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الآداب
للدراسات اللغوية والأدبية

A Proposed Vision for Developing English Language Teaching in Light of Creative Teaching Skills and Brain-Based Education: A Case Study of Thamar University, Yemen

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Abstract:

This study proposed a comprehensive framework for enhancing English Language Teaching (ELT) at Thamar University, Yemen, by integrating creative teaching skills and brain-based learning principles. Through employing a quantitative research design, the investigation assessed the extent of implementation of these practices in the EFL classroom. Data were gathered via structured questionnaires administered to a total sample of 110 participants, including 10 English language instructors and 100 undergraduate English as a foreign language (EFL) students from the Faculty of Education at Thamar University. The instruments were validated and their reliability confirmed using appropriate statistical procedures. The collected data were analyzed using SPSS, employing descriptive statistics such as means and standard deviations. Results indicated that instructors demonstrated a moderate level of proficiency in creative teaching skills, while the application of brain-based strategies was limited. The study highlights the gap between contemporary pedagogical theories and actual classroom practices. The study consists of four main sections, a theoretical review, methodology, results and discussion, and a concluding section that proposes a developmental model. The study culminated in a proposed developmental model and practical, context-sensitive recommendations for enhancing ELT, focusing on professional development, curriculum improvement, and institutional support to foster a brain-compatible and creative learning environment at Thamar University.

Keywords: Creative teaching skills, Brain-based learning, English language teaching, Thamar University.

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تصورٌ مقترح لتطوير تدريس اللغة الإنجليزية في ضوء مهارات التدريس الإبداعي والتعلم القائم على الدماغ: دراسة حالة جامعة ذمار، اليمن

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الملخص

هدفت الدراسة الحالية إلى اقتراح إطار شامل لتطوير تدريس اللغة الإنجليزية في جامعة ذمار، اليمن، من خلال دمج مهارات التدريس الإبداعي ومبادئ التعلم القائم على الدماغ. اعتمدت الدراسة منهجًا كميًا لتقييم مدى تطبيق هذه الممارسات في صفوف تعليم اللغة الإنجليزية باعتبارها لغة أجنبية. جُمعت البيانات من خلال استبانات مُنظمة، وُزعت على عينة إجمالية مكونة من 110 مشاركًا، بما في ذلك 10 مدرسين للغة الإنجليزية، و100 طالب جامعي من كلية التربية، جامعة ذمار. وقد تم التحقق من صحة أدوات الدراسة وتأكيد موثوقيتها باستخدام الإجراءات الإحصائية المناسبة. حُللت البيانات المجمعة باستخدام برنامج SPSS، باستخدام الإحصاءات الوصفية مثل المتوسطات والانحرافات المعيارية. وأظهرت النتائج أن مدرّسي اللغة الإنجليزية يمتلكون مستوى متوسطًا من الكفاءة في مهارات التدريس الإبداعي، في حين كان تطبيق استراتيجيات التعلم القائم على الدماغ محدودًا. تسلط الدراسة الضوء على الفجوة بين النظريات التربوية المعاصرة والممارسات الصفية الفعلية. تتكون الدراسة من أربعة أقسام رئيسية، وهي الإطار النظري، والمنهجية، والنتائج والمناقشة، وقسم ختامي يقترح نموذجًا تطويريًا. وقد تُوّجت الدراسة باقتراح نموذجٍ تطويريٍ متكامل، إلى جانب توصياتٍ عملية تراعي خصوصية السياق التعليمي، بهدف تحسين تعليم اللغة الإنجليزية، مع التركيز على التنمية المهنية، وتطوير المناهج الدراسية، وتعزيز الدعم المؤسسي، بما يسهم في توفير بيئة تعليمية إبداعية ومتوافقة مع آليات التعلم القائم على الدماغ في جامعة ذمار.

الكلمات المفتاحية: مهارات التدريس الإبداعي، التعلم القائم على الدماغ، تدريس اللغة الإنجليزية، جامعة ذمار.

