

Gamification in Foreign Language Learning: A Pathway to Inter-Cultural Communication Understanding in Reading Comprehension

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Abstract—As global interaction becomes increasingly prevalent, foreign language education must extend beyond grammatical instruction to foster linguistic proficiency and intercultural competence. Conventional reading methods in foreign language classrooms often lack the interactive and cultural dimensions needed to fully engage learners. This study investigates the role of gamification in enhancing reading comprehension and cross-cultural communication among students learning German. Employing a convergent mixed-methods approach, the study gathered quantitative evidence through CEFR-aligned reading assessments and learner questionnaires, while qualitative data were collected via classroom observation and in-depth interviews. The findings revealed notable progress in student outcomes, with average scores reaching 85 for A2 learners and 88 for those at the B1 level. Additionally, 92% of respondents acknowledged enhanced cultural insights, and 83% reported greater enthusiasm and involvement during the lessons. These results highlight that well-designed gamified learning environments can promote effective language development and deeper intercultural sensitivity. By integrating culturally rich scenarios and interactive elements, gamification offers a promising strategy for nurturing communicative competence in diverse educational settings.

Index Terms—gamification, foreign language, reading comprehension, intercultural communication

I. INTRODUCTION

A foreign language can be understood as a set of linguistic structures and a medium that enables individuals to connect across cultural lines. In today's globalized environment, mastering a foreign language means more than acquiring grammar and vocabulary—it involves gaining access to its speakers' worldview, values, and social practices. This kind of learning nurtures intercultural awareness and helps individuals develop the ability to interpret and understand meanings that lie beyond their cultural norms (Byram, 1997; Dervin & Gross, 2016). As a result, studying a foreign language broadens one's intellectual and cultural perspective, fostering openness and adaptability in diverse contexts.

Language significantly shapes how individuals interpret and engage with the world around them. The linguistic relativity theory, closely linked with scholars such as Sapir and Whorf, argues that language is a tool for communication and a framework that molds human thought and perception. Empirical studies in recent years affirm that bilingualism and exposure to multiple languages can influence cognitive abilities, including attention control, memory, and perception (Athanasopoulos et al., 2015; Idawati et al., 2025; Wolff & Holmes, 2011). In this context, learning a foreign language involves more than vocabulary acquisition—it becomes a cognitive process of adopting new ways of thinking. This mental flexibility enables learners to approach experiences from diverse cultural perspectives, fostering deeper critical thinking and enhancing intercultural understanding. Consequently, foreign language education plays a crucial role in shaping individuals who are more empathetic and globally minded (Proshina, 2015).

In line with the broader vision of language learning as a pathway to intercultural competence, German has become one of the prominent foreign languages taught in various universities across Indonesia. At the State University of Makassar,

for example, the German Education program under the Faculty of Language and Literature offers a structured curriculum from the first to the fourth semester. The courses are designed to develop students' proficiency from A1 to B1 levels, encompassing the four core language skills—listening, reading, writing, and speaking—along with grammar. Various instructional models, pedagogical strategies, and multimedia resources are employed to enhance comprehension and foster engagement. These approaches aim to build students' linguistic capabilities and introduce them to the socio-cultural dimensions of German-speaking countries, thereby fostering intercultural understanding and preparing learners for global citizenship.

Most students enrolled in the German Language Education Program at the State University of Makassar belong to Generation Z and Generation Alpha—demographics that have grown up immersed in digital technology, including social media, artificial intelligence, and virtual assistants. These generational characteristics have significantly shaped how they think, learn, and interact, thus necessitating a pedagogical shift in language instruction. Language education must now go beyond traditional content delivery to foster participatory, efficient, and collaborative learning environments. Although technological tools facilitate faster access to information, they do not necessarily guarantee deep comprehension. Based on the author's teaching experience, students frequently rely on smartphones to instantly translate texts rather than engaging in meaningful analysis and reflection. This behavior often results in shallow understanding, as it bypasses essential cognitive processes necessary for long-term retention. Therefore, the technology integration in language instruction must be accompanied by pedagogical strategies that promote critical thinking and active student engagement.

