Students' Performance and Perceptions of Authentic E-Learning Activities in English Intercultural Learning

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Abstract - **The study aims to investigate the influence of implementing nine real e-learning components in an online English intercultural course on improving the performance of vocational college students in China. There were 92 students involved in the course spanning thirteen weeks that comprised various task elements of group discussions, information gathering, online communication, and group reflection on the Chaoxing platform. Data were collected through performance data logging, questionnaires on the perception of authentic learning, and interviews. Qualitative and quantitative data results show that the students have improved their performance, with positive feedback on the life-relevant effect of learning activities. This research provides a humanistic perspective for online intercultural English education as it focuses on the fact that the integration of real-life activities during the English intercultural course is necessary for students' performance improvement.**

Keywords: **Authentic e-learning, English Intercultural Learning, Intercultural Communication Competence, Perception, Learning Performance**

I. INTRODUCTION

English intercultural learning plays a crucial role not only in enhancing language skills but also in the development of intercultural communicative competence, which now many countries have recognized as essential communication skills in global interaction (Byram, 2020). The Ministry of Education of China has shown the need to integrate the intercultural element into English learning so that students can communicate fluently in the global workplace (Gu & Zhao, 2021). However, while English classes in China mainly emphasize grammar and vocabulary using a traditional, textbook-oriented education system, they give the students little chance to use knowledge in intercultural communication patterns designed for real-world understanding (Mu & Yu, 2021). Indeed, this problem underlines the necessity of giving Chinese students practical experience in authentic and meaningful activities for skill improvement.

With technology growth, online platforms have been widely used to provide various amounts of learning materials, such as videos, articles, etc (Shen, 2021). but there are some learning obstacles, such as decreased student involvement or feelings of loneliness (Li et al., 2022). The online setting physically isolates students from teachers and peers, which thus requires sustained levels of learning motivation to engage in learning (Deardorff, 2020) The challenges needed to be overcome by identifying strategies to maintain students' involvement (Mathur et al., 2024).

Authentic e-learning offers real-life tasks which can be appealing for students to participate in online learning and complete assignments. This method can make the learning experience more meaningful by facilitating students to apply the concept to real-life situations and solve real-world problems (Hwang et al., 2020; Den Hertog & Boshuizen, 2022). Herrington et al., (2009) proposed nine authentic learning elements simulating cognitive authenticity, where students can cognitively connect their knowledge with real-life problems and see the practical value of learning (Martínez-Argüelles et al., 2023).

Although many studies have shown the strengths of using authentic materials and tasks (Wimontham et al., 2024; Su et al., 2021) the thorough integrative implementation of nine authentic learning elements in the online cultural context remains under investigation. Additionally, the success of authentic learning largely depends on how students view the relevance and authenticity of learning activities (Martínez-Argüelles et al., 2023). This paper is therefore set up to fill in this gap by considering how the implementation of nine elements of authentic e-learning in online English intercultural learning activities has an effect and gauging students' perceptions of such implementation (Arasu et al., 2024).

Specifically, this study explores (1) the effect of authentic e-learning activities on performance of Chinese vocational college students in online English courses, particularly in terms of participation, contribution, and completion rates, and (2) students' perceptions of the use of these authentic e-learning activities in their online English intercultural learning experience. By addressing these objectives, this research offers insights to enhance the authenticity and effectiveness of online learning and improve educational practices in online English intercultural courses (Sudipa et al., 2022).

II. LITERATURE REVIEW

2.1. English Intercultural Learning

English intercultural learning plays a crucial role in developing students' abilities to communicate effectively across diverse cultural contexts, especially as global interconnectedness continues to grow. Consequently, cultivating intercultural competence has become increasingly essential in language education (Byram, 2020). Liddicoat & Scarino, (2013) emphasize that intercultural learning combines language education with cultural understanding, aiming to boost students' abilities to engage and interact in varied cultural environments. Mastering intercultural communication not only enhances language skills but also aids in cultural adaptation, which is crucial for fostering mutual understanding and collaboration on an international scale (Lee & Song, 2019). Incorporating intercultural elements into English instruction enables students to better recognize and respond to cultural differences, thereby improving their communication skills and cultural awareness (He, 2020).

Authenticity is fundamental to effective intercultural learning. In language education, authenticity involves engaging students with real materials and contexts, which helps connect theoretical knowledge with practical application (Liddicoat & Scarino, 2013). Authentic materials, including texts, videos, and conversations produced by native speakers, provide content that mirrors actual language use (Deardorff, 2020). This method supports the objective of achieving deeper learning and enhancing intercultural communication skills.

In China, efforts by both the government and academia to integrate cultural learning objectives into English education aim to improve students' intercultural competence and communication skills. Despite these efforts, practical challenges remain in implementing intercultural English learning effectively. A major challenge is the insufficient provision of authentic intercultural communication experiences, which limits students' access to genuine cultural interactions and hinders the development of their intercultural communication skills (Mu & Yu, 2021). Another issue is that, in online learning environments, students often face specific motivational difficulties. Although a wide range of cultural resources is available, maintaining student motivation and fostering self-directed learning remain critical challenges (Mathur et al., 2024). Furthermore, the lack of in-person interactions can exacerbate feelings of isolation and reduce engagement (Li et al., 2022).

