The Mediating Role of Digital Literacy and Self Efficacy: A Comparative Analysis among English Teachers in Oman and Kerala.

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Abstract: Teaching as a profession has evolved in response to society's changing needs, aspirations, and realities. With the advent of digital technologies and their widespread use in the teaching-learning process, it has become necessary for teachers to have adequate digital competency for their students. The efficacy of teachers has been redefined to teach 21st-century digital natives. The findings from numerous empirical studies on the impact of ICT on educators show that technology improves teachers' teaching skills and enhances students' participation in creating a productive learning environment. When assessing a teacher's digital literacy level, self-efficacy belief is considered an essential motivational construct because a teacher's or a student's self-efficacy beliefs will determine their confidence and competence to complete a task. This study explores a comparative study of English teachers from India working in Oman and Kerala on their self-efficacy and digital literacy. It was found that teachers possess high digital literacy and self-efficacy in different areas. Curriculum design and school management practices have a stronger influence on teachers' digital literacy and teaching efficacy than other factors. However, the literature indicates notable advancements in digital literacy since the COVID-19 pandemic, highlighting its increased role in education. These findings emphasize the importance of institutional support and well-structured digital integration in boosting the effectiveness of educators in a post-pandemic educational environment.

Key Words: *Self-efficacy, Digital Literacy, English teachers' teaching efficacy, ICT, digital integration, curriculum design*

1.   INTRODUCTION:

The massive advancement of technology has brought immense changes in all sorts of life. The education field is one of the areas where technology has drastically been influenced. Digital natives are being taught by digital immigrants, which demands technology-infused classrooms and innovative teaching strategies. Language education undoubtedly has benefitted from this technological boom. New technologies like the Internet, computers, and mobile phones, have immensely contributed enough opportunities in language learning and teaching. Undoubtedly, technology has brought a paradigm shift by bringing a different, enriching classroom environment. Teaching English as a Foreign Language (EFL) in developing countries has long been challenging. The challenge is rooted in the students' incapacity to comprehend the immediate and future relevance of the subject beyond the confines of exams. Unfortunately, many students can move forward in their education without mastering English, which results in a general disregard for the subject. Considering the rapid advancement of technology, it is imperative for both students and educators to comprehend the integrative role of the English language. With its intricate complexity, the language accurately portrays various aspects of life, encompassing political, social, religious, and cultural domains. Despite this, English language teaching in India has remained a subject of limited research, with several unexplored areas, especially concerning digital literacy and self-efficacy in an international context. Therefore, this paper aims to investigate the teaching efficacy of English language teachers with the variable of digital literacy by comparing two geographical areas, Oman and Kerala.

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The problem chosen for the present study is entitled -The Mediating Role of Digital Literacy and Self-Efficacy: A Comparative Analysis among English Teachers in Oman and Kerala- it may explore the areas of similarities and differences among these two teacher communities regarding self-efficacy and Digital literacy. Hence the following research questions will be the focal area of the study :

1. What is the self-efficacy and digital literacy status of English teachers from India working in Oman and Kerala?
2. Do self-efficacy and digital literacy of English teachers from India working in Oman and Kerala vary?

2. LITERATURE REVIEW:

2.1. Teaching
The noble profession has evolved in response to society's changing needs, aspirations, and realities. As defined by Gage, "Teaching is a form of interpersonal influence aimed at changing behaviour potential of another person"(1962) (1). It is a highly professional activity requiring specialized knowledge, skills, and behaviour. Effective teaching requires well-qualified, trained teachers who motivate pupils to acquire new knowledge (Chaudhary, 2015) (2). Teachers must be academically able and care about the well-being of their students. Collaboration and influence make teaching learning inclusive and enjoyable.

2.2. Characteristics of Good Teaching
Research on effective language teaching highlights various key characteristics. Girard (1977) emphasizes making lessons engaging, providing clear explanations, and ensuring equal attention to all students (3). Prodromou (1991) adds traits like friendliness, humor, and not pressuring weaker learners (4). Brosh (1996) stresses knowledge of the language, organization, and the ability to motivate students (5). Jacobs G. et al. (2010) outline eight essential elements for teaching, including promoting student autonomy, social learning, and diverse assessments. Effective teaching blends subject expertise, pedagogical skills, and socio-affective qualities, though the importance of these traits can vary based on the specific group being taught (6).

