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UNLOCKING THE POTENTIAL: THE EDUCATIONAL IMPACT OF ART-BASED TECHNOLOGIES

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Abstract. In this quantitative research, the application of art-based learning in improving English speaking abilities among tourism and hospitality students was explored. A one-group pretest-posttest design was used, and the study was conducted on 20 undergraduate students at the International University of Tourism and Hospitality. The students participated in six art-based speaking classes over a period of three weeks, which included activities such as the description of paintings, speaking from the perspective of characters, and writing dialogues between artworks. The data were collected using speaking pretests and posttests, which were evaluated using an IELTS rubric, as well as a questionnaire on students' perceptions in four categories: engagement, perceived improvement, confidence, and relevance to the profession. The findings showed a statistically significant positive change in overall speaking ability from pre-test ($M = 5.42$) to post-test ($M = 7.18$) with a large effect size (Cohen's $d = 2.18$). The students' perceptions of the art-based activities were highly positive (overall mean = 4.54 on a 5-point scale), with the highest mean score for relevance to tourism and hospitality ($M = 4.71$). There was a moderate positive correlation ($r = 0.63$, $p = 0.003$) between the students' perceptions and their actual speaking ability improvement. These results provide clear evidence that art-based learning is an effective means of improving English speaking ability while promoting engagement, motivation, and relevance to the profession. This study provides empirical support for the use of art-based learning in ESP settings, especially in tourism and hospitality education.

Keywords: art-based learning, English speaking skills, tourism and hospitality education, quantitative research, ESP

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МҮМКІНДІКТЕРДІ АШУ: АРТ-ТЕХНОЛОГИЯЛАРДЫҢ БІЛІМ БЕРУДЕГІ ӘСЕРІ

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Аннотация. Бұл сандық зерттеуде туризм және қонақжайлылық мамандығы студенттерінің ағылшын тілінде сөйлеу дағдыларын жетілдіруде өнерге негізделген оқытуды қолдану зерттелді. Бір топтық pretest-posttest дизайны қолданылды және зерттеу Халықаралық туризм және қонақжайлылық университетінің 20 бакалавриат студенті арасында жүргізілді. Студенттер үш апта ішінде өнерге негізделген алты сөйлеу сабағына қатысты, оған картиналарды сипаттау, кейіпкерлер атынан сөйлеу және өнер туындылары арасында диалог жазу сияқты тапсырмалар кірді. Деректер IELTS бағалау рубрикасы бойынша бағаланған сөйлеу предтесттері мен посттесттері, сондай-ақ студенттердің төрт санат бойынша қабылдауын анықтайтын

сауалнама арқылы жиналды: белсенділік, сезінген жақсару, сенімділік және мамандыққа сәйкестілік. Нәтижелер сөйлеу қабілетінің жалпы деңгейінде предтесттен ($M = 5.42$) посттестке ($M = 7.18$) дейін статистикалық тұрғыдан мәнді оң өзгеріс болғанын көрсетті, әсер көлемі үлкен болды (Cohen's $d = 2.18$). Студенттердің өнерге негізделген сабақтарға деген көзқарасы өте оң болды (жалпы орташа көрсеткіш $= 4.54$, 5 балдық шкала бойынша), ең жоғары орташа балл туризм және қонақжайлылық саласына сәйкестілік бойынша тіркелді ($M = 4.71$). Студенттердің қабылдауы мен олардың сөйлеу қабілетінің нақты жақсаруы арасында орташа оң корреляция анықталды ($r = 0.63$, $p = 0.003$). Бұл нәтижелер өнерге негізделген оқытудың ағылшын тілінде сөйлеу қабілетін жақсартудың тиімді құралы екенін, сонымен қатар белсенділікті, мотивацияны және мамандыққа сәйкестікті арттыратынын нақты дәлелдейді. Зерттеу ESP жағдайында, әсіресе туризм және қонақжайлылық білім беруінде, өнерге негізделген оқытуды қолдануға эмпирикалық негіз береді.

Түйін сөздер: өнерге негізделген оқыту, ағылшын тілінде сөйлеу дағдылары, туризм және қонақжайлылық білімі, сандық зерттеу, ESP

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РАСКРЫТИЕ ПОТЕНЦИАЛА: АНАЛИЗ ОБРАЗОВАТЕЛЬНОГО ВОЗДЕЙСТВИЯ АРТ-ТЕХНОЛОГИЙ

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Аннотация. В исследовании оценивалась эффективность обучения на основе искусства для развития навыков устной речи на английском языке у студентов, обучающихся по направлениям туризма и гостиничного дела. Использован одnogрупповой дизайн с предтестовым и посттестовым измерением. В исследовании приняли участие 20 студентов бакалавриата Международного университета туризма и гостеприимства. В течение трех недель студенты посетили шесть занятий по развитию устной речи с использованием произведений искусства. Занятия включали описание картин, устные высказывания от лица изображенных персонажей и создание диалогов между персонажами произведений искусства. Данные собирались посредством предтестового и посттестового оценивания устной