In academia, Chinese scholars have developed various models and principles aimed at enhancing intercultural communicative competence, such as the assessment of intercultural competence of Chinese college students (Peng et al., 2015), five principles of Intercultural communicative competence development (Sun, 2016) and the intercultural competence development framework (Gu & Zhao, 2021). While these theories provide theoretical support for intercultural learning, there remains a lack of empirical research in their specific practical application (Gu & Zhao, 2021), particularly in addressing real-world challenges in mainland China, such as the lack of authentic interaction opportunities and motivational issues in online learning environments. Addressing these gaps through empirical research can offer valuable guidance to educators and policymakers

2.2. Authentic E-learning

Authentic e-learning involves using electronic technology to create learning environments that simulate real-life experiences (Herrington et al., 2009). This dynamic and highly effective educational approach integrates real-world experiences into the learning process, reflecting the complexities of how students use electronic technology daily (Utami et al., 2021). For English as a Foreign Language (EFL) learners, an authentic e-learning environment that provides context-rich scenarios can make it easier to grasp and apply language skills meaningfully (Polat & Erişti, 2019). Interaction with realistic scenarios allows students to generate new ideas, share these ideas, contribute to each other's thinking, and evaluate both their own and peers' academic insights (Almulla, 2020).

This authentic setting not only fosters collaborative practices but also provides students with opportunities to create and apply knowledge that is both genuine and enduring (Alioon & Delialioğlu, 2019). Additionally, authentic e-learning can stimulate students' natural curiosity and interest by enhancing the relevance and applicability of learning (Liu et al., 2021). For example, learning content is more closely aligned with real-life experiences or stories, students' participation and interest increase, reflecting a higher level of learning engagement (Den Hertog & Boshuizen, 2022). When learning activities are conducted in real-world contexts, students can better understand abstract concepts by making learning more relevant and applicable to everyday life, thereby boosting their interests and achievement (Hwang et al., 2020).

However, the real-life context does not necessarily lead to effectiveness in learning (Martínez-Argüelles et al., 2023). For instance, den Hertog & Boshuizen (Den Hertog & Boshuizen, 2022) also point out that Case studies and role play based on real-life scenarios failed to be effective as the repetitive nature of the cases and the limited realism of the role-playing activities, which did not sufficiently capture or reflect the complexities of actual professional practice Instead, the key to effective learning design lies in cognitive authenticity, meaning that the activities should reflect how students will practically apply their knowledge (Herrington et al., 2009).

The nine elements of authentic e-learning, as proposed (Herrington et al., 2009), play a vital role in guiding the designing of situated learning environments. These elements are (1) authentic contexts (2) authentic tasks that provide ill-defined activities which have real-world relevance, (3) expert performance, (4) Multiple roles and perspectives, (5) Collaborative construction of knowledge, (6) Reflection, (7) Articulation, (8) Coaching and scaffolding and (9) Authentic assessment. Martínez-Argüelles et al., 2023) highlight that employing all nine elements in online learning environments can significantly contribute to cognitive authenticity and learning performance. Lau & Tasir, (2024) Confirm that a well-designed online environment that incorporates these nine elements can offer a more tailored and effective learning experience

However, while authentic e-learning elements, such as authentic materials and intercultural communication, have been explored in some studies, comprehensive approaches to integrating all nine elements into English intercultural learning are still relatively rare. Thus, there is a need for further research to explore how a comprehensive integration of these elements can mirror real-world experiences to enhance intercultural learning outcomes.

Thus, this research utilizes these nine authentic learning elements for real-life learning experiences in online English intercultural learning and discusses how students learn best and view the authenticity of this learning.

III. METHOD

The research uses a quasi-experimental design with time series analysis for the assessment of intervention impact on student performance across different time points. The research conducts one pre-test and two post-tests over thirteen weeks.

3.1. Online Learning Context

The experiment was conducted in an online English intercultural course through the Chaoxing online learning platform, the most popular content management system in China. Chaoxing has given a flexible online learning space where students can find learning materials, communicate with classmates, and gain guidance from teachers. Herein, Tencent Meeting, a multi-functional web conferencing application, is merged into the platform to allow virtual meetings with Malaysian tourists, and group work for students. The online English intercultural course brings together the aspects of culture, communication, and language through the function of a wide range of learning management systems.

3.2. Participation

92 vocational college students from the tourism faculty at an institution in the Chinese mainland attended an "Online English Intercultural Learning" course in 18 different groups. The course includes three learning modules. Module 1 provided adequate guidance and time that helped the students to learn about the online learning function of Chaoxing and authentic learning activity rules and Modules 2 and 3 introduced authentic learning strategies as interventions. Performance data in metrics of participation, contribution, and task completion were collected after Module 1 as a baseline for comparison with Modules 2 and 3 to detect tendencies in students' performance. In the end, each student filled out a questionnaire to gather their perception of the learning activities, and 12 students participated in in-depth interviews, which focused on their ideas about authentic online activities.