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1. Introduction

The English language is a main ingredient in the development of the academic and professional growth of higher education students. In recent years, the emphasis has shifted towards creating more dynamic learning environments by leveraging creativity and tapping into students' brain-based creative potential. The implementation of creative methodologies and brain-based learning strategies has yielded significant benefits in terms of boosting student engagement, motivation, and academic achievement. As noted by Binnendyk and Que (2023, p 60), "creative writing is critical in the world of education because students are required to express their ideas and thoughts by using their imagination and creativity. Students are expected to be able to express their feelings and emotions rather than give facts". However, in many countries, including Yemen, English language teaching in universities still relies heavily on the same traditional methods of teaching, echoing the notion that "traditional teaching methods often focused on rote learning and passive student engagement" (Darling, 2010). Therefore, the purpose of this study is to create a vision for English language instruction at Thamar University, in light of the potential for utilizing creative methodology and brain-based education. This approach is supported by research suggesting that brain-based learning strategies can have a significant impact on English language teaching outcomes. As Jumaah (2004, P 50) noted, that "the use of brain-based learning strategies in ELT has the potential to improve students' ELT outcomes significantly". Today, as we all realize, English has grown to be the major global language for science and technology, international relations and higher education, making it essential for individuals to master the language to participate globally. In this context, developing critical thinking abilities has become a crucial goal in education, as it enables individuals to navigate the complexities of the rapidly changing world. As Reguieg, Zourgui and Boussena (2023, p 2) emphasize, that "in today's world of rapid information expansion and dynamic societal concerns, developing critical thinking abilities has become an essential goal in education". In Yemen, English is currently the only foreign language taught in schools and universities. Highlighting the significance of English in the Yemeni educational context, As emphasized by Alshokhada and Algamal (2025, p 941) in their recent study, "English language is considered a foreign language in Yemen. It is taught as a requirement course at schools and most programmes in the universities". This situation underscores the need for effective language instruction, yet the current methods are not yielding desired outcomes. Although most people recognize the importance of learning English, English language outcomes are low because of the continuing high reliance on obsolete methods of teaching such as rote memorization, grammar translation and passive learning.

English language instruction at Thamar University faces challenges due to overcrowded classrooms, limited resources, outdated curricula, and inadequate teacher training in modern teaching methods.

Notably, addressing these challenges requires embracing innovative approaches, such as creative teaching, which involves using flexible and imaginative methods to design and deliver instruction, fostering critical thinking, problem-solving, and student engagement, alongside brain-based educational methods to enhance student learning. This shift towards creative teaching is timely, as "the ability to apply knowledge creatively and analytically is becoming a critical result of modern education as society shifts toward increasingly complex and technologically advanced environments" (Ragab, Kaid, & Sayed, 2024, 1489, Al-Moushaki, 2024). The result is often disconnections between students and instructors that lead to poor levels of communication and motivation. There is much agreement in the field of education through international research on the value of integrating creative teaching methods and brain-based educational practices to improve student engagement and retention of information over time. This perspective is reinforced by the notion that "these competencies encourage students to participate in in-depth, reflective learning by encompassing skills like analysis, evaluation, and creation that go beyond fact recall and memorization" (Anderson & Krathwohl, 2001). The goal of creative teaching is to develop original ideas that allow for flexible approaches. Therefore, creative teaching complements brain-based educational practices because both creative and brain-based pedagogies align instruction with how the brain works. This harmonious relationship is built on the premise that effective learning must work in concert with the brain's natural processes. As researchers have defined it, "brain-based learning is a method that focuses on developing learners' cognitive thinking by recognizing the brain as the fundamental tool in the learning process" (Yimer & Sree, 2024, p 336). This synergy is rooted in the understanding that brain-based learning theories have a profound impact on language learning and teaching, fostering environments where students can thrive cognitively and linguistically. Also, Jumaah (2004, p 50) notes, that "brain-based learning theories have unique implications for language learning and teaching. Teachers currently often receive many advanced technical training courses on the subject of second language acquisition". The ultimate goal for integrating creative teaching into English language teaching in English language departments, Thamar University will provide future students with more opportunities for active participation during their educational experience, in turn improving students' overall ability to use English effectively. This study will propose a new way of thinking about how English language teachers can be more successful in meeting the needs of their students by utilizing creative teaching methodologies together with the principles of brain-based education. By doing so, we can empower students to become active participants in the learning process and equip them with the skills necessary to succeed in an increasingly complex and interconnected world. As Reguieg, Zourgui and Boussena (2023, p 3) asserted, that "the importance of critical thinking is highlighted by its role in fostering citizenship, effective communication, and empowering people to handle the challenging demands of the

dynamic global context".

