Deanship of Scientific Research

The Influence of Arab Culture and Technology on Code-switching in English Language Classrooms: Teachers' Perspectives

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Abstract

Objectives: This study explores the impact of culture and technological tools on English language teaching (ELT) in Oman, a bilingual country where English and Arabic are frequently code-switched by teachers in English-language classrooms. The aim is to understand the impact of Arab culture and digital tools on code-switching (CS) among English language teachers and their effect on language learning outcomes.

Methods: The research applies Vygotsky's sociocultural theory to examine the social and cultural dimensions of CS. A mixed-methods approach was used to collect data, including interviews and surveys with English second language educators. Descriptive and inferential statistics were used to analyze the data and identify common types of CS and factors contributing to CS in a digital environment.

Results: Preliminary findings suggest that CS in English and Arabic enhances teacher-student interaction and enables the adaptation of teaching strategies. By considering the role of technology in CS practices, the study sheds light on the impact of technology on ELT classrooms.

Conclusions: CS is a valuable tool in English foreign language learning (EFL) contexts, benefiting both students and teachers by enhancing engagement, reducing anxiety, and fostering dynamic learning environments. While CS supports less proficient students by integrating their native language, it should be used carefully to avoid disrupting advanced learners. Additionally, integrating technology and digital resources into EFL teaching can create immersive, personalized learning experiences, promoting self-reliance and better language acquisition. Instructors should align teaching materials with technology for optimal results.

Keywords: Arab culture; code-switching, English language teachers, Oman, sociocultural theory.

أثر الثقافة العربية والتكنولوجيا على تبديل اللغات في قاعات تدريس اللغة الإنجليزية: اتجاهات المعلمين

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ملخّص

الأهداف: يهدف هذا البحث إلى دراسة تأثير الثقافة والأدوات التكنولوجية على تدريس اللغة الإنجليزية في سلطنة عُمان، وعُمان دولة ثنائية اللغة: حيث يجري في كثير من الأحيان التبديل بين اللغتين –الإنجليزية والعربية—— من قبل المعلمين داخل قاعات تدريس اللغة الإنجليزية. لذلك، تسعى هذه الدراسة إلى فهم تأثير الثقافة العربية والأدوات الرقمية في تبديل اللغة بين معلمي اللغة الإنجليزية، وتأثيرها في نتائج تعلم اللغة.

المنهجية: يطبق البحث نظرية فيجوتسكي الاجتماعية والثقافية لدراسة الأبعاد الاجتماعية والثقافية لتبديل اللغة. استُخدِمَ نهجين مختلفي الأساليب لجمع البيانات، طبقت الدراسة منهج المقابلات والدراسات الاستقصائية مع معلمي اللغة الإنجليزية، كما استُخدِمَت الإحصائيات الوصفية والاستنتاجية لتحليل البيانات وتحديد الأنواع الشائعة من تبديل اللغة والعوامل المساهمة في تبديل اللغة في البيئة الرقمية.

النتائج: تشير النتائج الأولية إلى أن التبديل بين اللغة العربية والإنجليزية يعزز التفاعل بين المعلم والطالب ويمكّن من تكييف استراتيجيات التدريس. ومن خلال النظر في دور التكنولوجيا في ممارسات تبديل اللغة، تلقي الدراسة الضوء على تأثير التكنولوجيا على تعليم اللغة الإنجليزية داخل قاعات التدريس.

الخلاصة: يُعد التحول بين اللغات أداةً قيمةً في سياقات تعلم اللغة الإنجليزية كلغة أجنبية؛ حيث يستفيد كل من الطلبة والمعلمين من خلال تعزيز المشاركة، تقليل القلق، وتهيئة بيئات تعليمية ديناميكية. كما يدعم التحول بين اللغات الطلبة الأقل كفاءة من خلال دمج لغتهم الأم، ولكن يجب استخدامه بحذر لتجنب التأثير السلبي بالنسبة لطلبة المستويات المتقدمة. علاوة على ذلك، يُمكن أن يُساهم دمج التكنولوجيا في تدريس اللغة الإنجليزية كلغة أجنبية في خلق تجارب تعليمية شخصية، وتعزيز الاستقلالية وتحسين اكتساب اللغة. وعليه، ينبغي على المعلمين مواءمة المواد التعليمية مع التكنولوجيا لتحقيق أفضل النتائج.

الكلمات الدالة: الثقافة العربية، تبديل اللغة، معلمي اللغة الإنجليزية، النظرية الاجتماعية والثقافية، عُمان.