3.3. Authenticity of the Course

The course is grounded in the principles of authentic learning as outlined (Herrington et al., 2009), which emphasizes real-world relevance and practical application to enhance learners' performance in English intercultural learning. The integration of nine authentic learning elements provided a comprehensive and immersive learning experience, focusing on real-world tasks, collaboration, expert input, and reflective activities.

The initial step in creating a realistic and meaningful learning environment involved defining a relevant job context where students could apply course outcomes. Given the prevalence of Customized Travel Consultants in the travel industry, this role was chosen to simulate real-world job functions within travel-related fields. Students engaged in three core tasks that mirror the authentic responsibilities of travel consultants: recommending travel destinations, suggesting travel activities, and presenting a personalized travel plan. Table I demonstrates the way of employing authentic e-learning elements in English intercultural learning.

The second step was to implement this design in an online learning course that integrates these authentic elements, providing students with a realistic and engaging learning experience (see Fig. 1). The online course is divided into three modules, each corresponding to a core task: recommending travel destinations, suggesting travel activities, and presenting a personalized travel plan. To ensure a comprehensive learning process, each module includes four types of activities: group discussions, information searches, online communication, and group reflections. These activities were carefully selected to foster active participation, encourage meaningful contribution, and ensure the completion of tasks, thereby promoting both individual and collaborative learning experiences. The course design supports the development of various skills and knowledge areas, aligning with effective intercultural learning practices. To evaluate the effectiveness of these activities, data on student performance—including participation, contribution, and completion rates—were systematically logged and analyzed.

TABLE I AUTHENTIC LEARNING ELEMENTS IN INTERCULTURAL LEARNING ACTIVITIES

|	Authentic Learning Element	Description of Incorporation in English Intercultural Learning Activities
1	Authentic Context	• A realistic tourism work scenario is created where students assume the role of Customized Travel Consultants.
2	Authentic Activities	• Personal travel itineraries need to be designed for students to meet the travel expectations of Malaysian tourists.
3	Access to Experts	• Professional resource from learning platforms or website to prepare their authentic tasks.
4	Multiple Roles and Perspectives	• Group discussions allow students to exchange ideas on travel planning.
5	Collaboration in Construction of Knowledge	• Peer collaboration encourage students to support each other with the unevenness of their tasks, share their ideas and interact together with Malaysian tourists to accomplish tasks
6	Reflection	• Group reflection help students identify strength and weakness of their performance and enhance their skills for future assignments.
7	Articulation	• Students express their opinion during such discussions and after making presentations
8	Coaching And Scaffolding	• Feedback through peer reviews and instructor assessments helps students improve their performance.
9	Authentic Assessment of Learning	• Students' performance is assessed by Malaysian tourists in the form of customer satisfaction ratings.
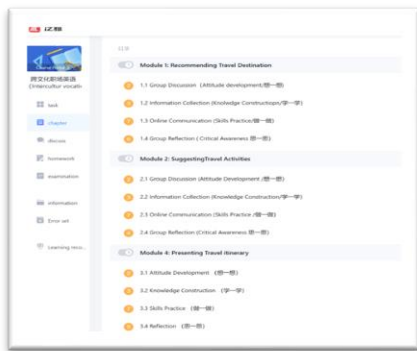
Fig. 1 Implementation of Authentic E-learning

Group discussion activities provided an authentic context where students, acting as travel consultants, collaborated in real time to interpret, analyze, and allocate complex tasks of creating travel plans tailored to Malaysian tourists, as shown in Fig. 2. These discussions simulated real-world problem-solving and decision-making, requiring students to articulate their reasoning, justify their choices, and navigate cultural nuances. By engaging in these strategic dialogues, students practised managing diverse perspectives and making informed decisions, mirroring the dynamics of professional work settings. This process deepened their engagement and fostered an open-minded attitude.
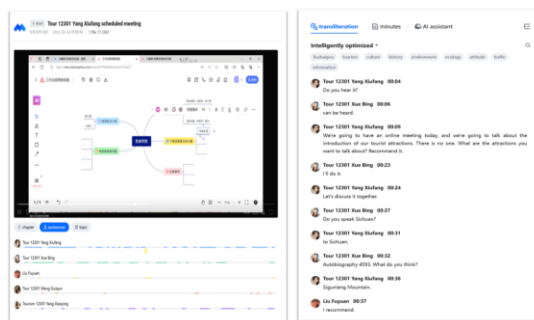

