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Coping Strategies of Omani Dental Students in Learning English for Specific Purposes (ESP)

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ABSTRACT : *This study examined the coping strategies used by dental students to overcome challenges in learning English for Specific Purposes (ESP) at Oman Dental College. In English-medium dental programs, students must develop both general English proficiency and specialized disciplinary vocabulary, which can present significant challenges for non-native English speakers. Using a qualitative phenomenological approach, data were collected through semi-structured interviews and focus group discussions with sixteen Foundation and first-year dental students. The data were analyzed using Braun and Clarke's reflexive thematic analysis. The findings revealed that students relied on repetition-based vocabulary learning strategies, multimedia resources, and self-developed techniques such as mnemonics and personal glossaries to understand dental terminology. Peer collaboration and peer feedback also played an important role in supporting comprehension and building confidence in using technical language, although unequal participation sometimes limited the effectiveness of group learning. The study highlights the importance of integrating structured vocabulary instruction, authentic learning materials, and collaborative learning activities into ESP courses to better support non-native English-speaking dental students.*

KEYWORDS : *coping strategies, dental education, English for Specific Purposes, language proficiency, peer learning*

I. INTRODUCTION

English has become the dominant language of global scientific communication and professional practice, particularly in fields such as dentistry where research publications, clinical documentation, and international collaboration are primarily conducted in English. As a result, students enrolled in professional healthcare programs must acquire not only general English proficiency but also specialized disciplinary language skills (Hyland, 2022). English for Specific Purposes (ESP) has therefore emerged as a critical component of professional education designed to address the linguistic needs of learners within specific academic and professional contexts (Basturkmen, 2023).

In dental education, ESP plays a particularly important role because students must develop the ability to understand technical terminology, read scientific literature, communicate with colleagues, and document patient information accurately. Research indicates that discipline-specific language competence significantly contributes to both academic success and professional readiness among healthcare students (Paltridge & Starfield, 2023). However, students studying in contexts where English is not the primary language frequently encounter difficulties in mastering specialized vocabulary, academic discourse conventions, and professional communication skills (Hyland & Jiang, 2024).

These challenges are particularly evident among dental students in the Middle East, where English is widely used in higher education but is not typically the students' first language. Studies conducted in regional contexts have reported that healthcare students often struggle with technical vocabulary, academic writing, and

oral communication in English-medium programs (Al-Mahrooqi & Denman, 2018; Al-Maamari & Dajani, 2020). Such difficulties may hinder students' academic performance and limit their ability to engage effectively with professional literature and clinical communication.

At Oman Dental College, ESP courses are designed to support students in developing the linguistic competencies necessary for academic study and professional practice. These courses emphasize discipline-specific vocabulary, academic reading, and professional communication skills relevant to dentistry. Despite this support, many students continue to experience challenges in understanding complex terminology, writing case reports, and participating confidently in academic discussions.

Previous research suggests that students adopt a range of coping strategies to manage language learning challenges in ESP environments. These strategies include self-regulated learning techniques, peer collaboration, and the use of digital learning tools (Oxford, 2017; Teng & Zhang, 2023). Collaborative learning environments have also been shown to enhance language development by enabling learners to share knowledge, provide feedback, and engage in socially mediated learning processes (Vygotsky, 1978; Swain, 2021).

Despite the growing body of research on ESP instruction, limited studies have examined the coping strategies used by dental students, particularly within the Omani higher education context. Understanding the strategies students use to overcome linguistic barriers can provide valuable insights for improving ESP instruction and curriculum design in dental education. Therefore, this study aims to investigate the coping strategies employed by dental students at Oman Dental College when learning English for Specific Purposes. The study specifically explores how language proficiency influences the strategies students adopt and how peer collaboration supports students in overcoming ESP learning challenges.

Research Questions

1. What coping strategies do dental students use to overcome challenges in learning ESP?
2. How does language proficiency influence the ESP learning strategies adopted by dental students?
3. How do peer collaboration and group interaction support students in overcoming ESP learning challenges.

II. Review of Related Literature

To address the research questions of this study, the literature review examines four key areas: the role of ESP in dental education, coping strategies used by ESP learners, the influence of language proficiency on strategy use, and the role of peer collaboration in language learning.

2.1 The Role of ESP in Dental Education

English for Specific Purposes has become an essential component of professional education, particularly in medical and dental programs where students must acquire discipline-specific language competence. ESP focuses on equipping learners with the linguistic skills required for academic and professional communication within a particular field (Basturkmen, 2023).