1. Introduction

Code-switching (CS) is a prevalent linguistic phenomenon in bilingual and multilingual speech communities, involving the transition or substitution between different language variants (Fitria & Syarif, 2021). It encompasses the active use of two or more languages within a single conversation or clause, occurring at both clause or multi-word string and single-word levels. Social and discourse structures may influence the choice to employ CS at the clause level, while single-word switches serve specific communicative purposes (Hamilton-Hollaway, 2023). CS is not arbitrary but rather a grammatical practice carrying sociolinguistic implications, shaped by social factors like cultural identity, social norms, and communicative context (Junaidi & Abdul-Majid, 2019; Maki, 2021). It serves various functions, including establishing social connections, expressing identity, and conveying meaning effectively. This phenomenon is common in bilingual and multilingual classrooms and is often a natural feature of bilingual speech strategy used for explanations and rapport-building with students (Euspawati, 2018; Junaidi & Abdul-Majid, 2019). Teachers' use of CS is not always conscious and may not be fully aware of its functions and outcomes (Hamid, 2016; Puspawati, 2018). Despite whether CS is performed consciously or subconsciously, individuals' attitudes towards its usage vary.

CS among English language teaching (ELT) educators in Oman is common in language classrooms (Al-Maashani et al., 2023; Domede, 2023). The Omani culture values bilingualism and views CS as a sign of fluency and prestige (Al-Jabri, 2020). This perspective may lead language teachers to employ CS as a strategy, and students may be more receptive to it as a learning tool. Oman's linguistic diversity, with various languages and distinct dialects within society, plays a role in the frequency and reasons for CS use among ELT educators (Peterson, 2004). Teachers use CS for various purposes, such as explaining complex concepts, maintaining classroom discipline, encouraging student participation, facilitating communication, and overcoming language barriers (Al-Busaidi, 2019; Al-Qassabi, 2021). Additionally, CS is used for cultural mediation, metaphorical translation, and approximation (Al-Qassabi, 2021).

Furthermore, technology has transformed language learning and teaching, offering educators access to a plethora of digital resources, from YouTube videos to online audio and reading materials (Al-Amrani & Al-Ghaithi, 2023). The integration these resources in ELT learning encourages students' willingness to communicate in English with their peers and instructors (Al-Amrani & Harrington, 2020). CS is increasingly linked to technology, particularly through digital communication platforms like social media, where multilingual users switch languages to convey specific ideas or emotions (Androutsopoulos, 2015). In education, language learning apps often use CS as a pedagogical tool to aid comprehension (Levy & Stockwell, 2006). Multimodal communication enabled by technology, such as combining text and video, also facilitates language mixing (Sebba, Mahootian, & Jonsson, 2012). Given the constant progression of technological advancements in language and education, this research aims to investigate the roles and influences of technology in CS to support effective learning outcomes among ELT practitioners.

In that lieu, this research seeks to examine CS among ELT educators in Oman, considering cultural context and technology interaction. It investigates the frequency, reasons, and perceived effectiveness of CS practices, deploying a mixed-methods approach, including interviews and surveys, to shed light on the interplay between culture, technology, and language education.

2. Literature review

2.1 Impact of Technology and Digital Resources on Code-switching

In today's technology-driven world, the integration of digital resources has become increasingly common in language classrooms (Mudra, 2019). Educators now have a vast array of tools at their disposal, including YouTube videos, Wikipedia, forums, blogs, online audio, and various reading sources. These digital/technological resources encompass a wide range of software, programs, applications, platforms, and online or offline materials specifically designed to support individuals in accomplishing specific tasks (Oikonomou & Patsala, 2021). Teachers incorporate these digital resources into their teaching in various ways (Anggeraini, 2018). For example, they may utilise them to deliver information to students, prepare teaching materials, and manage classroom activities (Li & Ni, 2011; Yang & Huang, 2008; Wozney et al., 2006). Kessler (2018) points out that language teachers today are faced with a wide range of captivating options when it comes to incorporating

technology into language learning. This abundance of possibilities can overwhelm educators as they navigate the various digital tools and resources available to them. Okojie et al. (2006) emphasise the importance of understanding pedagogical principles and effectively integrating technology into instructional practices. According to Rezaei et al. (2014), mobile applications can be practical tools for vocabulary acquisition in the second language learning context. The study suggests that the use of mobile technologies, such as mobile applications, can contribute to more engaging and interactive learning experiences, leading to improved language skills and increased learner motivation in CS. However, there is a tendency among teachers to underutilise technology for student-centred activities, such as recreational purposes like games, expansive applications like simulations, and constructivist learning approaches that involve students in creating digital artefacts demonstrating their learning (Gurcay et al., 2013; Wozney et al., 2006).

