International Journal of Innovative Research and Scientific Studies, 8(3) 2025, pages: 916-926

IJIRSS
International Journal of Innovative Research & Scientific Studies

ISSN: 2617-6548

URL: www.ijirss.com

Enhancing Spanish speaking skills of undergraduate students with metaverse role-playing

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Abstract

Speaking is one of the fundamental communicative skills in a language. However, most learners experience problems in speaking a foreign language fluently and lack confidence. This research aims to enhance the Spanish speaking skills of undergraduate students using role-playing as a teaching method and incorporates it into the metaverse, which was designed and created as virtual scenes in Spain, resulting in a Metaverse role-playing approach to enhance Spanish speaking skills. The approach was implemented with a sample group of 34 undergraduate students from Kasetsart University, Thailand, who enrolled in the Spanish for Communication 1 course for the academic year 2023, selected by a simple random sampling method and conducted using a one-group pretest-posttest research design. The findings of this research were: 1) The average post-test score (x-bar) of Spanish speaking skills of undergraduate students after the metaverse role-playing approach was significantly higher than before (pre-test) at the .01 level. 2) The average post-test score (x-bar) of Spanish speaking skills of undergraduate students after using metaverse role-playing was 87.50%, which was higher than the criteria set at 80%, with statistical significance at the .01 level. Therefore, the research concludes that the metaverse role-playing approach enhances students' learning achievement, thus also enhancing their speaking skills in Spanish.

Keywords: Metaverse, Role-playing, Spanish, Speaking skills.

DOI: 10.53894/ijirss.v8i3.6664
Funding: This research was funded by Kasetsart University Research and Development Institute (KURDI) and the Faculty of Humanities, Kasetsart University, Thailand. (Grant Number: YF(KU)17.65).
History: Received: 10 March 2025 / **Revised:** 11 April 2025 / **Accepted:** 14 April 2025 / **Published:** 2 May 2025

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.
Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.
Institutional Review Board Statement: The Ethical committee of Kasetsart University Research and Development Institute (KURDI), Thailand has granted approval for this study. (Ref. No. COE66/095).
Publisher: Innovative Research Publishing

1. Introduction

Speaking is one fundamental communication skill. The skill consists of the following sub-skills: 1) pronunciation 2) vocabulary 3) grammar and 4) fluency [1]. The latest sub-skill (fluency) is acquired through constant practice. However, most L2/L3 learners in Thailand encounter a problem: lack of fluency and confidence while practicing in a foreign language, especially with native speakers. According to the survey of academic performance of undergraduate students of Kasetsart

University, about 68.1% out of 101 students who enrolled in the Spanish for Communication 1 course of the academic year 2022 experienced problems in not speaking Spanish fluently and lack of confidence. This research, therefore, proposes a Metaverse role-playing approach to enhance Spanish speaking skills of the learners.

Role-playing is a widely-accepted and effective method used in speaking classes [2-4]. Role-playing creates opportunity for L2/L3 learners to practice in communicative situations and helps them speak more spontaneously. There are various recent studies that use role-playing in foreign language speaking classes [5-7], and the results of using it are optimal. Furthermore, in Cook et al. [8] and Harmer [9] it was proposed that in a role-play activity, using technology as an audiovisual tool can enhance learners' interest and engagement, especially in this era of disruptive technology. This research uses metaverse a 3D social media platform in which an immersive virtual world is created [10] as the technology to create scenes or situations for role-playing activity to make it more engaged and in consequently, to enhance speaking skills in a foreign language – Spanish, in this case.

the researcher selects the metaverse as the technology and platform for the following benefits: 1) the metaverse creates virtual 3D spaces that offer an immersive learning experience for learners; for example, places in Spain, 2) the metaverse supports independent learning; learners can join a role-play activity in the metaverse from anywhere and at any time they want by entering via a digital avatar. In this way, learners can study the skills at their own pace, 3) the metaverse supports real-time interaction between learners and instructors, especially through digital platforms, and 4) the metaverse supports cultural visualization through virtual scenes of countries around the world.

The objectives of this research are: 1) to develop Metaverse role-playing approach in order to enhance Spanish speaking skills of undergraduate students, 2) to compare undergraduate students' speaking skills scores before and after using Metaverse role-playing approach, and 3) to compare undergraduate students' speaking skills after using Metaverse role-playing approach with the criteria set at 80%. The research framework is as shown in Figure 1:

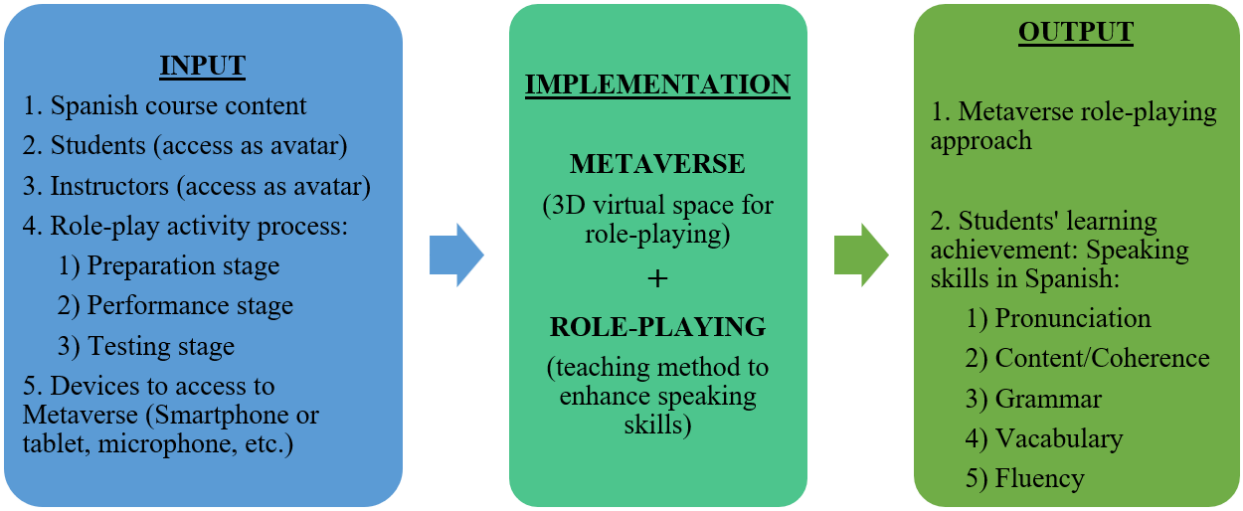

Figure 1.
Research Framework.

2. Literature Review

2.1. Speaking Skills and Assessment

Speaking skills are defined as a process to express thoughts, feelings, and knowledge through speech organs [11]. Speaking is a meaningful interactive process of communication which consists of producing and receiving a message, then analyzing it.

According to Brown [1] and Burn and Joice [12], speaking skills consist of the following competences: 1) grammatical competence 2) discourse competence 3) pragmatics competence and 4) strategic competence. Aside from those competences, fluency is another sub-skill that keeps the conversation flowing. Another sub-skill of speaking is comprehension and meaningful communication [13]. Finally, in Rizqiningsih and Hadi [14], the authors propose that the competence of reading between the line, predicting, and assuming are also included in speaking skills.

The process of teaching and learning speaking skills consists of the 3 following stages [15]: 1) presentation stage, in which the instructor introduces new content or a communicative situation. 2) practice stage, which includes all types of language practices, from controlled exercises to interactive activities. 3) communicative activities stage; in this last stage, learners have the opportunity to use the language in simulated situations and have more freedom to express themselves with the language they learn, such as through role-playing, group discussions, or interviews.

In the communicative activities stage, there is a widely-accepted technique called 'communicative task-based learning' [16-18]. This technique also corresponds to Vygotsky's socio-cultural theory that focuses on assigning tasks for communication and believes that the assigned tasks do help the intellectual process of learners while they do activities. The theory has 3 main key ideas: interaction, activities, and learning media [19]. In addition, Harmer [9] emphasizes the importance of using media as a learning tool (e.g., audiovisual media, technology), which stimulates, engages and motivates learners to immerse themselves in learning activities.

To assess learners' speaking skills, there are two main types of scoring rubrics: holistic and analytic. The former is a global assessment, while the latter consists of criteria and their scales [20]. Various authors have proposed criteria and scales for their rubrics. One example is obtained from Wier [21], where the author proposed 6 criteria: 1) appropriateness of language use 2) vocabulary 3) grammar 4) comprehension 5) fluency 6) coherence and relevance of content, with a 5-level scale rubric (0, 1, 2, 3, and 4). In the standardized test of Spanish language as a foreign language (DELE) organized by the Cervantes Institute (Spain), the criteria and scoring rubrics used to assess speaking skills depend on the candidate's level according to the MCER (in English – CEFR), and the assessment method is a real-time monologue and interview. For example, for A2-level candidates of DELE, the criteria are divided into two aspects: 1) language use (66%) and 2) achievement of task (34%), and there are 4 levels of scale (0, 1, 2, 3) [22].

To sum up, there is a variety of criteria and scales for 'analytic' scoring rubrics to assess speaking skills. Instructors can choose one or adapt from different rubrics to the class, depending on various factors such as the objectives of assessment, the component of speaking skills to assess, learners' level, etc. We can assume that the rubrics, in general, consist of the following 2 main criteria: 1) language uses (pronunciation, grammar, vocabulary and fluency) and 2) content (comprehension, relevance, coherence, task achievement and creative thinking). The scaling is varied, but most of them is from 0-5, depending on the skills we focus on. And finally, 'holistic rubrics' can also be used for a general and global scoring as well.

This research, therefore, designs the rubric by adapting from various rubrics presented above to assess Spanish speaking skills of students while they perform Metaverse role-playing. The rubric proposed in this research has 5 criteria: 1) pronunciation, 2) content and coherence, 3) grammar, 4) vocabulary, 5) fluency, with 4 scoring scales: 1,2,3 and 4 (as in Table 1).

