poor linguistic levels, affective factors), cultural norms, educational system, and class size-related constraints (Chouari & Nachit, 2016; Mrabti et al., 2023). Ouahani and Hiba (2023) also identified four weaknesses related to the practice of and research into critical thinking in Moroccan EFL higher education, namely the approaches used to teach or investigate critical thinking, the methods used to collect data, the areas and skills targeted, and the lack of training in critical instruction. This shows that there are many research gaps in the field of critical thinking pedagogy, including the investigation of the best practices of assessing critical thinking in speaking among EFL students. Hence, this study is an attempt to add to the paucity of research on the assessment of critical thinking and contribute to the overall practice and instruction of critical thinking.

METHOD

Research Design

The study employed a mixed-methods research design combining quantitative and qualitative approaches to ensure a more insightful understanding of the experiences of students related to the current assessment practices used to assess their critical thinking abilities, especially at the level of speaking. The design made use of questionnaires and semi-structured interviews. Using this type of research design is known to increase the validity and reliability of findings (Cohen et al., 2002).

Participants

The study involved a total of 364 of EFL students belonging to the department of English at the Faculty of Letters and Human Sciences of Sidi Mohamed Ben Abdelah University, Dhar Merhaz, Fez. The respondents were recruited using both purposive and convenience sampling. A great majority of them were third-year undergraduate students (66.2%) while 101 of them were postgraduate students (27.7%), and 22 (6%) were PhD students. 61.8% of them were females. 37.6% were males, and 0.5% were missing. Out of those respondents, 18 were of them took part in the interviews. Thirteen of them were females and five were males, and they also belonged to different educational levels. This sample encompassed a wide range of levels and experiences in terms of their exposure to different longitudinal assessments over the years.

P-ISSN 2656-9094
E-ISSN 2721-9011

Data Collection Procedures

For quantitative data, it was collected through questionnaires that were distributed both in-person and online. The items of the questionnaire that aimed to investigate the guiding question of this research paper was adopted and modified from previous literature on the assessment of critical thinking among students. Moreover, so as to improve internal validity, the questionnaire items were pilot tested with 30 students that were not included in the main study. As to qualitative data, it was collected using semi-structured interviews following Rabionet's (2011) six stages interview procedures model. This model begins by selecting the type of the interview most suitable for the study, followed by establishing ethical guidelines, crafting the interview protocol, conducting and documenting the interview, then fragmenting and coding the interview, and finally reporting the findings.

Data Analysis

For data analysis, quantitative data was computed and run using SPSS 27 and Microsoft Office Excel, and was analyzed and interpreted using descriptive statistics. Meanwhile, to analyze qualitative data, Nvivo 14 was utilized to carry out stages five and six of Robinet's (2011) and provide a more comprehensive deductive thematic analysis.

FINDINGS AND DISCUSSION

Findings

This section presents data related to the proposed guiding question. The table below illustrates respondents' reported frequencies of statements related to how students' critical thinking is assessed. Generally, the respondents tended to report average frequencies for four out of the five listed statements (M = 2.99, SD = 1.26). The first statement which aimed to identify the extent to which the respondents believed their critical thinking was diagnosed and assessed by professors, slightly higher than 15% reported that their critical thinking was always assessed by their professors, about 18% chose often, and over 27% chose sometimes. However, over 23% of them reported that they never were, and over 13% answered rarely. As to the whether they received feedback on their critical thinking use, only less than 12% reported that they always received this kind of feedback, about 26% answered often, over 25% answered sometimes whereas an equal percentage of about 17% reported that they rarely and never had.