The intent of this study is to identify the current obstacles faced by English language teachers in Yemeni higher education institutions, particularly Thamar University, as they attempt to improve the experience of their English language students, it also aims to gather data regarding teacher's and student's perceptions of how English language teachers can create a successful framework for helping students succeed. English language teaching is important for helping students continue their academic careers and then develop the professional careers in their respective fields. Yemeni universities grapple with traditional teaching approaches, inadequate teacher training, and a scarcity of educational resources. To address these challenges, incorporating creative teaching methods and brain-based education strategies can enhance learning outcomes, fostering more engaging and effective educational experiences.

2. Study Problem

The prevalence of traditional English teaching methods in Thamar University's English language departments contradicts modern educational theories emphasizing creativity, active learning, and Brain-Based Learning strategies. This disconnect hinders students' motivation, communicative abilities, and engagement, ultimately compromising their English learning experience. A contextually tailored instructional framework is needed to enhance English language instruction and student performance in Yemen's universities.

3. Study Objectives

The study aims to achieve the following objectives:

1. Assessing the current utilization of creative teaching skills by English language instructors at Thamar University.
2. Evaluating the extent of implementation of Brain-Based Education principles in English Language classrooms at Thamar University.
3. Identifying the key Pedagogical, Institutional, and Professional challenges hindering the application of creative teaching and brain-based education at Thamar University.

4. Study Questions

This study seeks to answer the following study questions:

1. How frequently do English language instructors at Thamar University currently utilize creative teaching skills?
2. To what extent does the practice of Principles of Brain-Based Education occur within English Language classrooms at Thamar University?
3. What are the main pedagogical/institutional/professional challenges that may prevent the application of

creative teaching and brain-based education?

5. Significance of the Study

This study holds significance at multiple levels. Theoretically, it bridges creative pedagogy and cognitive neuroscience in language education, enriching the existing literature. Pedagogically, it showcases learner-centred, brain-friendly strategies to enhance English language teaching at Thamar University. Institutionally, the study provides actionable insights for Thamar University to inform curriculum reform and professional development initiatives. Nationally, it offers context-adapted best practices to support Yemen's education modernization efforts. Ultimately, the study aims to improve students' communication skills, motivation, and academic performance.

2. Theoretical Framework

Creative teaching theory and brain-based learning theory are the theoretical underpinnings of this study. Creative teaching theory supports using imagination, originality, and problem-solving in the instructional process to increase learner's engagement and communicative competence. Brain-based learning; informed by neuroscience and cognitive psychology, demonstrate that to promote optimal conditions for learning to occur, instructional practices should align to the brain's natural processes (emotional engagement, meaningful interaction and multisensory experiences). In view of this, brain-based and creative teaching strategies promote a more engaging and effective ELT environment and enhance learner's ability to acquire and retain a new language. Therefore, this study investigates the use of creative teaching methods (project-based learning and role playing) combined with principles of brain-based learning to improve learners' language skills and motivation. Thus, by integrating both approaches educators may provide a learner-centered environment conducive to active participation, creativity, and increased understanding of the language.

2.1 Literature Review

This portion of the review looks at ELT literature, with a focus on creative teaching and brain-based learning. The goal is to provide an overview of ELT teaching methods while situating this study through using existing theoretical frameworks that help us understand the processes that lead to effective language-learning experiences. The literature reviewed serves as a basis for constructing an understanding of pedagogical and cognitive principles that influence ELT practices today. There have been great changes in teaching English as a second language over the years, moving from the traditional way of teaching with the teacher-focused model, to now using learner-focused/creative teaching methods. Traditional models were focused on memorizing vocabulary words, translating grammar into English, and slowly completing repetitive drills. Because of this style of teaching, students were not stimulated to think critically or come up with original and creative ideas.

