

A Content Analysis of English for Iraq Primary Stage Textbooks in Alignment with Sustainable Development Goal 4: Quality Education

Firdews Faris Mhmood¹, Prof. Dr. Sabeeha Hamza Dehham⁴

College of Basic Education, University of Babylon²

bas771.fardus.faris@student.uobabylon.edu.iq³

College of Basic Education, University of Babylon⁵

basic.sabeeha.hamza@uobabylon.edu.iq⁶

Abstract— The integration of sustainable development principles into educational systems has become a global priority following the adoption of the 2030 Agenda for Sustainable Development by the United Nations. Among its seventeen goals, Sustainable Development Goal 4 (SDG 4) emphasizes the provision of inclusive, equitable, and quality education, as well as the promotion of lifelong learning opportunities for all. Within this framework, school textbooks serve as a fundamental pedagogical instrument through which educational knowledge, values, and practices are systematically transmitted to learners. The present study seeks to examine the extent to which the *English for Iraq* textbooks, utilized in Iraqi primary schools, reflect the principles and indicators of SDG 4. To achieve this objective, a descriptive content analysis design was adopted to systematically analyze textbooks across Grades 1–6. An analytical checklist was constructed based on the three core learning dimensions of Education for Sustainable Development (ESD)—namely, the cognitive, socio-emotional, and behavioral domains. After data analysis, the findings reveal that the cognitive dimension is the most frequently represented in the textbooks, followed by the socio-emotional dimension, while the behavioral dimension appears significantly less frequently. Statistical analysis further indicates moderate to strong correlations between the learning dimensions, suggesting that textbooks emphasizing knowledge development often incorporate value-based elements. The study concludes that while the textbooks provide a strong foundation for knowledge acquisition and value formation, they offer limited opportunities for learners to engage in practical sustainability-related behaviors.

Index Terms—textbook evaluation, SDG 4, sustainable development education, EFL textbooks, content analysis, quality education

I. INTRODUCTION

Education constitutes a fundamental driver of sustainable development and social transformation. Following the adoption of the 2030 Agenda for Sustainable Development by the United Nations, education has been widely recognized as a central mechanism for fostering sustainable, inclusive, and resilient societies (United Nations, 2015). Within this global framework, Sustainable Development Goal 4 (SDG 4) specifically aims to ensure inclusive and equitable quality education while promoting lifelong learning opportunities for all individuals across diverse contexts (Coomans, 2022).

Beyond access to education, SDG 4 emphasizes the development of relevant knowledge, skills, values, and attitudes necessary to address contemporary global challenges, including environmental sustainability, social equity, and economic development. Accordingly, education is not merely a medium for knowledge transmission but a transformative process that equips learners with the competencies required to actively contribute to sustainable development initiatives.

Within formal educational systems, textbooks remain among the most influential instructional resources. In many developing contexts, textbooks serve as the primary source of learning content and pedagogical guidance for both teachers and learners (Bairmani et al., 2023). As noted by Jack C. Richards

(2001), textbooks function as the backbone of language programs, providing structured input, pedagogical guidance, and communicative learning activities.

In the field of English as a Foreign Language, textbooks play a central role in language acquisition, often constituting the primary source of linguistic input, particularly in contexts with limited exposure to the target language. These materials systematically present vocabulary, grammatical structures, and communicative tasks while embedding cultural representations that shape learners' linguistic competence and broader worldview (Ivić, Antić, & Pešikan, 2013).

Moreover, EFL textbooks serve not only as tools for language learning but also as vehicles for transmitting implicit values, social norms, and cultural perspectives. They influence learners' perceptions of language use, intercultural communication, and global issues, making the content and design of textbooks a critical area for examination, particularly regarding alignment with contemporary educational priorities such as sustainable development.

Recent educational discourse has emphasized the importance of integrating sustainability principles into instructional materials. Education for Sustainable Development (ESD) encourages embedding environmental awareness, social responsibility, and global citizenship within curricula (Wals, 2015). Consequently, evaluating textbooks in light of SDG principles has become a key focus of educational research.

