



Kuram ve Uygulamada Eğitim Yönetimi
Educational Administration: Theory and Practice
2023, Cilt 29, Sayı 4, ss: 159-174
2023, Volume 29, Issue 4, pp: 159-174
www.kuey.net



The Future of Language Interpretation and Translation in Education: Technology Use as a Mediator

Yang Wu ^{1*}

<p>Article History</p> <p>Article Submission 15 June 2023</p> <p>Revised Submission 24 July 2023</p> <p>Article Accepted 21 August 2023</p>	<p style="text-align: center;">Abstract</p> <p>The future of language interpretation and translation in education is likely to be heavily influenced by the emergence of new technologies. This study explores and identifies the cross-cultural studies aspects that influence performance evaluations and the key university faculty members in order to better understand the future of language translation and interpretation in education. A sequential mixed method (qualitative and quantitative) study has been done for the analysis of this research. Through the use of a questionnaire, information was gathered from the targeted group of university faculty members. The study has been done in two rounds of delphi surveys. Through the use of a questionnaire, information was gathered from the targeted group of university faculty members. The study has been done in two rounds of delphi surveys. Through delphi survey collected data for an initial interview from the semi-structured interviews for the qualitative study after that 16 nodes and 08 themes were developed. The most significant factors that identified in this study were concentrate on translation as a goal, a strong foundation for developing translation skills, optimization for production and interpretation, helping to create a more unified global community, language can be used to foster cultural understanding, facilitate communication between educators from different countries, information technology as a tool for the dissemination of knowledge and to encourage more cross-cultural contact among students. This study also revealed to identify these consensuses between targeted population (teachers, administrators and academic fields) for further discussion. This study has some limitations technology restrictions, data security issues, cultural biasness and time restrictions. The findings of this study are to work on these limitations for further research and this will help for learners in diversity environment.</p> <p>Keywords: Cross-cultural Studies; Language Translation; Language Interpretation; Technology Use in Education; Performance Assessment</p>
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^{1*}*Doctor, School of Foreign Languages, Huaihua University, Huaihua, China, 215221070@qq.com*

Introduction

The use of language interpretation and translation technology has also enabled educators to assess and evaluate student performance. By removing language barriers, educators can better measure student comprehension and mastery of the material, regardless of their native language. cross-cultural adaptation is the process of taking into account any differences between the source and target cultures to preserve semantic equivalence (Jeong and Lee, 2021). It is now understood that to retain the content validity of the instrument at a conceptual level across different cultures, measurements must not only be adequately translated linguistically but also culturally adapted (Papadakis et al., 2022). A translation strategy, broadly defined, could include "translation strategies, tactics, guiding principles or procedures" and even all potential decisions made by not only authorities but also translators, interpreters, and publishers. Translation policy is defined as "those factors that control the selection of text types, or even of individual texts, to be imported through translation into a specific culture/language at a specific point in time" (Li et al., 2017). In natural language interpretation, the idea of optimization is quite obvious and there is much evidence in favor of competition and constraint ranking in this field (Jesson et al., 1987). The performance evaluation definitions that have been put forth are not the same as the characteristics. The boundaries are more obvious when performance assessment is defined using a definition, in the sense that the definition states a more specific meaning of the notion (Nikoopour and Farsini, 2010). The focus and potential interpretations of what is actually to be recognized as performance assessment differ greatly among the definitions of performance assessment (Palm, 2008). It is crucial to assess how much using learning technology enhances teaching and learning given the constant influx of new and emerging technologies becoming available for use in education. For the improvement of the students learning, increment of the access in education and give motivation to the learners are many reasons for the usage of technology in education(Lai and Bower, 2019). Language translation is the best way to understand the study materials in their own language and for the suitable of the understanding level with the instructors from other language. With the passage of time technology will give potential to the learners for language translation and interpretation in education for cross-cultural studies impact (Blimpo and Pugatch, 2019). This study have these objectives are as (1).To examine the impact of language translation in education and language interpretation in education on cross-cultural studies with the mediating role of technology use in education. (2).To examines the impact of language translation in education and language interpretation in education on cross-cultural studies with the mediating role of performance assessment. The use of technology in language translation and interpretation had many challenges and as well as had many opportunities to improve the language proficiency and learning skills regarding performance assessment (Owan et al., 2022). The perception of cross-cultural studies will evaluate the attitude of learners and language professionals towards technology use in language interpretation and translation in education (Abdulwahed et al., 2010).