2.2. Role-playing

Role-playing an activity in 'communicative task-based learning' approach [18]. In role-playing, each learner will be assigned a 'role' (character, profession, etc.), then they are allowed to do a rehearsal, and finally, perform role-play in classroom [23]. Role-playing is more than a general speaking exercise; it helps learners to improve their communicative skills and, moreover, lets them think, solve a problem, improvise, express their feelings, as well as enhance performing and teamwork skills [4]. In a role-play activity, it's important to include a problem-solving element, and recognize the result learners would get after doing the activity with a criterion, as well as fluent and spontaneous speaking skills so that learners could apply the skill in their real-life situations [24]. Role-playing can be classified in different ways according to its controlled level. It can be classified in 3 levels [25]: complete-scripted role-play 2) partial-scripted role-play and 3) non-scripted role-play. In the latest, learners are only given a situation. One of distinguish advantages of role-play is that it helps learners to communicate more fluently and use correct and natural language in real-life situations [3]. Other skills that learners could get from role-play activity are creative thinking, problem-solving, teamworking skills, performance and acting skills. In addition, learners would get to understand attitude or idea of people in various roles or professions through playing their roles. In Scarcella [26], it was found that role-playing represents learners' progressive in using a language, especially grammar and vocabulary, and helps them to use the language more spontaneously. According to Porter-Ladousse [4], in a role-play activity, learners always focus on using language to communicate rather than thinking about grammar, so they express in more natural way. Social interaction also plays an important role in the activity.

A role-play activity has almost the same process as other speaking activities, divided into 3 steps [27]: preparation stage, 2) presentation stage, and 3) post-presentation stage. In the first step, the instructor explains the situation, introduces the environment, assigns a role, prepares language use, and rehearses. In the second step, learners perform their role in the assigned situation. In this stage, the instructor evaluates and notes some comments or feedback. In the last stage, the instructor gives feedback and discusses with learners about the performance, language use, and any other comments.

2.3. Metaverse

There are various definitions of metaverse proposed in recent researches, in Cheng [10] for example, indicates that metaverse is a new form of social network that allow users interact as in real-life in an immersive virtual environment via digital avatar. According to Takyar [28] metaverse is defined as 3D virtual world with a high level of interaction: users can interchange, buy and sell digital assets or other goods, as well as interact like in the real-world. The default components of metaverse are hardware, software, and content [28]. Hardware refers to physical equipment (e.g., head mounted displays, screen, input devices, motion input devices, etc.), while software refers to programs used to create or apply metaverse. Software has many functions: being scene and objects generator, synthesize and recognize sound and speech, render motions, etc. Content refers to well-organized story or situations used as the base to create 'immersive experience' for an activity, thus the idea of content is important because it indicates how to design the metaverse. Content is displayed in multimodal representation. Cloud technology and 5G internet are used for a better interactive quality while using metaverse. Metaverse can be displayed on screen or HDM headsets. Users access and interact with each other in real-time through 'avatar' (their virtual representative). Metaverse, therefore, is like an immense world that includes all technology in its operating system

Metaverse and its features are very popular nowadays as it is not complicated to use, and is supported by many devices or platforms (e.g., smartphone, personal computer). Metaverse applications provide significant change for training and skills development, as it is used as a simulated situation for practice. Recently metaverse has been used more by educators, especially with generation Z learners, whose learning process tends to depend on technology and is hybrid [29].

The Metaverse can also be used as a virtual learning medium (e.g., 3D objects, AR, VR) to enhance the learning experience, especially in cases where learners need to practice a skill in real-like situations. Furthermore, the Metaverse increases interaction between instructors and learners [30]. Nowadays, it is evident that the Metaverse is applied in various

sectors; for instance, 1) virtual office and learning spaces, 2) blockchain with real-time communication, 3) communication platforms for doctors and patients, 4) business and virtual markets (e-commerce), 5) virtual tourism, 6) game innovation, 7) educational tools, etc. [28]. For language learning, the Metaverse tends to be an immersive and high-quality communicative platform for sharing knowledge and experiences among students. As an educational tool, instructors should educate students to focus on appropriate and creative uses of the Metaverse.

3. Methodology

This research is quasi-experimental research, with one group pretest-posttest research design. The research collects students' speaking skills scores before and after using the metaverse role-play approach to enhance Spanish speaking skills. The population of this research consists of 74 undergraduate students who enrolled in the Spanish for Communication I course, which is a free elective subject of the Faculty of Humanities, Kasetsart University, Thailand, open to students from any undergraduate program at the university. The sample for this research includes 34 students selected by the simple random sampling method. After studying theoretical information and recent research about speaking skills and assessment, role-playing, and the metaverse, the researcher designs the following investigation process and tools to collect and analyze data.

3.1. Approach Design

Combining the process of speaking [31, 32] and role-playing activities [27], the result is the 3-stage activities on metaverse: 1) preparation stage 2) performing stage and 3) evaluation stage. Metaverse are used as the platform for each stage of the process. Students can access to the metaverse anytime they need to practice, both by themselves and with friends.