2.3. Self-efficacy
Perceived self-efficacy, a crucial concept developed by Albert Bandura in his social cognitive theory (Bandura, 1977, 1986, 1997) (7,8), refers to an individual's unwavering confidence in their ability to organize and execute actions required to achieve their objectives. Bandura (1997) posited that self-efficacy beliefs are inherently self-referential and directed towards perceived abilities in specific tasks, thereby significantly impacting behavior. In the realm of education, self-efficacy beliefs have been observed to exhibit a strong positive correlation with academic performance and self-regulated learning, as evidenced by the studies of Hackett (1995), Pajares (1996), Schunk (1991), and Zimmerman (1995) (9,10,11,12).

2.4. Teaching Self-efficacy
Tschannen-Moran and Woolfolk Hoy (2001) (13) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated". As highlighted by Allinder (1994), Guskey (1988), and Stein and Wang (1988), highly effective teachers are known for taking risks with different instruction methods, constantly seeking ways to improve their teaching, and experimenting with various instructional materials (14,15), 16). Gibson and Dembo's (1984) research highlights the importance of persistence and refraining from excessive criticism of incorrect answers when working with struggling students (17). Effective teachers also confidently advocate for integrating low socioeconomic status students into regular education settings and are less likely to refer them for special education, as supported by Meijer and Foster (1988), Podell and Soodak (1993) (18,19)

Undoubtedly, teacher self-efficacy is significantly associated with a range of school-based factors, which involve positive teacher conduct (Woodcock, 2011), enhanced student accomplishments (Cakiroglu et al., 2005), and increased teacher inspiration and efficacy (Klassen & Tze, 2014; Stripling et al., 2008) (20, 21,22,23). One can assert that teacher self-efficacy is essential in determining a school teacher's triumph or failure and their decision to remain in the teaching profession.

2.5. Digital Literacy
Digital literacy is a multifaceted concept that integrates various literacies, including media, visual, information, and computer literacy. It involves the ability to effectively perform digital tasks in everyday life across work, education, and leisure. Ng (2012) emphasizes the socio-emotional dimension, which includes responsible Internet use and adhering to

"netiquette" (24). Gilster (1997) defines digital literacy as understanding and using information from multiple formats on computers (25), while Martin (2005) views it as a lifelong developmental process (26). Eshet (2004) further expands digital literacy to include skills such as navigating non-linear information, evaluating digital content, and ethical engagement (27). The concept evolves beyond basic digital literacy to include digital competence and fluency, which are crucial for securely and efficiently using digital tools in an ever-changing technological landscape.

2.6.   Digital Literacy and Language Teaching

Foreign language acquisition benefits from diverse communication opportunities and cultural immersion. Teachers are key in developing adaptable curricula that meet learners' needs. Technology has transformed education, enabling independent access to learning materials and reducing reliance on traditional resources. This shift encourages independent learning and enhances student motivation through digital literacy and social interaction. To meet the needs of 21st-century learners, language teachers must incorporate multimedia instruction. Research shows that digital literacy involves using technology to access, evaluate, create, and communicate information, providing both cognitive and technical skills essential for effective, modern language learning.

3. RESEARCH OBJECTIVES:

To measure the current level of self-efficacy and digital literacy of English teachers from India working in Oman and

in Kerala

To understand and analyse any significant difference in self-efficacy and digital literacy of these teachers.