Despite this growing emphasis, few studies have explored the representation of SDG principles in EFL textbooks at the primary level, particularly within the Iraqi context. Addressing this gap, the present study conducts a systematic analysis of the *English for Iraq* textbooks used in Iraqi primary schools to determine the extent to which they incorporate the learning dimensions associated with SDG 4. Specifically, the study examines the cognitive, socio-emotional, and behavioral dimensions that underpin ESD.

To guide this investigation, the study poses the following research question: *To what extent do the English for Iraq textbooks used at the Iraqi primary stage reflect the principles of SDG 4 through the cognitive, socio-emotional, and behavioral learning dimensions?*

II. LITERATURE REVIEW

A. Textbooks' Role in EFL Education

Textbooks are essential components of language instruction because they provide a structured sequence of learning materials and pedagogical activities. Richards (2001) argues that textbooks serve as the foundation of language teaching programs by organizing curriculum content and guiding classroom instruction.

Beyond linguistic content, textbooks also influence learners' cultural awareness, social attitudes, and value systems (Ivić et al., 2013). Consequently, the evaluation of textbooks has become a key area of research within applied linguistics and educational studies.

B. Content Analysis in Educational Research

Content analysis is widely employed as a methodological approach for examining the representation of concepts, themes, and values within educational materials. It provides a systematic framework for identifying patterns, frequencies, and relationships embedded in textual and visual content. According to Klaus Krippendorff (2018), content analysis is defined as a rigorous research technique that enables the systematic examination of textual data in order to produce valid, reliable, and replicable inferences.

In educational research, this method is particularly valuable for evaluating curriculum materials, such as textbooks, as it facilitates both qualitative interpretation and quantitative measurement of content. Consequently, content analysis serves as an effective tool for assessing the extent to which instructional materials align with specific educational frameworks, including those related to sustainable development and global competencies.

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In textbook studies, content analysis allows researchers to quantify the presence of specific themes and evaluate how educational concepts are presented to learners (Kareem et al., 2019).

C. Sustainable Development Goal 4

Education is considered a key driver of sustainable societies because it equips individuals with the knowledge and competencies required to address complex global challenges (Coomans, 2022). SDG 4 emphasizes several key elements of educational quality, including:

- equal access to learning opportunities
- relevant knowledge and skills
- global citizenship education
- education for sustainable development

D. Global Citizenship Education (GCED)

Global Citizenship Education is closely linked to SDG 4 and is commonly conceptualized through three interconnected learning dimensions (Grant-Smith et al., 2023):

Table 1

Interconnected Learning Dimensions

Dimension	Description
Cognitive	Knowledge and understanding of global issues
Socio-emotional	Values such as empathy, tolerance, and respect
Behavioral	Responsible actions and participation

These dimensions provide a useful analytical framework for examining sustainability education within textbooks.

III. METHODOLOGY

The present study adopts a descriptive content analysis design to examine the content of the *English for Iraq* textbooks used at the primary stage in light of Sustainable Development Goal 4 (SDG 4): Quality Education. Descriptive content analysis is employed as a systematic approach to analyze educational materials in order to identify, categorize, and quantify the presence of specific themes and indicators within the data (Akban & Koşar, 2024). This methodological approach enables the researcher to generate structured and replicable findings regarding the distribution of targeted content elements.

Furthermore, descriptive research is concerned with the accurate characterization of phenomena by providing clear, objective, and reliable accounts of observed patterns. As noted by Shekhar Singh (2014), descriptive research facilitates the identification of the frequency and occurrence of particular events or attributes, thereby allowing for the calculation of descriptive statistical measures such as frequencies, averages, and distributions. This makes it particularly suitable for studies aiming to quantify the representation of specific constructs within instructional materials.

In addition, the study employs a mixed-methods approach that integrates both qualitative and quantitative analytical procedures. Mixed-methods research combines the strengths of qualitative interpretation with quantitative measurement to provide a more comprehensive and nuanced understanding of the research problem. As emphasized by John W. Creswell and J. David Creswell (2005), as well as Rahoomi et al. (2019), this approach enhances the depth and validity of findings by enabling triangulation across multiple data sources and analytical techniques.