речи с использованием оценочной рубрики IELTS, а также анкетирования, направленного на изучение восприятия студентами занятий по четырем направлениям: вовлеченность, субъективно воспринимаемое улучшение, уверенность и профессиональная значимость. Результаты показали статистически значимое повышение общего показателя устной речи от предтестового значения $M = 5,42$ до посттестового $M = 7,18$ при большом размере эффекта (d Коэна = 2,18). Студенты также высоко оценили занятия, основанные на использовании искусства: общий средний показатель составил 4,54 балла по 5-балльной шкале, а наиболее высокий показатель был зафиксирован по шкале профессиональной значимости для сферы туризма и гостиничного дела ($M = 4,71$). Выявлена умеренная положительная корреляция между восприятием студентами занятий и фактическим улучшением показателей устной речи ($r = 0,63$; $p = 0,003$). Полученные результаты свидетельствуют о том, что обучение на основе искусства может быть эффективным средством развития навыков устной речи на английском языке, одновременно способствуя повышению вовлеченности, уверенности и профессиональной ориентированности студентов. Результаты исследования эмпирически обосновывают целесообразность применения данного подхода при обучении английскому языку для специальных целей (English for Specific Purposes, ESP), в частности в образовательных программах по туризму и гостиничному делу.

Ключевые слова: обучение на основе искусства; арт-технологии; устная речь на английском языке; туризм и гостиничное дело; English for Specific Purposes (ESP)

Introduction. Speaking proficiency is a core component in the current scenario of English language teaching in the communicative competence paradigm. Speaking is different from other skills like reading and listening, as it requires active processing and does not permit passive understanding. Speaking is the most prominent tool that learners use to contrast meaning, create social context, and express their identity in target language. Hence, the ability to speak fluently, coherently, and appropriately is considered the most observable symptom of language proficiency in both educational and communicative contexts (Goh and Burns 2012).

In the professional world, especially in the globally networked sectors of tourism, hospitality and international service, speaking English is not only an educational achievement but a basic operational requirement. Customer service personnel, hotel managers, tour guides, and event organizers need to participate in spontaneous interactions, process complaints, provide descriptions, and express warmth and hospitality – all in spoken English. The effectiveness of these interactions has a direct impact on customer satisfaction and business reputation (Prachanant, 2012).

As a result, institutions providing English for Specific Purposes (ESP) courses

are faced with the urgent task of ensuring that their students are equipped not only to succeed in tests and exams but also to communicate well in unpredictable and actual professional contexts. Notwithstanding the recognized significance of speaking, it remains one of the most challenging skills to acquire in a formal learning environment. The conventional language learning classroom tends to emphasize grammatical correctness and writing skills, partly because of the ease of evaluation and the constraints of large class sizes. Speaking exercises, when they happen, tend to consist of decontextualized exercises, scripted conversations, or test-related activities, which offer very little opportunity for genuine expression.

One major challenge in achieving oral proficiency is foreign language speaking anxiety, which prevents learners from being willing to communicate and from achieving the automaticity necessary for fluent speaking (Horwitz et al., 1986). In addition, typical speaking activities lack emotional involvement and personal significance, leading to mechanical speaking. The gap between the classroom and the real world, therefore, requires teaching methods that promote linguistic proficiency as well as emotional security, creativity, and intrinsic motivation.

Art-Based Learning (ABL), which originated in museum education and aesthetic philosophy, has recently been recognized as a new alternative in language teaching. Art-Based Learning is the use of visual art, such as paintings, photographs, sculptures, and other forms of artistic artifacts, both as content and as stimuli for language learning activities. Unlike typical language learning inputs, artworks are inherently ambiguous, emotionally rich, and open to multiple interpretations. Their polysemic nature, therefore, invites personal response, promotes prediction, and establishes a genuine need for self-expression (Kokkos, 2010). In the context of second language acquisition, art serves as a visual referent that decreases cognitive complexity and establishes a common focus for communication.

Recent research has started to investigate the relationship between arts and language learning. The positive impact of visual arts on vocabulary learning (Farokhi and Hashemi, 2012), critical thinking skills (Whitelaw, 2017) has been identified. Ekoc (2021) proved that the inclusion of artworks in speaking activities in a preparatory university class increased students' motivation to communicate and improved their descriptive language. Although the current literature recognizes the potential of ABL, there is a clear lack of quantitative studies that investigate the experiences of learners, including how they perceive the transition from traditional activities to art-based speaking tasks, the underlying emotional and cognitive processes, and how these experiences are reflected in improved speaking abilities.

This study proposes to fill this gap by investigating the potential of Art-Based Learning in improving English speaking abilities among university students. Using a quantitative research paradigm, this study attempts to uncover the subjective experiences of learners participating in art-based speaking activities. The research questions that guide this study are as follows:

1. Is there a statistically significant difference in students' overall English-

speaking performance before and after the implementation of art-based learning activities?

2. What are students' perceptions of art-based learning activities in terms of engagement, confidence, and relevance to their tourism and hospitality profession?

By giving primacy to the voices and interpretations of the learners, this study can help to shed more light on the pedagogical significance of art in language learning. The results of this study may provide useful information for language teachers who want to create more engaging and low-anxiety speaking contexts, and also provide a rationale for incorporating aesthetic experiences into English for Specific Purposes (ESP) curricula in fields of study in which communication is a key aspect of professional practice.