There is a growing need to design learning tools that align with students' digital lifestyles. One promising approach is gamification—the game elements in educational activities. Effective innovation in language instruction does not require sophisticated applications or large budgets; rather, it can be achieved through simple, low-cost tools that foster an enjoyable and dynamic classroom atmosphere. Observations indicate that students demonstrate a strong interest in digital games, often playing them during idle time before or during lectures. While this tendency may be difficult to eliminate, it presents an opportunity for educators. Integrating gaming elements into language instruction enables teachers to design learning experiences that align with students' interests and digital habits. Numerous studies such as Bai et al. (2024), Boudadi and Gutiérrez-Colón (2020), and Das et al. (2025) confirm that gamification enhances student motivation and engagement. However, much of the existing literature focuses on large-scale digital platforms and well-established online learning environments.

The gap in current research lies in the limited exploration of simple gamification strategies tailored to students' digital habits, particularly in teaching German as a foreign language in resource-constrained environments. This study addresses this gap by adopting a practical and contextual approach to gamification that aligns with the behavioral patterns of today's digital-native learners. It aims to assess the effectiveness of gamification in teaching German as a foreign language, explore students' perspectives on their participation in gamified learning activities, and evaluate educators' experiences in facilitating intercultural communication understanding through gamification. Furthermore, this research analyzes how gamification can enhance language skills, particularly in reading comprehension, while strengthening intercultural communication. It examines how gamification boosts student motivation and engagement and explores the pedagogical benefits of applying gamification to create a more effective and engaging learning environment. Regarding these aims, this study contributes to advancing the understanding of gamification implementation in resource-limited contexts, offering practical insights for educators and curriculum designers in adapting to the needs of digital-native students.

II. LITERATURE REVIEW

A. Gamification in Foreign Language Learning

Gamification in foreign language learning is a pedagogical approach that applies game elements, such as points, levels, challenges, narratives, and leaderboards, to the learning process to increase student motivation and engagement (Daemei et al., 2025; Das et al., 2025; Hsu, 2025; Mabalay, 2025). In the context of reading skills, gamification creates a fun and interactive learning atmosphere, which encourages students to understand the text more deeply. Munday (2016) showed that gamification-based learning applications, such as Duolingo, can increase student engagement in reading texts in foreign languages and strengthen learning outcomes. The reading activity becomes not just a passive task, but an active experience that triggers curiosity and continuous language exploration.

Furthermore, Flow theory, developed by Csikszentmihalyi and adapted by Subhash and Cudney (2018), explains that an optimal learning experience occurs when students experience a balance between the level of challenge and their abilities. When challenges in reading activities are matched to students' competency levels, they tend to experience a state of flow, which is a state of full engagement in the activity without boredom or frustration. This allows reading learning to be more focused, meaningful, and enjoyable. Gamification provides a design framework that supports this state, especially when students feel they are constantly improving and being rewarded for their efforts.

Keller's ARCS (Attention, Relevance, Confidence, Satisfaction) theory is an important foundation in designing effective gamification stated that applying ARCS-based gamification can increase students' intrinsic motivation, especially in cognitively demanding learning such as reading in a foreign language. Game elements that attract students' attention, are adapted to the target cultural context, increase confidence through solvable challenges, and provide satisfaction through digital rewards, have proven effective in improving the quality of the reading experience. This approach also supports students' metacognitive skills in understanding the content and structure of texts.

B. Intercultural Understanding

Gamification plays a significant role in developing Intercultural Communicative Competence (ICC), which is the ability to communicate effectively and appropriately in cross-cultural contexts. This competence encompasses cultural knowledge, awareness of self and other cultures, and the social skills necessary to navigate and respond to differences in values and norms (Byram, 1997). By integrating cultural elements into gamified learning activities, students can engage with foreign cultures in an immersive and reflective manner. Research by Won et al. (2023) argues that text-based activities and foreign cultural content within a gamification framework can enhance students' intercultural awareness. In contrast, narrative-based approaches such as role-playing and intercultural simulations allow students to experience cultural interactions and gain deeper insights into cultural differences (Zhang, 2020). In foreign language teaching, including German as a foreign language, gamification offers students opportunities to engage with cultural contexts through interactive and scenario-based games (Reinhardt & Thorne, 2016).