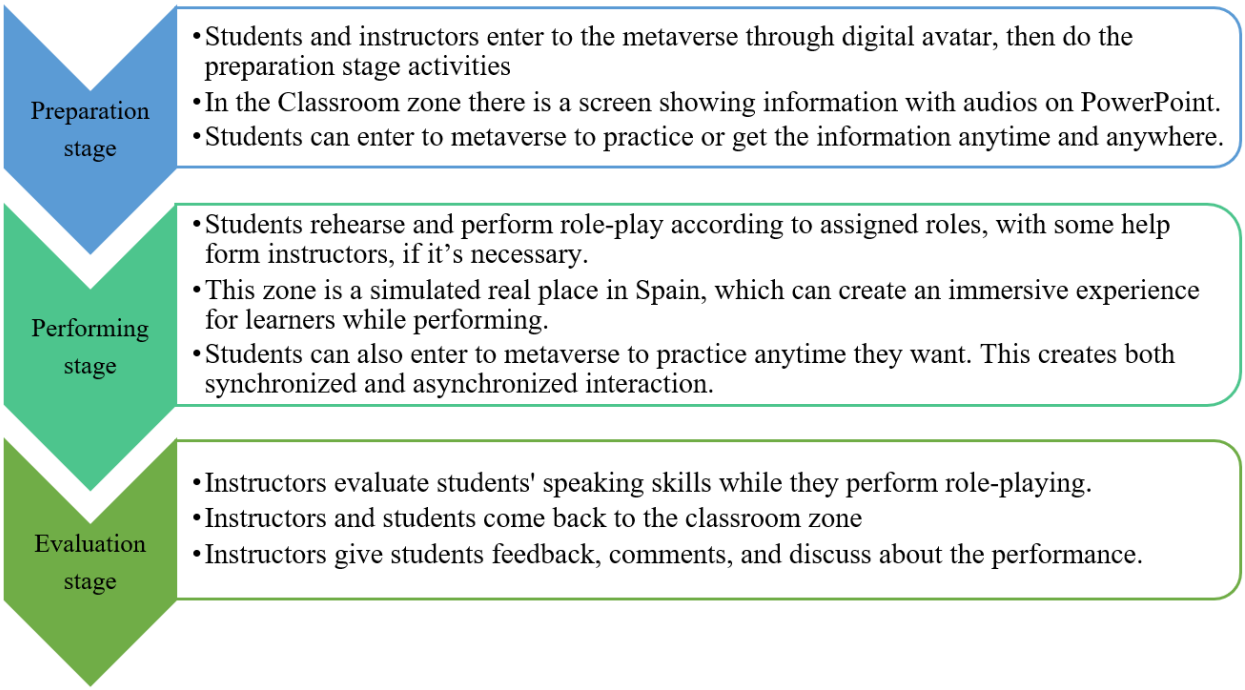

Figure 2.
Process of metaverse role-playing to enhance Spanish speaking skills.

3.2. Learning platform development

The researcher designed and created the virtual simulated scenes as in Spain on Metaverse, in order to create an immersive learning environment according to communicative situations in which students perform role-play. The situations, selected from the curriculum of the Spanish for Communication 1 course, consist of: 1) going shopping at a clothing shop in Spain, 2) giving directions at a tourist office in Spain, and 3) ordering food or beverages at a bar in Spain.

3D objects and realistic places in Spain are created using Blender and the Spatial program, as shown in Figures 3-5. Some items around the scene also include interactive audio with native speakers' voices. Students can click to listen to how each item is pronounced (Figure 6). The PowerPoint presentation program, with conversation in text and audio, is used as the lesson content on screen in the Classroom zone (for the preparation stage of each scene), as in Figure 7. Students can enter this zone to learn and practice at their own pace.

Figure 3.
Examples of scenes on metaverse: the tourist office.

Figure 4.
Examples of scenes on metaverse: the clothes shop.

Figure 5.
Examples of scenes on metaverse: the bar.

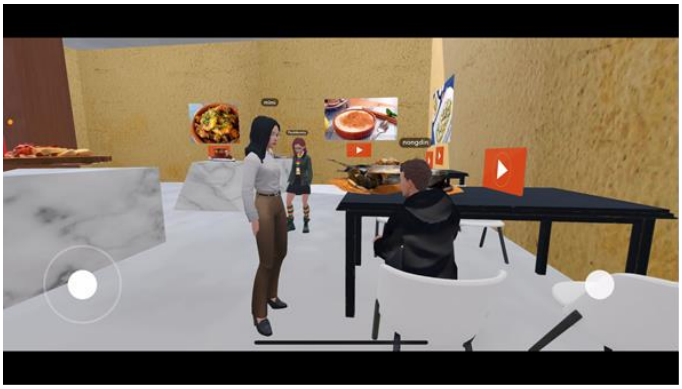

Figure 6.
Examples of items and interactive audio play button.

Figure 7.
Examples of Classroom zone with interactive PowerPoint presentation.