Respondents were also asked to report on the type of examination they mostly had experience with to assess their critical thinking. For written exams, interestingly, it received the highest mean value among the other statements in this section (M = 4.17, SD = 1.20). Particularly, slightly higher than 52% reported that they were always examined in CT in written form, over 30% answered often, while only less than 9% answered sometimes, 3% answered rarely, and less than 2% chose never. In contrast, oral exams received the lowest mean value of only 2.18 (SD = 1.11) as more respondents were rarely (21.4%) or never (45.6%) assessed this way. Notably, while about 17% reported that their CT ability was sometimes examined orally, only fewer than 5% reported that they were examined this way, and almost 8% answered often. As to the respondents' awareness of the use of specific rubrics in the exams designed to assess CT while speaking, it also received a moderate mean value of 2.97 (SD = 1.21). Only slightly higher than 8% reported they were always aware of the use of such rubrics, over 25% chose often, while about 42% reported they sometimes were. Additionally, about 11% answered rarely and slightly higher than 9% chose the option never.

P-ISSN 2656-9094
E-ISSN 2721-9011

Table 1. Descriptive Statistics of the extent to which Respondents' Manifestation of Critical thinking is Assessed in Speaking

Attributes	Missing	Frequency*					Mean	SD
		1	2	3	4	5		
Diagnosis and assessment by professors of critical thinking in class	3.0%	23.1%	13.5%	27.5%	17.9%	15.1%	2.79	1.43
Receiving feedback on critical thinking use	3.6%	16.8%	16.8%	25.3%	25.8%	11.8%	2.88	1.37
Written exams to assess critical thinking	3.6%	1.9%	3.0%	8.8%	30.5%	52.2%	4.17	1.20
Oral exams to assess critical thinking	3.6%	21.4%	45.6%	16.8%	7.7%	4.9%	2.18	1.11
Awareness of the use of rubrics in exams to assess critical thinking while speaking	4.9%	9.1%	10.7%	42.6%	24.5%	8.2%	2.97	1.21
Overall	**3.47%**	**14.46%**	**17.92%**	**24.20%**	**21.28%**	**18.44%**	**2.99**	**1.26**

*Frequency: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always

In regard to qualitative data, participants were asked two questions related to critical thinking assessment. Both questions aimed to explore the interviewed students' previous experiences of assessment and examination that were oral and that targeted critical thinking. As can be seen in Table 2, based on their answers and personal experiences, different codes and themes were generated.

Table 2. Statistical Summary of Interviewed Students' Experiences with Critical Thinking Assessment in Speaking

Attributes	N. of Participants	N. of References
Oral tests challenged my mental and thinking abilities	12	14
Focus on written exams more than on oral exams	6	6
Tests focus on content memorization	3	6
Use of alternative testing techniques to test critical thinking	3	3
Critical thinking cannot be assessed during exams but rather in real life	1	1
Total	**18**	**30**

For the most recurrent theme, 12 out of the 18 interviewed students reported that oral tests had challenged their mental and thinking abilities. For instance, Interviewee 12, after confirming that he had many oral tests, he spoke about how they allowed him to put his critical thinking into good use; he stated, "Yes, I have taken several oral tests, and most of them were actually good. It was an opportunity for me to implement and make use of my critical thinking abilities to deal with various situations and experiences." Likewise, Interviewee 10, shared that she had oral tests that challenged her critical thinking ability which was eye-opening for her; she stated,

P-ISSN 2656-9094
E-ISSN 2721-9011

"I had oral tests during the past years, and they were somewhat good. The tests I had taken questioned my mental and thinking abilities because I realized that I am still ignorant of many of the necessary techniques and methods in this process." Interviewee 16 also shared her experience with oral testing; she revealed that she found to be more challenging because her focus was divided both on language fluency and accuracy. She believed that those oral tests were similar to written ones in terms of the skills assessed; she stated, "I had a couple of oral tests and honestly they were way more difficult than the written one because you have to be careful to your spoken English and at the same to the things you are saying," she continued saying that, "The same that applied to written exams also applied to the oral ones. The skills assessed were more critical than linguistic."