Research observes that virtual exchanges and cross-cultural games help students develop empathic perspectives, cultural sensitivity, and the ability to respond appropriately to cultural differences (O'Dowd, 2020; Zhang, 2020). These activities, such as puzzles focused on German customs or narratives of daily life in German-speaking countries, create an engaging environment for students to understand the language in its cultural setting, reinforcing linguistic and intercultural competence (Zhang, 2020). In addition, integrating gamified tasks with reading materials related to the target culture, such as folktales, newspapers, or fictional stories, encourages students to reflect on the culture and compare it with their own, fostering a deeper understanding of intercultural communication (Thorne, 1996). Furthermore, Byram (1997) Intercultural Communicative Competence (ICC) framework, which highlights skills such as interpreting and attributing cultural values and maintaining openness to other perspectives, aligns well with gamified learning approaches. Research supports this, showing that culture-based games enhance linguistic understanding while promoting empathy, tolerance, and respect for diversity (Sykes, 2018). These findings suggest that gamification is an effective pedagogical tool for improving language skills and a powerful strategy for developing global character traits, preparing students to communicate competently and sensitively in intercultural settings. By designing gamified learning activities that incorporate cross-cultural values, students are encouraged to engage in cultural dilemmas and social issues actively, strengthening their ability to analyze and respond to cultural conflicts (Hofstede & Pedersen, 1999).

The Common European Framework of Reference for Languages (CEFR) provides a robust foundation for integrating gamification with intercultural communicative competence (ICC) development in language education. It outlines structured benchmarks for assessing language proficiency, including descriptors for linguistic ability and intercultural awareness across levels from A1 to C2 (Council of Europe, 2020). The CEFR promotes a holistic approach to language learning, emphasizing the interconnection between grammatical accuracy, communicative effectiveness, and cultural understanding (North et al., 2018). In today's globalized world, the ability to interpret and adapt to diverse cultural contexts is essential for effective communication (Little, 2013). CEFR-based instruction encourages learners to engage meaningfully with cultural diversity, supporting inclusive and context-sensitive communication. Moreover, gamified learning activities aligned with CEFR principles can simulate real-life interactions in multicultural settings, enhancing linguistic competence and intercultural sensitivity (Sykes, 2018). By incorporating gamification into CEFR-oriented curricula, educators can design dynamic and engaging learning environments that support language acquisition and cultivate the intercultural skills necessary for competent communication in a global society (Thorne, 1996; Won et al., 2023).

C. Constructivist Learning Theory

The application of gamification in foreign language learning can be examined in depth through the lens of Constructivist Learning Theory, which holds that knowledge is not passively transferred, but actively constructed by the learner through interaction with the social environment and learning materials. In this context, interactive elements in gamification, such as story-based quizzes, reading challenges rooted in foreign cultures, and collaborative activities, encourage students to experience meaningful learning. This interaction-rich learning environment reinforces students' role as active agents who interpret and critically reflect on the meaning of texts. The study by Chen et al. (2005) confirms that gamification based on constructivism can increase students' participation, self-reflection, and curiosity towards culturally meaningful content.

Furthermore, the social interactions created through gamification activities reinforce the collaborative aspect of constructivism theory. Activities such as teamwork in understanding cross-cultural narratives or completing reading missions together facilitate the exchange of perspectives and the formation of shared meaning. Research results by Agbo (2004) when students work in teams to complete reading challenges linked to specific cultural values, they learn the language and understand the way of thinking of the society that owns the language. This proves that gamification-based learning designed according to the principles of constructivism increases motivation and develops cross-cultural awareness (Akhir & Suardi, 2024).

Using gamification elements that support learning autonomy (Do et al., 2025; Fang & Chiu, 2025; Hanus & Fox, 2015; Jiang & Zhao, 2025), such as leaderboards, achievement points, and personal narratives, gives students the space to learn at their own pace and learning style. This freedom reinforces ownership of the learning process and encourages deeper cognitive engagement. A recent study by Nasni Naseri et al. (2023) found that a gamification design that gives learners

control over their learning path can strengthen learning outcomes, particularly in critical reading and foreign text interpretation skills. This aligns with the key tenets of constructivism, namely personalized, contextualized, and reflective learning.