Literature Review

There is a comparison of different values, norms and believes. This study will assist to categories the possible points of conflict as well as the cooperation areas between cultures(Pym, 2004). This level of proficiency is desired not only by students but also by teachers and program directors of educational initiatives with varied student populations (Owan et al., 2022).There are so many researches had been done from past 25 years on the development of the concept of cultural knowledge and cross-cultural studies for gaining the much needed attention from management and academic field (Mikhaylov, 2014).Online collaborative learning, a technique that encourages students to learn with one another whenever and wherever they like, is one of the well-researched methods for effective online learning (Horng et al., 2020). Cross-cultural collaborative learning, which enables students from different cultural backgrounds to learn together regardless of distance, is made possible via online collaborative learning enabled by computer technologies (Fosua Gyasi and Zheng, 2023). Employers and employees need to have cultural intelligence to have successful cross-cultural relationships. The ability to grasp unfamiliar gestures and settings and to adapt appropriate behavioral reactions is referred to as cultural intelligence. It can be

embarrassing for native supervisors and foreign-born staff if they lack cross-cultural competence or believe they do not have it (Gumah et al., 2021). There are some aspects of language that can be used to communicate with the positive aspects and as well as it can be the source of misunderstanding and conflicts. The best way is to interact between different cultures in cross-cultural studies to understand the better understand of the different norms, values and interaction (Lai and Bower, 2019). The future of language translation in education is very promising. Language translation tools with the development of technology become more complicated and precise. With the help of technology advancement every students have a wide variety of educational materials in different languages. To communicate with others, a particular language employs a certain type of terminology and vocabulary. Every single science discipline uses its unique language and vocabulary (Jaggy et al., 2023). It is clear that language can have a significant impact on what people know and do not know. Discourses produced by language's power have an impact on how individuals behave and act (Makoelle, 2020). The acknowledgement of cutting-edge training programs for translators and interpreters has also grown as a result of the translation industry's accelerated global expansion. In addition to this, translation is now being used as a general method in the teaching of academic languages. Translation plays a crucial role in global communication. The translation is essential when considering global news. Every significant message is swiftly and accurately translated into a wide range of languages to ensure effective communication across the globe (Adil, 2020). To reduce linguistic and cultural prejudices, dissenting in translation is a collaborative process between experts in the two cultures or languages (Nurjannah et al., 2014).

The future of language interpretation looks very promising. There are so many advanced alternatives increasing aptitudes in language interpretation with different artificial intelligence, natural language processing system and some machine learning techniques (Hongwei, 2002). We are already seeing the development of systems that can automatically translate between different language and this technology is becoming increasingly sophisticated and accurate. In light of this, the application of the translation method is also seen as a tool for relieving students' worries and stress and boosting their confidence in social situations. The differences in lexical tones affect the tone of the languages (Choi et al., 2012). The translation is challenging since the tonal differences affect how each character is understood. The textual structures of both languages also differ, which makes language translation more difficult. This allows the students to infer the meaning of a term depending on their interpretation, which affects how the sentences are translated (Adil, 2020). Many grounded theory studies will not accept the use of a professional translation if the research is conducted from a social constructionist, non-positivist, or interpretative perspective (Møller-Skau and Lindstøl, 2022). With this viewpoint, the data analysis procedure incorporates the cultural interpretation of a participant's words. As a result, the translator transforms into a creator of research data who, using their identities and experiences, creates the analysis (Nurjannah et al., 2014). The tasks and obligations of educational sign language interpreters, as well as the particular modes of communication they use, are mostly unknown. In the state of Iowa, a survey of educational interpreters who worked in K-12 schools discovered discrepancies between the interpreters' impressions of what was expected of them and what they actually did (Loker and Scannell, 1992). The automatic interpretation of spoken language may become a reality in the future, allowing us to easily converse with others who speak different languages. Additionally, AI-driven language interpretation systems may be created, allowing computers to comprehend and analyze linguistic nuances and produce translations that are more accurate (Makoelle, 2020). Computers and other digital devices, for instance, can be used to provide material, promote teamwork, and give users access to internet resources. A lot of recent studies .in educational technology have focused on the influence (Haleem et al., 2022). The positive effects of integrating technology with effective teacher preparation on teacher attitudes towards information technology, student attitudes towards information technology, and other learning-related student dispositions like motivation have generally been successfully demonstrated by researchers (Christensen and Knezek, 2002).