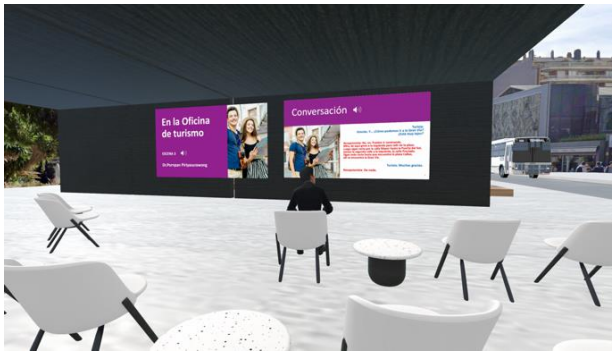

Figure 8.
Example of pre-test and post-test (No.1).

3.3. Testing Design

To achieve the objectives of the research, pre-tests and post-tests are designed and applied. The content of the pre-test and post-test is the same; however, the pre-test is conducted in the classroom while the post-test is conducted in the metaverse. The tests are conversation role-play quests in three situations: 1) going shopping, 2) giving directions, and 3) ordering food or beverages. The objectives and contents are clearly explained to the learners before they take the tests. In pairs or groups of three, students are assigned a role in each situation and then perform their roles using sentences in Spanish, as shown in the example of the pre-test and post-test (No.1) in Figure 8. Rubric scoring is used to assess students' speaking skills for both the pre-test and post-test. (See section 3.4 for the details of the rubric).

3.4 Scoring Rubrics Design

This research designs the following rubric scoring adapted from various rubrics mentioned in the Literature review section, and approved by native Spanish instructors, as shown in Table 1.

Table 1.
Scoring rubric for metaverse role-playing to enhance Spanish speaking skills.

Criteria	Scoring (Total 20 points)			
	4	**3**	**2**	**1**
Pronunciation	All clear. Correct intonation.	80% clearly. Some mistakes in intonation, but acceptable.	60% clearly. Not spontaneous intonation.	Less than 50% clearly. Lots of mistakes in pronunciation. Lack of intonation.
Content and coherence	Coherent interaction in determined situations without error while interacting (answering or asking). Able to create new expressions in context.	Coherent interaction in some situations, with 1-2 errors while interacting (answer or ask)	Lack of Coherent interaction in many situations. Lots of errors while interacting (answering or asking)	Most of interactions are incoherent and show lots of errors.
Grammar	Appropriately use of structures.	1-2 errors in use of structures.	50% appropriate use of structures.	Less than 50% appropriately uses structures.
Vocabulary	Precise use of words in a determined context.	1-2 errors in use of words in determined context.	50% precisely use of words in determined context.	Less than 50% precisely use of words in determined context.
Fluency	Appropriate tempo. Spontaneously. Appropriate use of tone and emotion. Some interjections or filling words (like *Bueno…*) while thinking.	A little bit too fast or too slow, but can be comfortably understood. A little pause while thinking.	Too fast or too slow, not a normal tempo. Long pause while thinking.	Way too fast or slow, difficult to understand, not spontaneously. Use of foreign words. Long pause while thinking.

In addition, the tools mentioned above in the section 3.1-3.4 are approved the validity and reliability by the experts before the implementation in 2 main aspects: 1) the quality of metaverse platform was approved by 2 experts in ICT for Education, and 2) the accuracy of language use (Spanish), the content, the tests, and the scoring rubric are also approved by 2 native experts in Spanish language teaching.

The average scores of quality assessment of the tools from the experts in the aspects of ICT for Education are 4.87 out of 5, with a standard deviation of 0.18, which is considered a very good level. Meanwhile, the average scores of quality assessment of the tools from the experts in the aspects of language use, content, and scoring rubrics are 4.75 out of 5, with a standard deviation of 0.25, which is also considered very good.

3.5. Implementation and collecting data

In this section, the process of implementation and collecting data presented in Figure 2 above will be explained in detail. The students, having basic knowledge of Spanish (A1-2), are assigned to do a pre-test (in-class role-playing test) in the 3 selected situations (as mentioned in the section 3.2) during the first week in classroom. Then, they access to the metaverse platform to practice during the next 3 weeks, and in the last week of the semester, they do the role-playing post-test on metaverse, in which the instructor give a final evaluation. The score collecting is related to the rubric of this research (see Table 1), which is 20 points for each situation. As we have 3 situations, the total score is 60 points for each student.