The integration of digital resources as materials in language teaching has a significant impact on the need for CS among English language teachers. With the availability of diverse digital tools, such as YouTube videos, online audio, and reading sources, teachers can incorporate authentic language input and multimedia content into their lessons. According to Watkins and Wilkins (2011), the visual and auditory nature of YouTube and other online videos makes them highly suitable for teachers to incorporate into English classes focused on listening and speaking skills. These resources provide a rich linguistic and cultural context for language learning. As teachers utilise these digital resources, CS may become necessary to bridge the gap between the target language (what teachers use to communicate) and the students' native language (Narayan, 2019). For instance, if a teacher is using a YouTube video in English but encounters a challenging concept or unfamiliar vocabulary, they may code-switch to the students' native language to clarify the meaning and ensure comprehension. While there is limited research specifically addressing the use of CS in technology-based language teaching, it is an area that warrants further exploration to better understand the role and impact of CS in digital language learning environments.

2.2 Influence of Culture on CS

Cultural beliefs and values can significantly impact individuals' motivations and decisions to code-switch. Cultural attitudes towards languages and language varieties are key factors shaping CS patterns. Language attitudes refer to one's evaluations of different languages or language varieties. Studies demonstrate that language attitudes and ideologies shape individuals' CS motivations and decisions. For example, Al-Bulushi (2017) conducted a study on the use of CS in Omani English language classrooms. The study found that teachers in Oman use CS as a teaching tool to facilitate understanding and improve language proficiency among their students. The author suggested that this is due to the cultural view of CS as a positive skill in Oman.

In a study by Al-Khatib and Al-Jabri (2020), Omani students frequently used Arabic and English in online forums to discuss various topics related to their academic and personal lives. The authors suggested that the use of CS in online forums reflects the cultural and linguistic diversity of Omani society. Al-Qahtani (2019) stated that English and Arabic were used in online videos by Saudi Arabian teachers to provide instructional content to their students. The authors found that the teachers used several types of CS: intersentential, intrasentential, and tag-switching. Intersentential CS involves switching languages between sentences, while intrasentential CS involves switching languages within a sentence. Tag-switching involves switching languages at the end of a sentence or phrase. These types of CS have different functions, such as providing emphasis, clarification, or humour. Tang (2016) also explores CS practices in English language classrooms and emphasises how cultural factors influence teachers' decisions to code-switch to facilitate comprehension and create a supportive learning environment. It suggests that cultural considerations play a pivotal role in determining when and how teachers employ CS strategies in their instructional practices. On the other hand, the Arab culture significantly impacts Omani students' willingness to communicate in English as a foreign language (EFL), and both the context and interlocutor types substantially influence their communication behaviour (Al Amrani, 2019; Al-Amrani, 2022).

2.3 CS from the Sociocultural Theory of Vygotsky

Lev Vygotsky, a renowned psychologist and educational theorist, emphasises the importance of social interactions and the role of more knowledgeable others (MKOs) in facilitating learning. According to Vygotsky, scaffolding is crucial for

guiding learners through their Zone of Proximal Development (ZPD), which refers to the range of tasks that learners can accomplish with the support of a competent individual (Lantolf, 2000).

Teachers use CS to, for example, clarify meaning, negotiate meaning, establish rapport, and express emotions. One notable strategy is scaffolding, which involves providing students with support and guidance as they learn new concepts and skills. Scaffolding in language teaching refers to the instructional support and guidance provided by teachers to help learners acquire new language skills and concepts (Yildiz & Celik, 2020). That is to say, teachers offer temporary support and assistance to learners, aiding them in comprehending and completing tasks that they would be unable to accomplish independently (Yamat et al., 2011). This assistance is provided during tasks that require teachers' involvement due to learners' limited understanding or skill level (Yildiz & Celik, 2020).

In Vygotsky's perspective, the social context includes interactions with others, cultural practices, and the language used within a particular community (Lantolf, 2000). CS aligns with this theory by recognising the importance of social contexts in learning. When teachers engage in CS, they acknowledge their students' diverse linguistic and cultural backgrounds and create an inclusive environment that values and respects these identities, promoting effective communication in the classroom. They switch between languages to ensure that students can understand concepts and instructions clearly. This facilitates comprehension and active participation in the learning process, enhancing cognitive development.

