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A Quest for Experts' Consensus on the Knowledge Domain for an ESL Global Competence Framework Using Fuzzy Delphi Method Analysis

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Abstract. Global competence has a permanent place in today's education system. Various researchers and past studies have associated global competence with three main domains of Knowledge, Skills, and Dispositions. This study aims to identify the experts' consensus regarding the indicators to represent the constructs in the Knowledge domain, necessary in the development of an ESL Global Competence Framework for English as a Second Language (ESL) teachers' global competence development. A quantitative research design was employed using the Fuzzy Delphi Method. A questionnaire instrument was used to collect data from eleven experts who were selected through a purposive sampling method. The eleven experts in global competence, teachers' professional development, teachers' training, curriculum, multicultural education, and ESL teaching and learning participated in the study. There were forty-four indicators for four constructs representing the Knowledge domain being reviewed by the experts for the Fuzzy Delphi Method. Based on the data analysis, the experts accepted thirty-six indicators representing their respective constructs following the expert consensus value above 75%, the threshold value (d) ≤ 0.2, and the fuzzy (A) score α-cut value of ≥ 0.5. However, after another evaluation conducted based on the experts' comments and

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feedback, three more indicators were rejected, maintaining thirty-three items for the framework. The findings further show that the indicators are significant to be included in the ESL Global Competence Framework under the Knowledge domain. Hence, this study provides understanding of the importance elements related to Knowledge domain focusing on enhancing ESL teachers' knowledge of global competence. Future research should focus on analyzing other domains that are necessary in assisting ESL teachers' global competence development.

Keywords: English as Second Language; ESL Global Competence framework; Fuzzy Delphi; Globally competent teaching

1. Introduction

English language teaching and learning is a multifaceted topic that has been frequently discussed and explored. The inclusion of global competence in English learning is significant in today's multicultural and interconnected era of increasing globalization. Global competence is distinguishable from the concepts of global citizenship and multicultural education as it contains knowledge, skills, and dispositions that support individuals to engage with various issues impacting the global community collaboratively (Tamerat, 2020). Global competence is linked to the United Nation's Sustainable Development Goals (SDGs), emphasizing quality education, inclusivity, the 4th Industrial Revolution, and 21st-century learning. It brings reformation in education in many countries worldwide to achieve the global standards advertised. In the local Malaysian education context, Wan et al. (2018, p. 15) agree that "for Malaysia to become a developed nation, the education system must also play a role in educating Malaysians about addressing global issues. However, Wan et al. (2018) are concerned about the lack of focus on the SDGs and sustainability in the education systems in Malaysia. Thus, knowledge of global competence in education is imperative to educate and develop students who are cognisant of global; international and local issues.

The necessities for global and multicultural awareness that consist of understanding, interaction, and collaboration among culturally diverse people to solve global problems are the underlying reasons for developing global competence in the present and future generations (Todd, 2017). Substantially, to be effective teachers in today's increasingly complex interconnected world, teachers need to obtain intercultural competency and global perspectives that will significantly affect the relevance of their content teaching (Crawford et al., 2020). Teachers need to have a greater understanding of global competence as it would allow them to be more effective in their teaching. Many benefits come with having global competence such as improved classroom management, increased creativity, better communication and collaboration, and a better understanding of other cultures. However, there are also challenges, such as the need to adapt to new environments rapidly, having a strong sense of responsibility, and working in a multicultural environment (Abdullah & Abdullah, 2018; Pereira, 2020).

Ultimately, the importance of global competence has been recognized by educators for quite some time now. For ESL teachers, having a solid global competence allows them to be a better communicator with their students. It is also significant for them to create a better self-awareness and a sense of belonging in their professions (Lontoh et al., 2021). Yet, despite its recognized value, there is a lack of detailed information on the specific elements, including self-awareness, that constitute global competence for ESL teachers. This study seeks to address this gap by identifying the key indicators within the Knowledge domain that are essential for developing a comprehensive global competence framework, which can be broadly applied in ESL settings. In the primary framework, the domains; Knowledge, Skills, and Dispositions that become the umbrella of the constructs and indicators were adapted from available global competence models and frameworks. However, the paper focuses on one domain, 'Knowledge' with four constructs due to knowledge being an essential element for teachers' awareness and understanding that later can be transformed into skills and dispositions. The identified constructs are Global Awareness (GA), Multicultural Awareness (MA), Indigenous Knowledge (IK), and Self-Awareness (SA). These constructs are interconnected and significant in shaping English language teachers' ability to cultivate globally competent teaching and students.

Primarily, knowledge is an essential foundation for educators, enabling them to impart information effectively, make informed decisions, and adapt to new pedagogical methods (Tamerat, 2020). Stemming from the concept of knowledge and global education, global awareness provides ESL teachers with a better understanding of global systems, challenges, and opportunities, fostering a broad perspective that transcends boundaries. ESL teachers benefit from this knowledge by gaining insights into students' diverse backgrounds, which helps them address linguistic and cultural differences in the classroom. Conclusively, global awareness allows them to approach teaching with strategies that promote inclusivity, understanding, and the ability to prepare students for a more interconnected world (Tichnor-Wagner et al., 2019).

Essentializing from this 'knowledge' domain in global competence, multicultural awareness enhances the abovementioned aspects by deepening teachers' sensitivity to and appreciation of diverse cultural contexts. Consequently, the teachers are able to navigate and address cultural differences in the classroom and outside more effectively. Indigenous knowledge is not discussed as openly and frequently in the English classroom due to the western focus in the Common European Framework of Reference or CEFR-aligned syllabus and topics (Shah et al., 2020). The indigenous knowledge construct, which is often marginalized in mainstream English education, enriches the framework by grounding teachers in rich, traditional knowledge systems of indigenous people, offering alternative worldviews and approaches to more understanding and inclusivity (Leung & Valdes, 2019). The self-awareness ties these constructs together by encouraging teachers to reflect on their own cultural identities, biases, and positionalities. Fittingly, these constructs empower ESL teachers to create inclusive, culturally responsive, and globally oriented learning

environments, essential for preparing students to thrive in a complex, interconnected world. Therefore, the literature and past studies were analyzed to gather the initial list of constructs and indicators for the development of an ESL Global Competence framework. This study aimed to achieve the research objective below:

To measure the experts' feedback on the identified constructs and indicators for the Knowledge domain of the ESL Global Competence framework for Malaysian teachers in an ESL context.

2. Literature Review

Education is about nurturing and empowering students to grow up with the knowledge, skills, and dispositions or attitudes to face challenging and complex real-life situations. Among the steps taken by the government are to update and revise the syllabus for most subjects learnt in school. Language studies, Mathematics, and Science subjects are often targeted for amendments since social science and technology fields are changing every second. New discoveries and innovations are found and celebrated worldwide. This is due to the rise of modern globalization, which encompasses features of the new and broader existing social areas and connections that transcend borders, interconnectivity and enhance social exchange and activity (Kaur, 2019; Orazbayeva, 2016). As a result, it transforms the way people live, work, and entertain while affecting perspectives in a borderless world (Abdullah & Abdullah, 2018). Therefore, Malaysia needs to step up its game to compete and move forward in education and global spheres. Wan, Morshidi, and Dzulkifli (2018) affirm that a holistic focus on education, guided by the National Philosophy of Education (NPE) will propel Malaysia into becoming a truly developed nation.