In intercultural communication learning, gamification acts as a bridge that connects students to authentic cultural contexts through symbolic representations in stories or narratives. In a gamified environment, students understand the text and experience the socio-cultural dynamics through their roles in the game. Li (2025) argued that gamification containing cultural story elements can increase empathy and understanding of other societies' values, key foundations in intercultural communication. Therefore, applying gamification based on constructivist theory strengthens students' linguistic understanding and shapes intercultural competencies that are essential in the global era.

III. METHODOLOGY

A. Research Design

This study uses a convergent mixed-methods design, where quantitative and qualitative data are collected simultaneously and analyzed separately, and then the results are combined to gain a comprehensive understanding. The quantitative approach was chosen to measure German reading skills objectively through standardized tests and questionnaires. In contrast, the qualitative approach explored students' learning experiences through participatory observation and interviews. By combining both methods, this research aims to triangulate the data to increase the validity of the findings.

B. Procedure for Collecting and Analyzing Data

Quantitative data were obtained through German reading tests at A2 and B1 levels and a closed-ended questionnaire. The reading test was designed based on CEFR standards, while the questionnaire was used to collect students' responses regarding learning difficulties or motivation. On the other hand, qualitative data was collected through participatory observation during the learning process and semi-structured interviews with students. Observations helped to record students' behavior directly, while interviews delved into their perceptions and learning strategies.

Quantitative data were analyzed using two techniques. First, an independent samples t-test was used to compare the significant difference between the reading ability of A2 and B1 level students. Second, the questionnaire results were analyzed using percentage techniques to identify student response trends. Meanwhile, qualitative data were analyzed using the Miles and Huberman method, which includes three stages: data reduction (selection and focus on relevant data), data presentation (visualization in tables or thematic narratives), and conclusion drawing (interpretation of emerging patterns or themes).

C. Population and Samples

This study's population was all German Language Education Program students at the Faculty of Language and Literature, especially in semesters 2 and 4. The research sample consisted of 75 students, with details of 35 A2 level students and 30 B1 level students. The sampling technique used was purposive sampling, where participants were selected based on specific criteria, namely language proficiency level (CEFR) and semester. This sample selection aims to ensure the representation of the group under study, namely students with basic (A2) and intermediate (B1) competence.

D. Materials

The research materials include quantitative and qualitative data collection instruments. CEFR standard A2 and B1 level questions, such as short texts with comprehension questions, were used for the reading skills test. The questionnaire contained closed questions to measure students' perceptions. Meanwhile, the observation guide included a format for recording student behavior, and the interview guide contained open-ended questions about the learning experience.

IV. FINDINGS

A. The Effectiveness of Gamification in Teaching German as a Foreign Language

The findings of the German language proficiency assessments, encompassing the A2 and B1 levels, demonstrate a notable improvement in students' ability to comprehend cross-cultural communication through reading and audio materials and to articulate their thoughts verbally and in writing. Implementing gamification strategies in the educational process has been identified as a pivotal factor in this improvement. The mean German language proficiency score at the A2 level is recorded as 85, while at the B1 level, it is documented as 88. According to the assessment rubric established by the Goethe Institut, both scores are categorized as "good." This success not only boosts students' confidence in their language skills but also highlights the potential of gamification in enhancing intercultural communication.