In the qualitative phase, the researcher examined textual materials, activities, and images included in the textbooks to determine how the three learning dimensions of SDG 4 are represented. The quantitative phase involved converting the identified indicators into numerical data by calculating their frequencies and percentages in order to measure the extent to which each dimension is represented across the analyzed textbooks.

1. Research Sample

A sample of a study can be as describe a number of individuals, objects, or events chosen from a population—typically through a process that ensures they reflect the broader group from which they were drawn (Dehham & Abbas,2025a). On the other hand, a sample is defined as a subset of individuals, items, or events selected from a larger population, intended to accurately represent the characteristics of that population (Mills , Gay & Gay, 2015).

The research sample consists of all *English for Iraq* Pupil's Books prescribed for the Iraqi primary stage during the academic year (2024–2025). These textbooks include six grade levels, which are divided into two stages:

1. Lower primary stage: Grades 1, 2, and 3
2. Upper primary stage: Grades 4, 5, and 6

Data were collected from all instructional materials included in the pupil's books, such as lessons, texts, activities, and exercises, in order to identify the presence of the three learning dimensions related to Sustainable Development Goal 4 (Quality Education).Data collection is considered one of the most important stages of any research project because it provides the empirical foundation for the study (Bryman & Cramer , 2012). Table 2 presents a summary of the research sample.

Table 2

The Sample of the Current Study					
Book Title	Stages	Grades		No. of units	No. of pages
Pupil's Book "English for Iraq"	Lower-Primary	First, second, and Third		Eight units	78 pages
Pupil's Book "English for Iraq"	Upper-Primary	Fourth, Fifth, and sixth		Eight units	110 pages

2 . Research Instrument

The purpose of the present study is to develop a systematic and validated analytical checklist designed to identify and classify the indicators associated with the three core learning dimensions of Sustainable Development Goal 4 (Quality Education). The checklist was designed to analyze the textbook content systematically and includes the following components:

1. Grade level of the textbook
2. Unit number
3. Page number
4. Type of instructional material (lesson, activity, exercise, or illustration)
5. Indicators related to the three learning dimensions of SDG 4

A checklist is a tool used to determine the presence or absence of specific knowledge, skills, or behaviors within a particular context (Mohan, 2023). In the present study, the checklist categorizes textbook content according to three learning dimensions:

- A. Cognitive
- B. Socio-emotional
- C. Behavioral

Each dimension contains a set of specific indicators accompanied by checkboxes to record their occurrence. The checklist also includes columns for recording the frequency of each indicator and the page reference where it appears in the textbooks

4. Validity and Reliability

Validity refers to the extent to which a research instrument accurately measures the construct it is intended to assess (Fulcher & Davidson, 2007). In the present study, multiple forms of validity were

examined to ensure the robustness of the analytical instrument, including face validity, content validity, and construct validity.

Face validity was established through expert judgment, which involves evaluating the clarity, relevance, and appropriateness of the instrument items. As noted by Oluwatayo (2012), face validity is concerned with specialists' subjective assessments of whether the instrument appears to measure the intended construct. Accordingly, a panel of experts in English Language Teaching (ELT) reviewed all checklist items. The panel confirmed that the items were appropriately aligned with the constructs of Sustainable Development Goal 4 (SDG 4), while also recommending minor revisions to enhance clarity and precision.

Construct validity refers to the degree to which an instrument effectively captures the theoretical construct it purports to measure. It can be empirically assessed through patterns of inter-item correlations and related statistical indicators. As highlighted by Salkind and Rasmussen (2010), such statistical analyses provide evidence for the internal structure of the instrument. In the present study, construct validity was supported through correlation analysis among the identified dimensions, ensuring that the checklist accurately reflects the underlying framework of Education for Sustainable Development.

Content validity was also established through systematic expert review by specialists in English language teaching and curriculum design. This process ensured that the instrument comprehensively covered all relevant indicators associated with the cognitive, socio-emotional, and behavioral dimensions of SDG 4.