However, there were few interviewed students who had opposite experiences during oral tests. For instance, Interviewees 9 and 3 shared that oral tests did not challenge their thinking and did not put their CT abilities into good use; Interviewee 9, for instance, shared how even though the tests were compatible with her language proficiency level, they did not challenge her thinking abilities; she stated, "Yeah I have had many oral test, they were adequate to my language level but they did not question my mental abilities but rather my knowledge background." As to Interviewee 3, she recounted one of her most recent oral testing experiences, which according to her, was disappointing and did not challenge her thinking; she stated, "Yes, recently I have had an oral exam. In this exam, unfortunately, the interviewers did not question my mental and thinking abilities."

The unbalanced focus on written exams over oral exams was also another theme that emerged during the interviews. For instance, Interviewee 5 shared that he could not recall his oral tests experiences, spoke about how critical thinking could be tested in essays; he stated, "Yes, it can be tested like having students write an argumentative essay where they have to not only write but ARGUE … but honestly I do not remember as I only had few oral ones." Similarly, Interviewee 6 and 12 spoke about having essays as a way of testing his CT abilities; he shared, "I was asked to write a critical essay about a certain topic in which I had to reflect on a quotation providing solid arguments reinforced with concrete examples." As to Interviewee 12, who had a similar experience, gave an example of such topics that necessitated the use of critical thinking to argue his point; he stated, "I was asked to write a persuasive or argumentative essay (e.g, an essay arguing for or against the use of the internet by children); critical thinking here would come into play here in several ways such as analyzing the topic and providing evidence."

The view that tests focused on content memorization rather on inquisitiveness was also a theme that emerged during the interviews. For example, Interviewee 9 stated, "I don't think examination test the critical thinking ability because it tests the knowledge and the ability to decipher messages and not the way you think and analyze data." Interviewee 14 also believed the same as he felt that tests focused mainly on content memorization; he stated when asked about whether he had tests that put his critical thinking into use, "I don't think that at all, maybe some skills get tested but critical thinking as an ability NO. Most of the exams I've taken required mechanical retention of knowledge," he further shared his experiences with oral exams which he found that they also heavily focused on memorization he had as BA student, "I only had two oral tests while I was a BA student, both on literature. The teachers only asked us to reiterate what they taught us in class. So, no, there was no mental ability stimulated except MEMORY."

For the use of alternative testing instruments to test critical thinking, Interviewee 4 listed some of the techniques that professors used to assess her critical thinking which were: "Case Studies," "Essay writing," "Multiple choice situations," "Critical reading comprehension," "Group discussion," and "Debates". Correspondingly, Interviewee 14 spoke about how some

P-ISSN 2656-9094
E-ISSN 2721-9011

professors made use of other alternative testing techniques other than written exams to assess students' critical thinking and overall performance; he stated, "Still, there were some teachers who didn't base their assessment altogether on the written exam, they also considered class performance and discussions," she then added how the use of those alternative techniques were an exception in comparison to the usual techniques used by most professors; as she put it, "They also assessed how much the students were involved in the learning process which at times required questioning, argumentation and analysis. But these cases are exceptions."

Notably, there was the singular perspective of Interviewee 8 who argued that critical thinking cannot be assessed during exams but rather in real life; she stated, "Critical thinking is tested in context, not during exam settings. I mean, it is tested in real-life situations, and in times of quandary." When asked to further explain she responded, "I was put to the test throughout my whole life. I received critiques, I raised the why, I fixed things, and then I moved ahead. (Here is the test of adaptability, flexibility, and creativity)."

Discussion

The present research paper aimed to explore the practices used by university professors to assess EFL students' manifestation of critical thinking in speaking in the current educational context. The general finding of both quantitative and qualitative data was that a majority of the respondents reported that the main form of assessment was written, which showed that students had less opportunities to make use of their critical thinking. Moreover, most respondents reported that the exams they previously had put more focus on retention and memorization on the expense of inquisitiveness and examination of students' higher order thinking cognitive abilities. These findings align with other findings from previous literature such as Yang et al., (2012), Khandaghi and Pakmeh (2012), Belghiti et al. (2016), Nold (2017). Such issues related to critical thinking assessment were previously raised by Rouijel and Bouziane (2020) who argued that most professors put more emphasis on teaching for the test on the expense of developing students' CT skills and as a result they "end up teaching students what to think instead of teaching them how to think." In the same regard, Nickname and Royafar (2019) concluded after conducting a study among 200 undergraduate students that most teachers put emphasis and even encourage "the literal reproduction and reiteration of the information recorded from the textbook and classroom sessions", which lead their students to be "superficially content with the minimum degree of mastery required to obtain acceptable scores and reluctant to analyze, distinguish and critique phenomena." Based on these findings, it is clearly evidenced that the traditional assessment of critical thinking within EFL education is no longer adequate, especially in the present context of AI era.