In language education, the rising demand for English competency has become common in many parts of the world (Hadi & Shah, 2020; Lee, 2018). It is no exception to the role of English as a medium of instruction and language of knowledge in Malaysian classrooms (Khair & Shah, 2021). Furthermore, today's increasingly interconnected world has assigned teachers with the responsibility to look into the roles of identity, culture, ethnicity, linguistics, and diverse essentials of ESL students (Pereira, 2020; Yaccob et al., 2022). As this research informs the ESL teachers or participants about global competence, it allows them to reflect on their teaching, knowledge, and adaptation of global competence elements in their ESL lessons. The proposed constructs and indicators provide an overview of the elements crucial in the changing roles of ESL teachers today.

Various organisations such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) accentuate global agendas worldwide, such as global competence and global citizenship, with great emphasis on the need for education systems in most countries to deal with global challenges (Oigara, 2022; Salze & Roczen, 2018). The OECD (2020) claims to unite the concepts of global citizenship, intercultural competence, and knowledge of globalization in

global competence. It is reflected in one of the OECD programmes, Programme for International Student Assessment (PISA), which was established as a measure to introduce global competence to students aged 15 (Auld & Morris, 2019) and to grow interest in global 21st-century skills (Engel et al., 2018). This being said, global competence is highly significant, as most institutions worldwide recognize the PISA assessment for students.

Previously, PISA was used to measure the students' performance, which did not reflect the work's core values, such as teaching quality, inclusion, and the relationship between teachers and students (Lundahl & Serder, 2020). Additionally, the OECD proposes the most recent 2018 PISA global competence framework to respond to the increasing prerequisite for students who can address global issues appropriately (OECD, 2020; Zakaria et al., 2019). The relevancy of PISA is considered for its sufficient and 'neutral' authoritative knowledge involving policy and reforms (Lundahl & Serder, 2020). Students ought to understand lengthy texts of facts, opinions, and ideas on various prominent topics (Avvisati et al., 2019). This is a standardized measure of students' performance in Reading, Mathematics, and Science with the inclusion of global competence. Thus, Afip, Hamid, and Renshaw (2019) consider it a significant shift to move forward since, in the locality, the Malaysian assessment scales are impractical for students who are future workers looking for jobs in the international job market.

Global Competence

Global competence is defined as the ability, commitment, disposition, and will to recognize one's global identity with a solid knowledge base about human diversity around the world, issues, and human concerns; and a positive attitude toward humanity and commitment to maintaining a fair, peaceful, and prosperous world (Ukpokodu, 2020; Orazbayeva, 2016). Stankovska, Dimitrovski, Memedi, and Ibraimi (2019) define global competence as mastering the ability to be critical, communicating and collaborating with diverse others, expressing rational perspectives, understanding conflict, and adapting to the interconnected world. It is a life-long process of self-development through daily interactions with the world (Mansilla & Wilson, 2020). Researchers in their past studies have coined global competence with various terms such as intercultural competence and global awareness, which may overlap with global competence since these are the elements of global competence, as referred to various models and frameworks (Liu et al., 2020; Tichnor-Wagner et al., 2019). However, the terminology is the least concerning since the main focus is supporting ESL teachers to cultivate the attributes that allow students to thrive in a complex, interconnected, and diverse world (Tichnor-Wagner et al. 2019; Yaccob et al., 2022).

In this study, the domain 'knowledge' has been selected and used in the proposed framework due to its representation of awareness of the elements of global competence. 'Knowledge' is widely mentioned and used by researchers such as Diveki (2020, 2023), Tichnor-Wagner et al. (2016, 2019), Cain et al. (2014),

and Hunter (2004) as the domain best defining awareness and understanding. The following section elaborates the Knowledge domain.

Domain: Knowledge

Teachers should be aware of the complexity and interdependence of global issues and promote active and responsible citizenship that will contribute to local and global communities (Diaz, 2017; Guo-Brennan, 2020; Yaccob et al., 2022). Popescu and Iordachescu (2015, p. 2316) state that "awareness of diversity, openness, tolerance, antiracism, social and professional inclusiveness are all prerequisites for a successful international career". The findings from Howe and Xu (2013, p. 41) further convince the need for global competence among individuals and teachers to help students understand the world from broader perspectives. It would result in a rising number of globally competent teachers in the 21st century.

ESL teachers' global awareness in linking international issues to similar issues in Malaysia and countries other than the Western will strengthen the CEFR-aligned content. Meaningful lessons can be successfully implemented under this condition (Lehman, 2017). ESL teachers can foster higher-order thinking skills by asking students to respectfully compare different cultural backgrounds and beliefs in the lesson. When ESL teachers can create a positive and meaningful language learning atmosphere by addressing fundamental topics and issues in English lessons, the students are more aware of more significant issues such as racism and xenophobia. For example, recent evidence has suggested that diversity caused by migration and the movement of people to and from other countries leads to changes in classroom conditions and presents new challenges for teachers (Howe & Xu, 2013; Leung & Valdes, 2019; Tichnor-Wagner et al., 2019; Ukpokodu, 2020).

In contrast, it can be seen as an opportunity to create better cultural awareness (Mansilla & Wilson, 2020) and understanding in society, especially in schools where students should get enough exposure to other cultures. It increases the linguistic and cultural diversity in the communities and classrooms that teachers and students should respond to by showing understanding, appreciation, respect, (Tichnor-Wagner et al., 2019) and mindfulness (focus, respect, and acceptance) (Dalib et al., 2019). The opinion is supported by Mansilla and Wilson (2020, p. 4) that migration is a call for a "new critical understanding of identity, local culture, citizenship, and a growing capacity to take perspective, to communicate across differences, and to take action collaboratively and creatively to solve social, political, economic, and environmental challenges". Especially for countries facing drastic labour shortages, such as Japan (Howe & Xu, 2013). Thus, ESL teachers can reflect the current CEFR-aligned syllabus content on the cultures of others and various values such as respect, appreciation, and acceptance that need to be addressed appropriately.

Initially, from the previous analysis and reviews conducted, an initial list of constructs and indicators for the domains that represent the ESL global

competence framework in the ESL context has been generated. Four constructs for the Knowledge domain with 44 indicators were identified from this first part of the needs analysis phase. This paper discusses the findings of the experts' consensus related to the selected indicators for the design and development of constructs for the domain, 'Knowledge'. The four constructs are:

1. Global Awareness (GA)
Global refers to worldwide, which includes international and local settings. Global awareness is the ESL teachers' understanding and consciousness towards worldwide events, issues and global perspectives. It also refers to the general and specific global knowledge brought into the classroom scenario. It is the ability to comprehend, respect and collaborate well with people from many cultures (Oigara, 2022). Therefore, the global awareness construct is crucial because it enables ESL teachers to create inclusive and culturally responsive learning environments, equipping students with the skills and perspectives necessary to thrive in an interconnected world.