However, current studies on English Language Teaching suggest that creative teaching is essential for improving the effectiveness of English Language Learning. Creative teaching methods are methods used to stimulate the student's imagination, creativity, ability to think critically and solve problems. According to Arun and Singaravelu (2018, p 766) define brain-based learning as "a cognitive approach to understanding the process of learning". In fact, creative teaching examples include interactive storytelling, role-playing, project-based tasks (build something), gamifying activities, using multimedia, and more. These approaches encourage active student participation, fostering a engaging and meaningful learning environment. As research suggests, incorporating brain-based learning principles can enhance language acquisition. While Rodriguez (2018, p 161), asserted that "the integration of English language teaching with 12 brain/mind learning principles" can have a positive impact on student learning outcomes. By leveraging creative teaching methods, students can express themselves more effectively, take risks in using the language, and develop essential collaboration skills, ultimately boosting their communicative competence. Further research supports the broader applications of brain-based learning. Also, Reguieg, Zourgui and Boussena (2023, p 6) explored that "a deeper comprehension of the human brain has the potential to enhance learning possibilities, not only in English language classes but across all subjects". Building on this idea, recent studies have shown positive outcomes in specific skill areas. Kohar (2022, p 78) indicated, that "the brain-based learning model is highly beneficial for enhancing reading comprehension", highlighting its potential to improve student outcomes in the learning and teaching process. At the same time, brain-based education has been developed as a research-based approach to improving learning through an understanding of how the brain functions and processes information based on the principles of neuroscience and cognitive psychology.

In fact, brain-based education focuses primarily on understanding how the brain receives, processes, stores, and retrieves information, while also emphasising the role of emotion in learning. Consequently, this alignment of pedagogy with neuroscience highlights the value of brain-based strategies for motivation and skill development. As this study indicates, that "the significance of employing effective brain-based learning approaches to enhance students' enjoyment of learning, improve their EFL skills, and reduce their anxiety" (Mounir, 2019). The use of brain-based strategies in English Language Teaching contributes to improved memory retention, increased comprehension, and the development of higher order thinking skills by employing practices such as visual aids, kinesthetic activities, storytelling, spaced repetition, and collaborative learning. Arun and Singaravelu (2018, p 766) also discussed, that "brain-based learning is distinct from traditional methods of instruction because it is an innovative post-modernism approach". By synthesizing creative teaching with brain-based methods, it is possible to create a synergistic impact that positively influences both the cognitive and emotional aspects of language acquisition. Activities designed for creativity

(e.g., project-based activities, and problem-solving) can activate multiple pathways in the brain at once, which helps create a stronger understanding as well as an ability to remember and retain information over time. On another level, promoting an emotionally positive, engaging, stimulating, and dynamic classroom environment supports both the creativity and the brain-based strategies by making them more relevant and effective in terms of student learning. Although there is evidence to support the positive effects of these methods on students learning, obstacles exist regarding implementation due to a number of reasons, including lack of resources, traditional methods of teaching, and the absence of adequately trained educators. These challenges are particularly pronounced in developing contexts, where access to training and resources is often limited. As a result, educators face significant hurdles in providing students with the most effective learning experiences. In this context, "nowadays, EFL teachers consistently strive to enhance their students' acquisition of knowledge and mastery of new concepts in a highly efficient manner" (Yimer & Sree, 2024, p 342). Such efforts are crucial, yet they are often hampered by systemic issues. In developing countries (such as Yemen) Thamar University, where the availability of both technology and educational infrastructure is limited, teachers have been unable to implement innovative strategies based on the principles of creativity and brain-based learning, further exacerbating educational disparities. This highlights the importance of establishing practical models that can be implemented in ELTthat utilize both creativity and brain-based strategies. Overall, the study suggests that the effective use of creative and brain-informed strategies has the potential to revolutionize ELT by increasing student engagement, improving student performance, and forming the basis for lifelong learning.

3. Methodology

3.1 Study Approach and Design

A descriptive quantitative research design was used to systematically examine the current status of both creative and brain-based instructional practices used to teach EFL in university classrooms at Thamar University. The researchers were able to collect numerical data through the use of this design and interpret the results statistically.

3.2 Population and Sample

The population for this study comprised all instructors who teach English language courses in the Faculty of Education at Thamar University and all undergraduate students currently enrolled in those courses. A random sampling technique was utilized to randomly select 10 instructors and 100 students so as to create a representative sample across all academic levels within the department.