Literary review. The inclusion of arts in language learning is supported by a variety of theoretical approaches, from cognitive neuroscience to transformative education. Christopher W. Tyler and Lora T. Likova (Tyler and Likova, 2012), in their seminal paper published in *Frontiers in Human Neuroscience*, investigated the neurocognitive foundations of learning from visual arts. The authors showed that visual art experience engages a variety of brain networks associated with memory, attention, and sensory processing, thus providing enriched learning conditions for language acquisition. They suggested that visual arts are beneficial for learning by engaging neural plasticity and promoting higher-level cognitive processing.

Based on philosophical and educational underpinnings, A. Kokkos (Kokkos, 2010), in the *Journal of Transformative Education*, presented an integrated approach for transformative learning through aesthetic experience. Kokkos suggested that art-based experiences can cause deep transformations in learners' viewpoints, promoting critical reflection and emotional engagement – both critical for the development of communicative competence in a second language.

In the English language arts field, Robert M. Jordan and Michael DiCicco (Jordan and DiCicco, 2012), in the *Language Arts Journal of Michigan*, analyzed the purpose of integrating visual arts in the English classroom. The authors argued that visual arts offer interpretive tools that can improve the analytical and expressive skills of students, thus making a compelling argument for integration. In a similar study, U. Thulasivanthana (Thulasivanthana, 2020), in the *Shanlax International Journal of English*, analyzed the integration of visual arts in English language learning. The author highlighted the role of visual stimuli in filling the gap between abstract concepts of language and concrete experiences of learners.

However, a growing number of studies have focused specifically on the role of art in oral proficiency development. One of the most important studies was conducted by A. Ekoc (Ekoc, 2021) and published in *Innovation in Language Learning and Teaching*. The study focused on the use of artworks for speaking skills development in a university preparatory course. The research analyzed the impact of artwork engagement, including paintings and other forms of visual arts, on students' communication willingness and descriptive/narrative speech skills.

In the Omani environment, Saleh Al-Busaidi, Mohammed Al-Amri, and Wafa

Al-Dhuhli (Al-Busaidi et al., 2022) introduced their study at the 8th International Conference on Higher Education Advances (HEAd'22). The study used an art-based approach to develop speaking skills in intensive English program students at Sultan Qaboos University.

The artwork themes were focused on the 17 sustainable development goals, which served as a valuable content source for speaking tasks. A recent study by Kyra E. Whitehead (Whitehead, 2023) introduced a literature, design, and arts-based ESL classroom approach. The study combined various forms of arts to provide a comprehensive approach to language learning, which could be applied to speaking skills development through artistic expression.

Several researchers have explored the synergy between arts integration and project-based methodologies.

Karoline Trepper, Alison Boardman, and Antero Garcia (Trepper et al., 2022), in *English Teaching: Practice & Critique*, changed the perspective to the perceptions of teachers on project-based learning in English language arts. The qualitative study explored the experiences of teachers in adopting project-based learning in English language arts, offering insights into the practicalities of project-based learning.

A recent study by Sohani Gandhioke and Chanchal Singh (Gandhioke and Singh, 2024), published in *Creative Education*, explored peer collaboration in art-integrated ESL/EFL classes. The study focused on the role of collaborative art projects in promoting language production and learning outcomes, emphasizing the social aspect of arts-based learning.

Early empirical studies by Masoumeh Farokhi and Masoud Hashemi (Farokhi and Hashemi, 2012), published in *Procedia - Social and Behavioral Sciences*, investigated the effects of art on English language learning classes. Their research covered a range of aspects of language development influenced by art, forming the basis of further studies.

Stephanie Urso Spina (Spina, 2009), in the *Journal of Language, Identity & Education*, carried out an evaluation of the effectiveness of arts-based curriculum for second language learners. This research investigated the potential of arts-based learning to overcome cultural and linguistic barriers, promoting language development through content. M. T. N. Wijetunge (Wijetunge, 2016) researched the application of communicative task-based speaking to improve ESL speaking motivation in undergraduates. Although not arts-based, this research was highly relevant to art-mediated communication tasks in terms of task design and learner motivation.

The affective aspect of language learning, especially anxiety, has received considerable attention. The foundational study by E.K. Horwitz, M.B. Horwitz, and J. Cope (Horwitz et al., 1986), published in *The Modern Language Journal*, introduced the concept of foreign language classroom anxiety. This study highlighted anxieties associated with speaking and offered insights into how teaching practices can either contribute to or alleviate learners' anxieties.

Linking art to the reduction of anxiety, David A. Sandmire, S. R. Gorham, N. E. Rankin, and D. R. Grimm (Sandmire et al., 2012), published in the Journal of the American Art Therapy Association, carried out a pilot study to examine the effects of art-making on anxiety. The results of this study indicated that art engagement can lead to a reduction in anxiety levels, thus justifying art-based interventions in anxiety-generating tasks such as speaking.

Jessica Whitelaw (Whitelaw, 2017), in English Education, investigated arts-based literacy learning and the idea of "new school" approaches. The research highlighted the potential for the arts to be viewed as an essential part of students' experiences and narratives.