The since the need for e-learning has increased year over year, the education sector has been encouraged by the Internet's and technology's rapid development to adopt Internet-based learning materials from primary to higher education (Fosua Gyasi and Zheng, 2023). In this context, the term "e-learning" refers to a concept in education that uses digital devices and technology to

disseminate educational content and support remote learning (Alyoussef, 2023). Teachers' attitudes and aversion to change, worries about money, a lack of training, and insufficient access are all obstacles to the effective use of technology. Teachers themselves state that to encourage change, there must be administrative support, sufficient funds, time, and training (Nyakundi MOSE, 2017). To employ technology in the classroom in the way that its ardent supporters imagine, teachers must make two significant changes: first, they must learn how to use it; second, they must alter the way that they teach (Fabry and Higgs, 1997). Personalized learning experiences, immersive learning settings, and improved evaluation and feedback are all possible with technology. Those who are unable to attend a typical brick-and-mortar school can still receive education by using technology to promote distant learning (Johnes, 1996). Higher levels of cognitive complexity, communication, real-world applications, assignments with instructional value, major time and effort commitments from students, and qualitative marking decisions are all components of performance assessment (Abdullah et al., 2023). When specific instances are provided, they typically bear a striking resemblance to actual circumstances and necessitate higher-order reasoning and communication (Palm, 2008). It has not been thoroughly investigated how this relatively new approach interacts with education. The necessity to 'get underneath' simple math to understand the intricacies of adequately accounting for the performance of the diverse ranges of behavior that distinguish the education service has prompted us to take an interdisciplinary approach to this subject (Jesson et al., 1987). Traditional metrics of teacher competency used to make licensing decisions have under criticized for lacking validity and authenticity. It may be possible to provide a more direct evaluation of teaching competence in performance assessments by including data from real teaching practice (Coburn, 2001; Liddicoat, 2016; Tomozeiu et al., 2016; Fernandez Alvarez and Garcia Hernandez, 2021; Vakhovska and Jusuk, 2021). Performance assessments have emerged as useful tools for measuring teacher performance as well as a way to assess the caliber of credential programs for state accountability systems and program accreditation in an era where teacher education is under pressure to prove its efficacy (Pecheone and Chung, 2006).

Methodology

To get beyond the single design's limitations, the study design presented in this section uses both narrative (a sort of qualitative approach) and quantitative methods (i.e., a delphi survey). By using the narrative technique, the data (i.e., semi-structured interviews) were gathered from the targeted population. Following the screening of the raw data using qualitative analysis, a total of 16 nodes were extracted. Later, the importance level of the identified components (themes) was evaluated and prioritized using the quantitative techniques (two-round delphi Survey) from the target population. Figure 1 shows the structure of this study that how divided the study into two parts (qualitative and quantitative). With the aid of statistical tools and nodes were generated from the data that had been recorded on audiotapes using this method. Expert advice was also a key component of this process. From the chosen semi-factors (nodes), a total of eight significant themes (linguistic translation and interpretation factors) were chosen. The themes that were found were used once more for quantitative analysis (a two-round delphi survey), but this time a questionnaire based on a five-point Likert scale was created to collect information from the target population such as teachers, administrators, and academia. There are 25 main open-ended questions made up of the instrument (questionnaire) used for the semi-structured interviews. Using the pilot survey, the experts in the field of academia validated these open-ended questions. There was each university has two departments. Table 1 below represents the nine universities and 18 departments.

Table 1. Cross-cultural studies universities and departments

Departments	Universities	Departments	Universities
Business	University 1	Economics	University 6
Biology		Engineering	
Chemistry	University 2	Arts	University 7
Agriculture		Artificial Intelligence	
Computer Sciences	University 3	Medicine	University 8
English		Literature	
History	University 4	Philosophy	University 9
Geography		Accounting and Finance	
Law	University 5		
Technology			