2. Multicultural Awareness (MA)
Multicultural consists of multiple cultures, ethnics, traditions, customs and backgrounds of community worldwide. Multicultural awareness refers to the ESL teachers' understanding and consciousness towards multiple cultures, backgrounds, attitudes and values. It promotes cross-cultural understanding, appreciation, and celebrating diversity in culturally diverse countries such as Malaysia (Abdullah & Abdullah, 2018). As a result, this construct is significant because it empowers ESL teachers to foster an inclusive classroom environment that values diversity and promotes mutual respect, essential for building harmonious relationships and effective communication in multicultural societies in Malaysia.

3. Indigenous Knowledge (IK)
Indigenous knowledge refers to the ESL teachers' knowledge of the aboriginal people in different tribes, distinct social and cultural societies and communities. The International Work Group for Indigenous Affairs reported that there are more than 370 million indigenous people in 90 countries representing nearly 5,000 different cultures (Buchholz, 2020). They are also known as the ecosystem people dependent on natural resources from their surroundings (Gadgil et al., 2021). In Malaysia, indigenous people are also known as Orang Asli, other than as the minorities who reside in several parts across Malaysia such as in Pahang and Kelantan (Shah et al., 2020). With this in mind, this construct is significant because understanding and valuing indigenous knowledge enables ESL teachers to incorporate diverse cultural perspectives into their teaching, thereby promoting cultural inclusivity and enriching the learning experience for all students, especially those from indigenous communities.

4. Self-Awareness (SA)
Self-awareness is the ability to know own self (Hunter, 2004). It is the ESL teachers' understanding and consciousness of themselves and their surroundings. It also refers to the ESL teachers' sense of identity developed

through social interactions that demonstrate ownership of the community shared views, values, or habits (Lontoh et al., 2021). In lieu of developing comprehensive indicators to represent the Knowledge domain, this construct is significant because self-awareness allows ESL teachers to critically reflect on their own beliefs, biases, and practices, enabling them to create more authentic connections with their students and foster a supportive and empathetic classroom environment.

To emphasize, the rationale of this study is to gain experts' consensus on the indicators representing the constructs in the Knowledge domain. It is to develop an ESL global competence framework that is a valuable and practical reference for Malaysian ESL teachers in developing their global competence and globally competent teaching.

3. Research Design

This study employed the Fuzzy Delphi method (FDM) as it suits the purpose of the study in finding out the experts' agreement on the identified constructs and indicators through the survey questionnaire. Delphi techniques are often used for model development and validation (Richey & Klein, 2007, 2014). It is frequently used in situations related to making judgments and decisions, while combining fuzzy sets that propose opinions from qualified experts has given more consistency (Saffie et al., 2016; Yusoff et al., 2021). As a result, more controlled feedback can be obtained in collecting data from the experts or participants. Besides, statistical definitions of group responses reduce group pressure for uniformity; individual opinions may differ significantly (Pill, 1971). More importantly, the statistical group response provides a mechanism for ensuring that every member of the group's perspective is reflected in the final response (Pill, 1971). Dawood et al. (2021) and Yusoff et al. (2021), who also employed FDM in their study confirm that FDM achieves consensus on the identified constructs and indicators and integrates the experts' views on the proposed framework. Therefore, the FDM analysis consequently enhanced the constructs and indicators that were selected as important in the design and development of the proposed ESL Global Competence framework.

Participants and Sample

A purposive sampling was conducted which as agreed by Mustapha et al. (2021), is the best-suited method for FDM. The sample selection of experts is the most crucial aspect of administering an FDM. It ensures the selected experts can provide the correct view and feedback in the study context (Abdullah & Yusof, 2018). There are many points of view regarding the number of samples in FDM. In terms of panel size, Okoli and Pawlowski (2004) recommended that, when using the Delphi approach, a smaller group is preferable to a bigger one because it allows for easier and faster convergence of ideas. Additionally, Akins et al. (2005) state that Delphi methods with fewer than 10 experts are rarely conducted to find experts' consensus. Many studies gathered collective input from more than 10 experts (Akins et al., 2005). Other researchers who have proposed a total number of 10 to 15 experts were Ziglio (1996) and Akins et al. (2005). In this study, the sample size for the FDM is

decided based on previous studies which have used a similar technique, such as a study by Mustapha et al. (2021).

The context of the experts is important to ensure the reliability of this study since the ESL Global Competence framework proposed would serve ESL practitioners, English curriculum developers, and English teachers' professional programme designers. Akins et al. (2005) hypothesized that FDM surveys with experts of similar backgrounds of expertise would yield stable results. From the definitions of the experts abovementioned, the criteria derived are listed below:

(a) a PhD holder in English language fields with more than five years of teaching using English as a medium of instruction;
(b) knowledgeable, experienced, and experts in global competence, global education, studies on globally competent teaching and learning;
(c) knowledgeable, experienced, and experts in intercultural competence, intercultural studies, and multicultural studies;
(d) researchers in teachers' training, teachers' development programmes and English education studies;
(e) authors or researchers in designing and developing English curriculum, CEFR- aligned curriculum, and global competence models and frameworks;
(f) experts in design and development research or studies;
(g) experts possessing more than one of the criteria mentioned above,
(h) in-service as a lecturer in a university or teacher training institute,
(i) experts teaching and supervising degree, master's degree, and doctorate (undergraduates and post-graduates) students.

The experts were contacted via email and social networking sites and a formal request to become the expert panel was sent individually upon agreement. Table 1 below shows the demographic details of the experts involved in the Fuzzy-Delphi consensus method.