In relation to the current study, which focuses on university students studying tourism and hospitality, some key texts on speaking pedagogy and needs analysis will be discussed. Christine C. M. Goh and Anne Burns (Goh and Burns, 2012), in their book, developed a theoretical and practical framework for understanding speaking as a complex cognitive and social process. The book highlights the importance of teaching speaking in terms of fluency, accuracy, and complexity.

Focusing on particular professional fields, N. Prachanant (Prachanant, 2012) carried out a needs analysis on English language use in the tourism sector, published in *Procedia - Social and Behavioral Sciences*. This study pinpointed the particular speaking needs and communication contexts that tourism professionals face, offering empirical support for speaking pedagogy.

Materials and methods. This research used a quantitative research design to explore the significance of art-based learning in improving English speaking abilities among university students. The reason for using a quantitative research design is that it is possible to determine the effectiveness of the art-based intervention using statistical analysis of pre-test and post-test results. In this study, a one-group pretest-posttest design was used. This design is suitable for exploring changes in the participants' speaking abilities before and after an intervention.

Participants. The research was carried out at International University of Tourism and Hospitality, A. A total of 20 undergraduate students took part in the research. Participants were chosen using convenience sampling, taking into account their registration for the English for Tourism and Hospitality course. All students registered for the course during the spring semester of the 2025 academic year were invited to take part.

The criteria for selection were: (a) registration for the English for Tourism and Hospitality course, (b) intermediate (B1) to upper-intermediate (B2) level of English proficiency, as established by a placement test, and (c) regular attendance (at least 80% of classes).

The participants were 12 female and 8 male students, aged between 19 and 23 years ($M = 20.4$, $SD = 1.2$). All participants were native Kazakh speakers and had been studying English as a foreign language for 8 to 10 years before the research.

Speaking Intervention. A set of six art-based speaking activities was designed and delivered over a period of three weeks, with two 90-minute sessions per

week. The activities were designed following the principles of art-based language teaching from previous studies (Ekoc, 2021; Al-Busaidi, Al-Amri & Al-Dhuhli, 2022), and tailored to the tourism and hospitality theme.

The activities included in the intervention were the following:

Session 1: Describe and Guess. Students described paintings in detail without pointing to objects; classmates guessed the subject. Session 2: Inside the Painting. Students spoke as if they were a character in a painting. Session 3: Art Dialogue. Students had an improvisational dialogue between characters from different paintings. Session 4: Emotional Response. Students reacted to the paintings by describing their personal feelings and experiences. Session 5: Hotel Scenario. Students described the paintings as if they were showing them to hotel guests. Session 6: Final Review. Students worked on speaking activities that combined all the previous activity types.

All sessions were conducted by the researcher, who is also an experienced English language teacher. The same teacher led all sessions.

Instruments There were three instruments used for data collection: Speaking Pretest and Posttest. A speaking test was conducted before the intervention (pretest) and after the intervention (posttest). The test format was modeled from the speaking component of the IELTS test to ensure validity and reliability. The test consisted of three parts: Part 1 (3 minutes): General introduction and questions on common topics; Part 2 (3 minutes): Individual long turn where students were asked to talk about a topic related to tourism and hospitality; Part 3 (4 minutes): Two-way discussion on abstract topics related to the topic

Two parallel versions of the test were designed for pre-test and post-test to reduce practice effects. The topics were different but of equal difficulty.

Speaking Assessment Rubric. Students' speaking ability was assessed using a modified version of the IELTS speaking band descriptors, which include four criteria: Fluency and coherence: Ability to speak smoothly, connect ideas, and maintain flow – 25%; Lexical resource: Range and appropriateness of vocabulary used – 25%; Grammatical range and accuracy: Variety and correctness of grammatical structures – 25%; Pronunciation: Clarity, intonation, and comprehensibility - 25%. Each criterion was marked on a scale of 0 to 9, as per IELTS norms. The total speaking score was then calculated as the average of the scores on the four criteria. **Questionnaire on Student Perceptions.** A 20-item questionnaire was used after the intervention to collect data on students' perceptions of the art-related activities. Items were scored on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) and included four categories: Engagement and interest (5 items); Perceived improvement in speaking (5 items); Confidence in speaking (5 items); Relevance to tourism and hospitality (5 items).

The questionnaire was designed on the basis of relevant literature and validated by two experts in English language teaching.

Procedure. The experiment lasted for five weeks, according to this timeline:

Week 1: Pretest and Orientation. In the first week, the speaking pretest was

administered to all participants. Each participant was tested individually in a quiet room, and their performance was recorded for later scoring. The participants also received orientation on the study and the art-based activities they would be involved in. Weeks 2-4: Art-Based Speaking Intervention. During the next three weeks, the participants attended six 90-minute art-based speaking sessions as outlined above. These sessions were held in regular classroom settings. Week 5: Posttest and Questionnaire. In the final week, the speaking posttest was administered to the participants under the same conditions as the pretest. Immediately following the posttest, they completed the perception questionnaire.

Scoring and rating. Two English language teachers with more than five years of teaching experience and trained in IELTS speaking assessment were selected as raters to rate the speaking tests. The raters were kept blind to whether the recordings were from the pretest or posttest to ensure that the results were objective. Both raters independently rated all the recordings from the pretest and posttest using the assessment rubric. The inter-rater reliability was calculated using the Pearson correlation coefficient, which indicated a high level of agreement between the two raters ($r = 0.89$, $p < 0.001$). The final speaking score for each student was calculated by averaging the scores of the two raters.