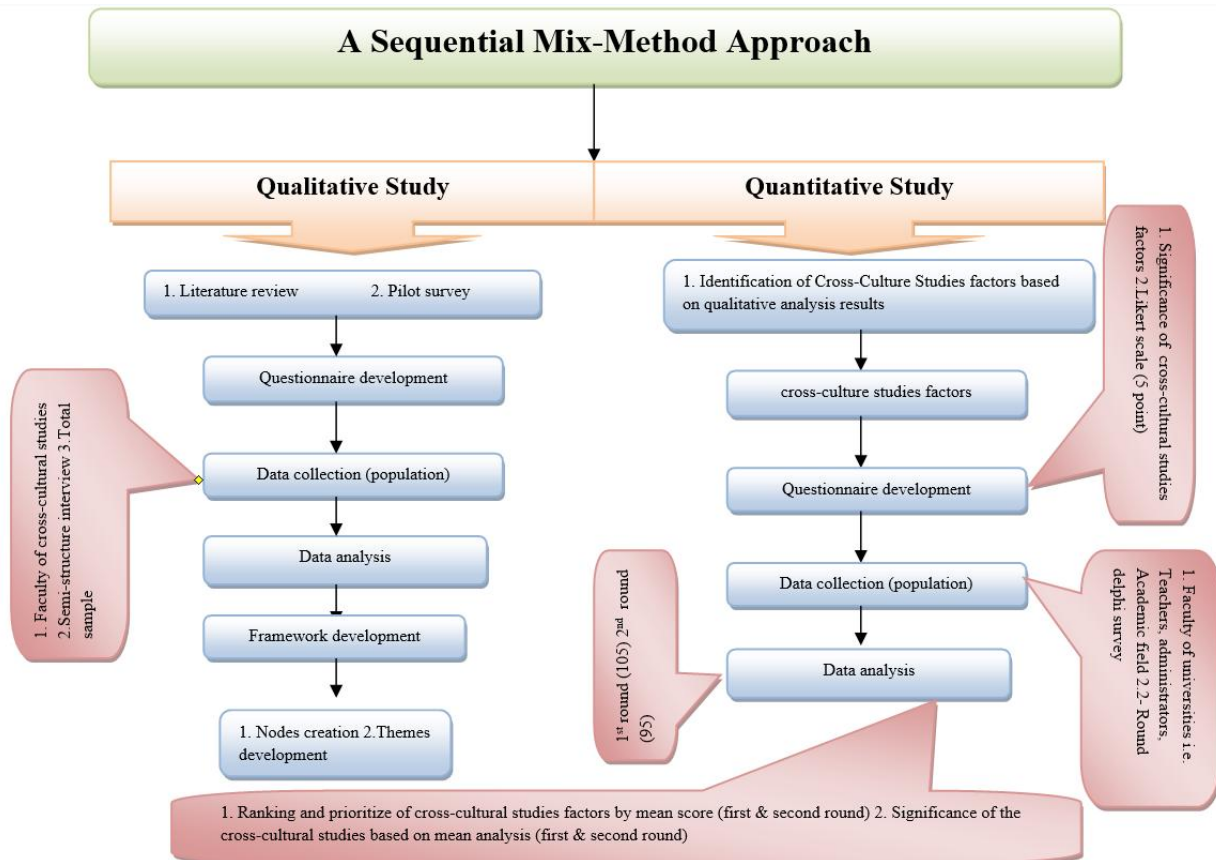


Figure 1. Research methodology adopted for study

A total of 105 replies were gathered in the initial round. The distribution of the respondents and their range of experiences are shown in Table 2. In the initial round postal mail (printed instruments) and in-person meetings were used to collect the data. To obtain more accurate findings, the respondents' identities were kept a secret from one another. The round was repeated until a consensus were reached, at which point the respondents were informed of the desired statistical results. The initial round of data collection was done. To determine whether the responder groups had reached a consensus or not, the data gathered from the first round were statistically analyzed. Using the online survey, the mean score for the second round was

determined and presented to the respondents. The responders were given the option to keep or modify their initial grading, and this decision was left up to them. However, for this round, the replies dropped to 95, as indicated in (Table 2), with their distribution being made up of teachers (43), administrators (31), and academics (21). When the respondent group reached an agreement, the delphi survey was terminated. The following part contains the analysis of the data's findings.

Table 2. Group wise distribution of the respondents for two rounds of the delphi survey

Distribution of Respondents	Teachers	Administrators	Academia Fields
1 Year	12(11)	10(9)	7(6)
3 Years	10(10)	5(4)	6(5)
5 Years	10(9)	10(9)	6(5)
7 Years	13(13)	10(9)	6(5)
Total (105 for first and 95 for the second round)	45(43)	35(31)	25(21)
Note: Digits in brackets "()" shows the respondents of the second round in delphi survey			

Results

This paragraph denotes two different forms of analysis. (i) Qualitative analysis, including the establishment of nodes, themes and factors, and the inter-correlation of the cross-cultural studies factors; and (ii) Quantitative analysis, including the normality and reliability of the data, ranking and prioritization of the cross-cultural studies factors based on mean scoring.