Table 1: The demographic details of the experts

Panel	Institution	Specialisation
Associate Professor heparkhouse@vcu.edu	Curriculum, Culture, and Change Concentration Department of Teaching and Learning, Virginia Commonwealth University	Globally Competent Teaching Continuum Developer, Global competence expert
Dr. mazlin@fbk.upsi.edu.my	English Language and Literature Department, Universiti Pendidikan Sultan Idris, Perak	Curriculum integration, DDR

Associate Professor safinas@fbk.upsi.edu.my	Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Perak	TESL, (Experience supervising a research on the conceptualisation of the Orang Asli Culture in ELT)
Dr. mmusab@ump.edu.my	Universiti Malaysia Pahang, Pahang	Educational linguistics, TESL
Associate Professor kerkhoffs@umsl.edu	Literacy and Secondary Education Department of Educator Preparation and Leadership, University of Missouri-St Louis	Teacher education, Teaching for global readiness scale, Global teacher education
Professor denchai@go.buu.ac.th	Faculty of Education, Burapha University, Thailand	Global Englishes, Multicultural education, Teacher professional development, Teacher education
Dr. hadeel_ashour@hotmail.com	Al-Madinah International University, Malaysia	Teacher education, Teacher professional development
Dr. nfarehah@unikl.edu.my	Universiti Kuala Lumpur, Kuala Lumpur	CEFR-aligned, Teacher education, Teacher awareness
Dr. nurhijrah@ipgm.edu.my	Head of Department, Science Social, IPG Kampus Dato' Razali Ismail, Terengganu	CEFR-aligned, Teacher education, Teacher awareness
Dr. sharminighanaguru@gmail.com	Institute of Teacher Education International Languages Campus, Kuala Lumpur	Teacher education, Teacher training programme
Associate Professor ffang@stu.edu.cn	Department of Foreign Languages and Literature, Shantou University, China	Multicultural education, Global Englishes, Language policy

Instrument: Questionnaire for Experts

Prior to this study, a needs analysis was conducted to collect initial data that made up the constructs and indicators of the proposed framework. Some of the constructs and indicators for the 'Knowledge' domain are adapted from past continuum', frameworks' and models' constructs; Globally Competent Teaching Continuum (Cain et al., 2014), Global Competence Model (Hunter, 2004), and research by Li (2013), and Tichnor-Wagner et al. (2019) as a guideline. The input from the needs analysis was used in designing the ESL global competence questionnaire for the FDM (Refer to Appendix 1). The valuable input from the previous findings comprised a list of proposed constructs and indicators for the framework. From there, the list was converted into several statements, forming items to be reviewed by the 11 experts. The word 'item' used throughout this study also referred to the indicators. The sections in the survey form were separated according to the constructs and indicators that represent the Knowledge domain. There are four constructs representing the Knowledge domain.

Validity and Reliability

The questionnaire development was guided by the review of literature. Before emailing the survey questionnaire to the 11 experts, the questionnaire went through several content and face validation processes by four local and international experts familiar with the topic under study. The experts were selected based on their active and timely contributions and quality publications in global competence, teachers' professional development, and SDGs 4.0: Quality education. Based on the feedback from the two experts, several revisions were made, such as 1) the choice of verbs, 2) some statements with grammatical errors, and 3) some statements that were simplified. A Cronbach' Alpha analysis was conducted after the changes. The reliability determined from Cronbach's Alpha is 0.98. As a result, this value indicates that the instruments used are in excellent condition and have a high consistency level. Nashir et al. (2020), and Bond and Fox (2015) agree that the instrument with a high Cronbach's Alpha value is in excellent condition and can be used for research. Thus, it indicates that the survey questionnaire (instrument) is highly appropriate for the study.

Data Collection Procedure

The survey questionnaires were then emailed to the experts with some information and instruction regarding the study. As the study progressed, the experts' review was in a form of a 5-Likert scale agreement whilst their additional comments and suggestions were recorded in writing. The written reviews were then organized and arranged into a table matrix according to the constructs and indicators. They were also encouraged to write their opinions, recommendations, and suggestions on any new or existing constructs and indicators in the space provided in the form. The numerical data gathered were transferred into the Fuzzy-Delphi Method Analysis Software developed by Jamil (2016) and the updated version by Jamil and Noh (2020). The software was easy to use as the data were automatically analysed upon entry. Yusoff et al. (2021) state that the two main prerequisites are the Triangular Fuzzy Number and the Defuzzification Process. Table 2 presents the level of agreement for the importance weight of criteria on a Fuzzy scale (Azlan et al., 2015).

Table 2: The level of agreement for the importance weight of criteria

Scale	Variable	Fuzzy Scale
1	Strongly Disagree	(0.0, 0.1, 0.2)
2	Disagree	(0.1, 0.2, 0.4)
3	Slightly Disagree	(0.2, 0.4, 0.6)
4	Agree	(0.4, 0.6, 0.8)
5	Strongly Agree	(0.6, 0.8, 1,0)

Data Analysis Proecedure

The experts' consensus was carefully analyzed using Microsoft Excel software developed by Jamil and Noh (2020). The quantitative data analysis in FDM undergoes four stages of Defuzzification: Threshold Value (d), Percentage of Experts' Agreement, Fuzzy Evaluation, Average of Fuzzy Number and Ranking (Ali, 2019). According to Jamil and Noh (2020), the cut-off for the average fuzzy number or score (defuzzification, α - cut) is 0.5, explaining any values above 0.5 (≥ 0.5) is accepted. Meanwhile, the items valued below (< 0.5) are rejected.

$$\text{Fuzzy score, } A_{max} = \tfrac{1}{4}\,(m_1 + 2m_2 + m_3)$$

The cut-off for threshold value (d) is ≤ 0.2, explaining that any threshold value (d) below 0.2 is accepted. For the percentage of experts' agreement, any values above 75% are accepted (Ali, 2019; Jamil & Noh, 2020).

$$d(\tilde{m}, \tilde{n}) = \sqrt{\frac{1}{3}[(m_1 - n_1)^2 + (m_2 - n_2)^2 + (m_3 - n_3)^2]}$$

The results of the three stages are important in determining the acceptance and rejection of each construct and indicator.

4. Results

In this section, the result of the three stages, Threshold Value (d), Percentage of Experts' Agreement, and Average of Fuzzy Number and Ranking, concerning the acceptance and rejection of the constructs and indicators for the proposed ESL global competence framework were explained.

Experts Demographic Information

Table 3 below presents the experts demographic information.

Table 3: Experts' demographic information

Level of Education	
Level	**Frequency**
Doctoral Degree (PhD)	11
Field of Experts	
Global Competence, Global Education, Globally Competent Teaching, and Learning	3
Teachers' Training and Teachers' Professional Development	2
English Curriculum, CEFR- Aligned Curriculum, and Global Competence Models and Frameworks	2
Intercultural Competence, Intercultural Studies, and Multicultural	2
ESL Teaching and Learning	2
University Setting	
Setting	**Frequency**
Local (Malaysia)	6
International	5

Analysis of Expert Consensus on Global Awareness Construct

In this Global Awareness construct, the items reviewed by the experts are presented in Table 4.

Table 4: Items for Global Awareness Construct

Number	**Items (Indicators)**
GA1	Understand local issues
GA2	Understand global issues
GA3	Understand historical and current issues
GA4	Understand CEFR-aligned curriculum in reference to the global standard
GA5	Accept development in various parts of the world
GA6	Integrate knowledge of global and local issues in ESL lessons
GA7	Integrate CEFR-aligned curriculum and global competence in ESL lessons
GA8	Integrate technological literacy in ESL lessons
GA9	Assist students to use English in communication with native and culturally diverse English users
GA10	Assist students' understanding of global issues in English lessons
GA11	Empower students with necessary knowledge, skills and dispositions for future employment and global market
GA12	Cooperate with people from various backgrounds
GA13	Discuss familiar and unfamiliar social, ecological, political, and economic issues
GA14	Use different assessment methods and techniques in teaching global knowledge

Table 5 displays the Fuzzy Delphi analysis of the Global Awareness construct. The items represent the indicators; the rejected items are highlighted in the table.