In healthcare education, the ability to interpret research literature, communicate with colleagues, and document clinical information accurately requires a high level of specialized language proficiency. Hyland (2022) notes that disciplinary discourse is characterized by specialized vocabulary, structured argumentation, and specific rhetorical conventions. Academic writing in professional disciplines requires an understanding of disciplinary discourse conventions and rhetorical practices (Hyland, 2023). Therefore, ESP instruction in healthcare programs must address both technical vocabulary and academic writing skills.

Research has shown that ESP training significantly improves students' ability to comprehend academic texts and engage with professional discourse. Paltridge and Starfield (2023) emphasize that explicit instruction in disciplinary communication helps students develop the genre awareness necessary for writing research reports, case studies, and clinical documentation.

Despite these benefits, many students in non-English-speaking contexts face difficulties in adapting to ESP-based curricula. Studies conducted in Middle Eastern universities indicate that healthcare students often struggle with understanding technical terminology and producing coherent academic writing in English (Al-Mahrooqi & Denman, 2018).

2.2 Coping Strategies in ESP Learning

Students adopt various strategies to cope with the challenges associated with learning ESP. Language learning strategies are defined as deliberate actions taken by learners to improve their language competence and facilitate comprehension (Oxford, 2017).

Recent studies highlight that successful ESP learners often employ metacognitive strategies such as planning, monitoring, and evaluating their learning processes (Teng & Zhang, 2023). These strategies enable students to regulate their learning and adapt to complex academic tasks.

Vocabulary acquisition strategies are particularly important in ESP learning because technical terminology constitutes a large proportion of disciplinary communication. Hyland and Jiang (2024) found that contextualized learning, repetition, and multimedia resources significantly improve vocabulary retention among university students.

Digital learning tools have also become increasingly important in ESP instruction. Online dictionaries, educational videos, and digital flashcard applications allow learners to access discipline-specific terminology in meaningful contexts (Godwin-Jones, 2022).

2.3 Language Proficiency and Strategy Use

Language proficiency plays a significant role in determining the effectiveness of coping strategies used by ESP learners. Research indicates that high-proficiency students tend to use autonomous learning strategies such as extensive reading, critical analysis of texts, and self-editing of written work (Basturkmen, 2023).

In contrast, students with lower proficiency levels often rely on translation, memorization, and teacher guidance when engaging with complex academic materials (Teng & Zhang, 2023). These differences highlight the need for differentiated ESP instruction that accommodates learners with varying linguistic abilities.

Cognitive Load Theory suggests that learners experience cognitive overload when processing complex information beyond their working memory capacity (Sweller, 1988). For ESP learners, the simultaneous processing of new vocabulary, unfamiliar concepts, and academic discourse structures can create significant cognitive demands.

2.4 Peer Collaboration in ESP Learning

Collaborative learning plays a vital role in language acquisition because it enables learners to construct knowledge through interaction and shared problem solving. Sociocultural Theory suggests that learning occurs through social interaction within the learner's Zone of Proximal Development (Vygotsky, 1978).

Peer-assisted learning environments allow students to clarify concepts, exchange learning strategies, and provide feedback on each other's work. Swain (2021) argues that collaborative dialogue encourages learners to notice linguistic gaps and refine their language use.

Recent studies have also shown that peer feedback significantly improves students' academic writing skills in ESP contexts (Hyland, 2022). Additionally, digital collaboration platforms such as discussion forums and online study groups have been found to enhance vocabulary acquisition and writing fluency (Godwin-Jones, 2022).

Although numerous studies have explored ESP instruction in higher education, limited research has examined the coping strategies used by dental students specifically. Furthermore, few studies have investigated

how language proficiency, peer collaboration, and self-regulated learning interact within ESP learning environments in the Omani context.

This study addresses this gap by examining how dental students at Oman Dental College navigate ESP learning challenges and the strategies they employ to support their academic development.

III. THEORETICAL FRAMEWORK

This study is primarily informed by Sociocultural Theory, which emphasizes the role of social interaction and collaboration in language learning. According to Vygotsky (1978), knowledge is constructed through interaction with others, and learning occurs within the learner's Zone of Proximal Development, where guidance and collaboration enable learners to perform tasks beyond their current level of independent ability. In language learning contexts, peer interaction and collaborative dialogue allow learners to negotiate meaning, clarify misunderstandings, and gradually develop linguistic competence.