CS can serve as a powerful scaffolding strategy in second language (L2) classrooms (Nkamta, 2020). By utilising students' first language(L1), teachers create a bridge between what students already know and the new language they are learning (Yadav, 2014). This helps to make the content more accessible and comprehensible, particularly for learners who may struggle with understanding instructions or concepts solely in the L2 (Negadi, 2021). CS as a scaffolding strategy aligns with Vygotsky's sociocultural theory and the ZPD. It acknowledges that learners may require a support system in bridging the gap between their current level of L2 proficiency. Thus, when viewed through the lens of scaffolding, CS facilitates students' access to new information, expands on their prior knowledge, and gradually develops their independence and proficiency in the L2, as shown in Figure 1.
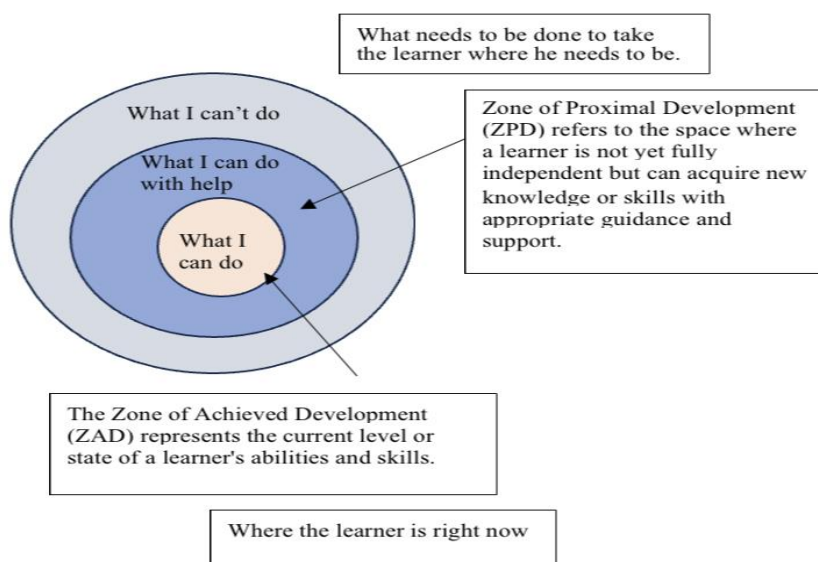

Figure 1. Vygotsky's ZPD and Scaffolding (Lantolf, 2000)

2.4 *Scaffolding of CS in L2 learning*

Several recent studies have explored the relationship between scaffolding and CS in L2 learning. For instance, Adriosh and Razı's study (2019) focused on six EFL instructors and students in Libyan universities. Arabic (L1) was occasionally used for pedagogical and social functions, primarily for clarification, repetition, recapitulation, and socialisation. The

limited use of Arabic in the Libyan community makes classroom interaction a unique opportunity for extensive English usage.

In the Australian context, Ma (2019) examined the use of the L1 by teachers and students at an elementary level with adult migrants. Teachers often used L1 for pedagogical and social purposes, such as controlling classroom behaviour, giving instructions, eliciting responses, and providing explanations. Mangila (2018) investigated the language habits of bilingual Filipino instructors in English language classrooms. The study found that instructors employed CS for various pedagogical reasons, mainly for instructional or content acquisition. CS was also used occasionally for reformulation and facilitation but not for language learning or habitual purposes. Mazur et al. (2016) introduced the CO-MIX system, which used CS for English vocabulary acquisition. Teachers used CS to build relationships with learners, conveying a desire to help students. Switching from L2 to L1 was highly desirable among L2 learners, who appreciated the extra explanations and the teacher's supportive attitude.

In brief, the literature review offers an overview of the impact of digital resources on CS, culture's influence on CS, and the use of CS as a scaffolding strategy in L2 learning. However, there is a gap in the literature review concerning the specific context of Oman and the interaction between CS, culture, and technology among educators in Omani ELT classrooms. Therefore, this study aims to investigate the frequency, reasons, and perceived effectiveness of CS practices in ELT classrooms in Oman while exploring the cultural factors that contribute to its prevalence and the impact of technological influences. The findings of the study can significantly contribute to a better understanding of the role of CS in Omani ELT classrooms and can inform language teaching practices in similar bilingual and multilingual contexts.

3.   Methodology

This study addresses the following research questions:

1. To what extent do ELT instructors in Oman use CS, and what are the common functions and reasons behind their CS practices?
2. How does the Arab culture impact the frequency of CS among English language teachers in Oman?
3. To what extent has the integration of technology, including digital resources, affected the CS practice in Oman's ELT classrooms?

To answer the research questions with validity, the present study employed the mixed method using qualitative and quantitative research methods. Adopting this method, researchers tend to combine, collect, and analyse elements of both quantitative and qualitative research techniques, approaches, and theories into a single study to explore diverse perspectives and a holistic view of the research study. It also allows participants to share their voices and experiences across the research process (Shorten & Smith, 2017). The implication of such a method prompts the researchers to answer the research questions accurately and thoroughly.

3.1 Participants

The research was conducted in multiple departments at Sohar University and involved 119 lecturers who completed a questionnaire. This group consisted of 63 males and 56 females with diverse educational backgrounds and more than five years of teaching experience. The lecturers' ages ranged from 25 to 50 years old; they represented various nationalities, including 58 Omanis, 18 Jordanians, 4 Sudanese, 9 Egyptians, 9 Tunisians, and 15 others. Subsequently, ten instructors were chosen to participate in semi-structured interviews.

3.2 Research Instruments

Two primary research tools were used to gather data: a questionnaire and semi-structured interviews.

Questionnaire: The study's questionnaire was adapted from Yao's (2011) research and tailored to the context of ELT educators in Oman. It consisted of three sections:

*   Functions and reasons for CS in ELT classrooms.
*   Attitudes focusing on educators' perceptions of CS's impact on ELT learning
*   Levels (words, phrases, or sentences) of CS.