Table 5: Threshold value (d), percentage of experts' agreement, and defuzzification of the Global Awareness (GA) construct

Item/ Indicator	Triangular Fuzzy Numbers		Fuzzy Evaluation				Experts' Agreement	Items' Acceptance	Ranking
	Threshold Value, d	Percentage of Experts' Consensus, %	m1	m2	m3	Fuzzy Number (A)			
GA1	0.186	90.9%	0.573	0.773	0.918	0.755	ACCEPT	0.755	6
GA2	0.075	100.0%	0.664	0.864	0.982	0.836	ACCEPT	0.836	2
GA3	0.258	81.8%	0.555	0.755	0.891	0.733	ACCEPT	0.733	8
GA4	0.258	81.82%	0.555	0.755	0.891	0.733	ACCEPT	0.733	8
GA5	**0.318**	**45.45%**	**0.436**	**0.627**	**0.800**	**0.621**	**REJECT**	**0.621**	**13**
GA6	0.042	100.00%	0.682	0.882	0.991	0.852	ACCEPT	0.852	1
GA7	0.187	90.91%	0.591	0.791	0.927	0.770	ACCEPT	0.770	4
GA8	0.187	90.91%	0.591	0.791	0.927	0.770	ACCEPT	0.770	4
GA9	0.283	81.82%	0.527	0.718	0.864	0.703	ACCEPT	0.703	10
GA10	0.100	100.00%	0.645	0.845	0.973	0.821	ACCEPT	0.821	3
GA11	0.215	90.91%	0.564	0.755	0.900	0.739	ACCEPT	0.739	7
GA12	**0.343**	**27.27%**	**0.473**	**0.664**	**0.818**	**0.652**	**REJECT**	**0.652**	**12**
GA13	**0.305**	**54.55%**	**0.418**	**0.609**	**0.791**	**0.606**	**REJECT**	**0.606**	**14**
GA14	**0.355**	**18.18%**	**0.491**	**0.682**	**0.827**	**0.667**	**REJECT**	**0.667**	**11**

Based on the findings, the defuzzification α-Cut values of all the items received a value above 0.5 and were accepted. However, the items 0.258 (GA3), 0.258 (GA4), 0.283 (GA9), and 0.215 (GA11) did not meet the cut-off threshold value (d) of ≤ 0.200 and percentages of experts' item agreement of 75%. Thus, these

four items were rejected. The Global Awareness (GA) construct analysis concluded that ten items were accepted, while four items that did not meet two out of the three criteria namely the threshold value (d) and percentage of experts' agreement were rejected.

Analysis of Expert Consensus on Multicultural Awareness Construct
In this Multicultural Awareness construct, the items reviewed by the experts are presented in Table 6.

Table 6: Items for Multicultural Awareness Construct

Number	Items (Indicators)
MA1	Understand local cultures
MA2	Understand foreign cultures
MA3	Understand global cultures
MA4	Understand the effective interaction in a multicultural environment
MA5	Appreciate cultural uniqueness
MA6	Build on existing cultural experiences
MA7	Show respect towards others from various racial and religious groups
MA8	Integrate knowledge of local and global cultures in ESL lessons
MA9	Assist students' understanding of multicultural issues in English lessons
MA10	Assist students to make connection between local and foreign cultures
MA11	Assist students to operate within their own microculture, mainstream culture and global community

Table 7 displays the Fuzzy Delphi analysis of the Multicultural Awareness construct. The items represent the indicators; the rejected items are highlighted in the table.

Table 7: Threshold value (d), percentage of experts' agreement, and defuzzification of the Multicultural Awareness (MA) construct

Item/ Indicator	Triangular Fuzzy Numbers		Fuzzy Evaluation				Experts' Agreement	Items' Acceptance	Ranking
	Threshold Value, d	Percentage of Experts' Agreement, %	m1	m2	m3	Fuzzy Number (A)			
MA1	0.260	81.8%	0.573	0.773	0.900	0.748	ACCEPT	0.748	9
MA2	0.235	81.8%	0.518	0.718	0.873	0.703	ACCEPT	0.703	10
MA3	**0.293**	**36.4%**	**0.464**	**0.664**	**0.827**	**0.652**	**REJECT**	**0.652**	11

MA4	0.075	100.00%	0.664	0.864	0.982	0.836	ACCEPT	0.836	1
MA5	0.116	100.00%	0.627	0.827	0.964	0.806	ACCEPT	0.806	5
MA6	0.075	100.00%	0.664	0.864	0.982	0.836	ACCEPT	0.836	1
MA7	0.075	100.00%	0.664	0.864	0.982	0.836	ACCEPT	0.836	1
MA8	0.075	100.00%	0.664	0.864	0.982	0.836	ACCEPT	0.836	1
MA9	0.116	100.00%	0.627	0.827	0.964	0.806	ACCEPT	0.806	5
MA10	0.180	90.91%	0.609	0.809	0.936	0.785	ACCEPT	0.785	8
MA11	0.125	100.00%	0.609	0.809	0.955	0.791	ACCEPT	0.791	7

Based on the analysis, a total of ten from the eleven items achieved a consensus of agreement from the experts, as they exceeded the acceptance value of 75%. As seen in Table 7, item MA1 and MA2 have the threshold value of above ≤ 0.200, but the percentage of experts' agreement exceeded the acceptance value of 75%, and the fuzzy number α-Cut values (defuzzification) were above 0.5. Thus, MA1 and MA2 were accepted. Meanwhile, MA3 has a threshold value of 0.293 and a defuzzification α-Cut value above 0.5, but it is rejected because of the low percentage of experts' agreement (36.4%). The analysis of the Multicultural Awareness (MA) construct concluded that ten items were accepted, and one item was rejected.

Analysis of Expert Consensus on Indigenous Knowledge Construct

In this Indigenous Knowledge construct, the items reviewed by the experts are presented in Table 8.

Table 8: Items for Indigenous Knowledge Construct

Number	Items (Indicators)
IK1	Understand and be aware of local indigenous community
IK2	Understand and be aware of foreign indigenous community
IK3	Understand and aware of global indigenous community
IK4	Appreciate indigenous community
IK5	Respect indigenous community
IK6	Integrate knowledge on indigenous cultures in ESL lessons
IK7	Integrate knowledge on indigenous lifestyle in ESL lessons
IK8	Integrate indigenous knowledge in local examples
IK9	Integrate indigenous knowledge in global examples
IK10	Assist students' awareness of the indigenous community in English lessons

Table 9 displays the Fuzzy Delphi analysis of the Indigenous Knowledge construct. The items represent the indicators; the rejected items are highlighted in the table.