In English for Specific Purposes (ESP) learning environments, collaborative activities such as peer discussion, group work, and feedback sessions provide opportunities for students to support each other's language development. Through these interactions, learners can share strategies for understanding technical vocabulary and disciplinary concepts, thereby strengthening their ability to use language within professional contexts.

In addition, Cognitive Load Theory (Sweller, 1988) provides insight into the challenges learners face when processing complex disciplinary language. ESP learners must simultaneously process unfamiliar vocabulary, specialized concepts, and academic discourse structures, which can place significant demands on working memory. Learning strategies such as repetition, contextualized vocabulary learning, and multimedia resources may help reduce cognitive load by facilitating the transfer of new terminology into long-term memory.

Together, these theoretical perspectives provide a foundation for understanding how dental students develop coping strategies to manage the linguistic demands of ESP learning. Sociocultural Theory explains the importance of peer collaboration and interaction, while Cognitive Load Theory helps explain the role of vocabulary learning strategies in managing the cognitive demands associated with specialized academic language.

IV. METHODOLOGY

This study employed a qualitative phenomenological research design to explore the lived experiences of dental students learning English for Specific Purposes (ESP). Sixteen dental students from the Foundation and Year 1 levels at Oman Dental College were selected using purposive sampling to ensure that participants had direct experience with ESP coursework. The participants included eight Foundation students and eight first-year dental students. Data were collected through semi-structured interviews and focus group discussions, allowing participants to describe individual learning experiences and reflect on shared challenges and coping strategies. The interview and focus group questions were designed to explore students' coping strategies, language proficiency experiences, and the role of peer collaboration in ESP learning. Participation was voluntary and informed consent was obtained from all participants, with confidentiality maintained throughout the study. Data were analyzed using Braun and Clarke's (2021) six-step reflexive thematic analysis process: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.

V. RESULTS AND DISCUSSION

The themes identified through the coding process correspond directly to the study's research questions concerning coping strategies, the influence of language proficiency, and peer collaboration in ESP learning.

Table 1. Coding Process and Emergent Themes from Student Interviews

Open Coding (Initial Concepts)	**Axial Coding (Categories)**	**Selective Coding (Themes)**	**Frequency of Responses**	**Excerpts from Student Interviews**
Repetition, flashcards, video-based learning	Vocabulary retention methods	Coping Strategies	18	"I use flashcards and watch dental-related videos repeatedly to memorize terms." (P3); "I listen to recorded lectures multiple times until I understand the terms." (P9); "Writing the terms repeatedly helps me retain them better." (P14)
Online dictionaries, real-world materials, practice tests	Preferred study materials	Methods & Materials	15	"Online dictionaries and practice tests help me reinforce my learning." (P7); "I rely on real-world dental articles and case reports to learn terminology in context." (P11); "Watching dental procedures on YouTube helps me understand how terms are used in practice." (P6)
Mnemonics, summarization, self-created glossaries	Unique learning techniques	Unique Techniques	12	"I create mnemonics for complex words and keep a glossary for quick reference." (P10); "Summarizing information in my own words helps me understand and remember it better." (P15); "I visualize terms by associating them

				with images or diagrams." (P2)
Reading, writing, speaking challenges, listening comprehension	Impact of English proficiency on ESP learning	Language Proficiency Impact	14	"My reading is good, but I struggle with listening to lectures in English." (P5); "I can understand written material, but speaking fluently in English is challenging." (P13); "Writing case reports in English is difficult because I struggle with grammar and sentence structure." (P4)
Basic vocabulary, contextual learning, code-switching	ESP learning tactics by proficiency level	ESP Tactics & Proficiency	11	"At first, I focused on simple terms, but now I use them in real patient cases." (P12); "I started with basic terms and gradually moved to using them in conversations with professors." (P8); "I sometimes switch to my native language when I don't know a term, then look up the English equivalent." (P1)
Study groups, peer discussions, knowledge-sharing	Benefits of peer collaboration	Peer Collaboration	16	"Discussing with my classmates helps me remember terms better." (P8); "We quiz each other on terminology, which

				makes learning more interactive." (P16); "Working in groups allows us to share different learning strategies." (P5)
Unequal participation, schedule conflicts, learning approach conflicts	Challenges in peer-based learning	Challenges in Peer Work	10	"Some classmates are better in English, so they talk more in group discussions." (P4); "It's difficult to coordinate study sessions because of different schedules." (P9); "Not everyone contributes equally, which makes group work frustrating." (P7)
Error correction, concept reinforcement, confidence boost	Role of peer review in ESP learning	Peer Review Impact	13	"Getting feedback from peers helps me correct mistakes and gain confidence." (P6); "When my classmates review my work, they point out errors I didn't notice." (P3); "Explaining concepts to peers forces me to understand them better myself." (P14)

Table 2. Frequency of Themes

Note: Frequencies represent the number of coded responses across interviews rather than the number of participants.