The Likert scale used in the questionnaire ranged from 1 (strongly agree) to 5 (strongly disagree). A pilot test was

conducted with a group of teachers before implementing the questionnaire with the target group of ELT educators. Their feedback and input were invaluable in refining the questionnaire and ensuring its clarity, relevance, and effectiveness in collecting the desired data.

Semi-Structured Interviews: Ten ELT instructors participated in flexible, open-ended semi-structured interviews conducted in face-to-face or remote formats based on availability. Topics included motivations for CS, its impact on teaching and learning, cultural/contextual influences, and the role of technology in CS practices. Interviews lasted around 30 minutes on average and were aimed at encouraging educators to share their experiences and insights. Recordings of these interviews were transcribed and analysed, complementing the questionnaire data to provide a comprehensive understanding of CS practices among ELT educators in Oman.

3.3   Data collection and analysis

The research adhered to a rigorous ethical framework, with ethical clearance granted by Sohar University's Research Department. The questionnaire was distributed across various faculties at the university, and follow-up interviews were conducted with participants who volunteered, with strict adherence to ethical guidelines and prior consent for audio recording.

Quantitative data were analysed using descriptive and inferential statistics to identify common functions and CS levels. For the interview data, a thematic analysis approach was employed. Thematic analysis is a qualitative data analysis method focused on identifying patterns, themes, and concepts within the data (Braun & Clarke, 2021).

The coding process involved several steps. Researchers first familiarised themselves with the interview transcripts to understand the content deeply. Initial coding was done independently, identifying meaningful data segments related to CS in ELT classrooms. Codes and categories emerged from the data rather than being predefined by existing theories. Each interview response was coded, and codes were grouped into broader categories based on similarities. Multiple researchers independently participated in the coding process, with discussions to reach consensus in cases of disagreement. This collaborative approach ensured a reliable and comprehensive thematic analysis, reducing potential biases. The thematic analysis provided valuable insights into teachers' perspectives on CS in ELT classrooms, with the resulting themes and findings offering a robust understanding of this sociolinguistic phenomenon.

4.   Findings

The internal consistency of the items within the instrument was used to estimate the reliability of scales. Table 1 shows that the scales used in the study had acceptable internal consistency reliabilities as all exceeded Cronbach's $\alpha \geq 0.70$.

Table 1. Internal Consistency Reliabilities of the Scales Used in the Study

Variables	Cronbach's α	No of Items
Student persona scale	0.72	5
Functions of CS	0.85	7
Levels of CS	0.69	3

4.1   Quantitative data analysis

4.1.1 Student Persona

The data in Table 2 reveals teachers' belief that students preferred teachers who code-switch from English to Arabic, particularly among less proficient students in the L2. Findings only point out that students understood concepts better when the teachers code-switched from English to Arabic. However, students fluent in the L2 felt that CS interrupts the flow of the conversation, which puts them off.

Table 2. Student persona

Item Description	N	Min	Max	Mean	SD
Students prefer teachers who code-switch from English to Arabic to those who do not.	119	1	5	2.02	1.12
Teachers are forced to code-switch from English to Arabic because of the students' deficiency in English.	119	1	5	2.67	1.09

Item Description	N	Min	Max	Mean	SD
Students understand concepts better if the teacher code-switches from English to Arabic.	119	1	5	2.06	1.12
Excellent learners do not appreciate frequent CS by teachers.	119	1	5	2.92	1.11
Weak learners appreciate CS from English to Arabic by teachers.	119	1	5	2.48	1.06
Average					

4.1.2 Function/ reasons for CS

The data revealed that the main reason for CS is that teachers think it helps them in classroom management, as shown in Table 3. In that manner, CS helps students understand specific topics better. Also, the main reason for CS indicates that it is appropriate for inclusivity. Therefore, teachers usually would promote solidarity and cooperation among speakers of L2.

Table 3. Functions of CS

Item Description	N	Min	Max	Mean	SD
Teachers code-switch from English to Arabic because they think it helps them in classroom management.	119	1	5	1.90	0.90
Teachers code-switch because they think it helps students understand specific topics better.	119	1	5	2.13	0.99
Teachers code-switch because they want to show solidarity with students.	119	1	5	2.56	1.05
Teachers code-switch because they think it makes the conversation more authoritative.	119	1	5	2.34	1.10
Teachers code-switch to continue with the flow of the conversation.	119	1	5	2.40	1.20
Teachers code-switch because they want to express their emotions effectively.	119	1	5	2.47	1.07
Teachers code-switch because they want to exclude/ include somebody from the conversation.	119	1	5	2.60	1.20
Average				2.34	1.07

4.1.3 Level of codeswitching

The data indicated that teachers tend to code-switch at the level of words more than at the level of phrases or sentences consecutively, as displayed in Table 4.