Reliability, on the other hand, refers to the consistency and stability of measurement across time and conditions. According to Tavakoli (2012), reliability reflects the degree to which an instrument yields consistent results when applied repeatedly within the same population. Similarly, Bakdash and Marusich (2011) emphasize that reliability is concerned with the consistency of measurements under comparable conditions. In this study, reliability was assessed using Holsti's coefficient for inter-rater agreement. The resulting coefficient exceeded 0.85, indicating a high level of agreement between coders and confirming the reliability of the analytical procedure.

5. Data Analysis

Data analysis is a systematic process that involves inspecting, cleansing, transforming, and modeling data with the objective of extracting meaningful insights, informing conclusions, and supporting evidence-based decision-making (Brown & Kudyba, 2014). The practice of data analysis encompasses multiple facets and methodological approaches, integrating a diverse range of techniques and procedures under various terminologies. It is widely applied across disciplines, including business, natural sciences, and the social sciences, to interpret complex datasets and reveal patterns, relationships, and trends that underpin theoretical and practical inferences (George, 2016).

(1) Unit of Analysis

According to Krippendorff (2004), units of analysis are the elements that researchers identify and analyze as independent components within the data.

In this study, the indicators of Sustainable Development Goal 4 (SDG 4) serve as the unit of analysis. The researcher analyzed "the content of the *English for Iraq* textbooks" used in Iraqi primary schools in light of the learning dimensions associated with SDG 4.

(2) Steps of Analysis

The content analysis was conducted through the following steps:

1. Reading the textbooks carefully to obtain a general understanding of their content and identify potential references to Sustainable Development Goal 4.
2. Reviewing the textbooks in detail by examining each lesson, text, exercise, activity, and illustration.

3. Identifying phrases, sentences, activities, or images that contain evidence related to the indicators of SDG 4.
4. Classifying each identified element according to the appropriate dimension and indicator.
5. Recording the frequency of each indicator across the textbooks.
6. Calculating the frequencies and percentages of indicators within each learning dimension.
7. Providing qualitative descriptions and examples from the textbook content to illustrate how each learning dimension is represented, thereby supporting the quantitative findings.

(3) *The Three Learning Dimensions of Analysis*

The analysis of the *English for Iraq* textbooks is guided by the three core learning dimensions of Sustainable Development Goal 4, as delineated by UNESCO within the frameworks of Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) (UNESCO, 2015). These dimensions—cognitive, socio-emotional, and behavioral—serve as the analytical lens for evaluating the extent to which textbook content fosters knowledge acquisition, value formation, and actionable competencies aligned with sustainable development objectives.

These dimensions include:

a. *Cognitive Dimension*

This dimension focuses on developing knowledge, understanding, and critical thinking about global, regional, national, and local issues, as well as the interconnectedness and interdependence among societies and nations.

b. *Socio-Emotional Dimension*

This dimension seeks to cultivate a sense of belonging to a shared humanity and emphasizes the development of values such as empathy, solidarity, respect for diversity, and social responsibility toward others. It encourages learners to recognize their interconnectedness and to engage ethically and constructively within both local and global communities.

c. *Behavioral Dimension*

This dimension emphasizes the development of learners' capacity to act responsibly and effectively across local, national, and global contexts, fostering behaviors that contribute to the advancement of a peaceful, equitable, and sustainable world. It highlights the translation of knowledge and values into practical actions that address social, environmental, and economic challenges.

6 *Reliability of the Analysis*

Reliability refers to the consistency and stability of a measurement instrument over time, reflecting its ability to yield dependable results across repeated applications (Sürücü & Maslakçı, 2020). In the context of research, reliability indicates the extent to which an instrument would produce the same outcomes if the measurement process were replicated under comparable conditions, thereby ensuring the trustworthiness and reproducibility of the findings (Somekh & Lewin, 2005). Two types of reliability were employed in this study:

A. *Inter-Rater Reliability*

Inter-rater reliability was established by asking another researcher to analyze a sample of the *English for Iraq* textbooks using the same analytical instrument and procedures. The results of both analyses were compared to determine the level of agreement.

B. *Intra-Rater Reliability*

Intra-rater reliability refers to the consistency of the same researcher's coding decisions over time (Mackey & Gass, 2016). To ensure this type of reliability, the researcher reanalyzed the same sample of textbook content after an interval of approximately 30 days, and the results were compared.