Theme	**Frequency**

Coping Strategies	18
Peer Collaboration	16
Methods & Materials	15
Language Proficiency Impact	14
Peer Review	13
Unique Techniques	12
ESP Tactics	11
Peer Work Challenges	10

The analysis revealed several major themes including vocabulary coping strategies, the use of digital learning tools, the role of peer collaboration, and challenges associated with group learning. Overall, the findings demonstrate that dental students employ a combination of individual learning strategies, technological tools, and collaborative learning practices to overcome ESP challenges.

Vocabulary learning strategies such as repetition, flashcards, and contextual learning were the most frequently reported techniques. This suggests that students often rely on memory-based learning approaches to manage the large volume of specialized dental terminology. From the perspective of Cognitive Load Theory, repetition and structured vocabulary practice may help reduce the cognitive burden associated with processing unfamiliar technical language. By repeatedly encountering and rehearsing key terms, students can transfer vocabulary from working memory to long-term memory, thereby reducing cognitive overload during lectures, reading tasks, and clinical discussions. These findings align with recent studies emphasizing the importance of strategic vocabulary learning in ESP environments (Hyland & Jiang, 2024; Teng & Zhang, 2023).

Digital tools also played a significant role in supporting students' learning processes. Students reported using online dictionaries and instructional videos to understand technical dental terminology in context. Previous research suggests that technology-enhanced learning environments support vocabulary acquisition and promote autonomous learning (Godwin-Jones, 2022).

Language proficiency significantly influenced the strategies students adopted. High-proficiency learners demonstrated greater independence in engaging with academic texts and clinical materials, whereas lower-proficiency students relied more heavily on peer collaboration and guided learning strategies. These findings support Basturkmen's (2023) assertion that language proficiency shapes the type of strategies learners employ.

Peer collaboration emerged as another important factor in ESP learning. Study groups enabled students to clarify difficult concepts and exchange learning strategies. From a sociocultural perspective, these interactions function as scaffolding within students' Zones of Proximal Development, allowing learners with stronger language proficiency to support peers who are still developing their ESP competence. Sociocultural Theory suggests that collaborative dialogue supports language development through shared knowledge construction (Vygotsky, 1978).

However, some students reported challenges in collaborative learning environments, including unequal participation and scheduling conflicts. Similar challenges have been identified in recent ESP studies examining group-based learning in higher education contexts.

Overall, the findings highlight the importance of integrating individual, technological, and collaborative learning strategies in ESP instruction.

VI. Implications for ESP Teaching

The findings suggest several implications for ESP instruction in dental education. First, ESP courses should incorporate explicit vocabulary learning strategies, including repetition, contextual learning, and visualization techniques. Instructors may also integrate terminology mapping, case-based vocabulary tasks, and peer review activities to reinforce the use of dental terminology in authentic contexts. Second, authentic learning materials such as clinical case studies, professional articles, and instructional videos should be incorporated into classroom activities to provide students with meaningful exposure to disciplinary language in real-world contexts. Third, collaborative learning approaches such as peer feedback sessions, structured study groups, and collaborative discussions can support students in clarifying difficult concepts and strengthening their understanding of dental terminology. Finally, ESP instruction should incorporate differentiated teaching strategies to accommodate students with varying levels of English proficiency.

VII. CONCLUSION

This study examined the coping strategies used by dental students at Oman Dental College in learning English for Specific Purposes. The findings demonstrate that students rely on a combination of vocabulary learning techniques, digital learning resources, and peer collaboration to manage the linguistic demands of dental education. Language proficiency also influences the strategies students employ, with higher-proficiency learners demonstrating greater autonomy while lower-proficiency learners benefit from collaborative support. These findings highlight the importance of integrating structured vocabulary instruction, technology-enhanced learning resources, and collaborative activities into ESP curricula to better support students in English-medium professional programs.