Fig. 2 Implementation of Group Discussion

Information collection activities required students to gather resources, such as videos and visual reading materials, from professional databases and relevant websites, as demonstrated in Fig. 3. This task helped them build a deeper understanding of cultural contexts, including the histories and values of various Chinese travel destinations and the cultural nuances of Malaysian social norms for online communication. By working with authentic materials, students were exposed to diverse perspectives and developed the ability to evaluate and synthesize information critically. The flexibility of asynchronous learning enabled students to engage with the content thoroughly, ensuring a comprehensive grasp of the material and expanding intercultural knowledge.
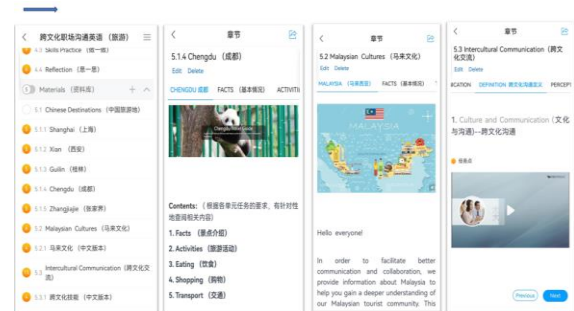

Fig. 3 Implementation of Information Collection

Online communication activities allowed students to engage directly with Malaysian tourists through online meetings, where they presented their proposed travel plans and responded to questions in real-time (see Fig. 4). This experience mirrored professional consultations, where effective communication, adaptability, and customer engagement are crucial. Students had to apply their intercultural knowledge practically, using both English and visual communication tools to clearly convey their ideas and receive feedback. This direct interaction challenged students to think on their feet and adjust their presentations based on tourist immediate feedback, thereby honing their communication and interpersonal skills in authentic settings.

Fig. 4 Implementation of Online Communication

Group reflection activities encouraged students to analyze their interactions with the tourists and assess the effectiveness of their communication strategies, as illustrated in Fig. 5. Group-based reflective sessions encouraged students to realize what was improved and provide ideas for future performance.

When producing this course, several factors were taken to replicate the atmosphere of the real-world job settings: (a) a "boss" or teacher sets the task just like in a workplace; (b) complexity of tasks, such as design of personal travel plan, require hard group work; (c) real-time communication with Malaysian tourists via online meetings; and (d) Tourist service satisfaction feedback functioned as a real-life assessment of their communication performance with

Malaysian tourists. These factors contributed to making the authentic environment surrounding the students and therefore effective in developing their learning performance.

3.4. Measurement Instruments

This research employs data logging across three modules to analyze the performance in the aspects of participation, contribution, and completion. A rubric, demonstrated in Table II, was constructed based on student performance data in four activities, dividing them into five levels to help assess performance changes.

TABLE II DATA LOGGING RUBRIC

Level	Participation	Completion	Contribution			
			Group Discussion	Information Collection	Online Communication	Group Reflection
1	0% - 20%	0% - 20%	1-7	1-5	1-6	1-4
2	21% - 40%	21% - 40%	8-14	6-9	7-12	5-8
3	41% - 60%	41% - 60%	15 - 21	10-13	13 - 18	9-12
4	61% - 80%	61% - 80%	22 - 28	14 - 17	19 - 24	13 - 15
5	81% - 100%	81% - 100%	29 - 35	18 - 22	25 - 30	16 - 18

Questionnaires and semi-structured interviews are used to investigate students' opinions concerning real learning activities. The questionnaire is based on (Lau & Tasir, 2024) survey question and features of authentic activities in English intercultural learning. it encompasses two multiple-choice questions (containing four choices), and one satisfaction rating question including the nine elements authentic with a 5-point Likert scale. The questionnaire demonstrated a high internal consistency and was confirmed with a Cronbach's alpha coefficient of 0.837. Along with that, semi-structured interviews were conducted with 12 students who performed at diverse levels of intercultural competence to collect feedback on their experiences and problems encountered with authentic learning tasks. These two methods build on each

other with the resultant data providing a firm and holistic discovery regarding the efficacy of such activities in the very intercultural setting of English learning.

IV. RESULTS

4.1. Analysis of Pre- and Post-Activities based on Data Logging

The data logging was dissected to explain the change in student performance over four activities (See Table III). This Table gives the subsequent numbers to study students' engagement and success at a particular learning activity from the perspective of the students, about participation, contribution, and completion.

TABLE III DESCRIPTIVE ANALYSIS OF DATA LOGGING LEVEL ACROSS FOUR ACTIVITIES

Activities	Data Logging	Module	N	Minimum	Maximum	Mean	Std. Deviation
Group Discussion	Participation	1	92	4	5	4.84	0.37
		2	92	4	5	4.89	0.31
		3	92	4	5	4.95	0.23
	Contribution	1	92	1	5	2.74	1.42
		2	92	1	5	3.39	1.31
		3	92	2	5	3.66	1.26
	Completion	1	92	4	5	4.78	0.41
		2	92	4	5	4.89	0.31
		3	92	4	5	4.95	0.23
Information Collection	Participation	1	92	3	5	4.5	0.76
		2	92	3	5	4.62	0.59
		3	92	3	5	4.67	0.58
	Contribution	1	92	2	5	3.02	0.89
		2	92	2	5	3.36	1.01
		3	92	2	5	3.79	1.03
	Completion	1	92	3	5	4	0.89
		2	92	3	5	4.57	0.6
		3	92	4	5	4.67	0.47
Online Communication	Participation	1	92	4	5	4.78	0.41
		2	92	4	5	4.95	0.23
		3	92	4	5	4.95	0.23
	Contribution	1	92	2	5	2.78	0.97
		2	92	2	5	3.4	0.83
		3	92	2	5	3.42	1.13
	Completion	1	92	3	5	3.86	0.85
		2	92	3	5	4.46	0.76
		3	92	3	5	4.67	0.58
Group Reflection	Participation	1	92	3	5	4.17	0.96
		2	92	2	5	4.14	0.92
		3	92	3	5	4.27	0.73
	Contribution	1	92	1	5	2.41	1.05
		2	92	2	5	2.72	1.04
		3	92	2	5	3.16	1.11
	Completion	1	92	2	5	3.35	0.83
		2	92	3	5	4.27	0.88
		3	92	3	5	4.46	0.83