Table 9: Threshold value (d), percentage of experts' agreement, and defuzzification of the Indigenous Knowledge (IK) construct

Item/ Indicator	Triangular Fuzzy Numbers		Fuzzy Evaluation				Experts' Agreement	Items' Acceptance	Ranking
	Threshold Value, d	Percentage of Experts' Agreement, %	m1	m2	m3	Fuzzy Number (A)			
IK1	0.186	90.9%	0.573	0.773	0.918	0.755	ACCEPT	0.755	3
IK2	**0.280**	**45.5%**	**0.445**	**0.645**	**0.818**	**0.636**	**REJECT**	**0.636**	**8**
IK3	**0.365**	**36.4%**	**0.400**	**0.591**	**0.764**	**0.585**	**REJECT**	**0.585**	**10**
IK4	0.186	90.91%	0.573	0.773	0.918	0.755	ACCEPT	0.755	3
IK5	0.180	90.91%	0.609	0.809	0.936	0.785	ACCEPT	0.785	2
IK6	0.180	90.91%	0.609	0.809	0.936	0.785	ACCEPT	0.785	1
IK7	**0.280**	**45.45%**	**0.445**	**0.645**	**0.818**	**0.636**	**REJECT**	**0.636**	**8**
IK8	0.235	81.82%	0.518	0.718	0.873	0.703	ACCEPT	0.703	6
IK9	0.221	81.82%	0.500	0.700	0.864	0.688	ACCEPT	0.688	7
IK10	0.186	90.91%	0.573	0.773	0.918	0.755	ACCEPT	0.755	3

From the analysis in Table 9, Item IK8 and IK9 have the threshold value of above ≤ 0.200, but the percentage of experts' agreement exceeded the acceptance value of 75% and the fuzzy number α-Cut values (defuzzification) were above 0.5. Thus, IK8 and IK9 were accepted. Meanwhile, IK2, IK3, and IK7 have a threshold value above ≤ 0.200 and a low percentage of experts' agreement that are; 45.5% (IK2), 36.4% (IK3), and 45.45% (IK7) respectively. As a result, IK2, IK3, and IK7 were rejected from the construct. The analysis of the Indigenous Knowledge (IK) construct concluded that seven items were accepted and three were rejected.

Analysis of Expert Consensus on Self-Awareness Construct

In this Self-Awareness construct, the items reviewed by the experts are presented in Table 10.

Table 10: Items for Self-Awareness Construct

Number	Items (Indicators)
SA1	Understand own self-identity
SA2	Understand own interest and culture
SA3	Appreciate the uniqueness of an individual
SA4	Explore and adapt to different roles of effective and competent ESL educators
SA5	Prepare for the challenging world
SA6	Integrate self-awareness in ESL lessons
SA7	Integrate mindfulness topics and activities in ESL lessons
SA8	Assist students' understanding of self-identity in English lessons
SA9	Build consciousness (personal and surrounding) and apply self-reflection

Table 11 shows the Fuzzy Delphi analysis of the Self-Awareness construct. The items represent the indicators for the Domain; Knowledge.

Table 11: Threshold value (d), percentage of experts' agreement, and defuzzification of the Self-Awareness (SA) construct

Item/ Indicator	Triangular Fuzzy Numbers		Fuzzy Evaluation				Experts' Agreement	Items' Acceptance	Ranking
	Threshold Value, d	Percentage of Experts' Agreement, %	m1	m2	m3	Fuzzy Number (A)			
SA1	0.116	100.0%	0.627	0.827	0.964	0.806	ACCEPT	0.806	3
SA2	0.187	90.9%	0.591	0.791	0.927	0.770	ACCEPT	0.770	6
SA3	0.180	90.9%	0.609	0.809	0.936	0.785	ACCEPT	0.785	5
SA4	0.116	100.00%	0.627	0.827	0.964	0.806	ACCEPT	0.806	3
SA5	0.260	81.82%	0.573	0.773	0.900	0.748	ACCEPT	0.748	7
SA6	0.075	100.00%	0.664	0.864	0.982	0.836	ACCEPT	0.836	1
SA7	0.159	90.91%	0.536	0.736	0.900	0.724	ACCEPT	0.724	8
SA8	0.159	90.91%	0.536	0.736	0.900	0.724	ACCEPT	0.724	8
SA9	0.100	100.00%	0.645	0.845	0.973	0.821	ACCEPT	0.821	2

To sum up, all nine items have met the minimum value of above 0.5, have exceeded the acceptance value of 75%, consequently, have been accepted by the experts. However, item SA5 (0.260) has a threshold value of above ≤ 0.200, but since the percentage of experts' agreement exceeded the acceptance value of 75%

and the fuzzy number α-Cut values (defuzzification) were above 0.5. Thus, SA5 was accepted, and all nine items in the Self-Awareness (SA) construct were accepted.

Overall, from the 44 indicators, 36 indicators were accepted and agreed on by the experts. Further, the review and feedback from the experts regarding the items constructed in the questionnaire strengthened the content and face validity of the questionnaire and the overall proposed framework. The experts' help to ensure the suitability of the indicators representing the constructs is a method of face validation (Azmi et al., 2019). Table 12 reveals the comments received for the constructs and items of the proposed ESL global competence framework development. Changes are made according to the comments and suggestions from the selected experts.

Table 12: Experts' comments and suggestions

Construct	Comment and Suggestion	Remark
1. Global Awareness	Change the words use to suit the domain – several items seem less like 'knowledge', more like 'skills'	FDM Analysis Result: Rejected GA5, GA12, GA13, and GA14
	Some indicators are unclear and unnecessary – can be excluded: GA13	Rejected GA2 as suggested to avoid redundancy
	Need to be more specific: GA5, GA12	
	GA2 is redundant – can be excluded	Rephrased GA9 by using the phrase 'culturally diverse English users'
	Use the phrase 'culturally diverse English users' since it is more politically correct: GA9	Rephrased all accepted items; GA1, GA2, GA3, GA4, GA6, GA7, GA8, GA9, GA10, and GA11 to be related to global awareness
	Unclear of what 'accept development in various parts of the world' means for GA5	
	All items are important but not all are related to global awareness	Changed the words use to suit the domain – several items seem less like 'knowledge', more like 'skills'
	More focus on the idea of language teaching and learning	Added focus on the idea of ESL language teaching and learning
2. Multicultural Awareness	Reject MA3	FDM Analysis Result: Rejected MA3
	Take out 'effective': MA4	
	Use the word 'cultural' to replace 'racial': MA7	Rejected MA2 based on experts' suggestion to avoid redundancy
	Seems more like skills than knowledge - rephrase: MA8 – MA11	
	'To make connection' is conceptually confusing for instruction: MA10	Rephrased MA1, MA4, MA5, MA6, MA7, MA8, MA9, MA10, and MA11
	MA11 will depend on which district that they are situated because not all communities consist of different cultures	Added focus on the idea of ESL language teaching and learning
	Some indicators should be combined such as 'understand similarities and differences between local and foreign	