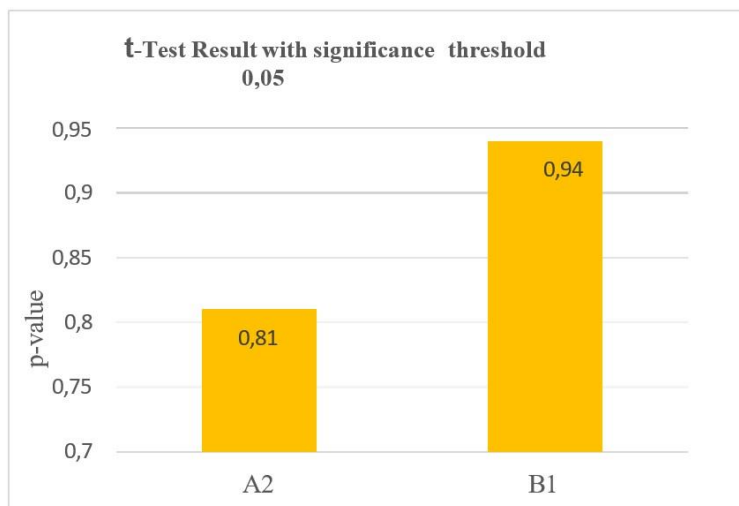


Figure 1. Results of the One-Sample t-Test for A2 and B1 German Reading Competencies

This study employs a one-sample t-test to evaluate the German Reading competencies at the A2 level against a population mean of 85. The results of the analysis show that there is no significant difference between the average score of each competency and the population score. All p-values obtained were more substantial than the significance threshold of 0.05, indicating no significant deviation from the reference values. Specifically, the p-values were 0.81 for reading. These values indicate that the mean skill score is not significantly different from 85. Thus, the available statistical evidence does not suggest a difference in achieving the four skills. From a practical perspective, these results show that no competency is superior or inferior. All skills were within a comparable range of scores, so no significant differences in learning effectiveness could be inferred.

The current study aims to evaluate whether there is a statistically significant discrepancy between the mean scores of German reading competencies at the B1 level (population score of 88) following instruction through the implementation of gamification techniques. The analysis was conducted using a one-sample t-test, and the findings indicated no statistically significant differences across all evaluated competencies. In the context of reading competency, the t-statistic value obtained was 0.60, with a p-value of 0.56. This indicates no statistically significant difference between the mean reading and population scores 87.

The statistical analysis revealed that none of the four competencies explicitly evaluated reading exhibited significant disparities from the established population average of 85 for A2 and 88 for B1 level. Consequently, the performance levels demonstrated by study participants in these competencies remained within a range that did not significantly deviate from the established norm.

B. Students' Perspective on Joining Gamified Learning Activities

The data regarding students' perceptions following foreign language learning, particularly in the realm of cross-cultural communication competence, is influenced by several factors. These factors encompass the extent to which students perceive the German language learning experience as practical and enjoyable, contingent on gamification; the degree to which gamification motivates students to pursue language learning; the extent to which gamification promotes active and interactive engagement during the learning process; and the elements of gamification that are most appealing to students. These inquiries have been carefully outlined in the subsequent questionnaire. The research data from the analysis of student responses can be seen in the following table:

TABLE 1
STUDENTS' PERCEPTION AFTER JOINING GAMIFIED LEARNING ACTIVITIES

No	Question	Answer		
		Choice	feedback	Percent
1.	How enjoyable do you find learning a language when it incorporates gamification elements, such as points, badges, leaderboards, and challenges?	very unenjoyable	0	0%
		unenjoyable	0	0%
		neutral	1	2%
		enjoyable	10	15%
		very enjoyable	54	83%
		Total	65	100%
2.	Do you feel more motivated to learn a language when it is engaging through Gamification?	Not at all	0	0%
		slightly motivated	0	0%
		neutral	0	0%
		moderately motivated	5	8%
		very motivated	60	92%
		Total	65	100%
3.	Which gamification elements do you enjoy the most in your language learning experience?	points/scores	15	23%
		badges/awards	20	31%
		leaderboards/rankings	14	22%
		challenges/levels	12	18%
		Game-based storyline or theme	4	6%
		Total	65	100%
4.	Do you think gamification helps you better understand the language material being taught?	not helpful at all	0	0%
		not helpful	0	0%
		neutral	10	15%
		helpful	25	38%
		very helpful	30	46%
		Total	65	100%
5.	How often would you like to see gamification included in your language learning activities?	never	0	0%
		occasionally	0	0%
		quite often	10	15%
		frequently	25	38%
		always	30	46%
		Total	65	100%
6.	Do you feel more confident using the language you learn after participating in gamified lessons?	not confident at all	0	0%
		not confident	0	0%
		neutral	15	23%
		confident	40	62%
		very confident	10	15%
		Total	65	100%
7.	Which do you find more effective in improving your language skills?	traditional learning (lectures, textbooks)	0	0%
		gamified learning	60	92%
		a combination of both	5	8%
		not sure	0	0%
		Total	65	100%
		8.	Does gamified language learning make you more actively engaged in class?	strongly disagree
disagree	0			0%
neutral	0			0%
agree	15			23%
strongly agree	50			77%
Total	65			100%
9.	Do you think gamification in language learning improves collaboration or interaction with classmates?	not at all	0	0%
		slightly	0	0%
		neutral	0	0%
		improves	5	8%
		greatly improves	60	92%
		Total	65	100%