Qualitative Method:

Table 3 lists the 16 nodes and their distribution throughout the several university departments for cross-cultural studies. Giving translation a more independent standing enables us, especially at more advanced levels, to concentrate on translation as a goal unto itself rather than just as a tool of language acquisition. The teaching of translation for professional purposes and general language classes with a translation component is not the same as the translation lessons in this context (Carreres and Noriega-Sánchez, 2011). Reference is made to a construct or phenomenon's universal and culturally specific features in the cross-cultural study. Studies in which researchers reported comparable scores on the value dimension of important quality-of-life concepts have shown the universality of the quality-of-life construct (Schalock et al., 2005). Training as an interpreter requires language fluency. However, most students who enroll in translation programs lack the necessary level of language proficiency. Students must comprehend not only what the interpretation phenomenon is, but also its causes and textual effects when applied to the interpretation classroom (Cui and Zhao, 2014). However, other students might be interested in pursuing careers as translators, in which case their core knowledge of translation acquired in the classroom might be a helpful starting point for honing their translation abilities (Dede, 1995). Adoption and use of technology require constant work in addition to financial resources. This paper's central thesis is that student learning outcomes are teachers' and educational systems' top priority. When, and only when, they are certain that there will be significant benefits in terms of student learning outcomes, the majority of educators will make the effort required to incorporate technology into education (Means, 2010). The concept of optimization is extremely evident in the field of natural language interpretation, and there is a lot of support for constraint ranking and competition in this area. The context changes the potential of an expression, which is regarded as a relationship between the input and output contexts, and serves as the beginning point. Simply put, optimality has the consequence of constraining this relationship in a way that requires both optimization for production and interpretation (Blutner, 2000). Sustainable development includes social well-being, which is dependent on education. It is also advantageous to use this proven approach in order to provide everyone with an excellent educational experience (Haleem et al., 2022).

Table 3. Cross-cultural studies nodes (semi factors)

Cross-cultural studies Nodes	University												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Concentrate on translation as a goal	✓				✓		✓						✓
Universality of the quality-of-life construct			✓			✓			✓			✓	
Necessary level of language proficiency		✓		✓				✓	✓		✓		
A strong foundation for developing translation skills		✓	✓		✓		✓		✓	✓	✓		✓
Effort required to incorporate technology into education	✓			✓		✓				✓			
Optimization for production and interpretation	✓		✓		✓			✓			✓	✓	✓
A top-notch learning experience for everyone				✓		✓	✓		✓				
To facilitate communication between students from different cultures		✓		✓		✓	✓						
To bridge cultural gaps and promote mutual understanding		✓	✓		✓		✓		✓	✓			✓
Helping to create a more unified global community	✓			✓		✓				✓			
Language can be used to foster cultural understanding	✓		✓		✓			✓			✓	✓	✓
Facilitate communication between educators from different countries	✓				✓		✓						✓
To create engaging and interactive learning experiences		✓		✓				✓					✓
Information technology as a tool for the dissemination of knowledge		✓	✓		✓		✓		✓	✓			✓
Speak multiple languages to access instructional resources	✓			✓		✓	✓	✓		✓	✓		
To create learning experiences	✓				✓		✓						✓

The interviewee of the universities of 1, 5, 7 and 13 have a goal on concentrated on translation in education. However, translation includes more than just language because it also entails cultural conciliation between the source and destination cultures (Hongwei, 2002). The interviewee from universities 3, 6, 9, and 12 discussed the quality of life in education regarding cross-cultural studies. The interviewee from the universities of 2, 4, 8, 11, and 13 noticed that the there is the necessary level of language proficiency is the most important factor in cross-cultural studies (Blutner, 2000). The universities interviewee (2, 3, 5, 7, 9, 10, and 13) discussed the interpretation as a strong foundation for developing translation skills in students (Livingstone, 2009). The use of technology discussed by the interviewee (1, 4, 6, and 10) that there are so many efforts required for technology usage in education. There is a lot of support for optimizing production or interpretation in education for future implementation discussed by the interviewee of universities 1, 3, 5, 8, 11, 12, and 13 (Light et al., 1987). A top-notch learning experience for every one of technology usage was noticed by the interviewee of universities 4, 6, 7, and 9. Interviewees 2, 4, 6, and 7 revealed the need to facilitate communication between students from different cultures with the help of language translation. Interviewees 2, 3, 5, 7, 9, 10, and 13 bridges cultural gaps and promote mutual understanding with the help of language translation in cross-cultural studies (Philippecattin and Alainjolibert, 1982). The interviewee (1, 4, 6, and 10) revealed that technology is helping to create a more unified global community. Language can be used to foster cultural understanding of the diversity concept discussed by interviewees 1, 3, 5, 8, 11, 12, and 13. Interviewees 1, 5, 7, and 13 discussed facilitating communication between educators from different countries through different language translations and interpretations in universities (Adams and Osgood, 1973). Language interpretation is frequently employed in cross-cultural studies to guarantee that data obtained from participants who speak various languages are appropriately translated for analysis. Researchers can better comprehend the opinions and experiences of individuals from various cultural backgrounds by interpreting language in cross-cultural studies (Petrescu, 2015). To create engaging and interactive learning experiences through technology usage and communication between students discussed by 2, 4, 8, and 13 (Means, 2010). The interviewee from universities 2, 3, 5, 7, 9, 10, and 13 mentioned information technology as a tool for the dissemination of knowledge. Creating learning experiences through different languages were also identified by the interviewee of universities 1, 5, 7, and 13.