	cultures' since it matches with the construct of 'multicultural awareness': MA1 - MA3 It is not possible to understand all cultures Need to make the link between culture and language more obvious	
3. Indigenous Knowledge	Change the words use to suit the domain – several items seem less like 'knowledge', more like 'skills' Take out 'local': IK1 Redundant: IK7 Conceptually confusing: IK9 This could be an interesting aspect to focus on, but then again, some may not feel that it is necessary to know about this as they will no encounter it in their communities Vague connection between Indigenous Knowledge and language learning Some of these items would be very important if there were students from Indigenous cultures in the class – may not possible to understand all global cultures Unclear of what exactly would be taught regarding "lifestyle" than wouldn't be covered in "culture"	FDM Analysis Result: Rejected IK2, IK3, and IK7 Rephrased all accepted items using words to suit the domain 'knowledge' and to show clearer gist: IK1, IK4, IK5, IK6, IK8, 1K9, and IK10 Made connection between Indigenous knowledge and ESL language learning
4. Self-Awareness	Change the words use to suit the domain – several items seem less like 'knowledge', more like 'skills' Use either "events" or "issues." I think the world "issues" seems to be more appropriate than events. This should apply to all items Some indicators are unclear – need to be rephrased: SA1, SA4, SA7 Conceptually confusing, prepare for students or teachers, need to be specific: SA5 SA8 should be excluded since it is redundant and not really suitable for 'knowledge' domain Build consciousness is vague but apply self-reflection is acceptable: SA9 The items are good but rather general and does not address the ESL context in particular	FDM Analysis Result: None rejected Rejected SA8 as suggested by the experts due to redundancy Rephrased all accepted items using words to suit the domain 'knowledge' and to show clearer gist: SA1, SA2, SA3, SA4, SA5, SA6, SA7, and SA9 Rephrased to address the connection of the indicators to ESL context

As seen in the comment matrix above, another evaluation was conducted by the researcher based on the experts' comments and feedback regarding the suitability of the items representing respective constructs. As a result, three more indicators were rejected, leaving only thirty-three significant items for the framework. A detailed overview of the rejected items from the overall FDM analysis results in is presented in Table 13 below:

Table 13: The items rejected by the Fuzzy-Delphi experts' suggestions

	Construct	Item Total from FDM Experts' Review (Survey)	Experts' Suggestion for Rejection	Item Total for Rejection	Final Item Total
1.	Global Awareness (GA)	10	GA2: Understand global issues	1	9
2.	Multicultural Awareness (MA)	10	MA2: Understand foreign cultures	1	9
3.	Indigenous Knowledge (IK)	7	-	-	7
4.	Self-Awareness (SA)	9	SA8: Assist students' understanding of self-identity in English lessons	1	8

From the quantitative and qualitative findings of the experts' consensus, all four constructs are accepted with some changes on the indicators representing their respective constructs. Nine indicators are agreed on for the Global Awareness and Multicultural Awareness constructs respectively. Indigenous Knowledge holds seven indicators, and eight indicators are secured under the Self-Awareness construct. A total of 33 indicators were finalized for the domain Knowledge in this framework.

5. Discussion

From the results of the analysis carried out using Fuzzy Delphi Method, the identified indicators for the respective constructs under the domain, Knowledge have received consensus from eleven experts. The results further implied that 33 indicators need to be included in the proposed ESL Global Competence Framework to represent and describe the constructs of Global Awareness, Multicultural Awareness, Indigenous Knowledge, and Self-Awareness.

In English lessons, the content goes beyond linguistic elements; it also involves discussing selected themes and topics being taught in the target language. Content such as cultural knowledge is commonly tied to tradition, geography, and nationality (Zaharin, 2019). Given the diversity of global citizenship and individual backgrounds, fostering intercultural understanding is crucial. As highlighted by Tichnor-Wagner et al., (2019), intercultural understanding is a key element of global competence. Thus, displaying intercultural understanding

is a concrete criterion of a good English teacher. Kerkhoff and Cloud (2020, p. 13) define intercultural as "an exchange between two cultures". To meet the needs of increasingly diverse classrooms and societies, it is vital for teachers to be interculturally adept in responding to the issues raised by the students (Hepple et al., 2017). They must prepare themselves and their students to navigate multicultural environments. However, a study by Abdullah and Abdullah (2018) on preschool teachers revealed that although the teachers were optimistic about the training related to multicultural education, two-thirds of the teachers showed misconceptions about the main principles of multicultural education. This negatively reflects their understanding of multiculturalism in education (Abdullah & Abdullah, 2018). In a similar context to ESL education, this study focuses on developing a framework to fill the gap in ESL teachers' understanding of global competence elements, including multicultural awareness. Therefore, the emphasis on cross cultural understanding mentioned as part of the indicators in the construct makes the framework valuable to be a point of reference for ESL teachers and educators in developing their global competence.

In this age of interconnectedness, the goal to understand the world through disciplinary and interdisciplinary approaches is at the centre of global competence (Mansilla & Wilson, 2020). Due to the demands of globalization, teachers need to be competent in guiding students to explore global and local issues within and beyond the curriculum (McCardle, 2017; Pereira, 2020; Tichnor-Wagner et al., 2016), as well as develop global competency (Liu et al., 2020). In the context of PISA 2018, it can improve students' assessment results. Thereby, teachers' perceptions and views towards the objective of English language teaching will influence their teaching practices and students' achievement (Hesan et al., 2019; Rafiq et al., 2022). Globally competent educators should have a solid global knowledge base, a tolerant attitude toward human variety, and recognize themselves as players in solving critical global challenges in a dangerous, dynamic, and interconnected world (Orazbayeva, 2016; Sinagatullin, 2019). These elements of global competency are reflected in ESL teachers' teaching of core content, approaches, and their overall English lessons. The inclusion of the indicators agreed by the experts' participants in this study creates a meaningful guideline for ESL teachers to develop and further enhance their knowledge of global competence.

In lieu of focusing on improving students' performances and achievements, teachers' quality and professional development need proper attention. To succeed in the competitive world, global competence has a deeper goal of building higher taxonomies of thinking and adapting oneself in the interconnected and intercultural world. Being critical and flexible is a crucial aspect of gaining global competence. As verified by the findings reported by Meng, Zhu, and Cao (2017, p. 135), "a high level of global competence may lead to international students' sense of connectedness with the social world around them". This highlight the purpose for educators need to be aware of the global, multicultural, and intercultural facets of English teaching and learning would assist in preparing school and university graduates for future employability and

social life in a society that is increasingly interdependent and global (Sinagatullin, 2019; Ting et al., 2017). Summarising the importance of knowledge of global competence that specifies global awareness, multicultural awareness, indigenous knowledge, and self-awareness among teachers.