Group Discussion consistently showed high levels of participation, with scores remaining above 4.8 throughout all modules, suggesting strong initial engagement that was sustained over time (see Fig. 5). The completion rates for discussion tasks mirrored this trend, also starting and remaining high, increasing slightly from 4.78 to 4.95. In contrast, contribution, which assesses the quality and depth of inputs during discussions, showed a more significant growth from 2.74 to 3.66. This indicates that while students were actively participating from the start, their ability to provide more substantial and thoughtful contributions developed more prominently as they progressed through the modules.
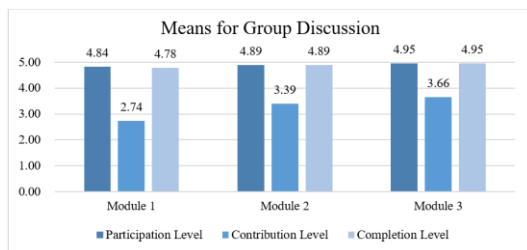
For Information Collection, while participation and completion rates started at a relatively high level and showed steady improvement (participation from 4.50 to 4.67 and completion from 4.00 to 4.67), it is the contribution that demonstrated the most noticeable growth, rising from 3.02 to 3.79 (see Fig. 6). This suggests that students became more adept at gathering relevant and valuable information, which improved the quality of their contributions over time. The overall trends for this activity indicate balanced growth across all three metrics, but the significant increase in contribution highlights a deepening of students' engagement in information-gathering tasks.
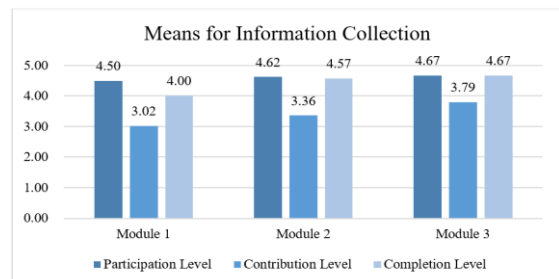

Fig. 5 Means Across Three Modules for Group Discussion

Fig. 6 Means Across Three Modules for Information Collection

Online Communication displayed consistently high participation rates, remaining near the maximum score (4.95) by the second module and maintaining that level (see Fig. 7). This suggests that students found online communication activities highly engaging and easy to participate in. Completion rates also showed a marked increase, from 3.86 to 4.67, demonstrating improved effectiveness in completing online tasks. However, contribution scores, which measure the depth and substance of students' online exchanges, grew more modestly from 2.78 to 3.42. This reflects that while students were consistently active in online communication, the depth of their contributions improved at a slower pace.
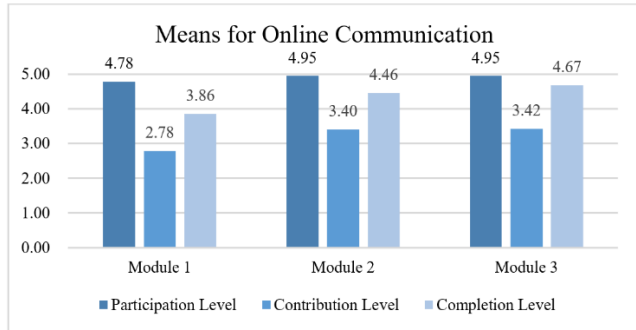

Fig. 7 Means Across Three Modules for Online Communication

In the **Group Reflection** activity, participation levels remained relatively stable, with slight fluctuations around 4.17 to 4.27, suggesting consistent but moderate engagement (see Fig. 8). The most notable growth occurred in contribution, which rose from 2.41 to 3.16, indicating an increase in the quality of reflective inputs over time. Completion rates saw a substantial rise from 3.35 to 4.46, signifying that students became more comfortable and diligent in completing reflection tasks as they advanced through the modules. Overall, group reflection showed a balanced improvement in all three metrics, with the most pronounced growth in completion.
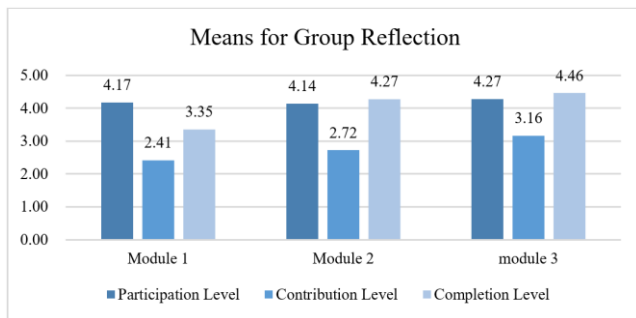