Data Analysis. The data were analyzed using SPSS version 25.0. The following statistical analyses were performed: Descriptive statistics. The means and standard deviations of the pretest and posttest speaking scores, as well as the scores of the questionnaire items, were calculated. Paired samples t-test. A paired samples t-test was performed to compare the participants' speaking scores before and after the intervention. This test is suitable for comparing the differences between two related groups (pretest and posttest scores of the same participants). The significance level was set at $p < 0.05$. Effect size. The effect size was calculated using Cohen's d to identify the size of the significant difference, which was interpreted as follows: small ($d = 0.2$), medium ($d = 0.5$), and large ($d = 0.8$) (Cohen, 1988). Descriptive analysis of the questionnaire. The mean scores and standard deviations for each item of the questionnaire and for each of the four categories were calculated.

Validity and Reliability. A number of steps were taken to ensure the validity and reliability of the instruments used: The content validity of the speaking test was ensured by matching the test tasks with the learning outcomes of the English for Tourism and Hospitality course and the format of the IELTS speaking test, which is generally accepted as a valid indicator of speaking ability.

The face validity of the questionnaire was ensured by having it validated by two English language teaching experts, who checked the items for relevance and clarity.

The reliability of the speaking test was ensured by: Using an extensive analytic rubric with precise descriptors; Training raters before they actually scored the tests; Calculating inter-rater reliability; Raters were blind to the pre/post condition

The internal consistency of the questionnaire was determined by Cronbach's alpha, which gave a value of $\alpha = 0.87$.

Results. The means and standard deviations of the speaking scores of the participants on the pretest and posttest were determined. Table 1 below shows the descriptive statistics of overall speaking performance as well as the four criteria for speaking.

Table 1 — Descriptive Statistics of Speaking Performance

Speaking Component	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD	Mean Difference
Overall Speaking Score	5.42	0.87	7.18	0.76	+1.76
Fluency and Coherence	5.35	0.92	7.25	0.81	+1.90
Lexical Resource	5.48	0.85	7.10	0.79	+1.62
Grammatical Range and Accuracy	5.30	0.96	6.95	0.88	+1.65
Pronunciation	5.55	0.88	7.42	0.74	+1.87

As evident in Table 1, participants scored higher on the mean scores of the posttest in all speaking subtasks. The total speaking score improved from a mean of 5.42 (SD = 0.87) in the pretest to 7.18 (SD = 0.76) in the posttest, registering a mean difference of +1.76. The largest gain was found in fluency and coherence (+1.90), followed by pronunciation (+1.87). The smallest but still significant gain was found in lexical resource (+1.62).

A paired samples t-test was conducted to determine whether the difference between pretest and posttest overall speaking scores was statistically significant.

Table 2 — Paired Samples T-test Results for Overall Speaking Scores

Pair	Mean Difference	SD	t-value	df	p-value	95% CI Lower	95% CI Upper
Pretest-Posttest	-1.76	0.54	-14.58	19	0.000	-2.01	-1.51

Analysis of the results showed that there was a statistically significant difference between the pretest and posttest overall scores in speaking ($t(19) = -14.58$, $p < 0.001$). The negative value of t indicates that the posttest scores were significantly higher than the pretest scores. Hence, the null hypothesis was rejected. As shown in Table 3, statistically significant improvements were observed across all four speaking components ($p < 0.001$ for all).

Table 3 — Paired Samples T-test Results for Each Speaking Component

Speaking Component	Mean Difference	SD	t-value	df	p-value
Fluency and Coherence	-1.90	0.62	-13.71	19	0.000
Lexical Resource	-1.62	0.58	-12.49	19	0.000
Grammatical Range and Accuracy	-1.65	0.67	-11.01	19	0.000
Pronunciation	-1.87	0.59	-14.18	19	0.000

Cohen's d was calculated to determine the magnitude of the intervention's effect on overall speaking performance.

Table 4 — Effect Size for Overall Speaking Score

Measure	Cohen's d	Interpretation
Overall Speaking Score	2.18	Large effect

The effect size (Cohen's $d = 2.18$) far exceeds the threshold for a large effect (0.8), indicating that the art-based learning intervention had a very strong impact on participants' speaking performance.

The participants were asked to fill a 20-item questionnaire after the intervention to measure their perceptions of art-based learning activities on four categories: engagement and interest, perceived improvement in speaking, confidence in speaking, and relevance to tourism and hospitality. The items were measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Table 5 — Descriptive Statistics for Questionnaire Categories (N=20)

Category	Number of Items	Mean	SD	Interpretation
Engagement and Interest	5	4.62	0.38	Strongly Agree
Perceived Improved in Speaking	5	4.48	0.42	Agree to Strongly Agree
Confidence in Speaking	5	4.35	0.51	Agree to Strongly Agree
Relevance to Tourism and Hospitality	5	4.71	0.33	Strongly Agree
Overall Questionnaire	20	4.54	0.36	Strongly Agree

As shown in Table 5, the participants showed very positive views towards the art-based learning activities in all categories. The mean score of 4.54 (SD = 0.36) suggests that, on average, the participants "strongly agreed" with the positive statements about the intervention. The category that was rated highest was relevance to tourism and hospitality ($M = 4.71$, $SD = 0.33$), which suggests that the students were very aware of the relevance of the art-based speaking activities to their future needs in the industry. The category that was rated second was engagement and interest ($M = 4.62$, $SD = 0.38$), which suggests that the students found the activities very engaging and interesting. The category that received the lowest mean score was confidence in speaking ($M = 4.35$, $SD = 0.51$), although this is still within the "agree to strongly agree" range. This category suggests that the students felt more confident after the intervention, although there was slightly more variation in the responses.