CONCLUSION

The essence of the study was to collect information about students' experiences related to the current practices that target the assessment of their manifestation of critical thinking in academic speaking. The study adopted a concurrent mixed methods research design. The study findings affirmed that students were mainly used to written formal exams that emphasized on lower order thinking skills over higher order thinking skills. A main conclusion of this study was that traditional assessment, specifically the assessment of critical thinking among other soft skills, is outmoded and insufficient in the current landscape AI-driven technologies. The findings of this study contribute to the scarce literature on the assessment of critical thinking within the skill of speaking in EFL education.

Although the findings of the study are informative, they should be understood within the context of the study's limitations, which may influence their interpretation and generalization.

P-ISSN 2656-9094
E-ISSN 2721-9011

Future research direction should reconfirm these findings by conducting larger-scale studies and investigate teachers' views as well on the practices used to assess students' manifestation of critical thinking within academic speaking. Moreover, based on the findings, it has become imperative to evaluate and optimize current practices related to the assessment of critical thinking. This entails the adoption of alternative critical thinking-based assessment activities that target tracking, monitoring, and assessing students' practice, use, and development of different critical thinking skills within different language skills. Such a change in the course of practice aligns and serves the mission of higher education of nurturing and cultivating independent and critical thinkers.

REFERENCES

Alias, A., Mohtar, L. E., Ayop, S. K., & Rahim, F. R. (2022). A Systematic Review on Instruments to Assess Critical Thinking & Problem-Solving Skills. EDUCATUM Journal of Science, Mathematics and Technology, 9, 38-47. https://doi.org/10.37134/ejsmt.vol9.sp.5.2022

Al-Selwi, A. (2021). Assessment and evaluation: A conceptual difference. *Academia Letters, Article* 1666. https://doi.org/10.20935/AL1666

Belghiti, K., Allame, Y. E., & Chana, M. (2016). Critical thinking development: The case of the English course in the CPGE classes in Meknes, Fes and Kenitra. Arab World English Journal, 106-127. doi:10.31219/osf.io/px8s4

Beniche, M., Larouz, M., & Anasse, K. (2021). Examining the relationship between critical thinking skills and argumentative writing skills in Moroccan preparatory classes of higher engineering schools (CPGE). International Journal of Linguistics, Literature and Translation, 4(9), 194–201. https://doi.org/10.32996/ijllt.2021.4.9.19

Bensley, D. A., & Murtagh, M. P. (2011). Guidelines for a scientific approach to critical thinking assessment. *Teaching of Psychology, 39*(1), 5-16. doi:10.1177/0098628311430642

Beyer, B. K. (1987). *Practical strategies for the teaching of thinking*. Boston, MA: Allyn and Bacon.

Bouanani, N. (2015). Enhancing critical thinking skills through reflective writing intervention among business college students. Journal of Research & Method in Education, 5(1), 50-55. doi:10.9790/7388-05135055

Chouari, A., & Nachit, M. (2016). Teaching and assessing 21st century critical thinking skills in Morocco: A case study. *Arab World English Journal, 7*(4), 21-41. doi:10.24093/awej/vol7no4.3

Cohen, L., Manion, L. and Morrison, K. (2002) Research Methods in Education. Routledge, London.

Coster, J. & Ledovski V. (2005). Thinking outside the square: Promoting critical thinking through online discussions. In Proceedings of the 18th Annual English Australia Education Conference.