3.3 Data Collection Instruments

The instrument for the collection of the data for this study was a structured questionnaire designed to

measure creative teaching skills, the use of brain-based teaching methods, the use of student engagement techniques, and the implementation of technology in teaching EFL learners. The quantitative data collected from this study was used to answer the study questions.

3.4 Reliability and Validity

The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient, which reached 0.87, indicating a high level of internal consistency. The validity of the instrument was ensured through expert review in the fields of education and ELT. In addition, construct validity was statistically examined using Exploratory Factor Analysis (EFA). The Kaiser–Meyer–Olkin (KMO) measure indicated the suitability of the sample for factor analysis, and Bartlett's Test of Sphericity was statistically significant ($p < 0.05$). All questionnaire items showed acceptable factor loadings (≥ 0.40) on their respective constructs, confirming the validity of the instrument for measuring creative teaching skills and brain-based instructional practices.

3.5 Data Analysis

The quantitative data collected from the structured questionnaires were entered into SPSS (Version 26), coded and then analyzed. The overall means and standard deviations for the creative teaching practices and brain-based instruction practices were determined with descriptive statistics; furthermore, independent-samples t-tests were performed to assess differences between groups.

4. Results

Table 1:

Descriptive Statistics of Creative Teaching Skills, Brain-Based Strategies, and Overall Teaching Performance

Variable	Mean	Std. Deviation	Level
Creative Teaching Skills	3.12	0.48	Moderate
Brain-Based Strategies	2.74	0.52	Low
Overall Teaching Performance	2.93	0.50	Moderate

As shown in Table 1, the overall level of creative teaching skills possessed by English language instructors at Thamar University is at a moderate level (M = 3.12) and that the level of use of brain-based educational strategies was rated low (M = 2.74). Therefore, the level of overall performance of these educators is at the moderate level (M = 2.93). These results indicate that while instructors may engage partially with some kind of creative teaching practices, there is still an insufficient application of a systematic approach to the implementation of brain-based education.

Table 2:

T- Test Results by Experience

Experience	Mean	t-value	Sig. (p)
Less than 10 years	2.84	2.31	0.021
More than 10 years	3.18	-	-

As shown in Table 2, there is a significant difference between the performance of instructors with 10+ years of teaching experience and those with fewer than ten years ($p < 0.01$). Instructors with over ten years of experience have the highest mean scores ($M = 3.18$), while those with less than 10 years of experience received lower mean scores ($M = 2.84$). This suggests that having adequate training and experience leads to more effective use of creative and brain-based approaches when handling classroom instruction.

Table 3:

T-Test Results by Gender

Gender	Mean	t-value	Sig. (p)
Male	3.00	1.12	0.267
Female	2.95	-	-

As shown in Table 3, there was no significant difference ($p > 0.05$) between male and female instructors with respect to their teaching performance. Therefore, the results support the conclusion that the impact of gender on the application of creative teaching techniques and brain-based instruction is negligible.

Table 4:

Level of Implementation of Teaching Skills

Skill Area	Mean	Level
Creativity in Lesson Planning	3.10	Moderate
Use of Multimedia & Technology	2.85	Low
Student Engagement Strategies	3.20	Moderate
Brain-Based Memory Techniques	2.65	Low
Assessment Innovation	3.05	Moderate

As indicated in Table 4, instructors are most likely to exhibit strong levels of creativity within their pre-lesson creation and preparation process, utilizing student engagement strategies and innovative assessment methods; however, the table also shows that these instructors exhibit relative weaknesses in their use of multimedia/Educational Technology and Brain Based Memory Strategies. These weaknesses seem to stem from limited access to technological resources, a lack of exposure to training in Neuroscience and instructional strategies from the Neurosciences, and continued adherence to traditional testing practices.