Table 4. Levels of CS

Item Description	N	Min	Max	Mean	SD
Teachers code-switch from English to Arabic at the level of words.	119	1	5	2.17	2.17
Teachers code-switch from English to Arabic at the level of phrases.	119	1	5	2.62	2.62
Teachers code-switch from English to Arabic at the level of sentences.	119	1	5	2.92	2.92
Average					

4.2   Qualitative data analysis

Based on the interview data analysis, the teachers' responses can be categorised into several themes that highlight the reasons for CS to Arabic while teaching. These themes include:

4.2.1 When to code-switch to L1

Overall, the data indicates that teachers code-switch to Arabic while teaching for various reasons, which can be

categorised into the following themes:

Clarification and Comprehension: Several teachers code-switch when perceiving that students are struggling to understand specific concepts. This clarifies and ensures that students grasp the terms and ideas effectively. For example, Teacher D states, "I rarely code-switch to Arabic, but I do so occasionally for specific reasons. One such instance is when I perceive that students are having difficulty understanding the lesson." CS makes it easier for students to comprehend complex information.

Engaging Students: Some teachers code-switch to attract students' attention in the classroom. They believe that incorporating Arabic sentences or Arabic jokes can create a more engaging and dynamic learning environment. For instance, Teacher B states, "I code-switch to Arabic in specific situations, such as when students lose interest in the material or feel sleepy or bored." This approach aims to reduce students' learning anxiety and strengthen the teacher-student relationship.

Language Barriers: Some teachers code-switch when introducing new concepts or teaching grammar, particularly with students with lower language proficiency levels. The purpose is to overcome language barriers and facilitate understanding by providing examples and comparisons in Arabic that relate to the English context.

Instructional Support: Teachers also code-switch to provide help, support, and extra explanations when students ask for clarification regarding the discussed subject. CS becomes a means of measuring students' comprehension and ensuring they are following along with the lesson.

Translation Contextual Clarity: CS clarifies complicated things. This suggests that CS is used to enhance understanding by providing additional information or explanations in Arabic.

4.2.2 Levels of code-switching

Overall, the thematic analysis reveals that teachers make deliberate choices regarding the level at which they code-switch to Arabic (words, phrases, or sentences), which are based on the following reasons:

Key Concepts and Vocabulary: Several teachers code-switch at the word level, particularly when it comes to clarifying specific vocabulary terms. They believe CS helps them understand the main concepts being taught. For example, Teacher C reports, "I mostly code-switch for words, terms, or phrasal verbs because sometimes they are key to understanding main concepts, and I find it more useful than stating sentences in Arabic." Thus, they clearly and concisely explain these terms in Arabic at the word level.

Engaging Students and Breaking Monotony: Teachers code-switch at the phrase or sentence level to break the monotony of the class and engage students. This approach captures students' attention, creating a lively and interactive learning environment.

Explanation and Comparison: Some teachers code-switch at the sentence level when the objective is to provide explanations and compare concepts to the student's mother tongue. By switching to the sentence level, teachers can offer a more comprehensive and contextualised discourse, enabling students to understand better and relate to the content being taught.

Proficiency Level: The level at which teachers code-switch to Arabic varies depending on the student's proficiency level. For higher proficiency levels (upper-intermediate), CS primarily occurs at the word level, mainly when introducing new vocabulary. This helps students grasp the meaning of unfamiliar words. In contrast, CS occurs at the sentence or phrase level for lower proficiency levels (beginner) to provide more comprehensive explanations and ensure understanding.

4.2.3 Pros and cons of CS to L1

Overall, the data indicated that there are diverse perspectives regarding the benefits and drawbacks of CS to Arabic for students, which can be categorised into different themes:

Maintaining Attention and Engagement: CS to Arabic can be beneficial for low-performing students as it helps maintain their attention during class. By incorporating elements of Arabic, teachers can capture students' focus and enhance their engagement with the subject matter. However, for high-performing students, CS may impede their interest in independently exploring the meanings and concepts in the L2.

Bridging the Linguistic Gap and Establishing Connection: Several teachers view CS as a tool to bridge the linguistic gap between the teacher and students, establishing a closer teacher-student relationship. Incorporating Arabic elements into instruction provides familiarity and connection for students, enhancing their engagement and understanding of the subject matter.

Comprehension and Support: CS is seen as a valuable tool to familiarise students with unfamiliar terms, aiding their understanding and reducing anxiety during lessons. It can also help students follow along with the teacher, especially when the topic is complex or new.

4.2.4 Impact of CS on Learning and Teaching

Overall, the thematic analysis suggests that CS to Arabic can improve teaching and learning. The teachers' responses can be categorised into the following themes:

Maintaining Communication and Attention: CS is seen as a way to maintain communication between the teacher and low-performing students. It helps students stay engaged and focused during lessons, thus improving the teaching and learning processes.