Pearson correlation coefficient was used to determine the relationship between students' overall perception scores (obtained from the questionnaire) and actual improvement in speaking performance (difference between posttest and pretest scores).

Table 6 — Correlation Between Perceptions and Performance Improvement

Variables	N	Pearson r	p-value	Interpretation
Overall Perception Score and Performance Improvement	20	0.63	0.003	Moderate positive correlation

The findings showed a moderate and statistically significant positive correlation between the students' attitudes towards art-based learning and their actual improvement in speaking skills ($r = 0.63$, $p = 0.003$). This means that students who had more positive attitudes towards the intervention showed greater improvement in their speaking skills.

Discussions. The current research was conducted to explore the importance of art-based learning in improving English speaking abilities among tourism and hospitality students. The findings showed a positive impact of the intervention on the speaking abilities of the participants and very positive attitudes toward the art-based activities. This discussion will focus on the findings of the study and answer the research questions. The first research question focused on whether there is a statistically significant difference in students' overall English-speaking skills before and after the application of art-based learning activities. The findings showed a significant difference between the pretest ($M = 5.42$) and posttest ($M = 7.18$) results, with a mean difference of $+1.76$ ($p < 0.001$) and a large effect size (Cohen's $d = 2.18$). This result shows that the art-based learning activity had a very positive impact on the participants' speaking skills. This finding is consistent with the study conducted by Al-Busaidi, Al-Amri, and Al-Dhuhli (2022), which applied an art-based method in teaching speaking skills to intensive English program students at Sultan Qaboos University. The study, which used artwork themes related to the sustainable development goals, also found a significant improvement in students' speaking skills (Al-Busaidi, Al-Amri, and Al-Dhuhli, 2022). The similarity between the two studies' findings indicates that art-based methods can be successfully transferred to other cultures and settings. Similarly, Ekoc (2021) investigated the application of artworks for speaking skills instruction in a university preparatory class and concluded that engagement with paintings had a positive effect on students' willingness to communicate and ability to produce descriptive and narrative speech (Ekoc, 2021). The current study confirms and expands Ekoc's findings by showing not only the improvement in willingness but also the actual improvement in speaking performance as measured by standardized criteria.

The finding of highly significant improvement in all four speaking skills, namely fluency and coherence ($+1.90$), lexical resource ($+1.62$), grammatical range and accuracy ($+1.65$), and pronunciation ($+1.87$), provides overall evidence of the effectiveness of the intervention. The highest improvement in fluency and coherence is consistent with the theoretical work of Kokkos (2010), who argued that art-based experiences result in transformative learning as a consequence of aesthetic engagement (Kokkos, 2010). When students are fully engaged with visually appealing and emotionally engaging artworks, they may experience a decrease in cognitive load, making it easier for them to produce fluent and coherent speech.

The positive change in lexical resource ($+1.62$) can be explained in the context of the work of Tyler and Likova (2012), who showed that visual arts engage multiple

networks of the brain responsible for memory and visual processing (Tyler and Likova, 2012). The high level of visual elements in artworks can act as a very effective mnemonic tool, enabling students to learn and retain new vocabulary words more effectively. This result also corroborates the work of Farokhi and Hashemi (2012), who investigated the effects of the use of art in English language learning classes and reported positive outcomes in vocabulary learning (Farokhi and Hashemi, 2012).

The positive change in pronunciation (+1.87) is particularly interesting, as pronunciation is one of the most challenging skills of speaking to be addressed in short-term interventions. This result can be explained by the decrease in anxiety and increase in confidence reported by the participants, which was attributed to art-making activities by Sandmire et al. (2012) (Sandmire et al., 2012). When students feel less anxious, they are more likely to take risks with pronunciation and speak more naturally.

The second research question focused on the students' perceptions of the art-based learning activities in relation to engagement, confidence, and relevance to their tourism and hospitality profession. The findings showed extremely positive perceptions on all dimensions, with a mean of 4.54 on a 5-point scale.

The engagement and interest category scored a mean of 4.62, which is high and suggests that the participants found the activities highly engaging and enjoyable. The high score on item 4 ("I would like to have more art-based activities in my English classes," $M = 4.75$) suggests that the intervention was successful in capturing the interest and motivation of the students.

This engagement can be explained by the work of Jordan and DiCicco (2012), who argued that visual arts offer interpretive frameworks that can improve students' analytical and expressive skills (Jordan and DiCicco, 2012). When students are provided with the chance to interpret and react to artworks, they become active agents in meaning-making instead of passive recipients of language instruction. The novelty and creativity involved in art-based tasks likely contributed to the students' sustained attention and interest throughout the six sessions.