VIII. Limitations

This study involved a relatively small sample size of sixteen participants from a single institution. However, phenomenological research prioritizes depth of insight into participants' lived experiences rather than statistical generalization. The use of in-depth interviews and focus group discussions allowed the researcher to explore students' perspectives on ESP learning challenges in detail. Nevertheless, future studies with larger samples and multiple institutions could provide broader insights into ESP learning strategies among dental students.

IX. Future Research

Future studies could include larger samples across multiple institutions and explore the role of digital technologies and artificial intelligence in ESP learning environments.

References

[1] Ahmed, H., & Hassan, R. (2020). Scaffolded learning in ESP: A case study of Egyptian dental students. Journal of Language Teaching, 10(2), 145–161.

[2] Al-Husseini, S. (2020). Vocabulary acquisition in Omani dental students: Strategies and challenges. Arabian Journal of Education, 15(3), 78–95.

[3] Al-Khalil, M. (2022). Bilingual education and ESP proficiency in Qatar. International Journal of Linguistics, 9(4), 230–248.

[4] Al-Maamari, F., & Dajani, B. (2020). English for specific purposes in Oman: Challenges and opportunities in higher education. Asian ESP Journal, 16(3), 55–72.

[5] Al-Mahrooqi, R., & Denman, C. (2018). ESP challenges for Middle Eastern dental students. TESOL Quarterly, 52(1), 33–55.

[6] Al-Zadjali, F., & Al-Mahrooqi, R. (2019). The impact of peer-assisted learning on Omani ESP students. Applied Linguistics Review, 8(2), 120–138.

[7] Basturkmen, H. (2023). Developments in English for specific purposes (2nd ed.). Routledge.

[8] Borg, S. (2019). Academic writing in dentistry: Strategies for ESP students. Journal of English for Academic Purposes, 38, 25–39.

[9] Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide. SAGE.

[10] Cao, Y., & Ni, X. (2018). English for specific purposes in medical education: A global perspective. ESP Today, 6(2), 185–203.

[11] Dudley-Evans, T., & St. John, M. J. (1998). Developments in English for specific purposes: A multi-disciplinary approach. Cambridge University Press.

[12] Flowerdew, J., & Peacock, M. (Eds.). (2001). Research perspectives on English for academic purposes. Cambridge University Press.

[13] Godwin-Jones, R. (2022). Emerging technologies for language learning. Language Learning & Technology, 26(2), 5–17.

[14] Hyland, K. (2022). English for specific purposes: What is it and where is it taking us? ESP Journal, 57, 1–12.

[15] Hyland, K. (2023). Disciplinary discourses: Social interactions in academic writing (2nd ed.). University of Michigan Press.

[16] Hyland, K., & Jiang, F. (2024). Academic vocabulary and disciplinary communication. Journal of English for Academic Purposes, 68, 101318. https://doi.org/10.1016/j.jeap.2023.101318

[17] Jordan, R. R. (1997). English for academic purposes: A guide and resource book for teachers. Cambridge University Press.

[18] Nation, I. S. P. (2013). Learning vocabulary in another language (2nd ed.). Cambridge University Press.

[19] Oxford, R. L. (2017). Teaching and researching language learning strategies (2nd ed.). Routledge.

[20] Paltridge, B., & Starfield, S. (2023). The handbook of English for specific purposes (2nd ed.). Wiley Blackwell.

[21] Rahman, M., Singh, M., & Pandian, A. (2021). Language learning strategies and ESP instruction in higher education. Asian ESP Journal, 17(1), 34–52.

[22] Richards, J. C., & Rodgers, T. S. (2014). Approaches and methods in language teaching (3rd ed.). Cambridge University Press.

[23] Swain, M. (2021). The inseparability of cognition and emotion in second language learning. Language Teaching, 54(1), 1–14.

[24] Swales, J. M. (1990). Genre analysis: English in academic and research settings. Cambridge University Press.

[25] Swales, J. M. (2004). Research genres: Explorations and applications. Cambridge University Press.

[26] Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. Cognitive Science, 12(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4

[27] Teng, F., & Zhang, L. (2023). Self-regulated learning strategies and academic writing development in ESL students. System, 115, 102999. https://doi.org/10.1016/j.system.2023.102999

[28] Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

[29] Zhang, L. J., & Hyland, K. (2021). Fostering academic literacy in ESP contexts. Journal of English for Academic Purposes, 52, 100999. https://doi.org/10.1016/j.jeap.2021.100999