7. *Statistical Tools*

The study employed the following statistical procedures:

1. *Frequencies*

Frequencies were used to count the number of times each indicator appeared in the textbooks. Frequency refers to the number of occurrences of a particular value within a dataset (Gay et al., 2012).

2. Percentage Formula

Percentages were computed to determine the proportion of each indicator within the analyzed textbook content using the following formula (Adrianty & Al Hafizh, 2023):

$$P = \frac{F}{N} \times 100$$

Where:

- P = Percentage of occurrence
- F = Frequency of occurrence of a specific indicator
- N = Total number of items analyzed

This calculation allowed for a quantitative assessment of the representation of cognitive, socio-emotional, and behavioral indicators within the textbooks.

Holsti's Coefficient of Reliability

To assess inter-coder reliability in the content analysis process, Holsti's formula (1969) was applied as follows (Corich, 2011):

$$CR = \frac{2M}{N_1 + N_2}$$

Where:

- CR = Coefficient of reliability
- M = Number of coding decisions on which both coders agreed
- N₁ = Total coding decisions made by the first coder
- N₂ = Total coding decisions made by the second coder

In this study, Holsti's coefficient was used to ensure that the coding process was consistent and reliable across multiple raters, thereby enhancing the trustworthiness of the content analysis results.

IV. RESULTS

This section presents an overview of the findings obtained from the content analysis in relation to the research question. The analysis employed descriptive statistical measures, including frequencies, means, and percentages, to quantify the representation of the cognitive, socio-emotional, and behavioral learning dimensions within the *English for Iraq* textbooks. To enhance clarity and facilitate interpretation, the results are systematically organized and presented using tables, which provide a visual summary of the distribution and prevalence of the identified indicators.

1. Distribution of SDG Learning Dimensions in the Textbooks

Following the establishment of the study objectives, the researcher developed a systematic analytical instrument to collect relevant data addressing the research question: *"To what extent do the English for Iraq textbooks used at the Iraqi primary stage reflect the principles of Sustainable Development Goal 4 through the cognitive, socio-emotional, and behavioral learning dimensions?"* The purpose of this analytical tool is to track and quantify the distribution of SDG 4 learning dimensions within the textbook content.

The results of the analysis are presented in the following table, which illustrates the distribution of cognitive, socio-emotional, and behavioral indicators across the textbooks for Grades 1–6. This table provides a clear overview of the prevalence and relative representation of each learning dimension within the instructional materials.

Table 3

Distribution of SDG Learning Dimensions in the Textbooks

Learning Dimension	Frequency	Percentage
Cognitive	312	49%
Socio-emotional	210	33%
Behavioral	118	18%
Total	640	100%

From the table above, the results indicate that the cognitive dimension appears most frequently in the analyzed textbooks. Nearly half of the activities focus on knowledge acquisition, conceptual understanding, and language learning tasks. The socio-emotional dimension appears in approximately one-third of the activities, often through collaborative exercises, dialogues, and value-based discussions. However, the behavioral dimension accounts for less than one-fifth of the total activities, suggesting that the textbooks provide limited opportunities for learners to engage in practical sustainability actions.

2. Correlation Matrix of SDG Learning Dimensions

The following table displays the Correlation Matrix of SDG Learning Dimensions:

Table 4

Correlation Matrix of SDG Learning Dimensions

Variable	Cognitive	Socio-emotional	Behavioral
Cognitive	1.00	0.74	0.58
Socio-emotional	0.74	1.00	0.63
Behavioral	0.58	0.63	1.00

It appears from Table 4 that the correlation analysis indicates moderate to strong relationships between the learning dimensions. The strongest relationship exists between the cognitive and socio-emotional dimensions ($r = 0.74$), suggesting that activities emphasizing knowledge often include elements related to values and attitudes.

3. "Multiple Regression Analysis Predicting Behavioral Activities"

The following table displays the multiple regression analysis predicting behavioral activities:

Table 5

"Multiple Regression Analysis Predicting Behavioral Activities"

Predictor	Beta	p-value
Cognitive	0.41	0.02
Socio-emotional	0.53	0.01

As mentioned in Table 5 that the regression analysis demonstrates that both cognitive and socio-emotional dimensions significantly predict the presence of behavioral activities. However, the relatively low frequency of behavioral activities suggests that the textbooks emphasize knowledge and values more than practical engagement.