Breaking Monotony and Creating Engagement: CS improves teaching and learning by breaking the monotony of the class. It creates an engaging environment and helps students focus. Using CS strategically makes the learning experience more relatable and enjoyable for students.

Promoting L2 and Comprehension: CS is viewed as a tool to promote L2 and facilitate comprehension. Teachers use CS to ensure that students remain attentive and focused on the content being explained. This enhances comprehension, allows students to effectively grasp concepts, and contributes to improved learning outcomes.

Limited Role for Advanced Students: The role of CS in improving teaching and learning is somewhat limited, particularly for advanced students. They emphasised the importance of minimising CS to create an immersive learning environment where the focus remains on accurately using and understanding the target language.

Bridging Language Gap and Easing Understanding: CS significantly bridges the gap between languages. It makes it easier for students, especially those struggling with the L2, to understand the presented information. CS facilitates comprehension and improves overall learning outcomes.

Facilitating Feedback and Performance: CS is seen as a tool to provide feedback to students, which can help them perform better in their learning. It clarifies complicated terms or concepts, making the learning process more effective.

4.2.5 Role of technology and digital resources in CS practices

The findings suggest that technology fundamentally reshapes CS practices in ELT education, emphasising the following themes:

Impact of Technology on CS: The integration of technology and digital resources has significantly transformed CS practices in ELT education. Instructors acknowledged the profound influence of technology on their CS methods, utilising online resources, language learning apps, and multimedia to enhance language comprehension and engagement. For instance, Teacher A states, "When using educational videos or multimedia content, instructors can activate bilingual subtitles, which allows students to follow along in both English and their native language, aiding comprehension and vocabulary acquisition." The integration of these resources into the learning process was deemed crucial.

Benefits of Technology in CS: Instructors outlined several advantages of technology in CS. The decision to CS depended on factors such as student proficiency, the digital content's nature, and the lecture context. Digital tools such as Microsoft Teams, Zoom and translation tools like Google Translate proved effective. Virtual reality (VR) was seen as capable of creating immersive language learning environments. Visual aids and bilingual content were also influential. Students responded positively to CS with digital resources, finding it beneficial for comprehension and language acquisition. Personalised learning experiences were facilitated by technology. However, the risk of overreliance on technology was recognised.

Challenges and Concerns: While technology offers advantages, instructors expressed concerns about potential challenges. For example, one instructor raised the issue of over-reliance on translation tools, noting, "There's a risk that

students might become too reliant on them, hindering their progress in achieving fluency in speaking English". Thus, maintaining a balance between English and Arabic with technology was perceived as both easier and more challenging. While technology could reduce the need for traditional CS by providing comprehensive language support, there was also concern that students might overly depend on digital resources, hindering their fluency and language development.

Balancing Traditional and Digital Approaches: Instructors emphasised the importance of maintaining a balance between traditional and digital approaches. Striking the right balance was considered crucial for comprehensive language development in ELT classes. They stressed the need to preserve CS as a valuable tool while integrating technology-driven learning.

Future Role of Technology: Instructors envisioned technology as a transformative force shaping CS practices in ELT education, particularly in Oman. They anticipated the rise of virtual reality, language learning apps, and the potential for analytics to guide effective CS. The availability of bilingual resources and global content from platforms like TikTok and Instagram was expected to further promote CS, language engagement, and acquisition. The development of digital resources tailored for Arabic-speaking English students was predicted. Technology was also expected to provide insights into effective CS practices and empower students to become more self-reliant in their language learning journey.

In summary, the current study's findings suggest that CS from English to Arabic in the teaching context serves various functions and can benefit students in terms of comprehension and engagement, particularly among less proficient learners. Besides, technology is anticipated to shape the future of ELT education, offering innovative tools and resources for language acquisition.

5.   Discussion

This research explores CS among ELT educators in Oman, focusing on its frequency, reasons, and effectiveness within the cultural context and its interaction with technology. The findings above indicated that CS is mainly integrated to build a good rapport with the learners. It influences language teachers in providing a conducive language learning environment. The finding of this study aligns with Moody and ELTami's (2020) findings, asserting the influence of CS to establish a supportive language learning classroom environment. The influence of the L1 in learning an L2 cannot be disregarded. This is because such interference would also affect students' comprehension during the 'translation' phase. Understanding communication in any culture requires knowledge of culture-general information where the culture falls on the various dimensions of cultural variability and knowledge of culture-specific information. This is in line with the findings of Ijudin et al. (2021) and Puspawati (2018), who suggested that teachers code-switch to effectively aid the teaching and learning process when students are unable to respond appropriately to teachers' instruction in the L2. Therefore, teachers' CS from Arabic to English and vice versa would allow students to use the L2 and understand its correct form. Such a strategy attempts to strengthen students' acquisition of the L2 rather than weakening its usage when CS.