The data in the table above shows that 54 students found it very enjoyable, and 10 students found it enjoyable to learn a language through gamification. However, one student chose "neutral" when given the option to select based on their experience. Regarding motivation, gamification in German language learning profoundly impacts students, as it motivates them to better understand intercultural communication during the learning process. Ninety-two percent of the research sample, or 60 students, felt highly motivated, and five felt moderately motivated by applying gamification in learning. Five gamification elements were measured: points and scores, badges and rewards, leaderboards and classifications, challenges and levels, and game-based storylines or themes. According to the data analysis, the badges/rewards element was the most popular among 20 respondents (31%). This was followed by points/scores, with 15 respondents (23%), and leaderboards/levels, with 14 respondents (22%). Meanwhile, challenges or levels were chosen by 12 respondents (18%), and the least preferred element was a game-based storyline or theme, with only four respondents (6%). These findings

suggest that gamification elements, such as personal rewards or recognition, are more appealing to participants than narrative or thematic elements. This may be crucial in designing more engaging and motivating language learning platforms.

Based on a survey of 65 respondents, data were obtained regarding the participants' perceptions of the effectiveness of gamification in supporting comprehension of the language material being taught. All participants were optimistic about incorporating gamification elements into the learning process. A total of 40 respondents (62%) indicated that gamification was very helpful, while 25 respondents (38%) stated that it was worthwhile. No respondents were neutral, unhelpful, or found the information not at all beneficial. This finding suggests that the gamification-based learning approach effectively enhances most participants' understanding of the material. This finding supports the argument that integrating gaming elements into learning can create a more enjoyable and meaningful learning experience.

The fifth and sixth questions describe students' perceptions and preferences regarding the application of gamification in German language learning activities and its impact on their confidence in using the language they have learned. When asked about the expected frequency of gamification applications in language learning activities, many respondents showed a strong preference. A total of 30 people (46%) wanted gamification to be used constantly, while 25 people (38%) chose a frequency of 'often'. Meanwhile, 10 respondents (15%) chose "quite often." There were no respondents who chose the 'occasionally' or 'never' options, indicating that all participants wanted gamification to exist at varying levels of engagement.

Regarding the impact of participation in gamified learning on confidence in using the language being learned, 40 people (62%) reported feeling more confident, and 10 people (15%) stated they felt very confident. Meanwhile, 15 people (23%) were neutral, and no respondents expressed less or no confidence. Overall, these data indicate that the consistent use of gamification elements is not only expected in the learning process but also contributes positively to participants' increased confidence in using the language they are learning. This finding reinforces the argument for the effectiveness of gamification strategies in foreign language education contexts. On the other hand, in the seventh question, most respondents showed a robust preference for gamification-based learning approaches. 92% of respondents chose gamified learning as the most effective method for improving their German language skills. Meanwhile, 8% of respondents indicated that combining traditional learning and gamification provided optimal results. There were no respondents who chose traditional learning exclusively or who were unsure of their choice. This finding suggests that the gamification approach is more relevant to participants' current needs and learning styles.

The eighth question, which focused on participants' active engagement in the classroom, was answered positively by all respondents. 77% of respondents strongly agreed, and 23% agreed that gamification-based German learning increased their active engagement in class. No respondents gave neutral or negative responses, reflecting a strong consensus on the positive impact of gamification on student participation. Furthermore, the data from the ninth question shows that gamification in language learning also contributes positively to increased participant interaction and collaboration. 92% of respondents indicated that gamification significantly impacted interaction with classmates, while another 8% reported that such interaction had increased. There were no neutral or negative responses from participants. These findings suggest that gamification-based language learning effectively enhances language proficiency and fosters an interactive, collaborative, and participatory learning environment.