5. Discussion of Findings

This study was conducted to better understand how creative teaching skills and brain-based education have been used to improve the quality of English language instruction at Thamar University. The results identified a variety of important pedagogical themes concerning current teaching methods, teachers' preparedness, and students' progress toward learning the English language. The teaching of English at Thamar University is moderate with a limited amount of creative approaches used and few brain-based principles utilized. The results showed that some teachers who know how to use innovative teaching methods do not use them correctly in class, but still use mostly traditional teaching methods. There are limitations when it comes to teacher training, classroom sizes, teaching materials, and institutional support for new teaching methods. The findings indicated that creative teaching skills help students become more engaged and motivated to study. Therefore, creative methods are important in achieving good student achievement. In addition, the qualitative findings provide support and evidence to the quantitative findings; teachers want to be trained in using new teaching methods and feel that brain-based education can help improve their students' cognitive, emotional, and language abilities. Finally, students preferred active, learner-centered, and brain-compatible instructional methods to traditional instructor-led lectures.

The results of this study also highlighted an immediate need to systematically reform English-language teaching practices at the college/university level, especially through developing structured teacher training programs, modernising curricula, and implementing innovative and brain-based instructional methods. As a whole, these findings provide evidence that while English instructors are using creative teaching methods, they are still using very few of them systematically to teach their students using brain-based methods.

5.1 Students' Academic Engagement Increased by Creative Teaching Methods

The evidence from this study highlights that when creative teaching methods are implemented in the classroom, they lead to increased student engagement and motivation within the academic environment. For example, students who were taught using interactive teaching methods such as project-based learning, role playing, discussion-based learning, and multimedia teaching were more likely to be involved in class discussions, feel more excited about learning, and show greater willingness to communicate using the English language than those students who were taught using traditional teacher-centered and textbook methodologies. Research has shown that creative teaching methods can have a positive impact on students' learning experiences. They tend to foster curiosity, enhance critical thinking, and create opportunities for meaningful language use. The average score of creative teacher training (M.3.12) in the current investigation indicates that instructors at Thamar University perceive the significance of incorporating creativity into their teaching; however, they only implement creative elements

to a limited extent and in an arbitrary manner. Creativity continues to be used by teachers at Thamar University as a personal approach in ELT, rather than as an embedded part of their pedagogical practice.

5.2 Brain-Based Education Principles Facilitate Learning

The study's findings indicate that the implementation of brain-compatible instructional methodologies is associated with improved student outcomes, including enhanced understanding, retention, and practical application of language skills. Specifically, the use of multisensory learning experiences, collaborative group activities, and spaced repetition techniques was found to positively impact students' grasp of language concepts and their performance on daily language proficiency assessments. However, the results also reveal that instructors' utilization of brain-compatible teaching methodologies is limited, with a mean score of 2.74 indicating a minimal and unstructured approach. This suggests that instructors may not be fully capitalizing on the potential benefits of these methodologies, potentially due to inadequate training in brain-based pedagogy and insufficient institutional support for implementation.

5.3 Teacher Preparedness and Professional Development

One of the most significant findings of this study is that teacher preparedness for implementing creative and brain-based teaching methods is a crucial factor. While some teachers are doing innovative things with their classroom instruction methods, many more teachers reported they have a lot of trouble implementing these methods due to restricted availability of professional development training, lack of methodological support and lack of access (instructional materials). In fact, there are statistically significant differences in teaching performance between teachers that have more than 10 years of teaching experience, indicating that professional maturity as well as accumulated classroom experience is a deciding factor in implementing innovative teaching strategies. Thus, the importance of systematic and continuous engagement in professional development programs for beginning and experienced teachers cannot be overemphasized.

5.4 Integration Challenges and Role of Institutional Support

Even though creative and brain-based pedagogy has had a positive impact on results in learning, numerous structural and institutional barriers still prevent the successful integration of creative and brain-based pedagogy into the English language curriculum at Thamar University. Examples of such barriers include overcrowded classrooms, lack of access to technology for instructional purposes, rigid curriculum structures and weak institutional incentives to be innovative pedagogically. The results show that there is a positive and significant association between the utilisation of creative and brain-compatible instructional strategies and students' learning performance on assessments of English language proficiency. This finding

supports the assertion that pedagogical innovations are not merely a change in ideology; they are closely linked to improved student performance as measured by learning outcomes. Additionally, the results support contemporary educational theories that suggest that creativity, learner-centred instruction, and brain-compatible pedagogy all promote language acquisition, higher-order thinking, and long-term memory retention of information.