In addition, teachers also integrate digital resources into their teaching. The study findings indicated that the teachers' choices of digital resources can be influenced by their knowledge of their students' preferences and learning styles. Teachers who possess a solid understanding of their students' skills, interests, and levels of digital proficiency usually choose materials that appeal to them in their learning. A similar study by Dilin et al. (2004) on instructors' CS in Korean classrooms found that cultural background may sometimes take precedence over even curriculum recommendations for L2 use. Therefore, their choice to CS is influenced by individual views on the benefits of cultural diversity and the significance of students' cultural identities. They understand that CS validates students' native language and closes the gap between students' native language and the L2 (Alqarni, 2022). In other words, although the digital materials, such as videos and audio, are used to enhance communication and fluency in the target language, teachers were found to code-switch to Arabic for collective understanding in the classroom (Kkese, 2021). Nevertheless, one cannot simply deny that culture and communication are closely interrelated concepts. It shapes language and communication styles and differentiates them from members of other societies within the Arab culture.

Furthermore, teachers' strategy in providing feedback in the L1 as a form of corrective feedback is vital in the era of technology and information. CS instructional materials are frequently included in online language-learning platforms.

These platforms can offer interactive drills, role-playing scenarios, and opportunities for language practice that explicitly target CS abilities. Although teaching and learning are tedious and time-consuming, it has enabled instructors and students to capture the essence of feedback and discussion meaningfully. Students might find it challenging to understand the instructions; thus, teachers tend to use students' L1 to avoid confusion among students (Mañoso-Pacheco, 2023). The findings in Hanafiah et al. (2021) found that eleven CS techniques, such as amusement, translation, emphasising, drawing conclusions, and providing feedback, were used to foster understanding in a conversation. This study's findings show that using technology to provide CS feedback to students has many benefits, including improved accessibility, rapid feedback, personal learning experiences, and the capacity to review and reflect on language use. However, it can help promote effective learning in situations where English is used as a second language through online tools. However, it's crucial to combine face-to-face interactions and guidance with technology-based feedback to meet the needs of individual students. Such a take would determine whether further improvement is required in terms of description and explanation for their language learners.

In that vein, the findings of this study also indicated that one's cultural background relatively influences teachers' CS. In this culture, Arabs accept a hierarchical order where every individual has a place. Hierarchy also regulates the interpersonal influence between a superior and a subordinate as perceived by the subordinate (Hofstede, 1991). In Arab societies, subordinates expect to be told what to do by their superiors. In terms of communication, high-distance culture reflects the recognition of the unequal distribution of authority or privileges, such as the use of titles or polite addresses. Such a condition would damper one's ability to express opinions freely. Thus, CS builds rapport or solidarity between teachers and students and prevents the occurrence of negative emotions, which may, later on, affect students' motivation to learn. Teachers who CS may be viewed as more personable, relatable, and appreciative of their learners' linguistic identities, which promotes a better learning environment. Thus, students will develop the courage and audacity to seek help or clarification without worrying about the language used.

6. Conclusion

In the context of L1 and L2 learning, CS is a valuable tool benefiting both students and teachers. It enhances the learning experience, offering advantages for diverse student needs. Students find comfort in navigating between languages, promoting engagement and potentially improving academic outcomes. EFL teachers harness CS to interact effectively with students, creating dynamic and inviting learning environments by integrating elements of students' native language. This approach reduces student anxiety and fosters an interactive rapport.

However, CS must be used judiciously, considering potential disruptive effects on advanced students. EFL instructors can customise CS techniques for specific student groups, optimising comprehension for less proficient students while maintaining conversational flow for more advanced learners.

The study also highlights the benefits of integrating technology and digital resources into EFL teaching. Digital tools can create immersive, personalised learning experiences, fostering self-reliance among students. To maximise these benefits, instructors should align curricula and materials with technological resources, promoting language acquisition in a more English-centric environment.

The study's focus on EFL teachers in Oman provides valuable insights, but caution is needed when applying findings to other educational contexts due to regional sociolinguistic and cultural differences. The long-term effects of CS on language proficiency and the potential drawbacks of overreliance require further exploration. More research is needed to assess the effectiveness of specific digital tools and strategies in EFL education, particularly within the Omani context.

In summary, thoughtfully applied CS serves as a scaffolding tool, simplifying and enriching students' learning experiences in culturally diverse classrooms. Teachers play a pivotal role in using CS to enhance comprehension, foster relationships with students, and create supportive language learning environments. This dynamic strategy benefits L2 learners, particularly when faced with the challenge of comprehending complex ideas in the target language. When used judiciously, CS offers multiple benefits, including enriched education, increased solidarity, and reduced stress, making it a valuable strategy for inclusive and productive L2 classrooms.

Conflict of Interest

The authors declare that there is no conflict of interest.

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