P-ISSN 2656-9094
E-ISSN 2721-9011

Ennis, R. H. (1993). Critical thinking assessment. *Theory into Practice, 32*(3), 179-186. doi: 10.1080/00405849309543594

Ennis, R. H. (1996). Critical thinking dispositions: Their nature and assessability. *Informal Logic, 18*(2), 165-182. doi:10.22329/il.v18i2.2378

Facione, P. A. (2020). Critical thinking: What it is and why it counts. In Insight assessment: Vol. XXVIII (Issue 1). http://www.insightassessment.com/pdf_files/what&why2007.pd%0Ahttp://www.edutekа.org/PensamientoCrit icoFacione.php

Hellalet, N. (2021). Critical thinking in Moroccan University students‟ writing: The case of Chouaib Doukkali University. *Journal of Applied Language and Culture Studies, 4*, 179-194.

Hursen, C. (2023). Examination of Studies on Critical Thinking in Teacher Education: a Bibliometric Analysis. Revista Românească pentru Educaţie Multidimensională, 15(3), 288-311. https://doi.org/10.18662/rrem/15.3/767

Johnson, R. H., & Hamby, B. (2015). A meta-level approach to the problem of defining 'Critical Thinking'. *Argumentation, 29*(4), 417-430. doi:10.1007/s10503-015-9356-4

Jose, B., Cherian, J., Verghis, A. M., Varghise, S. M., S, M., & Joseph, S. (2025). The cognitive paradox of AI in education: Between enhancement and erosion. *Frontiers in Psychology*, *16*. https://doi.org/10.3389/fpsyg.2025.1550621

Khandaghi, M. A., & Pakmeh, H. (2012). Critical thinking disposition: A neglected loop of humanities curriculum in higher education. *Cypriot Journal of Educational Sciences, 7*(1), 01-13. http://world-educationcenter.org/index.php/cjes/article/viewFile/249/7.1

Lawasi, M. C., Rohman, V. A., & Shoreamanis, M. (2024). The Use of AI in Improving Student's Critical Thinking Skills. *Proceedings Series on Social Sciences & Humanities*, *18*, 366–370. **https://doi.org/10.30595/pssh.v18i.1279**

Leong, L., & Ahmadi, S. M. (2017). An analysis of factors influencing learners' English speaking skill. *International Journal of Research in English Education, 2*(1), 34-41. doi:10.18869/acadpub.ijree.2.1.34

Liu, O. L., Frankel, L., & Roohr, K. C. (2014). Assessing critical thinking in higher education: Current state and directions for next-generation assessment. *ETS Research Report Series, 2014*(1), 1–23. doi: 10.1002/ets2.12009

Luoma, S. (2004). *Assessing speaking*. Cambridge, UK: Cambridge University Press.

Marin, M. A., & Pava, L. D. la. (2017). *Conceptions of Critical Thinking from University EFL Teachers. English Language Teaching, 10(7), 78-88.* doi:10.5539/elt.v10n7p78

Meylani, R. (2024). A comparative analysis of traditional and modern approaches to assessment and evaluation in education. Western Anatolia Journal of Educational Sciences, 15(1), 520-555. DOI. 10.51460/baebd.1386737

P-ISSN 2656-9094
E-ISSN 2721-9011

Mohammadi, M., Abbasian, G. R., & Siyyari, M. (2022). Characterization and development of critically-thinker EFL readers' reading ability: AWC vs. QAR approaches. *Cogent Education*, *9*(1). https://doi.org/10.1080/2331186X.2022.2148451

Mrabti, A., Nfissi, A., & Alaoui Madani, K. (2023). University EFL teachers' perceptions of critical thinking barriers in higher education. *International Journal For Multidisciplinary Research*, *5*(5), 1–12. https://doi.org/10.36948/ijfmr.2023.v05i05.7508