The metaverse platform consists of 3 scenes. Each scene is divided in 2 zones: classroom zone and the simulated-real places in Spain zone. Firstly, students enter the zone 1 to learn and revise the conversation. Then, they can move to zone 2 to practice the conversation in a simulated place. After that, they can move (or 'warp') to the other scenes to repeat the same process. In metaverse, student have the opportunity to practice in 2 styles of learning: synchronously and asynchronously. In the first one, students log in to the metaverse to practice Spanish speaking skills with their colleagues and instructor on a scheduled date and time, while in the second one, asynchronously, the students can access to the metaverse anytime and anywhere to practice during 3 weeks. The process is presented in the following chart (Figure 9):

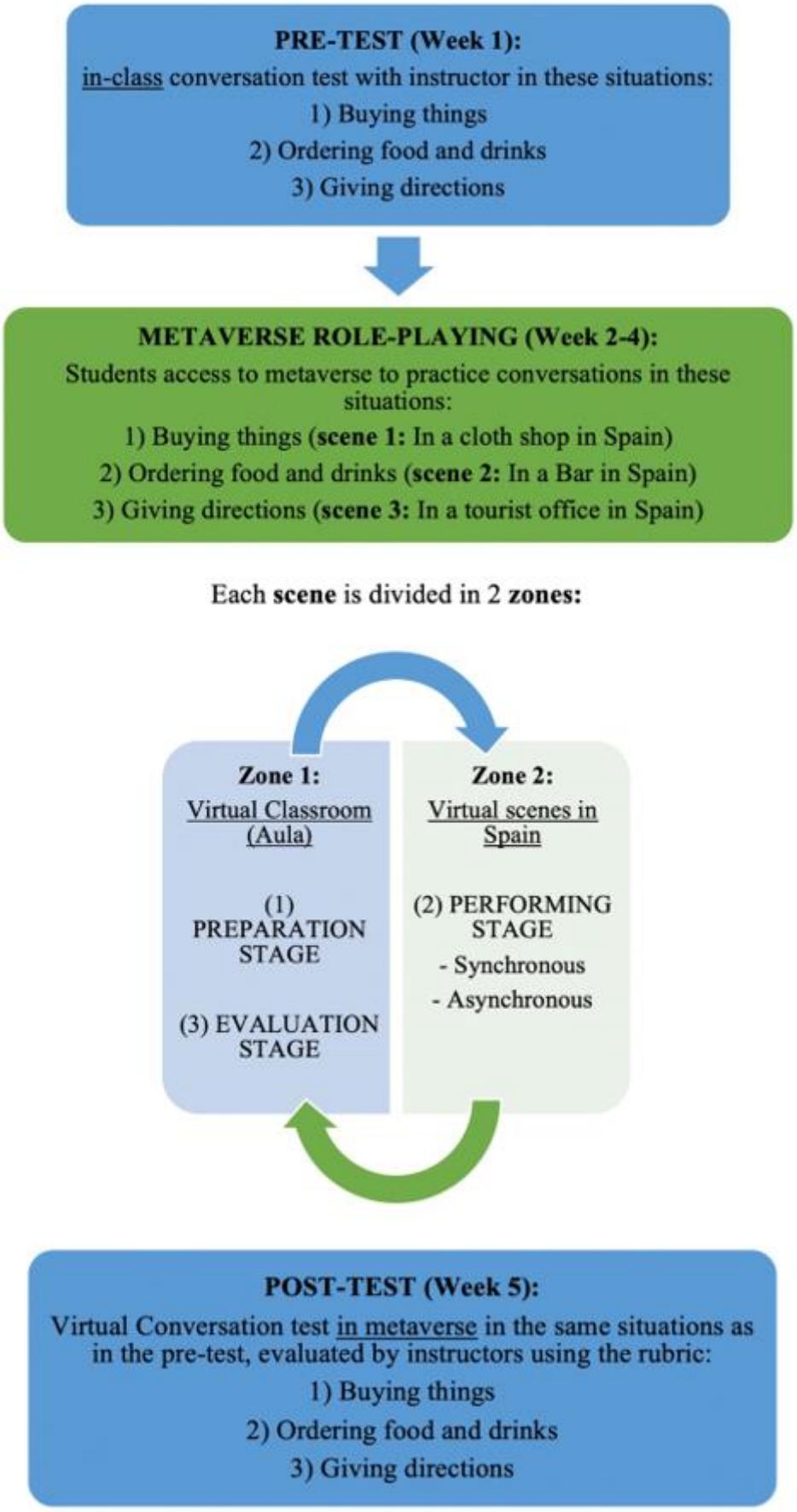

Figure 9.
Process of metaverse role-playing approach to enhance Spanish speaking skills.

Each scene is divided into 2 zones:

4. Results

This research developed a Metaverse role-playing approach to enhance Spanish speaking skills of L2/L3 undergraduate students, as presented in detail in the previous section. The results of the development are optimum: the metaverse platform was designed and created as virtual scenes in Spain, and the role-playing method was included in the practice of speaking skills through conversation in selected situations, combined with the study plan of the Spanish for Communication 1 course. The approach was certified for quality by the experts, and then it was applied with the L2/L3 undergraduate students, who are the sample group of this research. The findings are as follows:

4.1. Comparing Spanish Speaking Skills of Undergraduate Students Before and After Using Metaverse Role-Playing

The experiment with the sample group of 34 undergraduate students who practice speaking skills with metaverse role-playing shows the scores comparing before and after practicing, as the Table 2.