4. RESEARCH METHOD:

4.1. Tools
In this study, the following tools were employed for data collection.
 1. Digital Literacy Questionnaire (DLS) – adapted (NG 2012, Bayrakcı, S., & Narmanlıoğlu, H. (2021) (28)
 2. Teachers' Self Efficacy Questionnaire – Tschannen-Moran, M., & Woolfolk Hoy, A. (2001)

Considering the rapid evolution of digital technologies and the inevitability of certain components of the framework becoming obsolete, the researcher has considered a systematic revision of the framework in alignment with technological advancements and societal needs. A suitable framework was adapted from the existing scale of Ng, (2012) ,Chen (2015), and Bayrakcı, S., & Narmanlıoğlu, H. (2021).   The scale consists of 61 items with a 5-point Likert-type scale. The second tool, Teachers' Sense of Efficacy Scale, was developed by Tschannen-Moran, M., & Woolfolk Hoy, A. (2001) from Ohio State University and was adopted for the present study as the second tool. The scale consisted of 24 items divided into three subscales.

Table 1: Cronbach Alpha Analysis

Column1	No. of Items	Cronbach Alpha
Ethics and Responsibility	6	0.724
General Knowledge and Functional skills	6	0.757
Daily Usage	6	0.834
Advanced Production	2	0.77
Privacy and Security	4	0.859
Social Dimension	4	0.741
Resources and Services	7	0.88
Use Digital Resources /Platforms	17	0.899
Teachers Self Efficacy	24	0.92

The analysis draws quantitative data across various dimensions, each assessed for internal consistency by applying the Cronbach's Alpha reliability coefficient. These dimensions encompass Ethics and Responsibility, General Knowledge

and Functional Skills, Daily Usage, Advanced Production, Privacy and Security, Social Dimension, Resources and Services, Utilization of Digital Resources/Platforms, and Teachers' Self-Efficacy. This metric offers valuable insights into the internal consistency of the items employed to evaluate each construct, with coefficients exceeding 0.70 typically regarded as acceptable and values approaching 1.0 signifying high reliability.

4.2. Sample

The investigator sought permission from all the school authorities and the schools approached the respective teachers. The research tools were administered to a sample of 310 English language teachers working in Oman and Kerala. 200 teachers from Kerala and 110 teachers from Oman responded to the questionnaires.

4.3. Procedure

The teachers were requested to go through the instructions and statements carefully and tick their responses so as to get accurate and reliable data. There was no time limit given. The questionnaires were created using Google Forms, and the link was created. Mail and WhatsApp were used as medium to distribute and gather data. They were also assured that their responses would not be disclosed to their colleagues and school management because the present study was conducted in conformity with the research's ethical considerations

and concerns for participant's anonymity. The collected data were analysed using SPSS by adapting Descriptive Analysis (Mean and Standard deviation)

5. RESULT:

The table below appends the mean and standard deviation of digital literacy and teaching self-efficacy among English teachers from Kerala and Oman. Utilizing a comprehensive framework that examines eight dimensions of digital literacy in conjunction with three aspects of teaching self-efficacy, this study provides critical insights into the professional competencies of educators within these geographical regions. The digital literacy scale encompasses Ethics and Responsibility, General Information and Functional Skills, Daily Use, Advanced Production, Privacy and Security, Social Dimension, Knowledge and Resources, and Frequency and Use of Digital Resources. Conversely, teaching self-efficacy is measured under three areas which are Student Engagement, Instructional Strategies, and Classroom Management**.**

Table 2 : Mean and SD

Mean and SD		Ethics &Res	General inf/ Functional skills	Daily Usage	Advanced Production	Privacy & Security	Social Dimension	Knowledge Resources/services	Frequency of use of Digital Resources	Teaching Self Efficacy
Place										
kerala	Mean		3.4804	3.7684	2.6950	3.9550	3.2925	3.0597	2.8722	4.2057
	N	Daily Usage	200	200	200	200	200	200	200	200
	Std. Deviation	Advanced Production	.55361	.62149	.85330	.68672	.75775	.81330	.62514	.50281
oman	Mean	Privacy & Security	3.5743	4.0146	2.4107	4.1071	3.3438	3.2221	3.2645	4.1380
	N	Social Dimension	112	112	112	112	112	112	112	112
	Std. Deviation	Knowledge on Resources/services	.67061	.54575	.93533	.70369	.68865	.70845	.66397	.43401
Total	Mean	Use of Digital Resources	3.5141	3.8568	2.5929	4.0096	3.3109	3.1180	3.0130	4.1814
	N	312	312	312	312	312	312	312	312	312
	Std. Deviation	.51522	.59888	.60618	.89264	.69558	.73299	.78005	.66553	.47964