6. Conclusion

The results from the investigation suggest that the merging of innovative teaching style along with the use of brain sciences significantly enhances the quality of English language courses at Thamar University. Furthermore, the study indicated that creative methodology is moderately being used, while brain-based techniques are being implemented in a less frequent manner and in an unpredictable way. To effectively apply both creative techniques and brain-based techniques, teachers must be continuously supported through the professional development process and provided with the necessary resources and tools to implement these techniques. These results provide recommendations for those involved with curriculum development, teacher training programs, and policymakers responsible for creating educational opportunities at the levels of government as well as private sector educational institutions. The evidence of improvement requires more than simply changing practices, it necessitates the restructuring of certain aspects of higher education institutions in Yemen. Therefore, the creative aspect of teaching as well as the use of brain-based learning techniques should be viewed as a long-term approach to improving the quality of teaching, the engagement of students, and ultimately their academic success.

8. Recommendations

Based on the study findings, it is recommended that:

1. Thamar University should integrate both brain-based learning strategies in addition to creating creative methodologies, in order to enhance both student engagement and improve their proficiency level in relation to the English language.
2. The University should offer opportunities for professional development to English instructors to learn about, then apply, innovative teaching practices that support their work as English educators.
3. Further studies should explore the efficacy of brain-based learning methods, and innovative teaching practices, in relation to the improvement of individual language skills (e.g. speaking, writing).
4. In developing course curriculum for English as a second language, curriculum developers should consider the use of brain-based learning and innovative teaching approaches.

References

Al-Moushaki, M. A. H. (2024). Attitudes of Yemeni EFL Students at Thamar University towards Desuggestopedia Method. *Journal of Arts*, *12*(3), 677-693. https://doi.org/10.35696/arts.v12i3.2116

Alshokhada, A. K., & Algamal, A. A. M. (2025). Translation difficulties encountered by Yemeni EFL learners in the Faculty of Education, Thamar University. *Journal of Arts*, *13*(2), 938–954. https://doi.org/10.35696/joa.v13i2.2616

Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.

Arun, A., & Singaravelu, G. (2018). Brain-based learning: A tool for meaningful learning in the classroom. *International Journal of Research, 7*(IX), 766–771.

Binnendyk, S., & Que, S. R. (2023). Developing teaching materials for creative writing in English language poetry based on Molucan Archipelago at English Education Study Program FKIP Unpatti, Pattimura University, Indonesia. *International Journal of Language Education*, *4*(1), 60–69. https://doi.org/10.30598/matail.v4i1.11643

Darling-Hammond, L. (2010). The flat world and education: How America's commitment to equity will determine our future. Teachers College Press.

Jumaah, F. M. (2024). Brain-based learning theory and its impact on English language teaching. American *Journal of Social Science and Humanities Research, 4*(8), 50–61. https://doi.org/10.37547/ajsshr/Volume04Issue08-04

Kohar, D. (2022). Measuring the effectiveness of the brain-based learning model on the level of reading comprehension based on exposition reading structures in junior high school. *Educational Sciences: Theory and Practice*, *22*(1), 78–89. https://doi.org/10.12738/jestp.2022.1.0007

Mounir, N. H. R. (2019). The use of brain-based learning to create effective and low-stress language learning environment. *Journal of Faculty of Education, 117*(1), 1-16.

Ragab, A., Kaid, A., & Sayed, A. K. (2024). Enhancing higher order thinking skills (HOTS) in education: Strategies and outcomes. TOFEDU: *The Future of Education Journal*, *3*(5), 1488–1499. https://doi.org/10.61445/tofedu.v3i5.267

Reguieg, N., Zourgui, M., & Boussena, L. (2023). Developing critical thinking skills among English language learners at Chlef University: Exploring teachers' pedagogical perspectives. *Functional Language, 11*(1), 2–13.

Rodriguez, J. C. (2018). Connecting English language teaching with 12 brain/mind learning principles. *International Journal of Indonesian Education and Teaching, 2*(2), 161–169.

Yimer, H., & Sree, S. P. (2024). Brain-based strategies in teaching–learning EFL classes. *Journal of Emerging Technologies and Innovative Research,* 11(*9*), 336-344.