Table 2.
The result of comparing Spanish speaking skills before and after using metaverse role-playing

Students N = 34	**Spanish speaking skills (scores)**				**Score difference (D)**	**Score difference squared (D^2)**
	Before studying		After studying			
	Full score (60 points)	Percentage	Full score (60 points)	Percentage		
Average Score	40.09	66.81 %	52.50	87.50 %	421	5403

As presented in Table 2, the researcher analyzed the data by comparing Spanish speaking skills scores of 34 undergraduate students before and after practicing with metaverse role-playing by testing with t-test (dependent) statistics. The results were obtained as demonstrated in Table 3:

Table 3.
Results of the comparative analysis of Spanish-speaking skill scores of undergraduate students before and after using metaverse role-playing.

Testing	**n**	$\overline{X}$	**S.D.**	**t**
Before (pre-test)	34	40.09	3.47	30.08**
After (post-test)	34	52.50	2.53	

Note: $t_{(.01,33)} =$ 2.44, ** Statistically significant at the .01 level.

Table 3 shows the results of a comparative analysis of Spanish-speaking skills scores of undergraduate students before and after studying with metaverse role-playing. It was found that the statistical calculation results has a t-calculated value of 30.08, and t-table value of 2.44, therefore the t-calculated value has greater than the t-table value, so it's accepted H1 and rejected H0, that means Spanish speaking skill scores of undergraduate students after studying with Metaverse role-playing has higher value than before studying, and it's statistically significant at the .01 level.

4.2. Comparing Spanish-speaking skills of undergraduate students after using metaverse role-playing with the criteria set at 80%

The data analysis by taking Spanish-speaking skill scores of undergraduate students after studying with metaverse role-playing is calculated and compared with the specified criteria (at 80%). By testing with t-test statistics (one-sample group), the results are shown in Table 4.

Table 4.
Results of comparing Spanish speaking skills after using metaverse role-playing with the criteria set at 80%

N	$\overline{X}$	μ_0	**S.D.**	**t**
34	87.50%	80%	4.21	10.39**

Note: $t_{(.01,33)} =$ 2.44, ** Statistically significant at the .01 level.

In Table 4, the analysis comparing Spanish speaking skills scores of undergraduate students after studying with metaverse role-playing was found that the results of statistical calculations calculated by t-test statistics has a value of 10.39, while the t-table value had a value of 2.44. The calculated t value has greater than the t-table value therefore, we accept H1 and reject H0. That is, the Spanish speaking skills scores of undergraduate students after studying with metaverse role-playing has an average score higher than the specified criteria of 80% with statistical significance at the .01 level.

5. Conclusion and Discussion

The results show that Metaverse role-playing approach significantly enhances students' learning achievements. This leads to the following research conclusions:

1) Students significantly develop their Spanish speaking skills after using the Metaverse role-playing approach in practicing conversation, both synchronously and asynchronously.

2) The average scores of students' Spanish speaking skills after studying with the Metaverse role-playing approach were higher than before, exceeding the criteria set at 80%, with statistical significance at the .01 level, which can be interpreted as a very good level.

The conclusions mentioned above indicate that the Metaverse role-playing approach helps students improve their speaking skills by creating an immersive environment in which they perform role-playing and practice speaking. Role-play helps students engage with the situation and can achieve the objective of the lesson, Thisana [33]. The Metaverse role-playing approach is, in addition, qualified in both the production technique and content. This demonstrates that the research is under internal validity control in every process, as shown in the methodology section. In addition, the metaverse platform is designed according to the learning strategy and objectives of the subject. Virtual, real-like scenes allow students to practice with a more immersive experience, resulting in the students' Spanish speaking skills scores after using the metaverse role-play being significantly higher than before.

The conclusions also correspond to other recent studies. In Alghamdy [5], the author compares the potential of using role-play strategy and traditional teaching in developing 10-13-year-old students' learning achievement in English as a foreign language in communicative skills. The results show that the learning achievement between the pre-test and post-test of students is significantly greater than that of students who use the traditional method. Another study [34] concluded that Metaverse-Based Immersive Learning significantly improves TESOL curricula, as learners accepted the use of the metaverse more readily. Considering the progressive achievement, it is convincing that while performing role-play, students have the opportunity to practice speaking, imitating, repeating, confirming, responding, giving opinions, providing examples, etc. In [35], it was also found that students' language competencies can be developed through role-play activities.

In conclusion, with the Metaverse role-playing approach, students develop speaking skills in many aspects better than in a traditional speaking class.