Fig. 8 Means Across Three Modules for Group Reflection

When comparing the four activities, Online Communication had the highest participation rates throughout, indicating it was the most engaging activity in terms of getting students involved. Group Discussion showed a high initial engagement and continued to perform well in terms of both participation and completion, but its most notable growth was

in the quality of contributions. Information Collection demonstrated the most balanced improvement across all three metrics, with a significant increase in contribution, highlighting students' growing ability to provide valuable content. Finally, Group Reflection showed considerable growth in both contribution and completion rates, suggesting it became more meaningful to students over time, even though its initial participation was moderate (see Fig. 9).
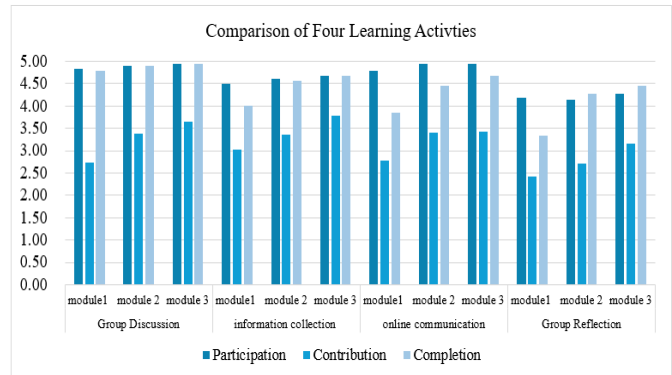

Fig. 9 Comparison of Four Activities

Overall, the activities that involved more dynamic and interactive tasks—like group discussions and online communication—tended to have higher participation rates. In contrast, activities that required deeper cognitive engagement and reflection, such as group reflection and information collection, showed more growth in contribution and completion, reflecting their increasing effectiveness in enhancing students' reflective and analytical skills over time.

4.2. Analysis of Questionnaire Data Regarding Students' Perceptions on Authentic Activities

This section presents an analysis of the questionnaire data that explores students' perceptions of English learning activities designed around authentic e-learning strategies. A total of 92 questionnaires were initially collected for this study. To ensure the reliability and validity of the responses, a lower threshold of 165 seconds was established as the minimum response time for considering a questionnaire valid based on the complexity of the whole questionnaire items and the time reasonably required to read, comprehend, and provide thoughtful answers. This criterion led to the selection of 77 valid questionnaires, ensuring that the analysis was based on meaningful and reliable data.

The results, summarized in Table IV, demonstrate that students showed a strong preference for engaging and interactive learning activities. Group Discussion emerged as the most favoured and engaging activity, with 74% of students selecting it as their top choice. The combined mean score for Group Discussion across both preference and engagement questions was the highest (Mean = 0.65, SD = 0.39), reflecting its effectiveness in creating a dynamic and collaborative learning environment.

TABLE IV DESCRIPTIVE STATISTICS ON LEARNING ACTIVITIES

1. Which type of activity do you like the most?	N	Not Selected	Selected	Mean	SD
A. Group Discussion	77	20 (26%)	57 (74%)	0.74	0.441
B. Information Collection	77	43 (56%)	34 (44%)	0.44	0.5
C. Online Communication	77	46 (60 %)	31 (40 %)	0.4	0.494
D. Reflection	77	50 (65%)	27 (35%)	0.35	0.48
2. Which activity engages you the most?	N	Not Selected	Selected	Mean	SD
A. Group Discussion	77	34 (44%）	43 （56%)	0.56	0.5
B. Information Collection	77	29 (38%)	48 (62%)	0.62	0.488
C. Online Communication	77	49 (64%)	28 (36%)	0.36	0.484
D. Reflection	77	49 (64%)	28 (36%)	0.36	0.484

Information Collection also received positive feedback as the second most preferred activity, with a combined mean score of 0.53 (SD = 0.39). This indicates that students appreciate structured tasks that allow for deeper exploration of specific content areas. Online Communication and Group Reflection, while receiving slightly lower scores (Mean = 0.38, SD = 0.39 and Mean = 0.36, SD = 0.40, respectively), still represent valuable learning experiences, contributing to a diverse range of learning preferences and engagement styles among students.

The satisfaction ratings for various authentic activity elements are presented in Table V. The elements "Multiple Perspectives" and "Professional Materials and Videos" received particularly high satisfaction ratings (Mean = 4.38, SD = 0.49 and Mean = 4.29, SD = 0.70, respectively), highlighting their success in promoting rich, context-driven learning experiences. Other elements, such as "Feedback and Assistance," "Group Collaboration," and "Authentic Performance Assessment," also received favourable ratings, all with means above 4.0, indicating that students value supportive and interactive components that enhance their learning outcomes.