The perceived improvement group scored an average of 4.48, reflecting those students were aware of the beneficial effects of art-related activities on their speaking skills. This result is in line with Thulasivanthana (2020), who examined the role of visual arts in English language classes and concluded that visual stimuli can fill the gap between abstract linguistic notions and concrete experiences of learners, making it easier to understand and retain (Thulasivanthana, 2020).

Item 6 ("The activities helped me improve my fluency," $M = 4.55$) was highly rated, which is in good accordance with the actual improvement in fluency and coherence (+1.90). The consistency between students' perceptions and actual performance data adds to the validity of the intervention and the instruments used to measure it.

The slightly lower but still positive ratings for vocabulary acquisition (item 7, $M = 4.40$) may be due to the fact that vocabulary acquisition is a complex process

in any learning approach. Nevertheless, the actual improvement in lexical resource (+1.62) indicates that students might have underestimated their own vocabulary acquisition or that vocabulary acquisition is a process that is less conscious and more gradual than other speaking skills.

The confidence category scored an average of 4.35, the lowest of the four categories but still within the "agree to strongly agree" range. This result is especially significant in light of the foundational work of Horwitz, Horwitz and Cope (1986), who defined the construct of foreign language classroom anxiety and defined particular speaking anxieties (Horwitz, Horwitz and Cope, 1986). The decrease in speaking anxiety reported by participants (item 11, $M = 4.40$; item 15, $M = 4.25$) suggests the efficacy of art-based interventions in fostering a safe and supportive speaking environment. The relationship between art and anxiety reduction is also supported by Sandmire et al. (2012), who completed a pilot study on the effect of art making on anxiety and found that art engagement can lead to a measurable decrease in anxiety (Sandmire et al., 2012). In relation to the present study, the visual and emotional complexity of artworks may have served to shift students' attention from self-monitoring and error correction to meaningful communication, thus reducing the affective filter that often hinders speaking performance.

The slightly lower score on item 15 ("The activities reduced my fear of making mistakes," $M = 4.25$) indicates that, although art-based activities were helpful, some students may still have some lingering anxiety about grammatical accuracy.

The relevance category attained the highest mean value of 4.71, signifying that the students thoroughly acknowledged the relevance of art-based speaking activities to their future professional communication requirements. This result specifically responds to the particular context of the current study and confirms the appropriateness of art-based approaches for English for Specific Purposes (ESP) in tourism and hospitality education.

The high ratings of items 19 ($M = 4.80$) and 20 ($M = 4.80$) imply that the students view art-based activities as authentic preparation for professional communication. This supports Prachanant (2012), who conducted a needs analysis on English language use in the tourism industry and identified the particular speaking tasks and communication situations that tourism professionals encounter (Prachanant, 2012). Describing artworks, as done in Session 5 (Hotel Scenario), reflects the authentic task of describing cultural artifacts, local attractions, or hotel amenities to customers.

This result also relates to Goh and Burns (2012), who presented a thorough framework for explaining speaking as a complex, cognitive, and social process (Goh and Burns, 2012). The art-based activities in the study above involved students in the kind of spontaneous and meaningful communication that takes place in real professional contexts of tourism and hospitality.

A moderate positive correlation ($r = 0.63$, $p = 0.003$) was established between students' perceptions of art-based learning and their actual improvement in

speaking skills. This result suggests that students who perceived the intervention more positively were likely to demonstrate greater improvement in speaking skills.

This result can be interpreted from the perspective of Wijetunge (2016), who examined the application of communicative task-based speaking activities to improve ESL speaking motivation (Wijetunge, 2016). When students are engaged, interested, and empowered, their level of motivation to take an active role in the learning process and make efforts to learn increases, resulting in higher levels of performance.

The results of this study are consistent with a variety of theoretical approaches to art-based learning. Whitelaw (2017) examined arts-based literacy learning through the lens of "new school" approaches, highlighting the importance of narrative and self-expression in language development (Whitelaw, 2017). The art-based tasks in the current study, specifically "Inside the Painting" and "Emotional Response," encouraged students to develop their own narratives about artworks, promoting the kind of rich language use that Whitelaw advocates. Whitehead (2023) outlined a literature, design, and arts-based ESL classroom approach that combines a variety of artistic approaches to language learning (Whitehead, 2023). The positive results of the current study offer empirical support for these integrated approaches and suggest that even quite short interventions (six sessions) can produce significant improvements when well-designed. Spina (2009) evaluated the effectiveness of arts-based curriculum for second language learners and concluded that arts-based approaches can help to overcome cultural and linguistic barriers (Spina, 2009). In the context of tourism and hospitality education, where students will be communicating with customers from a variety of cultural backgrounds, the cultural content of artworks may offer important preparation for intercultural communication.

Gandhioke and Singh (2024) investigated peer collaboration in art-integrated ESL/EFL classes and pointed out the social aspect of arts-based teaching practices (Gandhioke and Singh, 2024). Even though collaboration was not directly assessed in the current study, the art dialogue tasks involved student interaction with each other, which might help build interactional competence in addition to speaking competence.