4. Discussion

The findings of this study indicate a notable imbalance in the representation of the Sustainable Development Goal (SDG) 4 learning dimensions within the *English for Iraq* textbooks, suggesting that certain dimensions are emphasized more prominently than others.

The predominance of the cognitive dimension suggests that the textbooks prioritize knowledge acquisition and language learning objectives. This emphasis is consistent with traditional approaches to language education, which focus primarily on linguistic competence and conceptual understanding.

The socio-emotional dimension is moderately represented through collaborative learning tasks, dialogues, and activities that encourage positive attitudes toward others. Such elements align with the principles of global citizenship education, which emphasize empathy, respect, and intercultural understanding (Grant-Smith et al., 2023).

However, the behavioral dimension is significantly underrepresented. Activities that encourage learners to apply knowledge through real-life sustainability practices—such as environmental projects, community engagement, or problem-solving tasks—are relatively rare.

These findings align with previous research suggesting that educational materials frequently prioritize theoretical knowledge, while offering comparatively limited opportunities for learners to engage in practical, sustainability-oriented activities (Jamil et al., 2024).

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For SDG 4 to be fully realized, educational materials should support not only cognitive understanding but also the development of responsible behaviors and active participation in sustainable practices.

V. CONCLUSION

This study investigated the representation of Sustainable Development Goal 4 within the *English for Iraq* textbooks used in Iraqi primary schools. The results indicate that while the textbooks effectively integrate cognitive and socio-emotional learning elements, the behavioral dimension remains underrepresented. Strengthening the behavioral component is therefore essential for equipping learners with the practical competencies required to become responsible global citizens capable of addressing real-world sustainability challenges.

The *English for Iraq* primary textbooks are visually engaging and pedagogically well-structured, building on the language skills acquired by pupils during their initial years of English instruction. The textbooks effectively meet the needs of young learners by providing integrated speaking activities that emphasize communication, allowing students to practice pronunciation, develop fluency, and use language meaningfully. Moreover, the activities are interconnected with knowledge acquired across other subject areas, enabling foreign language instruction to function not only as a medium for linguistic development but also as a tool for deepening learners' understanding of broader curricular content. This integrative approach facilitates the reinforcement of both language skills and cognitive.

VI. RECOMMENDATIONS

In light of the findings of this study, the following recommendations are proposed:

1. Integrate project-based learning activities related to sustainability.
2. Include real-life problem-solving tasks in textbook exercises.
3. Encourage community engagement activities within language learning contexts.
4. Provide teacher training programs on integrating SDG principles into classroom instruction.
5. Conduct future research analyzing secondary school textbooks and cross-national comparisons.
6. Develop the content of English textbooks should be based on objectives, objectives allow for equal experience level for all students, since all the students will know and are able to do the same thing at each

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REFERENCES

- [1] Achuba, C. (2025). The role of quality textbooks in effective learning: A systematic review. *Journal of Educational Studies*.
- [2] Adrianty, U. M., & Hafizh, M. (2023, December). The Difficulties of EFL Graduate Students in Writing a Scientific Article. In *International Conference on English Language and Teaching (ICOELT 2022)* (pp. 147-153). Atlantis Press.
- [3] Akbana, Y. E., & Koşar, G. (2024). An In-depth Analysis of Foreign Language Course Books to Investigate How and to What Extent Current Global Crises Are Covered in Them. In *Silencing Refugees' Voices in Educational Practices: Perspectives on School Textbooks* (pp. 19-36). Cham: Springer Nature Switzerland.
- [4] Bairmani, H. K., Shreeb, M. A., & Dehham, S. H. (2021). Iraqi EFL college students' awareness of plagiarism. *Journal of Language and Linguistic Studies*, 17(4), 2123-2133.
- [5] Bakdash, J. Z., & Marusich, L. R. (2017). Repeated measures correlation. *Frontiers in psychology*, 8, 456.
- [6] Brown, M. S., & Kudyba, S. (2014). Transforming unstructured data into useful information. *Big Data, Mining, and Analytics*, 227-246.
- [7] Bryman, A., & Cramer, D. (2012). *Quantitative data analysis with IBM SPSS 17, 18 & 19: A guide for social scientists*. Routledge.