6. DISCUSSION:
Examining the provided data seeks to elucidate two principal research inquiries: (1) What is the current status of self-efficacy and digital literacy among English educators from India employed in Oman and Kerala? (2) Do the self-efficacy and digital literacy levels of English educators from India working in Oman and Kerala exhibit significant variations? This investigation is predicated on a thorough evaluation of various dimensions of digital literacy as well as teaching self-efficacy metrics, thereby facilitating an enhanced comprehension of the competencies and confidence levels of English educators within these two disparate educational environments.

6.1 Self-Efficacy and Digital Literacy Status of English Teachers in Oman and Kerala
The notion of self-efficacy within the teaching domain pertains to an educator's conviction in their capacity to effectively engage learners, implement instructional strategies, and govern the classroom environment. The data reveals that English teachers from both Oman and Kerala demonstrate elevated levels of teaching self-efficacy, implying a robust confidence in their ability to promote student learning. The average self-efficacy score for educators in Kerala is 4.2057, which marginally surpasses the score for educators in Oman, recorded at 4.1380. This slight disparity signifies minute differences in teaching confidence between the two regions.

With regard to digital literacy, average scores across eight dimensions indicate that English educators from both regions possess a commendable understanding of digital literacy; however, proficiency levels differ across various facets. The cumulative mean scores for each dimension suggest that educators generally exhibit comfort in utilizing digital tools and resources, with elevated scores in areas such as Privacy & Security (4.0096) and General Knowledge/Functional Skills (3.8568).

Kerala Teachers' Digital Literacy Status: English educators from Kerala exhibit a moderate-to-high level of digital literacy, with significant strengths observed in General Knowledge/Functional Skills (mean = 3.7684), Privacy & Security (mean = 3.9550), and Daily Usage (mean = 3.7684). This finding implies that educators in Kerala are proficient in fundamental digital operations and privacy protocols, and they consistently integrate digital tools into their daily instructional activities. Nonetheless, they attain lower scores in Advanced Production (mean = 2.6950) and Use of Digital Resources (mean = 2.8722), which suggests a relative unfamiliarity with the production of complex digital content and the effective utilization of digital resources for pedagogical purposes.

Oman Teachers' Digital Literacy Status: Conversely, English educators in Oman exhibit a superior overall digital literacy score, demonstrating robust performance in Daily Usage (mean = 4.0146), Privacy & Security (mean = 4.1071), and General Knowledge/Functional Skills (mean = 4.0146). This trend indicates that Omani educators are proficient in integrating digital tools into their routine teaching practices and possess a solid comprehension of digital safety measures. Paralleling their counterparts in Kerala, Omani educators also manifest relatively lower scores in Advanced Production (mean = 2.4107), thereby underscoring the necessity for additional training in the creation of digital content.

The result shows that the status of self-efficacy and digital literacy among English educators in Oman and Kerala illustrates a coherent yet distinctly varied skill set influenced by regional disparities in educational objectives and available resources.

6.2. Variations in Self-Efficacy and Digital Literacy Between Teachers in Oman and Kerala
The second research inquiry examines whether significant disparities exist in self-efficacy and digital literacy among English educators in Oman and Kerala. The analysis of average scores for both regions uncovers several critical distinctions:

Teaching Self-Efficacy: The average self-efficacy score for teachers in Kerala (4.2057) is marginally superior to that of their Omani counterparts (4.1380). This suggests that educators in Kerala may possess a somewhat enhanced conviction in their capacity to affect student learning outcomes and manage classroom dynamics. This phenomenon may be attributed to the robust teacher training programs and support mechanisms in Kerala that prioritize pedagogical proficiency and conventional instructional methodologies. Conversely, Omani educators, although adept in utilizing digital tools, may encounter difficulties in sustaining a comparable degree of confidence within a more technologically integrated instructional framework.