TABLE V DESCRIPTIVE STATISTICS ON AUTHENTIC ACTIVITY ELEMENTS

3. Satisfaction Rating for Activity Elements	N	VD	D	N	D	VS	Mean	SD
A. Tourism Work Scenario (Students act as Customized Travel Consultant)	77	0	1 (1%)	19 (25%)	33 (43%)	24 (31%)	4.04	0.79
B. Work Task (Create personal travel itineraries, hands-on practice, experience potential future job tasks)	77	0	1 (1%)	15 (20%)	37 (48%)	24 (31%)	4.09	0.75
C. Professional Materials and Videos (Collect and understand online and course materials)	77	0	0	11 (14%)	33 (43%)	33 (43%)	4.29	0.70
D. Multiple Perspectives (Group discussions, understanding different viewpoints, promote diverse thinking)	77	0	0	0	48 (62%)	29 (38%)	4.38	0.49
E. Group Collaboration (Cooperate with peers, prepare together to interact with foreign tourists, complete tasks)	77	0	1 (1%)	11 (14%)	40 (52%)	25 (33%)	4.16	0.71
F. Reflection (Enhance performance for future tasks)	77	1 (1%)	1 (1%)	15 (20%)	37 (48%)	23 (30%)	4.04	0.82
G. Expressing Own Views (Share and communicate personal ideas)	77	0	2 (3%)	13 (17%)	37 (48 %)	25 (33%)	4.1	0.77
H. Feedback and Assistance (Peer reviews, teacher feedback, receive evaluations and suggestions)	77	0	0	13 (17%)	37 (48%)	27 (35%)	4.18	0.70
I. Authentic Performance Assessment (tourist satisfaction ratings)	77	0	1 (1%)	14 (18%)	35 (46%)	27 (35%)	4.14	0.76

The analysis indicates that students positively perceive learning activities that are collaborative, and engaging, and offer opportunities for meaningful interaction and reflection. Group Discussion stands out as the most preferred and engaging activity, while satisfaction ratings across various authentic elements show a strong appreciation for learning experiences that foster diverse perspectives and practical knowledge application.

4.3. Interviews Regarding the Effectiveness of Authentic Learning

To support the descriptive analysis, the interview was conducted to gather students' perceptions toward the English learning activities implemented using authentic e-learning strategies. The interviews focused on three key questions: (1) How do you think these activities have affected your learning performance? (2) How do you feel about how real-world and relevant these activities are to your learning experience? (3) What aspects of these activities did you find most appealing?

What challenges did you face, and what improvements would you suggest? The interviews revealed several key insights into how these activities influence learning experiences and performance. The themes derived from the interviews are summarized in the coding themes (see Table VI). Overall, the interviews highlighted the positive impact of authentic learning activities on student engagement, confidence, and practical skills. While challenges existed, the benefits of these activities in fostering collaboration, reflection, and professional readiness were evident.

TABLE VI SUMMARY OF THEMES' CODING ON PERCEPTION OF AUTHENTIC E-LEARNING

Theme	Code	Example
Diverse learning activities foster Collaborative and Reflective Practices	Fostering diverse perspectives through Group Discussion	S57： Group discussions are helpful in understanding and completing online communication tasks. During group discussions, everyone can contribute a lot of ideas."
	Stimulating exploratory learning through information collection	S62: Searching online is quite convenient because browsers provide access to everything with a simple search. I particularly enjoy the process of exploring and discovering a wealth of information on my own.
	Increased confidence in online communication	S89: Overall, it has increased my confidence and made me more willing to communicate directly with Malaysians!
	Reflection driving progress	S49: I quite like this reflection because it promotes progress and helps us prepare for the next time.
Authentic learning elements enhance Practical Application and Engagement	Practical application in work scenarios and authentic tasks	S57: Simulating a professional work environment is practical. Since we will be working in the tourism industry in the future, as a current tourism worker, I am entering this environment ahead of time.
	Expanding knowledge through professional materials	S57: Collecting information allows us to learn more about cultures, not only our own but also Malaysian culture. Additionally, through the process of gathering information, we can acquire more communication skills, enabling us to express ourselves more completely and fluently during interactions.
	Expanding thinking through diverse perspectives	S57: During the discussion about the travel itinerary, someone suggested where to go and how to introduce the place in a certain way. I hadn't thought of that, and I found it meaningful.
	Enhancing effective online communication through Group collaboration	S89: Our group works as a team to present our work and introduce attractions to Malaysian tourists, engaging in conversations with them. I really enjoy it; the atmosphere is great.
	Fulfillment through opinion sharing	S53: In the group, I enjoy sharing my opinions and perspectives because, as the group leader, I need to motivate others. When I express my views and receive recognition, it gives me a strong sense of accomplishment
	Dive continuous improvement by reflection, tourist feedback, and teacher support.	S53: I also ask each person to summarize their own shortcomings and reflect on what could be improved in this activity.
Evaluation of Learning Experience	Interesting	S57: What attracted me the most was collecting specialized materials and gaining professional knowledge. Additionally, online communication was quite appealing, especially since it was my first time interacting with Malaysians. I also enjoyed the group approach.
	meaningful	S57: I think this is a very meaningful experience and it has been quite helpful for me personally. I believe it has contributed significantly to my self-improvement
	language barriers.	S62: Online communication can be challenging for us because it is difficult to understand
	Challenges in Integrating Diverse Views	S30: In group discussions, their ideas are too numerous and a bit disorganized.
	Time-consuming	S57: Because this activity is quite complex, it requires a lot of time and effort