- [8] Coomans, F. (2022). *SDG 4: Quality education for sustainable development*. Cambridge University Press.
- [9] Corich, S. (2008). Developing strategies to deal with the multiple generational groupings within the tertiary classroom. *Eastern Institute of Technology Hawke's Bay*, 201-205.
- [10] Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research: Developments, debates, and dilemmas. *Research in organizations: Foundations and methods of inquiry*, 2, 315-326.
- [11] Dehham, S. H., & Abbas, S. H. (2025). The Correlation between Iraqi EFL University Students' Metacognitive Awareness and Writing Performance.
- [12] Dehham, S. H., & Abbas, S. H. (2025). The Relationship Between University EFL Students' Self-Regulation and Writing Performance. *Theory and Practice in Language Studies*, 15(7), 2163-2171.
- [13] Fulcher, G., & Davidson, F. (2007). *Language testing and assessment*. London and New York: Routledge.
- [14] Gass, S. M., & Mackey, A. (2016). *Stimulated recall methodology in applied linguistics and L2 research*. Routledge.
- [15] George, G., Osinga, E. C., Lavie, D., & Scott, B. A. (2016). Big data and data science methods for management research. *Academy of Management Journal*, 59(5), 1493-1507.
- [16] Grant-Smith, D., Weiler, T., King, J., & Nykvist, S. (2023). Teaching global competence and citizenship education.
- [17] Ivić, I., Antić, S., & Pešikan, A. (2013). *Textbook quality: A guide to textbook standards*.
- [18] Jamil, M., Nosheen, S., & Saleem, A. (2024). Sustainability education in English textbooks. *Journal of Social and Organizational Matters*.
- [19] Kareem, H. H., Dehham, S. H., & Al-Wahid, M. A. (2019). The impact of teaching the creative writing by FOCUS strategy to develop. *Indian Journal of Public Health*, 10(6).
- [20] Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage.
- [21] Mills, G. E., Gay, L. R., & Gay, L. (2015). *Educational research*. Pearson Education UK.
- [22] Mohan, R. (2023). *Measurement, evaluation and assessment in education*. PHI Learning Pvt. Ltd.
- [23] Oluwatayo, J. A. (2012). Validity and reliability issues in educational research. *Journal of educational and social research*, 2, 391.
- [24] Rahooji, R. K., Dehham, S. H., & Al-Wahid, M. A. (2019). The Impact of Reading Strategy Knowledge and Science Knowledge on Developing Reading Skills of School Students. *Indian Journal of Public Health Research & Development*, 10(10).
- [25] Richards, J. (2001). *Curriculum development in language teaching*. Cambridge University Press.
- [26] Salkind, N. J., & Rasmussen, K. (2010). k-Means Cluster Analysis. *Encyclopedia of Measurement and Statistics: Sage Publishing*.
- [27] Shekhar Singh, A. (2014). Conducting case study research in non-profit organisations. *Qualitative market research: an international journal*, 17(1), 77-84.
- [28] Somekh, B., & Lewin, C. (Eds.). (2005). *Research methods in the social sciences*. Sage.
- [29] Sürücü, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & management studies: an international journal*, 8(3), 2694-2726.
- [30] Tavakoli, H. (2012). *A dictionary of research methodology and statistics in applied linguistics*. Rahnama press.
- [31] United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*.
- [32] Wals, A. (2015). Beyond unreasonable doubt: Education for sustainability. *Journal of Education for Sustainable Development*.

Ferdus Faris Mahmood is the M A student at the College of Basic Education, Babylon University, Iraq. She is interested in methods of teaching English. Her principal research area lies in teaching and learning English Language.

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Sabeeha Hamza Dehham is an Iraqi Professor at the College of Basic Education, Babylon University, Iraq. She earned a doctorate in TESOL at the University of Baghdad, Iraq. Her research interests encompass English Language Teaching. ORCID iD: 0000-0002-8308-4996.