Digital Literacy Across Dimensions: The aggregate digital literacy score for Indian educators in Oman surpasses that of Kerala educators in most dimensions, including General Knowledge/Functional Skills (mean = 4.0146 vs 3.7684), Daily

Usage (mean = 4.0146 vs 3.7684), and Privacy & Security (mean = 4.1071 vs 3.9550). This trend implies that teachers in Oman experience greater exposure to digital instruments and incorporate them more routinely into their daily pedagogical practices. This may stem from the systematic integration of digital platforms within Oman's educational paradigm and a heightened focus on technology-enhanced learning.

6.2.1. Specific Dimensions of Variation
Ethics and Responsibility: Indian educators in Oman attain a slightly elevated score in this dimension (mean = 3.5743) relative to Kerala educators (mean = 3.4804), signifying an enhanced awareness of digital ethics and the responsible employment of technology. This may be shaped by the more stringent digital regulations in Oman that underscore the ethical utilization of digital resources.

Social Dimension: Indian educators in Oman also demonstrate superior performance compared to their Kerala counterparts in the Social Dimension (mean = 3.3438 vs. 3.2925), indicating a more profound comprehension of digital communication and collaboration competencies. This may be attributed to Oman's emphasis on collaborative digital learning and interactive pedagogical strategies.

Knowledge on Resources and Services: The average score for Knowledge on Resources and Services is elevated for Omani educators (mean = 3.2221) compared to Kerala educators (mean = 3.0597), reflecting a wider awareness of digital resources accessible for educational purposes.

Use of Digital Resources: Likewise, Indian teachers in Oman achieve a higher score in this dimension (mean = 3.2645) compared to their Kerala counterparts (mean = 2.8722), indicating a more frequent and effective application of digital tools in their teaching practices.

These disparities indicate that while Indian teachers in Oman exhibit a greater proficiency in digital literacy, this does not necessarily correlate with enhanced teaching self-efficacy. In contrast, Kerala educators display elevated self-efficacy despite possessing lower digital literacy, potentially due to their solid foundation in traditional instructional methodologies and subject matter expertise.

6.3. Contextual Factors Influencing Digital Literacy and Self-Efficacy
A multitude of contextual factors may elucidate the discernible disparities in digital literacy and self-efficacy between the two regions

The Sultanate of Oman has made significant investments in digital infrastructure and the integration of technology within educational settings, thereby accounting for the elevated digital literacy metrics observed among Omani educators. Conversely, Kerala's educational policies place a greater emphasis on pedagogical competencies and mastery of content, which results in enhanced self-efficacy, albeit with comparatively lower digital literacy.

Professional Development Opportunities: Educators in Oman likely have access to a wider array of professional development initiatives that concentrate on the utilization of digital tools, thereby improving their digital literacy. In contrast, teachers in Kerala may derive advantages from more conventional professional development programs that bolster teaching effectiveness.

Cultural and Pedagogical Expectations: The cultural milieu of teaching in Oman, characterized by a more heterogeneous student demographic and a pronounced emphasis on the integration of technology, may influence educators' perceptions of their instructional capabilities. In contrast, Kerala's more homogenous student population and traditional educational methodologies may cultivate a distinct set of expectations regarding teacher proficiency.

7. CONCLUSION:
According to the study, the self-efficacy and digital literacy proficiencies of English teachers from India and teaching in Oman and Kerala reveal commendable levels of competence, although with notable strengths and areas necessitating enhancement. While educators in Oman exhibit superior digital literacy, particularly in the domains of daily usage and privacy and security, their Kerala counterparts possess a heightened overall teaching self-efficacy. The discrepancies in digital literacy between the two groups are shaped by regional educational policies, resource accessibility, and opportunities for professional development. This examination highlights the imperative for specialized training

programs aimed at addressing both digital literacy and teaching self-efficacy to optimize overall educator effectiveness within diverse educational frameworks,

8. LIMITATIONS:

The present study is confined to a sample of 312 English language teachers from India working in Oman and Kerala. It is restricted to the following demographic variables: gender, age, grade level, professional qualification, Teaching experience, type of curriculum, and place of work. The analysis was limited to Indian and Omani contexts while comparing a cross-cultural analysis.

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