References

[1] H. D. Brown, *Teaching by principles: An interactive approach to language pedagogy*, 2nd ed. New York: Longman, Inc, 2001.
[2] N. Chareechum, "Role-play activity in teaching english for police trainee," *Journal of Lawasri,* vol. 4, no. 1, pp. 101-108, 2020.
[3] B. Kowalska, *Let them talk in English*. Warsaw: School and Pedagogical Publishing House, 1991.
[4] G. Porter-Ladousse, *Role-play*. Oxford: Oxford University Press, 1987.
[5] R. Alghamdy, "How do EFL learners interact and learn English communication skills during a role-play strategy?," *World Journal of English Language,* vol. 12, no. 1, pp. 313-320, 2022.
[6] T. Baranovskaya and V. Shaforostova, "Learner autonomy through role plays in English language teaching," *Journal of Language and Education,* vol. 4, no. 4 (16), pp. 8-19, 2018.
[7] W. Budi, "Task-based language teaching and theme-based role-play: Developing EFL learners' communicative competence," *Electronic Journal of Foreign Language Teaching,* vol. 16, no. 1, pp. 153-168, 2019.
[8] A. S. Cook, S. P. Dow, and J. Hammer, "Towards designing technology for classroom role-play," in *Proceedings of the Annual Symposium on Computer-Human Interaction in Play*, 2017, pp. 241-251.
[9] J. Harmer, *The practice of English language teaching*. Edinburgh: Pearson Education Limited, 2001.
[10] R. Cheng, "Will metaverse be nextg internet? Vision, hype, and reality," *IEEE Network,* vol. 36, no. 5, pp. 197-204, 2022.
[11] R. Barrass, *Speaking for yourself: A guide for students*. New York: Routlegde Taylor and Francis Group, 2006.
[12] A. Burn and H. Joice, *Focus on speaking*. Sydney: National Center for English Language Teaching and Research, 1997.
[13] A. E. F. T. Shiamaa, "The effectiveness of a task-based instruction program," Thesis Ain Shams University Women's College, 2006.
[14] S. Rizqiningsih and M. S. Hadi, "Multiple intelligences (MI) on developing speaking skills," *English Language in Focus,* vol. 1, no. 2, pp. 127-136, 2019.
[15] R. Eckard and M. Kearny, *Teaching conversational skill in ESL*. Washington, D.C: Center of Applied Linguistics, 1981.
[16] D. Byrne, *Teaching Oral English*. Harlow: Longman Group, 1991.
[17] R. A. Carter and M. J. McCarthy, *Designing the discourse syllabus. In D. Hall and A. Hewings (Eds.). Innovation in English Language Teaching. A Reader*. London: Routledge, 2001.
[18] R. Dinapoli, "Promoting discourse with task-based scenario interaction," presented at the The International Conference on Language for Specific Purposes (Barcelona, Spain, September 7-9, 2000) (ERIC Document Reproduction Service No. ED 454742), 2000.
[19] L. L. Myers, "Task interpretation and task effectiveness: A Vygotskian analysis of a French L2 classroom task," *Texas Papers in Foreign Language Education,* vol. 5, no. 1, pp. 9-21, 2000.
[20] A. J. Nitko, *Educational assessment of students*. United States: Merrill, 1996.
[21] C. J. Wier, *Understanding and developing language test*. Great Britain: Prentice Hall, 1993.
[22] Cervantes Institute, "DELE A2 exam guide," Retrieved: https://examenes.cervantes.es/sites/default/files/guia_examen_dele_a2_0..pdf. [Accessed 25 March 2025], 2025
[23] J. Scrivener, *Learning teaching*. Oxford: Oxford University Press, 2005.
[24] J. R. Willis, *A framework for task-based learning*. United Kingdom: Longman, 1996.
[25] S. Harper-Whalen and S. Morris, "Using a role-play activity in training," *Training Solutions,* vol. 9, no. 1, pp. 1-4, 2005.
[26] R. C. Scarcella, "Socio-drama for social interaction," *Tesol Quarterly,* vol. 12, pp. 41-46, 1978.
[27] P. Krish, "A role play activity with distance learners in an English language classroom," *The Internet TESL Journal,* vol. 7, no. 7, pp. 1-6, 2001.
[28] A. Takyar, "Metaverse use cases and benefits," Retrieved: https://www.leewayhertz.com/metaverse-use-cases-and-benefits/. [Accessed 25 Mar. 2025], 2025
[29] S. Park and S. Kim, "Identifying world types to deliver gameful experiences for sustainable learning in the metaverse," *Sustainability,* vol. 14, no. 3, pp. 1-17, 2022.
[30] S. P. Suryodiningrat, A. Ramadhan, and T. Hirashima, "The elements of every metaverse types: A systematic literature review," *TEM Journal,* vol. 13, no. 1, pp. 771-782, 2024.
[31] J. Baker and H. Westrup, *Essential speaking skills: A handbook for English language teachers*. London: Continuum, 2003.
[32] A. Hughes, *Testing for language teachers*, 2nd ed. Cambridge: Cambridge University Press, 2003.
[33] K. Thisana, *The science of teaching*, 2nd ed. Bangkok: Chulalongkorn University Publisher, 2007.

[34] S. Wardat and M. Akour, "Investigating the adoption of metaverse-based immersive learning in TESOL," *Emerging Science Journal*, vol. 8, pp. 396-409, 2025.

[35] M. Ziafar, N. Toughiry, and H. Z. Sadat, "The relationship between teaching conversation through role-play and the students' speaking development," *International Journal of Language Learning and Applied Linguistics World*, vol. 5, no. 1, pp. 547-553, 2014.