Nickname, Z., & Royafar, A. (2019). Critical thinking skills of undergraduate students of educational sciences at Tehran universities. *Utopía Y Praxis Latinoamericana*, *24*(1), 54-63. Recuperado a partir de https://produccioncientificaluz.org/index.php/utopia/article/view/30059

Nold, H. (2017). Using critical thinking teaching methods to increase student success: An action research project. *International Journal of Teaching and Learning in Higher Education*, *29*(1), 17–32. Retrieved from http://www.isetl.org/ijtlhe/

Oroujlou, N., & Sadeghi, K. (2022). Effects of explicit teaching of critical thinking strategies on EFL Learners' Reading Comprehension. Teaching English Language, 16 (2), 1–29. https://doi.org/10.22132/TEL.2022.142935

Ouahani, N., & Hiba, B. (2023). Critical thinking practice in Moroccan higher education: An evaluation. International Journal of Linguistics, Literature and Translation, 6(1), 91–97. https://doi.org/10.32996/ijllt.2023.6.1.12

Payan-Carreira, R., Sacau-Fontenla, A., Rebelo, H., Sebastião, L., & Pnevmatikos, D. (2022). Development and Validation of a Critical Thinking Assessment-Scale Short Form. Education Sciences, 12(12), 938. https://doi.org/10.3390/educsci12120938

Piaw, C.Y. (2014). Effects of gender and thinking style on student's creative thinking ability. *Procedia - Social and Behavioral Sciences*, 116, 5135-5139. https://doi.org/10.1016/j.sbspro.2014.01.1087

Rabionet, S. E. (2011). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *The Qualitative Report*, *16*(2), 563-566. Retrieved from http://www.nova.edu/ssss/QR/QR16-2/rabionet.pdf

Rouijel, E., & Bouziane, A. (2020). Moroccan middle-school, secondary and tertiary EFL teaching staff perceptions and instruction of critical thinking. *European Journal of English Language Teaching, 5*(3), 15-27. doi:10.5281/zenodo.3739309

Saleh, S. E. (2019). Critical thinking as a 21st century skill: conceptions, implementation, and challenges in the EFL classroom. *European Journal of Foreign Language Teaching, 4*(1), 1–16. https://doi.org/10.5281/zenodo.2542838

Salido, A., Syarif, I., Sitepu, M. S., Suparjan, W., Wana, P. R., Taufika, R., & Melisa, R. (2025). Integrating critical thinking and artificial intelligence in higher education: A bibliometric and systematic review of skills and strategies. *Social Sciences & Humanities Open, 12*, Article 101924. https://doi.org/10.1016/j.ssaho.2025.101924

P-ISSN 2656-9094
E-ISSN 2721-9011

Snyder, L. G., & Snyder, M. J. (2008). Teaching critical thinking and problem solving skills. *The Delta Pi Epsilon Journal*, 2, 90-99.

Tiruneh, D. T., Verburgh, A., & Elen, J. (2014). Effectiveness of Critical Thinking Instruction in Higher Education: A Systematic Review of Intervention Studies. *Higher Education Studies, 4*(1), 1-17. doi:10.5539/hes.v4n1p1

Vdovina, E., & Gaibisso, L. C. (2013). Developing critical thinking in the English language classroom: A lesson plan. *English Language Teacher's Association*, *1*(1), 54-68.

Wang, S. (2017). An exploration into research on critical thinking and its cultivation: An overview. *Theory and Practice in Language Studies*, *7*(12), 1266–1280. https://doi.org/10.17507/tpls.0712.14

Yang, Y. C., Chuang, Y., Li, L., & Tseng, S. (2013). A blended learning environment for individualized English listening and speaking integrating Critical Thinking. *Computers & Education*, 63, 285-305. doi:10.1016/j.compedu.2012.12.012

Zeng, X., & Ravindran, L. (2025). Design, implementation, and evaluation of peer feedback to develop students' critical thinking:A systematic review from 2010 to 2023. Thinking Skills and Creativity, 55, 101691. https://doi.org/10.1016/j.tsc.2024.101691