V. DISCUSSION

5.1. Summary and Discussion on the Impact of Authentic E-Learning on Student Performance

The integration of authentic e-learning elements into English intercultural learning has demonstrated a significant impact on student performance reflecting participation, contribution, and task completion, across four key activities—group discussions, information collection, online communication, and group reflection. The activities that were more interactive and dynamic, such as group discussions and online communication, attracted higher participation rates and sustained student engagement. Meanwhile, activities that demanded deeper cognitive engagement and reflection, like information collection and group reflection, showed significant growth in the quality and completion of contributions.

Group discussions and online communication, effectively utilized authentic contexts, multiple perspectives, and

collaborative approaches, achieving high levels of participation and engagement. By linking authentic contexts to students' real-world experiences and aspirations, incorporating collaboration on real-world tasks, and exploring diverse viewpoints, these activities fostered deeper engagement and more thoughtful contributions. This aligns with (Lock & Redmond, 2021). findings that authentic contexts stimulate positive involvement by demonstrating the practical application of their knowledge and fostering deep understanding through diverse viewpoints. Additionally, (Telaumbanua et al., 2020) emphasize that collaboration on real-life tasks creates a supportive learning environment, further stimulating students to share ideas and develop solutions, which is consistent with the observed increase in participation and contribution.

Information collection activities showed significant growth in both contribution quality and completion rates. The authentic element of accessing experts is particularly emphasized in these activities, encouraging students to engage with genuine professional resources as this exposure aids them in handling real-life tasks effectively. Egorova, (2022) supports this by noting that authentic materials, closely aligned with students' future careers and real-life scenarios, illustrate the practical value of their learning, thus stimulating their interest in understanding and acquiring the material. Similarly, (Sabiq, 2023) highlight that providing materials reflective of real-life language use helps students form a stronger connection to the language's practical applications, further boosting their engagement and achievement.

Group reflection activities demonstrate notable enhancements in reflective contributions and task completion, driven by the inclusion of authentic assessment and continuous feedback. These elements encouraged students to critically assess their learning processes and cultural perspectives, leading to deeper engagement and a more nuanced understanding of intercultural communication. Authentic assessment, by providing opportunities for reflection and feedback akin to real-world evaluations, made learning more meaningful and directly relevant to students' future careers, thereby increasing engagement and commitment (Farrell, 2020).

Overall, the tailored integration of specific authentic learning elements within each activity—dynamic and collaborative for group discussions and online communication, and reflective and expert-driven for information collection and group reflection—effectively enhanced students 'performance.

5.2. Summary and Discussion on Student Perception of Authentic E-Learning Activities

In addition to the objective improvements in student performance, the study also explored students' subjective perceptions of authentic e-learning activities. Students' overall perception of authentic e-learning activities was largely positive, with many expressing satisfaction with the engaging and interactive nature of the learning tasks. They found the diverse activities, such as group discussions, information collection, and online communication, particularly effective in facilitating English intercultural. students appreciated the real-world relevance of the tasks, as indicated by the following statements:

S57: Simulating a professional work environment is practical. Since we will be working in the tourism industry in the future, as a current tourism worker, I am entering this environment ahead of time.

S53: This is a great opportunity to enhance my skills for the future.

Our findings support (Zhang et al., 2024) who highlight the role of authentic learning in promoting engagement through task relevance and autonomy. Similarly, (Lau & Tasir, 2024) reaffirm that well-constructed and presented authentic learning environments stimulate not only student motivation but also the practical application of both the content and skills, which is consistent with the results of our study.

Additionally, students' feedback implies that real-life e-learning activities would become much more effective. First, for language barriers, additional support in language learning, such as more structured language assistance during online communication, could be used. Moreover, clear guidance on managing time needs to be provided to facilitate students to control time in completing tasks.

VI. CONCLUSION

The findings in this study demonstrated that integrating authentic e-learning activities into English intercultural learning significantly improves student performance and perceptions. The activities—group discussions, information collection, online communication, and group reflection—enhanced student participation, contribution quality, and task completion. Dynamic and collaborative tasks effectively engaged students, while authentic materials and expert resources boosted contribution quality. Additionally, group reflections, supported by authentic assessments, fostered deeper engage understanding standing of intercultural communication. Positive student feedback highlights the relevance and effectiveness of these activities. Overall, the study demonstrates that authentic e-learning strategies offer a valuable approach to enhancing learning outcomes and engagement for Chinese vocational college students.

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