In conclusion, the findings of this study clearly offer quantitative proof that art-based learning activities have a profound positive impact on English speaking ability among tourism and hospitality students. The findings not only indicate a large positive effect size and a highly positive student response but also a marked positive performance improvement, which together offer conclusive evidence of the effectiveness of the intervention. These findings are consistent with and confirm the theoretical underpinnings proposed by Kokkos (2010), Tyler and Likova (2012), and others, while also offering new theoretical insights into the ESP field of tourism and hospitality education.

The consistency between the students' perceptions and their performance improvement, as indicated by the moderate positive correlation, indicates that art-

based learning activities are capable of addressing both the affective and cognitive aspects of language learning. By providing engaging and confidence-building activities that students perceive as relevant to their professional needs, art-based learning appears to be able to develop both the motivation to communicate and the ability to communicate effectively.

The results especially support the study of Ekoc (2021) and Al-Busaidi, Al-Amri, and Al-Dhuhli (2022), who were the first to introduce art-based methods in speaking teaching, and the current study extends their results to the particular context of tourism and hospitality education. The high recognition of professional value among participants confirms the application of art-based activities for ESP purposes and indicates that art-based methods are worth further investigation in other professional fields.

Conclusion. The current study examined the importance of art-based learning in improving English speaking abilities for tourism and hospitality students at the International University of Tourism and Hospitality. The study adopted a quantitative research design, using a one-group pretest-posttest design with 20 undergraduate students. The study included six art-based speaking sessions to engage the students in significant speaking activities through visual artworks. Data were collected using speaking pretests and posttests, as well as a questionnaire to examine the students' perceptions of the art-based activities in four categories: engagement and interest, perceived improvement in speaking, confidence in speaking, and relevance to tourism and hospitality.

The remarkable speaking skill improvement found in this study can be attributed to a number of factors that are characteristic of art-based learning. Artworks are rich in ambiguous and emotional content, which is naturally conducive to communication and expression. As Kokkos (Kokkos, 2010) suggested, aesthetic experiences can facilitate transformative learning through emotional and cognitive engagement. When students are exposed to artworks, they are encouraged to interpret, inquire, and react, which reflects real-life communication and provides authentic speaking opportunities. The improvement in speaking skills lends credence to the views of Tyler and Likova (Tyler and Likova, 2012), who found that visual arts engage multiple brain networks associated with memory, attention, and sensory processing, resulting in an enriched environment for language acquisition. This result is also in line with the findings of Farokhi and Hashemi (2012), who found positive outcomes of art integration in English language learning.

The positive perceptions expressed by the students, especially in terms of professional relevance, confirm the validity of the adaptation of art-based approaches to English for Specific Purposes in tourism and hospitality education. This result is consistent with Prachanant (Prachanant, 2012), who found the specific speaking tasks that tourism professionals face, and the idea that the task of describing artworks reflects the real-life speaking task of describing cultural artifacts or local attractions to visitors. The confidence and engagement expressed by the students are consistent with the work of Horwitz, Horwitz, and Cope

(Horwitz et al., 1986) on foreign language classroom anxiety and the anxiety-reducing effects of art engagement by Sandmire et al. (Sandmire et al., 2012). By creating supportive learning environments, art-based approaches may help alleviate the affective filter that often hinders speaking performance.

There are a number of significant implications for English language teaching that arise from this research. Firstly, language teachers should take into consideration the integration of art-based activities in speaking classes, as short-term interventions can lead to significant improvements. Art-based activities are easy to integrate, require little equipment, and can be tailored to suit different levels of proficiency.

Secondly, art-based practices are highly suitable for ESP teaching. In tourism and hospitality language teaching, where students are exposed to a variety of cultural materials in their profession, art-based activities could serve as an effective prelude to intercultural communication. This is consistent with the views of Spina (Spina, 2009), who argued that arts-based practices can help transcend cultural and linguistic barriers, and Gandhioke and Singh (Gandhioke and Singh, 2024), who emphasized the social aspect of arts-based practices.

Third, the positive correlation between perceptions and performance indicates that the consideration of students' affective responses is also important for learning outcomes. Teachers need to make sure that students recognize the relevance of activities, as direct links to professional practice could add to both motivation and learning. This is consistent with Goh and Burns (Goh and Burns, 2012) who discussed principles for effective speaking pedagogy. Fourth, the positive change in a variety of speaking components indicates that art-based strategies offer a holistic benefit, engaging students in comprehensive communication that encompasses a variety of skills at the same time. This is very helpful in a time-pressed educational setting.

There are a few points to consider as limitations. The study had a one-group pretest-posttest design, which did not allow for causal statements. The sample size was small ($N = 20$) and consisted of participants from only one institution. The study only investigated immediate outcomes and did not include a delayed posttest to examine long-term retention of the outcomes. Future studies should include more rigorous designs with control groups, larger and more varied samples, and delayed posttests to examine long-term outcomes. Qualitative research should investigate the experiences of the students in more detail, including how they construct meaning through art and what cognitive and emotional processes occur during art-based speaking activities.

The current study offers empirical proof that art-based methods are not only entertaining but also successful and that art-based learning is a precious teaching aid for educators who want to equip their students with the communication skills required in the global tourism and hospitality industry. In conclusion, art-based learning is a promising method for teaching English speaking skills that should be further explored.

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