Development of a cross-cultural studies framework for narrative studies

Eight themes (cross-cultural studies factors) were developed from these significant nodes (semi-factors), which were the most prevalent in all thirteen interviews. They were created once nodes were discovered. The following are these eight key themes or factors:

1. Concentrate on translation as a goal
2. A strong foundation for developing translation skills
3. Optimization for production and interpretation
4. Helping to create a more unified global community
5. Language can be used to foster cultural understanding
6. Facilitate communication between educators from different countries
7. Information technology as a tool for the dissemination of knowledge
8. To encourage more cross-cultural contact among students

Developing a framework is the last step in the qualitative approach for data interpretation. Figure 2 represents the factors and its relationship.

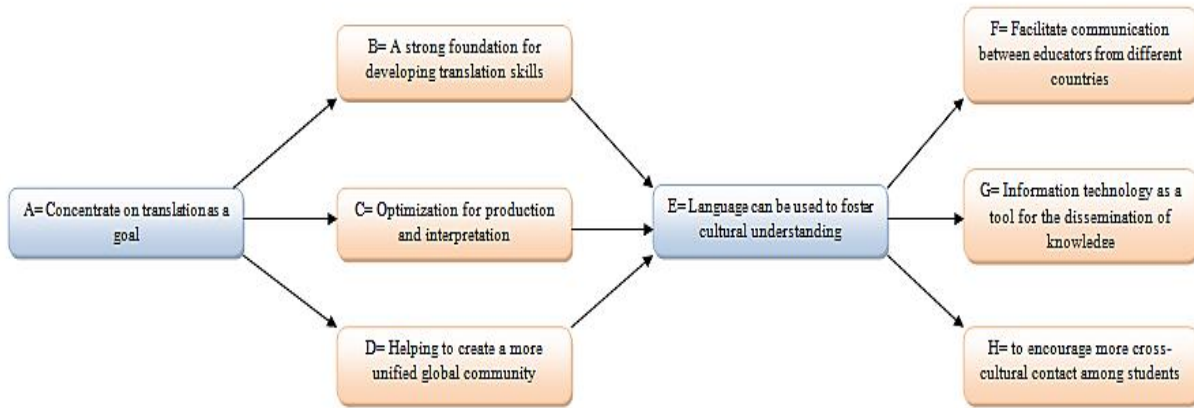


Figure 2. The developed framework of cross-cultural studies factors

Quantitative Method

Normality & Reliability Test:

The data was gathered and analyzed using Microsoft excels and the smart PLS (SEM). To determine if the data were normally distributed or not, the Shapiro-Wilk normality test was run. The findings reveal that the discovered significant value for both rounds of the delphi survey of all the components was less than 0.05 (p<0.05). The non-parametric test is necessary for this instance for additional investigation.





Table 4. First round of delphi survey

Factors	All Groups		Teachers		Administrator		Academia Field	
	M	R	M	R	M	R	M	R
A	2.937	2	2.895	3	2.955	2	2.960	4
B	2.943	1	2.580	7	3.150	1	3.100	2
C	2.700	5	2.555	8	2.450	8	3.095	3
D	2.930	3	3.100	1	2.550	6	3.140	1
E	2.613	7	2.735	5	2.480	7	2.625	6
F	2.610	8	2.605	6	2.600	4	2.625	6
G	2.772	4	2.950	2	2.750	3	2.615	8
H	2.685	6	2.760	4	2.595	5	2.700	5
Samples	105		45		35		25	
Cronbach's Alpha	0.804		0.771		0.762		0.769	

Note: M = Mean; R = Rank. ◊ Present consensus between teachers and administrators. ◊ Present consensus between teachers and the academic field. ◊ Present consensus between teachers and the academic field. ◊ Present consensus between administrators and the academic field.

Table 5. Second round of delphi survey

Factors	All Groups		Teachers		Administrator		Academia Field	
	M	R	M	R	M	R	M	R
A	2.738	6	2.510	8	2.900	2	2.805	6
B	2.600	8	2.550	7	2.620	7	2.630	8
C	2.752	5	2.775	5	2.520	8	2.960	5
D	2.865	4	2.805	4	2.690	5	3.100	2
E	3.003	1	2.855	3	3.120	1	3.035	3
F	2.895	2	2.740	6	2.805	3	3.140	1
G	2.882	3	2.900	1	2.725	4	3.020	4
H	2.727	7	2.860	2	2.630	6	2.690	7
Samples	95		43		31		21	
Cronbach's Alpha	0.806		0.762		0.702		0.756	

Note: M = Mean; R = Rank.  Present consensus between teachers and administrators.  Present consensus between teachers and the academic field.  Present consensus between teachers and the academic field.  Present consensus between administrators and the academic field.

Ranking Based on the Mean Score:

In addition, the respondent's groups were asked to identify and rank the cross-cultural studies factors on a scale of 1 to 5, where 1 stood for strongly agree and 5 for strongly disagree. The cross-cultural studies factors were calculated and organized from strongly agree to strongly disagree based on their mean. Eight criteria in all were ranked based on their mean scores for both all respondents and each respondent group (Table 4 & Table 5). The first round's ranking of the cross-cultural studies elements is shown in Table 4. The factor concentrating on translation as a goal (mean 2.937) was selected as strongly agreed by the respondents and ranked 1st based on their mean. Likewise, a strong foundation for developing translation skills was selected as important (mean 2.943) as per their significance. The factor optimization for production and interpretation was important by the respondents and ranked 1st based on their mean (2.700) and helping to create a more unified global community ranked 3rd on their mean (2.930). The factors Language can be used to foster cultural understanding mean in 7th rank according to mean (2.613). In the second round of the delphi survey facilitating communication between educators from different countries placed 2nd ranked by the respondent with a mean (of 2.895). The factor information technology as a tool for the dissemination of knowledge ranked 4th in the first round survey (mean 2.772) and 3rd in the second survey (mean 2.882). Similarly, the "factor" to encourage more cross-cultural contact among students was ranked 6th (mean 2.685) by the respondents and considered very important as per their unified significance level.

All of the cross-cultural studies factors were ranked based on their mean score gained after the second round of the delphi survey. The results also direct that the factors have increased their significance level based on their mean score from "agree" to "neutral" (highlighted by the upward arrow). Other factors have a significance level based on the mean score as "concentrate on translation as a goal (significance as neutral) in both rounds, a strong foundation for developing translation skills (significance as neutral) in the first-round round and (significance as agree) in the second round, optimization for production and interpretation, helping to create a more unified global community, language can be used to foster cultural understanding, facilitate communication between educators from different countries, information technology as a tool for the dissemination of knowledge, and to encourage more cross-cultural contact among students (significance as neutral) in both rounds of the delphi survey. This study witnessed to mark that not a single factor was graded below 2.5 and each factor has a significant level of neutral or

agree. Hence, it is concluded that all of the identified factors have a significant role in the future of language translation and interpretation in education from a perspective of cross-cultural studies.

Table 6. The significance level of cross-cultural studies factors.

1st Round				2nd Round			
Factors	M	R	S	Factors	M	R	S
A	2.937	2	Neutral	A	2.895	2	Neutral
B	2.943	1	Neutral	B	3.003	1	Agree
C	2.700	5	Neutral	C	2.752	5	Neutral
D	2.930	3	Neutral	D	2.882	3	Neutral
E	2.613	7	Neutral	E	2.727	7	Neutral
F	2.610	8	Neutral	F	2.600	8	Neutral
G	2.772	4	Neutral	G	2.865	4	Neutral
H	2.685	6	Neutral	H	2.738	6	Neutral

Note: M = Mean; R = Rank; S = Significance and agree shows the more significance from first round to second round.

Discussion

With the aid of technology utilization and performance evaluation, the study has revealed the cross-cultural studies aspects that influence the future of language translation and interpretation in education. Semi-structured interviews and a delphi survey were both a part of the cross-cultural study that used a mixed-method approach. The targeted group (university faculty) was surveyed to get qualitative data using semi-structured interviews that incorporated the narrative technique. The qualitative analysis produced a total of 16 nodes, which were then prioritized according to their importance using a two-round delphi survey (quantitative approach) of the targeted demographic (university professors, administrators, and academic field). The qualitative data were eliminated and subjected to statistical analysis with the assistance of statistical tools, which led to the extraction of all eight components for cross-cultural studies. The delphi survey (quantitative analysis) was carried out to see whether university professors, administrators, and academic field respondents agreed. The results are displayed in Tables 4 and 5. Cronbach's alpha was used to test the data's reliability for further analysis, and it revealed greater values in both rounds of the delphi survey.

The difficulty of linguistics and the effect of translation on research findings, particularly translation procedures, have been the main areas of study in cross-cultural, cross-language qualitative research. challenges with multilingual translation, particularly when it comes to cross-cultural studies' employment of interpreters for data gathering (Choi et al., 2012). However, translation includes more than just language because it also entails cultural conciliation between the source and destination cultures (Hongwei, 2002). Yes, there is a strong connection between cross-cultural studies and language interpretation in the classroom. Communication between people who speak various languages and have distinct cultural backgrounds is greatly aided by language interpretation (Tsang, 2022). Language interpretation is frequently employed in cross-cultural studies to guarantee that data obtained from participants who speak various languages are appropriately translated for analysis. Researchers can better comprehend the opinions and experiences of individuals from various cultural backgrounds by interpreting language in cross-cultural studies (Petrescu, 2015). The ability of pupils who speak multiple languages to access instructional resources in their mother tongues is one of the key advantages of language translation technology in education. This encourages diversity and guarantees that all students have access to educational materials equally (Means, 2010), (Haleem et al., 2022). For instance, online databases and digital libraries can be used to access research materials and data from different countries and cultures, making it easier to conduct cross-cultural studies (Mikhaylov,

2014). The use of technology in education has also simplified the teaching and learning of other cultures and languages. For instance, cultural exchange programs and online language learning platforms can be utilized to give students the chance to learn about many cultures and languages, fostering cross-cultural knowledge and understanding (Al-Ali and Lazenbatt, 2012), (Light et al., 1987).

Conclusion

The study identifies the cross-cultural factors those are involved in the need of linguistic translation and interpretation in education with the help of modern technology for learners' performance assessment. Specialized information, resources and courses provided to students has the ability to overcome linguistic and cultural barriers. Now students can access how to communicate and understand the cultures by diverse nature. Overall, 16 nodes (semi-factors) were generated by using the narrative technique (semi-structured interviews) from the targeted population (university faculty); furthermore, these identified nodes were rectified and then screened out to extract the themes (major factors). A delphi technique (quantitative analysis) was applied to test the consensus between university teachers, administrators and the academic field. Language interpretation and translation can support cross-cultural learning and collaboration by bridging cultural gaps using technology and performance evaluation. Furthermore, these tools can help teachers connect important aspects of many cultures in order to give pupils a more complete view of the world. In cross-cultural research, language interpretation and translation can thus be very significant. By providing students with access to specialized information, resources, and courses, technology use in education has the ability to overcome cultural and language challenges. Students can learn how to communicate and comprehend people from diverse cultures by having access to materials and courses in those languages. Students can work and communicate with peers from many cultures and backgrounds because to technology's ability to offer language interpretation and translation services. This might also aid in lowering language barriers in a variety of educational contexts. The efficiency of language interpreting and translation services in education can also be evaluated using performance assessment as a moderator. This might be used to inform educators, decision-makers, and other stakeholders about the success of language programs and point out any areas in need of development.

The technology employed in the study could have certain limitations. Technology restrictions could result from network problems, data security issues, or software or hardware flaws, which could impact the study's dependability and validity. Particularly in cross-cultural research, the study may be exposed to ethical questions about the use of human beings. Cultural sensitivity, informed permission, and privacy concerns are only a few examples of ethical dilemmas. The study may have limitations due to the performance evaluation techniques used, which might not account for all the elements that affect language interpretation and translation. Language proficiency limitations and cultural bias may also affect performance evaluations. Time restrictions may limit the investigation, which may have an impact on the scope and depth of the research. It's possible that the study won't be able to capture long-term effects or adjustments in technology use and performance evaluation over time.

Acknowledgement

This work was supported by the Outstanding Youth Scientific Research Project of Hunan Provincial Education Department (No.22B0768), the Teaching Reform Project of Hunan Province (HNJG-2021-0930).

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