Overall, by utilizing the Fuzzy Delphi Method and engaging with a diverse panel of experts, this study contributes to the Knowledge domain in the development of an ESL Global Competence Framework for ESL teachers. The accepted indicators reflect a consensus among experts, underscoring their relevance in guiding ESL teachers' global competence development. Ultimately, the findings underscore the ongoing commitment to promoting global competence within the ESL education context, ensuring teachers are equipped with the necessary knowledge to navigate diverse cultural landscapes and effectively prepare students to work in interconnected and unpredictable world.

6. Limitations of the Research

There are some limitations when conducting the research. Due to time constraints, some pre-identified experts could not participate as the participants of the Fuzzy Delphi Method. Therefore, this study had 11 experts based on recommendations of similar research involving number of experts for a Fuzzy Delphi Method employment. There might also be a risk for overgeneralization of the findings. Hence, it is crucial to note that the FDM approach is not aimed for generalization but, to complete a phase in the design and development research (DDR) which methodologically contains more than one phases (Richey & Klein, 2014).

7. Recommendations

This study explored the relevant constructs and indicators for the domain Knowledge to be included in the ESL Global Competence Framework designed for Malaysian ESL teachers. This study can benefit the policymakers and educators through the awareness toward global competence in the ESL context. Future research should look into other constructs and indicators that can represent other crucial domains such as Skills, Dispositions, and/or Values. Apart from that, it is recommended for future research to include more experts in reviewing the selected domains, constructs, and indicators for a framework design and development research. It is recommended for future studies to also investigate other concepts related to the teaching and learning of global competence in the local Malaysian context. Moreover, stakeholders and policymakers are advised to consider the adaptation of the constructs from the ESL Global Competence Framework in the English or CEFR-aligned curriculum and syllabus.

8. Conclusion

ESL teachers also need to keep up with current trends in the education field. This emphasizes the importance of understanding local and global issues, and how they are related. Through this practice, the teachers can assist students' development of global perspectives and further improve their skills, including cross-cultural communication skills. The knowledge in global competence can be

leveraged to help students become more holistic students who have good English proficiency and are ready to compete in the real-world. Finally, it is significant for ESL teachers to continue developing their global competence by participating in professional development opportunities. This method allows them to stay up-to-date on the latest trends, issues, and ideas worldwide. Overall, having a comprehensive understanding of global competence is crucial as it opens the path to becoming effective educators and individuals. In this study, the concepts being highlighted in the domain include, but are not limited to, cultural diversity, human development, learning styles, cross-cultural communication, intercultural awareness, and global perspectives. The Fuzzy Delphi Method, which identified the experts' agreement, validation, and opinions of the constructs and indicators representing the Knowledge domain, proved the quality of the domain in the proposed ESL Global Competence Framework. The key concepts and perimeters can be discussed through structured programmes and modules for ESL teachers.

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APPENDIX 1: FUZZY DELPHI METHOD: SAMPLE QUESTIONNAIRES FOR EXPERTS

DEFINITIONS AND EXPLANATIONS OF THE PROPOSED 4 CONSTRUCTS FOR THE DOMAIN KNOWLEDGE

i) DOMAIN: KNOWLEDGE

DEMOGRAPHIC BACKGROUND:

NAME OF EXPERT	
DATE	
INSTITUTION	
AREA OF EXPERTISE	

SD: STRONGLY DISAGREE	**D: DISAGREE**	**A: AGREE**	**SA: STRONGLY AGREE**

SECTION A: KNOWLEDGE (K)
CONSTRUCT: GLOBAL AWARENESS (GA)

Indicator	**Item**	**Your Agreement**			
Question: ESL teachers should be able to …		**SD**	**D**	**A**	**SA**
GA1	Understand and be aware of local events/ issues				
GA2	Understand and be aware of global events/ issues				
GA3	Understand and be aware of historical and current events/ issues				
GA4	Understand CEFR-aligned curriculum in reference to the global standard				
GA5	Accept development in various parts of the world				
GA6	Integrate knowledge of global and local issues in ESL lessons				
GA7	Integrate CEFR-aligned curriculum and global competence in ESL lessons				
GA8	Integrate technological literacy in ESL lessons				
GA9	Assist students to use English in communication with native and non-native English speakers				
GA10	Assist students' understanding of global issues in English lessons				
GA11	Empower students with necessary knowledge, skills and dispositions for future employment and global market				
GA12	Cooperate with people from various backgrounds				
GA13	Discuss common and unfamiliar social, ecological, political and economic issues				
GA14	Use different assessment methods and techniques in teaching global knowledge				

Comments on the Global Awareness (GA) construct:

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CONSTRUCT: MULTICULTURAL AWARENESS (MA)

Indicator	Item	Your Agreement			
Question: ESL teachers should be able to …		**SD**	**D**	**A**	**SA**
MA1	Understand and be aware of local cultures				
MA2	Understand and be aware of foreign cultures				
MA3	Understand and be aware of global cultures				
MA4	Understand the effective interaction in a multicultural environment				
MA5	Appreciate cultural uniqueness				
MA6	Build on existing cultural experiences				
MA7	Show respect towards others from various racial and religious groups				
MA8	Integrate knowledge of local and global cultures in ESL lessons				
MA9	Assist students' understanding of multicultural issues in English lessons				
MA10	Assist students to make connection between local and foreign cultures				
MA11	Assist students to operate within their own microculture, mainstream culture and global community				

Comments on the Multicultural Awareness (MA) construct:

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CONSTRUCT: INDIGENOUS KNOWLEDGE (IK)

Indicator	Item	Your Agreement			
Question: ESL teachers should be able to …		**SD**	**D**	**A**	**SA**
IK1	Understand and be aware of local indigenous community				
IK2	Understand and be aware of foreign indigenous community				
IK3	Understand and be aware of global indigenous community				
IK4	Appreciate indigenous community				
IK5	Respect indigenous community				
IK6	Integrate knowledge on indigenous cultures in ESL lessons				
IK7	Integrate knowledge on indigenous lifestyle in ESL lessons				
IK8	Integrate indigenous knowledge in local examples				
IK9	Integrate indigenous knowledge in global examples				
IK10	Assist students' awareness of the indigenous community in English lessons				

Comments on the Indigenous Knowledge (IK) construct:

CONSTRUCT: SELF-AWARENESS (SA)

Indicator	Item	Your Agreement			
Question: ESL teachers should be able to …		**SD**	**D**	**A**	**SA**
SA1	Understand and be aware of own self-identity				
SA2	Understand and be aware of own interest and culture				
SA3	Appreciate the uniqueness of an individual				
SA4	Explore and adapt to different roles of effective and competent ESL educators				
SA5	Prepare for the challenging world				
SA6	Integrate self-awareness in ESL lessons				
SA7	Integrate mindfulness topics and activities in ESL lessons				
SA8	Assist students' understanding of self-identity in English lessons				
SA9	Build consciousness (personal and surrounding) and apply self-reflection				

Comments on the Self-Awareness (SA) construct:

Comments on the Knowledge (K) dimension: