Advancing Higher Vocational English Reading Instruction: The Development Protocol of the Intercultural Awareness Experiential Teaching (IAET) Model

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Abstract: Higher vocational English education places significant emphasis on intercultural understanding. However, there is a notable lack of research on the reliability and validity of blended intercultural awareness teaching methodologies in higher vocational English reading education in Henan, China. This project addresses this gap by building an Intercultural Awareness Experiential Teaching (IAET) model. A pilot study conducted in a higher vocational college in Henan province, China, evaluates the efficacy of the IAET model. Using a model based on the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) instructional design, the findings affirm that the proposed IAET teaching model demonstrates validity and reliability for higher vocational English instruction. The IAET model emerges as a valuable tool, assisting English teachers in enhancing students' competence in English reading, thereby addressing the existing research gap. The IAET model stands as a catalyst, empowering English teachers to enhance students' competence in English reading.

Keywords: IAET model, Intercultural awareness, Higher-vocational, English reading classes

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1. Introduction

The inclusion of many cultural implications from other nations in English teaching in China establishes intercultural awareness as a fundamental aspect (Zhang, 2019). According to Niu (2020), it is suggested that higher vocational English teachers strive to strike a harmonious equilibrium between fostering intercultural awareness and effectively utilizing teaching resources to enhance the English application ability of higher vocational students. Specifically, to scientifically promote student reading competence, teachers must develop a structured and scientifically structured teaching model based on actual students' situations and teaching content. To be more specific, an instructional model that integrates English reading teaching with cultural instruction by helping students understand and recognize relevant cultural information within reading materials (Sun, 2022).

The notion of the teaching model has been around for a considerable duration, but it has emerged as a distinct classification within the field of educational research, mostly stemming from the investigation conducted by Joyce, Weil, & Calhoun (1986). The teaching model refers to a structured framework or model that encompasses the design of a course, the selection of instructional resources, and the facilitation of teaching activities within various learning environments, including the traditional offline classroom. There have been many teaching models in China that focus on promoting the reading competency of ESL learners, and professors at these institutions often choose the conventional teaching approach, as Sun (2021), which emphasizes language points in reading materials rather than improving reading competence cognitively by improving intercultural awareness of students. Therefore, there is a scarcity of research on the English teaching model that seeks to improve students' reading competence through improving intercultural awareness.

The primary aim of this project is to enhance students' intercultural awareness in higher-vocational English through the development of a novel Intercultural Awareness Experiential Teaching Model (IAET), in response to the identified research gap. To be more specific, the goals of this study are to analyze the literature related to the intercultural English teaching model, clarify the steps of the instructional teaching model (ADDIE: Analysis, Design, Development, Implementation, and Evaluation), generate the IAET model for higher vocational English education based on the ADDIE model, implement the pilot study of the IAET model, and evaluate the IAET model. The IAET model is a pedagogical approach that combines several instructional methods and consists of three distinct phases, each comprising six sequential steps

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that will systematically promote the development of higher vocational EFL learners' reading competence by improving their intercultural awareness during the reading process cognitively.

The researcher has engaged in a comprehensive review and analysis of pertinent academic material to inform the development of the IAET (Intercultural Awareness Experienced Teaching) model for the study. The methodology used for the development of the model is derived from the design techniques utilized in the ADDIE instructional design model. The ADDIE instructional design model is a simplified form of instructional design theory, and it is also a dynamic teaching activity process that provides a visual approach with strong operability (Li, 2008). ADDIE originated in 1975 in the United States, Florida State University, teaching team for the Army's internal training courses designed at that time (Qi, 2016), and then the field of instructional design began to use systematic methods to construct instructional design models. Although the ranking and focus of these models are different, they reflect the common features of instructional design, namely the ADDIE model: Analysis, Design, Development, Implementation, and Evaluation. ADDIE is known as a generic model and is used as a fundamental process to create effective learning resources (Branch, 2009; Crawford, 2004). Nevertheless, the ADDIE model is a general model and a nonlinear model (Xu & Fan, 2014). Using the ADDIE model, Branch (2009) suggested common procedures for instructional design, which have been applied in the five phases of designing the IAET model in this research. The Intercultural Awareness Experiencing Teaching (IAET) model aims to enhance students' reading competence in higher vocational English education in China.

2. Literature Review

Teaching models used in higher-vocational English have been analyzed by many researchers in China. As for the higher-vocational intercultural teaching model, there is limited research focusing on developing an intercultural teaching model for higher vocational English education, for example, Liu (2022) proposes a collaborative education path of public English courses in higher vocational colleges that combines intercultural critical English teaching and ideological education from the four perspectives of teaching content, teaching mode, evaluation mechanism, and teaching team.

Furthermore, one of the primary objectives in contemporary university English teaching is to investigate a proficient reading instructional model that may enhance students' reading proficiency (Feng, 2020). The study conducted by Yulian and Yuniarti (2020) sought to perform a needs analysis in order to develop a teaching material model that can be effectively adjusted to the needs of university students and enhance their English reading competence. Highlighting the key models for English language reading, Amini, Zahabi, Amini, and Hosseini (2020) reviewed previous studies conducted on reading strategies and reading comprehension skills and proposed a framework for exploring reading strategies in teaching and learning English as a Foreign Language. In addition, to enhance students' reading competence, it is suggested that a theme-based English learning model be implemented, incorporating the ADDIE model for instructional design and integrating the Content and Language Integrated Learning (CLIL) method (Subaedah, Bundu, & Yahya, 2023). Similarly, another study aims to thoroughly examine the application of the theme-based instruction model in the context of lengthy reading instruction (Mutiarani & Rahman, 2019).

In addition, there exist studies that concentrate on the use of online and offline teaching models in the context of English language reading instruction. The study by Zhou (2021) aims to investigate the application of the overall language teaching theory in the context of English education by integrating different skills of English learning to enhance students' reading competence. The successful implementation of English teaching through Moodle is contingent upon the lecturer's proficiency in English pedagogy, as well as their familiarity with the Moodle platform (Prasetya, 2021). Furthermore, in the realm of English education, Wang (2020) has introduced a novel pedagogical framework that centers on the concept of fragmented reading. This methodology promotes student engagement with English texts, both within and outside the classroom.

Regarding the integration of intercultural awareness in English reading teaching models, Wang (2017) designed the English experiential teaching model to promote intercultural awareness among students in China. Intercultural awareness is the deliberate comprehension of the influence that culturally rooted forms, practices, and frames of reference can exert on intercultural communication, including basic cultural awareness, advanced cultural awareness, and intercultural awareness (Baker, 2011). The influence of intercultural awareness on foreign language reading competence shall be clarified by first identifying the components of reading competence. Tang (2021) also proposed measures to promote the development of English reading competence and intercultural awareness from the perspectives of English teachers, students, and reading materials. Nevertheless, there is a research gap in that no higher vocational English teaching models have been developed by integrating the three levels of intercultural awareness (Baker, 2011) into teaching procedures to promote English reading competence.

3. Materials and Methods

3.1. Research Design

When employing the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) instructional design model for this research study, a systematic and comprehensive approach was taken to guide the research design, as recommended by Branch (2009). The initial phase involved a meticulous analysis to identify the specific needs and challenges within the realm of higher vocational English education, with a particular focus on intercultural

awareness. Following the analysis, the design phase allowed the conceptualization and structuring of the Intercultural Awareness Experiential Teaching (IAET) model. This involved the creation of a blueprint that outlined the instructional strategies, content, and materials necessary to address the identified gaps. Subsequently, the development phase transformed the design into a tangible teaching model, incorporating insights from existing literature and an intercultural awareness model. The implementation phase saw the IAET model introduced into a real higher vocational college setting in Henan province, China, where a pilot study was conducted to evaluate its effectiveness. Finally, the evaluation phase involved a comprehensive assessment of the impact of the IAET model on higher vocational English instruction, considering both qualitative and quantitative feedback. The iterative nature of the ADDIE model ensured a continuous refinement process, contributing to the overall robustness and effectiveness of the research design.

3.2. Research Method

This study applied the blended research method, including both the quantitative and qualitative parts under the guidance of the ADDIE instructional design model. The methods pertaining to each specified time in the ADDIE procedures are enumerated in Figure 1. As illustrated in Figure 1, a survey was conducted that involved interviews with 40 English professors from 20 higher vocational colleges in Henan province to find the causes of the differences in the desired performance and the actual performance in English education (qualitative study). In the design stage, the concept of a task inventory has been fulfilled in the design of the IAET model using the ADDIE instructional design model (qualitative study). In the development stage, the contents of the IAET model have been generated and validated by the expert group (qualitative study). In the implementation stage, a pilot study was conducted from September 10, 2023, to October 10, 2023, both online and offline, with 90 minutes of intervention every week (quantitative study). In the evaluation stage, the researcher evaluated the IAET model with the Kirkpatrick model evaluation system. Moreover, data analysis results of the pilot study have also been provided in this procedure.
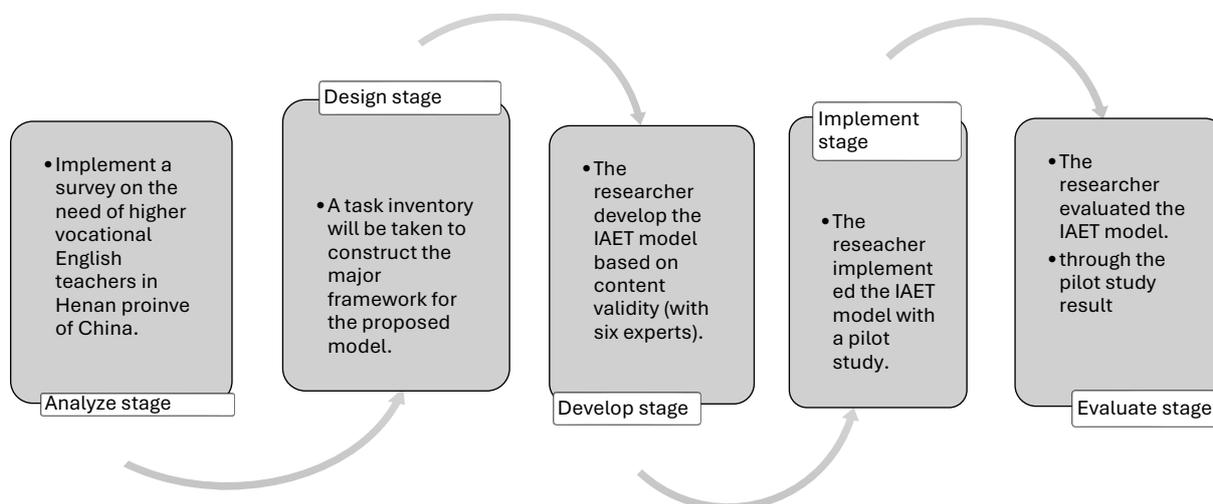
Figure 1: Stages of IAET model development based on ADDIE.

3.3. Research Participants

Five freshmen from Luoyang Polytechnique, one of the representative higher vocational schools in Henan province, have been randomly chosen to participate in the pilot study. Furthermore, the researcher herself is the implementer of the IAET model in the pilot study of this research.

3.4. Instructional theories for the IAET model

### 3.4.1. Will Baker's Intercultural Awareness

Baker (2011) proposed a theoretical framework for intercultural awareness consisting of three distinct levels: basic cultural awareness, advanced cultural awareness, and intercultural awareness. This theoretical framework encompasses two separate forms of intercultural awareness: conceptual intercultural awareness and practice-oriented intercultural awareness. These two forms are evident at every level within the model. Completion of higher levels will have an impact on the lower level within this framework.

The primary emphasis of the initial level is on understanding the cultural aspects of the native language. The practice-oriented approach to cultural awareness involves the examination and comparison of cultures at a broad, overarching level. The second tier encompasses a higher level of complex conceptual intercultural awareness. This stage of development entails the ability to transcend cultural stereotypes and a greater awareness of potential misunderstandings that may arise from diverse cultural backgrounds. The final level is intricately linked to intercultural awareness and encompasses an understanding of the principles and practices of effective intercultural communication.

3.4.2. Intercultural theory of foreign language education

The intercultural theory of foreign language education is derived from several independent lines of research, in which the theory of intercultural teaching and the theory of intercultural communication are the basis. This research has applied the intercultural theory of foreign language education illustrated in the research named 'Mediating Languages and Cultures' by Buttjes and Byram (1991). According to this theory, culture plays several roles in foreign language learning, especially when the goal is to build interlingual and intercultural skills. In the early period, cultural awareness helps motivate second language learning. However, culture has unique qualities that go beyond languages and literature (Buttjes & Byram, 1991).

Based on this theory, the integration of language and culture learning with the foreign language as a medium is intended to develop students' cultural competence by changing it into intercultural competence, in which there is also a modification of monocultural awareness to intercultural awareness. The language of the learners (L1) can be used to compare their cultural meanings with those of other cultures and to understand foreign cultural phenomena. As illustrated in Figure 2 below, different methods and skills interact cyclically throughout the process. This includes first learning modern language skills and then studying language as a social and cultural phenomenon (language awareness). Language and culture will next be examined using comparison methods in the learners' native language (cultural awareness). Immersion in a foreign culture via the prism of the ethnic identification of the foreign peer group may also improve language abilities. Exclusively in a foreign language, this immersive experience may boost language acquisition (cultural experience). If comparative analysis emphasizes the language being studied, this can be reinforced through learning. Language learning emphasizes rehearsal-based instruction and the communicative teaching approach (Language learning). Therefore, language learning and cultural experience are interconnected.
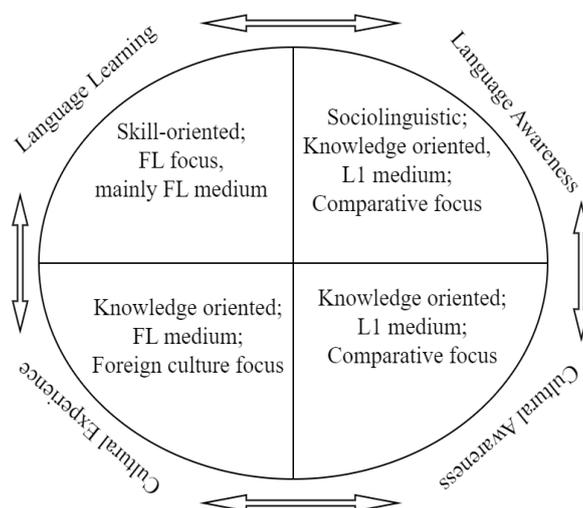
Figure 2: The Language and Culture Teaching Process

Note: Adapted from the research of Buttjes and Byram (1991, p.21)

4. Results

The research results first involve the content validity results of the experts for the IAET model. Then, the results of the pilot study have been introduced in two dimensions: qualitative interview analysis of the results and quantitative questionnaire analysis of the results. Furthermore, the implementation evaluation of the IAET model has also been summarized. Finally, the contents of the IAET model have been generated and visualized.

4.1. Validity of Content With The Expert Group

To assess the content validity of the IAET model, a group of six experts completed a review form based on Quoc (2015). The form had sections for personal information and review content. The first section pertains to the essential personal details of the reviewers and their tenure as English educators. The following section refers to the evaluative perspectives of the reviewers regarding three distinct teaching periods and the six sequential teaching steps within the IAET model. If individuals perceive the aspect to be suitable, they will proceed with the subsequent inquiry. If individuals perceive the content as unsuitable, it is expected that they will offer their recommendations for modification.

The model has been validated by a group of six specialists who meet a specific set of requirements. The aforementioned characteristics encompass: Initially, it is imperative to note that all individuals possessing expertise in this field are highly skilled and experienced English as a Foreign Language (EFL) teachers. Furthermore, individuals have knowledge related to multicultural awareness, the ADDIE instructional design model, and the IAET model within the realm of research. Additionally, it is imperative that individuals possess either a Master's

or Ph.D. degree in the field of English instruction. Lastly, it is expected that they possess a minimum of ten years of experience teaching English. Consequently, a panel of three specialists has been assembled. The group consists of three Chinese higher-vocational English professors. The information provided by the expert group is shown in Table 1.

Table 1: Information of the expert group

	Items	F
Gender	Male	4
	Female	2
Age	Under 30	0
	31-40	2
	41-50	3
	Over 51	1
Highest degree	MA	1
	PhD.	5
	Other	0
Years of teaching English	Under 10	0
	11-15	2
	16-20	3
	Over 21	1
Experts' evaluation of the steps of IAET model	5 experts thought all the steps are appropriate and suitable for higher vocational English reading classes.	
	1 expert thought that the last step requires revision to enhance the influence of this model.	

Source: Based on the information of experts attending the validation of contents for the IAET model development in this research

The appropriateness of the framework of the IAET model, consisting of three periods with six steps, was universally acknowledged by specialists. 5 experts thought that the steps of the IAET model were appropriate. Nevertheless, it is important to note that an expert has underscored the significance of the third phase in this model, namely "After class: Output Assessing," which is intended to encompass a comprehensive approach that involves both online assignments and offline practical activities. Consequently, the IAET model has undergone revisions according to the suggestions of experts.

4.2. Results of the Pilot Study

Based on the revised content of the IAET model, five students were involved in the pilot project aimed at adopting and evaluating the IAET model, a higher vocational English teaching approach specifically designed for reading classes. The blended IAET model has been implemented from September 10 to October 10, 2023, both online and offline, with a 90-minute intervention every week. Following the implementation of the pilot study of the IAET model, a quantitative questionnaire was administered to students to assess the model. As for reading materials to implement the IAET model, reading texts in a representative higher vocational English textbook have been selected and designed based on the requirements of the IAET model. One of the symbolic reading materials is from Unit 7 'Transportation' with the title 'China's High-Speed Rail 'Goes Global''. All the media used learning tasks, and tasks of different levels of intercultural awareness have been designed based on the IAET model.

4.2.1. Basic evaluation of general factors of the IAET model

To analyze the basic evaluation of the general factors of the IAET model of the pilot study participants, multiple response analysis has been conducted in SPSS 27 by defining two sets of multiple variables: evaluation of teaching arrangements (TA) from Q2 to Q7; evaluation of content and resources (CR) from Q8 to Q19. The IAET model evaluation results of the five participants in the pilot study have been analyzed and illustrated in the following part.

The frequencies pertaining to the evaluation of teaching arrangements (TA) are shown in Table 2 provided below. According to the data shown in Table 2, the results reveal that 40 % of the responses were classified as 'strongly agree', 56.7% as 'agree', and 3.3% as 'strongly disagree'. These findings suggest that more than 96% of the participants in the pilot study have a positive view of the teaching arrangements of the IAET model.

Table 2: Frequencies of teaching arrangements (TA)

		Responses		Percent of Cases
		N	Percent	
TA[a]	Strongly disagree	1	3.3%	20.0%
	Agree	17	56.7%	340.0%
	Strongly agree	12	40.0%	240.0%
Total		30	100.0%	600.0%
a. Group				

Source: SPSS 27 data analysis results in this research

As shown in Table 3 below, the frequencies pertaining to content and resources (CR) evaluation are shown. According to the data shown in Table 3, the results reveal that 35% of the responses were classified as "strongly agree", 51.7% as "agree", 10% as "medium", 1.7% as "disagree", and 1.7% as "strongly disagree". These findings suggest that the pilot study participants had a positive evaluation of the content and resources in the IAET model.

Table 4: Frequencies of content and resources (CR)

		Responses		**Percent of Cases**
		N	**Percent**	
CR[a]	Strongly disagree	1	1.7%	20.0%
	Disagree	1	1.7%	20.0%
	Medium	6	10.0%	120.0%
	Agree	31	51.7%	620.0%
	Strongly agree	21	35.0%	420.0%
Total		60	100.0%	1200.0%
a. Group				

Source: SPSS 27 data analysis results in this research

4.2.2. Evaluation of the intercultural components of the IAET model

To analyze the evaluation of intercultural components of the IAET model by pilot study participants, the Multiple Response Analysis has been analyzed in SPSS 27 by defining two sets of multiple variables: intercultural content fusion (ICF) evaluation, including Q20 to Q30; evaluation of intercultural knowledge application (IKA) evaluation, including Q31 to Q39.

As shown in Table 4 below, the frequencies related to the evaluation of intercultural content fusion (ICF) are shown. According to the data shown in Table 4, the results reveal that 41.8% of the responses were classified as "strongly agree," 32.7% as "agree", and 25.5% as "medium". These findings suggest that most of the experimental participants have a positive view of the intercultural content fusion of the IAET model. It is also important to emphasize that none of the pilot study participants has chosen 'Strongly disagree' for the ICF evaluation.

Table 4: Frequencies of Intercultural Content Fusion (ICF)

		Responses		**Percent of Cases**
		N	**Percent**	
	Medium	14	25.5%	280.0%
	Agree	18	32.7%	360.0%
	Strongly agree	23	41.8%	460.0%
Total		55	100.0%	1100.0%

Source: SPSS 27 data analysis results in this research

As shown in Table 5, the frequencies related to the evaluation of the application of intercultural knowledge (IKA) are shown. According to the data shown in Table 5, the results reveal that 51.1% of the responses were classified as 'strongly agree', 33.3% as 'agree', 11.1% as 'medium', and 4.4% as 'strongly disagree'. These findings suggest that the experimental participants had a positive evaluation of the content and resources in the IAET model.

Table 5: Frequencies of Intercultural Knowledge Application (IKA)

		Responses		**Percent of Cases**
		N	**Percent**	
IKA[a]	Strongly disagree	2	4.4%	40.0%
	Medium	5	11.1%	100.0%
	Agree	15	33.3%	300.0%
	Strongly agree	23	51.1%	460.0%
Total		45	100.0%	900.0%
a. Group				

Source: SPSS 27 data analysis results in this research

In conclusion, the evaluations of the IAET model by participants in the pilot study are satisfactory. The evaluation of the IAET model has been analyzed from the perspective of students who participated in the pilot study. Students' evaluation of the IAET model has been analyzed by data collected from the questionnaire. The Multiple Response Analysis results have been utilized for the analysis with SPSS 27. As the results of the data analysis indicate, students have of positive view of both the general factors of the IAET teaching model, including teaching arrangements, evaluation of teaching content and resources, and the intercultural components of the IAET model, including intercultural content fusion and intercultural knowledge application.

4.2.3. Student suggestions for the IAET model

During the pilot study of the IAET model, all students provided their understanding and suggestions for this blended English reading teaching model. All data from the semi-structured interviews have been collected into a Word document and entered into ATLAS. ti 9 for analysis. The details of the coded information have been

visualized in the network generated in ATLAS.ti 9 and illustrated in Figure 3. Although 85 percent of the participants are satisfied with the IAET model, some of them have provided suggestions for the improvement of the IAET model from six perspectives.

Regarding the teaching content, it is suggested to highlight cultural key points and difficult areas. However, there are suggestions to emphasize grammar, language points, and knowledge in the textbook. Regarding teaching methods, it is recommended to summarize frequently during English teaching with the IAET model. Regarding the teaching atmosphere, it is suggested to improve the innovative and interactive class atmosphere. Regarding teaching activities, it is suggested to interact more with students, add more songs and movies, and pay more attention to students with weak foundations. Regarding teaching attitudes, teachers are suggested to be stricter when implementing the IAET model. Regarding the evaluation method, students are advised to have open-book exams. In addition, CET 4 and CET 6 are supposed to be available to students. To promote the efficiency of the IAET model, all suggestions of students who participated in the pilot study have been merged into the design of English reading classes based on the IAET model.
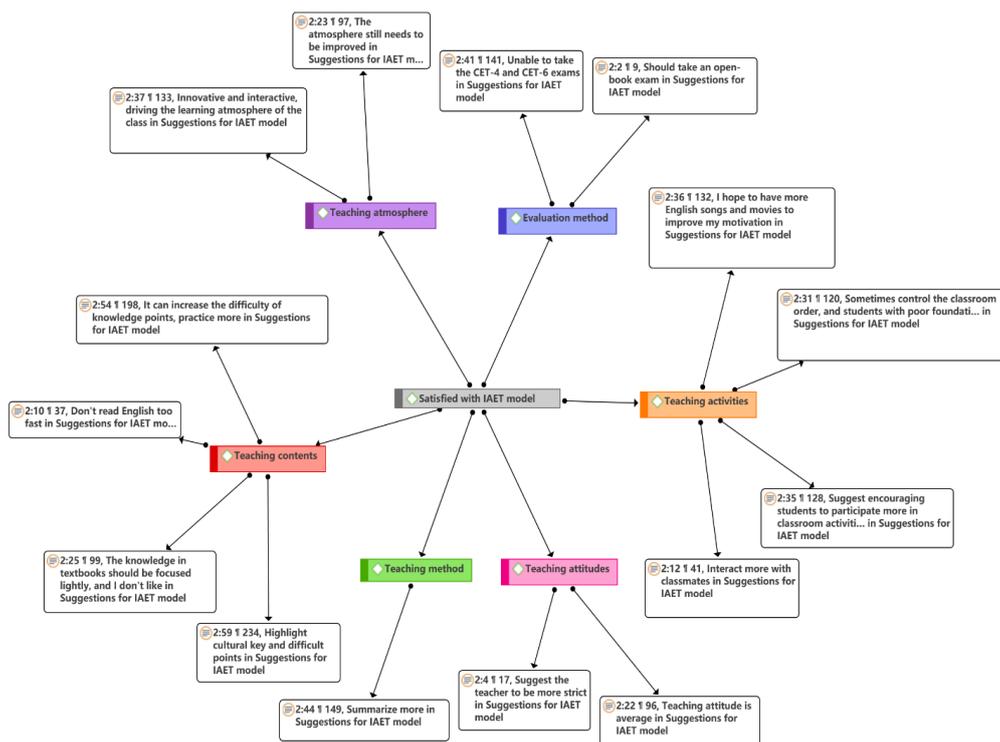

Figure 3: Network of suggestions for the IAET model

4.3. Evaluation of the Implementer

After implementing the IAET model, the researcher herself evaluated the IAET model based on the objective of promoting student reading competence by improving their intercultural awareness with this proposed model. The Kirkpatrick evaluation model was established to develop a comprehensive assessment framework to assess the effectiveness of the blended teaching model (Liang, Shen, Shi, & Zheng, 2022), which has been the instructional evaluation framework for the IAET model designed in this study. The researcher has evaluated the proposed IAET model with the help of the basic framework of a blended teaching effect evaluation system based on the Kirkpatrick model designed by Liang Liang, Shen, Shi, and Zheng (2022), and the evaluation results are summarized in Table 6.

Table 6: Evaluation results of the IAET model based on the evaluation system of the Kirkpatrick model.

Evaluation Level	Evaluation metrics	Evaluation result
Reactive layer	Teaching courses, Classroom environment	Designing the courses for higher vocational English reading classes with the guidance of the IAET model has been more systematical. The classroom environment for the designed reading classes has been active and motivating compared to traditional English reading classes.
Learning layer	Self-learning concept, professional knowledge, professional skill	With the guidance of the IAET model, EFL learners in higher vocational English classes have mastered more self-learning skills by finishing on-line and offline tasks. In addition, the students' reading competence has been improved by enhancing the intercultural awareness reflected in the reading materials and other creative activities designed in the IAET model.

Evaluation Level	Evaluation metrics	Evaluation result
Behavioral layer	Behavioral changes, attitude change, concept change	As for the behavioral changes, higher vocational EFL learners have become more active to participate in the activities designed for reading tasks in the IAET model. The attitude of students toward English reading classes, Chinese and western cultures, and the objective of English learning have been much more positive.
Result layer	Personal achievement	As the researcher and implementer of the IAET model, the author has thoroughly mastered the literature and theories related to intercultural awareness, reading competence, and English reading teaching model. During the implementation of the IAET model, the researcher has improved the teaching abilities to promote the efficiency of the IAET English reading model.

Note: The main framework of the evaluation system is adapted from the basic framework of the blended teaching effect evaluation system based on the Kirkpatrick model (Liang, Shen, Shi, & Zheng, 2022).

4.4. IAET model

Based on the analysis results of the pilot study, the contents of the IAET model have been revised and finalized. The researcher used Baker's (2011) concept of intercultural awareness as a theoretical framework and used the ADDIE instructional design model to systematically develop the Intercultural Awareness Experiential Teaching (IAET) model for the study. The main contents of the blended IAET model have been depicted in Figure 4.
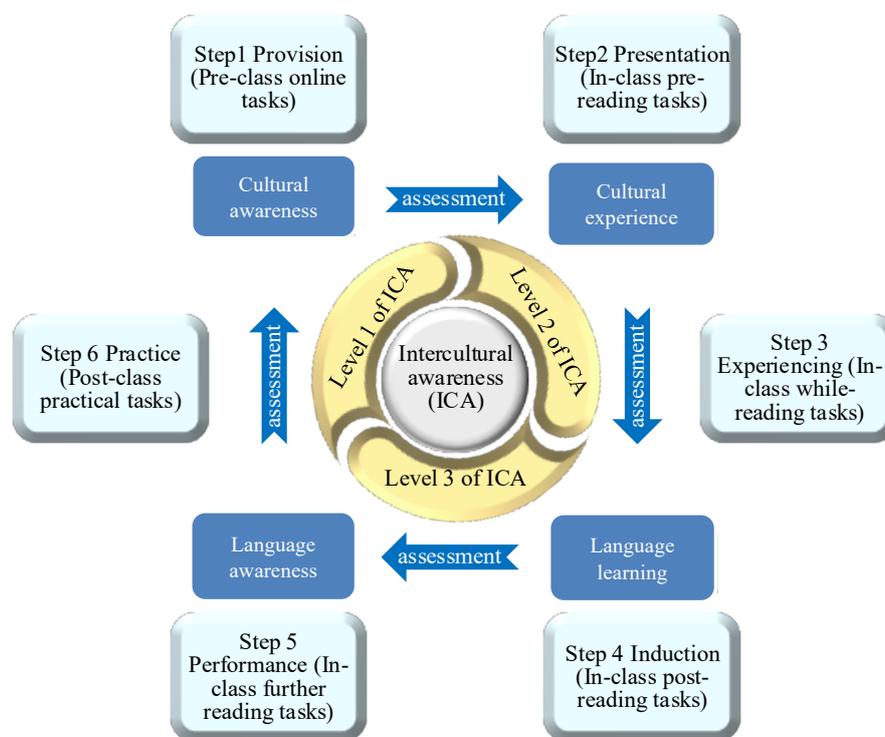
Figure 4: Intercultural Awareness Experiential Teaching Model (An English reading blended teaching model). Source: Intercultural Awareness Experiential Teaching (IAET) Model developed with the guidance of the ADDIE instructional design model.

The IAET blended English reading teaching model is supposed to be implemented based on the major theory of intercultural awareness, which is at the center of this model. Based on the theory of Will Baker, intercultural awareness has three levels including basic cultural awareness, advanced cultural awareness, and intercultural awareness. This model is constructed on the components of the three levels of intercultural awareness. The assessment-based teaching objectives for this model include attitude development, knowledge construction, skill practice, and critical reflection. In order to fulfill these teaching objectives with the instruction of intercultural awareness, this IAET model, designed for higher vocational English reading classes, has applied both online and offline teaching procedures, including provision, presentation, experience, induction, performance, and practice, which will be introduced in detail in the following three periods. The implementation of the IAET English reading teaching model is supposed to be based on the central theory of intercultural awareness. According to Will Baker's theoretical framework, intercultural awareness can be conceptualized as comprising three distinct levels: basic cultural awareness, advanced cultural awareness, and intercultural awareness. This model has been developed on the basis of the constituents of the three levels of intercultural awareness.

The second circle in Figure 2 is the inner language and culture teaching process based on the intercultural theory of foreign language education, illustrated in the research named "Mediating Languages and Cultures" by

Buttjes and Byram (1991). The first procedure indicates that language and culture should be examined using comparison methods in the learners' native language (Cultural Awareness). The second procedure refers to immersion in a foreign culture through experiencing of cultural components of the target language (cultural experience). The third procedure is language learning, which emphasizes rehearsal-based instruction and a communicative teaching approach (Language Learning). The last procedure illustrates the language awareness that English learning involves mastering language skills and then studying language as a social and cultural phenomenon (Language Awareness).

The third circle illustrated in Figure 3 is the teaching steps to be followed in the higher vocational IAET teaching classes. As a blended teaching model, the IAET model incorporates both online and offline teaching procedures, encompassing the online output motivating procedure, offline input enabling procedure, and the online output assessing procedure. The following sections will provide a detailed explanation of these three periods.

Period one - Pre-class: Motivation of the output (Step 1)

The procedure is based on the use of the online platform 'Xuexitong'. The motivation of students to engage in studying is facilitated through the implementation of the output motivational phase of the Production-oriented Approach (Wen, 2015). Teachers should ensure that students are adequately prepared for the input materials, according to the specified output objectives (Huang, 2022). During this particular time frame, the student's perspectives and dispositions toward the assigned reading materials will be cultivated through the use of online reading tasks that focus on their cultural backgrounds.

Step 1 Provision (pre-class online tasks)

The first-step provision is in accordance with the before-class procedure of the intercultural teaching model for higher-vocational English (Liu, 2022). In the online provision process, teachers excavate intercultural elements, select the appropriate intercultural topic, and students collect intercultural data through multiple channels. Initially, the instructor will furnish educational materials related to the literary texts that will be examined on the designated learning platform. In preparation for the upcoming English class, it is recommended that students engage in a comprehensive exploration of the cultural context around the chosen topic of the reading materials. This can be achieved through a variety of means, including conducting literature reviews, using search engines, drawing on personal cultural experiences, and employing other relevant resources. Subsequently, a comparative analysis of cultural stereotypes pertaining to this topic could be conducted online.

Period Two - In-class: Input enabling (Step2-5)

The IAET model, as the implementing guidance of Wen (2016), operates within the framework of the Production-Oriented Approach (POA). Its primary objective is to facilitate teaching by empowering instructors to provide students with the required learning support to successfully complete designated output tasks (Huang, 2022). This period is characterized by a strong emphasis on the construction of knowledge and the development of skills through practice. The IAET model in this procedure consists of offline steps 2, step 3, step 4, and step 5 which have been described in detail below.

Step 2 Presentation (In-class prereading tasks)

As the first offline procedure of the blended teaching model, students should first discuss related cultural topics through cooperative discussion and debate so as to learn to respect cultural similarities and differences (Liu, 2022). In higher vocational English classes, students will initially demonstrate their comprehension of the cultural conte xt and stereotypes depicted in the assigned reading materials. Higher vocational English lessons will provide students with opportunities to identify and analyze intercultural tensions. Through discussion and debate, students will be encouraged to critically examine and reshape their understanding of fundamental cultural awareness as shown in the reading materials.

Step 3 Experience (in-class while reading tasks)

This step is adapted from the experience perception of the English experiential teaching model designed by Wang (2017), in which teachers provide students with intercultural communication scenarios and learners participate in the scenarios as protagonists. During the process of developing intercultural awareness, people face favorable and unfavorable impressions of intercultural knowledge, which are influenced by the presence of cultural similarities and differences. The instructor will facilitate the students' exposure to many aspects that embody heightened cultural sensitivity within the curriculum of this course. This will be achieved through activities such as reading literary texts, viewing cultural videos, and participating in comparative analyses of Chinese and Western cultures, among other instructional strategies.

Step 4 Induction (Post-reading tasks in class)

In the process of acquiring knowledge, learners are required to condense their cognitive understanding and moments of realization at the initial stages of learning. The current phase of induction involves the systematic generation of knowledge, which facilitates scholars to demonstrate their originality and autonomy (Wang, 2017). During the course of advanced intercultural awareness training, participants engage in a deliberate exploration of the underlying values, seeking to understand them through the analysis of observable cultural differences and

phenomena. This process occurs inside the framework of intercultural awareness training, as part of the model's introductory phase. During this phase, students are required to diligently craft a speech centered on the manifestation of intercultural awareness, as depicted in the assigned reading materials.

Step 5 Performance (In-class further reading tasks)

A teaching scenario will be developed in which students engage in intercultural communication, facilitated by the inclusion of intercultural content in the reading material. Engaging in this form of communication in higher vocational English lessons will serve to increase your advanced intercultural understanding. During this stage, educators present intercultural communication scenarios to students, who then actively engage in these scenarios as the main participants (Wang, 2017).

Period three-After class: Output Evaluation (Step 6)

The primary objective of the output assessment stage is to facilitate instructors and students in understanding the effects of instruction and to enable students to recognize their own strengths and areas of weakness in their studies (Huang, 2022). The purpose of this period is to achieve the objective of critical reflection by completing intercultural projects either online or offline outside of class hours.

Step 6 Practice

Initially, students will engage in an online reflection on the impact of their cultivated intercultural awareness within the context of this course. During this phase, the educator will largely assess the results of the motivating and empowering stages, as well as evaluate the overall influence of educational initiatives on the organization. Subsequently, the teacher will provide suitable recommendations based on the analysis (Huang, 2022). In addition, students have the opportunity to engage in many offline cultural activities, such as visiting local museums, volunteering as foreign tourist guides, and participating in speech contests aimed at narrating Chinese stories in English.

5. Discussion

Expanding on Branch's nine established procedures of the ADDIE model (Branch, 2009), this research developed the IAET model for higher vocational English reading courses, which comprises three fundamental stages: "Before Class-Output motivating" (Provision), "During Class-Input enabling" (Presentation, Experiencing, Induction, Performance), and "After Class-Output assessing" (Practice). As a blended English reading teaching model, the IAET model has combined online and offline culture and language learning. Furthermore, the results of the pilot study indicate that the basic teaching factors and intercultural components of the IAET model are satisfactory to all participants. The evaluation analysis results also indicate that the IAET model is satisfactory based on the Kirkpatrick model evaluation system designed for the blended teaching model (Liang, Shen, Shi, & Zheng, 2022). Therefore, the IAET model has been analyzed as a systematic and scientific blended teaching model for higher vocational English reading education.

The proposed IAET model has achieved a balanced and harmonious state by promoting intercultural awareness of students and optimizing instructional resources, in order to enhance English language proficiency, especially the ability to read English of higher vocational students, as proposed by Niu (2020) and the intercultural teaching model (Liu, 2022). According to Sun (2021), it has been observed that higher vocational English teachers frequently choose a traditional teaching methodology. The present study has developed a blended IAET model that integrates online and offline teaching procedures for instructors of higher vocational English reading courses to enhance students' reading competence by improving their intercultural awareness. Moreover, the IAET model is also more specific to English reading teaching than the English experiential teaching model designed by Wang (2017).

The results of this research open an exciting new avenue of study focused on a blended teaching model aiming to promote the competence of students in English reading and intercultural awareness in higher vocational English reading courses, which will provide the context required to determine how to improve the efficiency of teaching and the intercultural function of higher vocational English education in China and even in other countries of the world.

6. Conclusions

With the ADDIE instructional design model, the proposed IAET model has been constructed as a blended teaching model for higher vocational English reading courses that incorporates both online and offline instructional methods. This proposed IAET model for English reading aims to promote students' reading competence by improving their intercultural awareness in higher vocational institutions in Henan province in China.

One limitation of this study is the inability to fully incorporate intercultural awareness, as depicted in different higher vocational English textbooks currently used in the Henan province of China, into the IAET model due to time constraints. In the forthcoming research, it is suggested to incorporate the concept of reflected intercultural awareness into the reading materials found in more representative higher vocational English textbooks as part of the implementation of the IAET model.

The use of the IAET model is expected to enhance students' English reading competence, hence facilitating

the advancement of English language education reforms in the contemporary era. If the proposed IAET model is robust to future analyses in English reading classes of other periods of the Chinese education system, it would indicate an increased capacity to promote the intercultural function of English education in China.

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Data availability statement: All data and related metadata underlying the findings reported in a submitted manuscript should be deposited in an appropriate public repository unless already provided as part of the submitted article

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APPENDIX 1 IAET Model Review Form

Research Title: *An Intercultural Awareness Experiential Teaching (IAET)*
Model for EFL Learners in Higher Vocational English Reading Classes
Objectives: To develop and evaluate an Intercultural Awareness Experiential Teaching Model for EFL learners
----
Please tick ( ) in the boxes based on your basic information
Reviewer:
Age:
   Under 30
   30-40
   41-50
   Over 50
Highest degree:
   M.A.
   Ph.D.
Nationality:
   Chinese
   Malaysian
                          (Other countries)
Number of years' teaching:
   Under 10
   11-15
   16-20
   Over 20

Please tick ( ) the boxes that best represent your options
1. This IAET model has THREE periods:
1.1 The first period (Before class: Output motivating) is based on the online platform to make preparations for students' understanding of the intercultural background of the reading materials to be studied.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

1.2 The second period (During class: Input enabling) will make full use of the time during classes to help the input of the intercultural awareness reflected in the reading materials.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

1.3 The last period (After class: Output Assessing) is also to be finished online which will help the output of reading materials studied.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2. There are six steps in the IAET model in all:
2.1 The first step *Provision* is to help learners gather enough knowledge of language content and intercultural content in the reading materials to be studied online.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2.2 The second step *Presentation* is for learners to present their understanding of the cultural background and stereotypes on the reading materials in order to raise basis cultural awareness.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2.3 The third step *Experiencing* is to cultivate advanced cultural awareness by help students experience the elements reflecting the advanced cultural awareness in the content of this class by reading text, watching cultural videos, and so on.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2.4 The fourth step *Induction* will help learners seek the values behind them and try to understand them by analyzing the observed cultural differences and cultural phenomena.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2.5 The fifth step *Performance* is to promote advanced intercultural awareness during the communication in the created intercultural scenario.
   Appropriate
   Inappropriate (please provide your revising suggestions)

_____

2.6 The sixth step of p*ractice* is to help learners to produce their earlier input of the reading materials and reflect on the reflected three levels of intercultural awareness.
   Appropriate
   Inappropriate (please provide your revision suggestions)

_____

APPENDIX 2   IAET Model Panel of Experts

Experts	Work	Bio Data of Expert
Assoc. Prof. Xuemei Yuan	Faculty of Foreign Languages, Luoyang Normal University, China	Pedagogy And Education English Literature
Assoc. Prof. Dr. Lu Bin	Faculty of Foreign Languages, Luoyang Normal University, China	Intercultural English education College English

Experts	Work	Bio Data of Expert
Assoc. Prof. Tianjiao Yu	Beijing Polytechnic, China	ESL Intercultural Higher Vocational English Education
Dr. Yaxiong Li	Universiti Putra Malaysia (UPM), Malaysia	Applied Linguistics
Dr. Zhe Zhao	Kunsan National University, South Korea	Higher Education
Teacher Maxim	Belarus Vitebsk State Technological University, (Russia teacher in Luoyang polytechnic), Belarus	Intercultural language education

Appendix 3: Questionnaire for the evaluation of the IAET model

1. Student Code for the experimental group.
2. What is your attitude towards the teaching methods adopted in this semester's course?
3. Your attitude towards the design of educational classroom activities in this semester?
4. How would you rate the pace and atmosphere of the classroom this semester?
5. What is your attitude towards completing the online learning tasks before class?
6. What is your attitude towards participation in class discussions?
7. What is your attitude towards participating in practical work after class?
8. What do you think about the compatibility of the class content with the examination?
9. Are you satisfied with the grading system of the course?
10. whether you are satisfied with the feedback you received from the teachers after the class presentation or completion of the assignments?
11. Whether you are satisfied with the learning materials?
12. Whether you are satisfied with the online course resources?
13. Whether the classroom teaching PPT design is satisfactory to you?
14. Are you satisfied with the classroom audio and video teaching resources?
15. Are you satisfied with the explanations of the teacher for the tasks related to the online and offline learning activities?
16. Whether you are satisfied with the interaction with the teacher during the class?
17. Are you satisfied with the interaction with the teacher before and after the class?
18. Whether you are satisfied with the co-operation with your classmates during class
19. How satisfied are you with working with your classmates after class?
Evaluation of cross-cultural content in the classroom
20. Were you satisfied with the instructor's explanation of why he/she extended relevant cultural content?
21. Were you satisfied with the main concepts explored in this course?
22. Were you satisfied with the elements of Chinese culture covered in this course?
23. Whether you were satisfied with the elements of Western culture covered in this course?
24. Whether you are satisfied with the cross-cultural content reflected in this course?
25. How satisfied are you with the elements in the induction network that relate to the cultural content of this course
26. What is your satisfaction with being able to read critically and ask questions about cross-cultural conflicts in class?
27. What is your satisfaction with identifying and extending cross-cultural content and awareness in texts?
28. What is your satisfaction with telling Chinese stories in English?
29. What is your satisfaction with the reasonable resolution of cross-cultural conflicts in specific situations?
30. Whether you are satisfied with the enhancement of intercultural cooperation in this course
31. Were you satisfied with the IAET's ability to increase your enthusiasm for learning English?
32. Are you satisfied with the IAET's enhancement of your ability to discuss relevant domestic and international cultural content?
33. Whether participating in the in-depth study of the IAET model increase your confidence in learning English well?
34. Whether linking the cultural themes of the class readings to other cultural elements at home and abroad enabled you to achieve satisfaction?
35. Using a critical approach in the course to analyze cross-cultural conflicts in my daily life has brought you to a satisfactory level.
36. Applying what you learnt in this course to other intercultural situations was satisfactory for you?
37. The learning experiment will enable you to read and think critically and to understand the point of view of the author of an English text.
38. This experiment enables you to interpret and reflect on the intercultural awareness reflected in the content of the English texts you read.
39. learning with the IAET model enables you to increase intercultural awareness.
40. Please give us your suggestions for teaching this course ....