C. Educator's Experience in Facilitating Intercultural Communication Understanding by Using Gamification in Teaching German as a Foreign Language

Gamification in foreign language learning, mainly German, is increasingly recognized as an innovative pedagogical approach to building language skills while strengthening intercultural understanding. In this study, educators' experiences showed that gamification has excellent potential to provide an inclusive, participatory, and contextualized learning environment, thus enabling students to develop intercultural communication skills more effectively. Based on the data collected, educators observed that gamification elements such as badges or awards (31%), points/scores (23%), and leaderboards (22%) were the features that most encouraged student engagement. These elements motivate learners to actively participate in tasks that include a German cultural context, such as interactive games about communication norms in Germany, role-playing in everyday situations, and language challenges that involve collaboration between participants from different cultural backgrounds.

Based on experience in testing learning activities, some of the benefits of gamification include:

- A significant increase in student engagement, as evidenced by data showing that 100% of respondents felt more actively engaged in class with gamification-based learning.
- Effectiveness in enhancing material comprehension, with all respondents indicating that gamification helped or helped them understand learning materials, including content containing cultural values.
- Increased confidence in using foreign languages, with 77% of respondents feeling confident or very confident after participating in gamification-based learning.
- Increased collaboration between learners: 92% of respondents agreed that gamification significantly improved their interaction with peers, an essential aspect of developing intercultural competence.
- Also, 92% of participants rated gamified learning as more effective than traditional methods, and 46% even stated that gamification should always be used in foreign language learning activities. These findings support the view

that this strategy can meet the learning needs of the modern generation, who are more responsive to digital, interactive, and experiential approaches.

Educators, however, point to some disadvantages and challenges in applying gamification, especially in learning aimed at intercultural understanding. First, gamification risks overemphasizing the competitive aspect, which can hinder the creation of reflective spaces necessary for discussing complex intercultural issues. Second, careful pedagogical integration is needed to ensure that the game elements do not distract from the main learning objective: the balanced development of linguistic and intercultural competencies. Third, the availability of resources and technological readiness are still obstacles in some educational institutions, especially in designing contextual, authentic games appropriate to the intended cultural standards.

Overall, educators' experiences show that gamification has excellent potential as a bridge between language learning and intercultural awareness building. It is implemented with a structured approach, sensitive to the cultural context, and supported by adequate resources. Using gamification in teaching German as a foreign language has improved cognitive performance and enriched learners' social and emotional experiences in authentic and meaningful intercultural interactions.

V. DISCUSSION

The integration of gamification into the instruction of German as a foreign language yields positive outcomes in linguistic proficiency and in fostering intercultural communication competence. The research findings suggest that gamified learning environments enhance cognitive achievement and emotional engagement, especially within intercultural contexts. This supports the conceptualization offered by Bai et al. (2024) and Boudadi and Gutiérrez-Colón (2020), who describe gamification as a game-like element adaptation in non-game settings to promote engagement and motivation. Within the field of education, this strategy has become a dynamic teaching innovation that encourages active student participation and enhances learning outcomes.

Empirical analysis, both quantitative and qualitative, revealed that gamified instruction positively influenced learners' German language abilities, particularly in comprehension and production skills, while also developing their capacity for cross-cultural interaction. Results from standardized proficiency tests aligned with Goethe-Institut benchmarks showed average learner scores of 85 at the A2 level and 88 at the B1 level, most falling under the "good" category, which suggests functional command for everyday and semi-formal communication. A one-sample t-test on reading comprehension showed no significant variance from expected norms ($p > 0.05$), reinforcing the consistency of gamification's benefits across language skills.

Moreover, the student perception data indicated unanimous agreement (100%) that gamification clarified course content, and a majority (92%) found it instrumental in understanding German cultural perspectives. These insights echo prior research, which emphasized that role-based and culturally immersed tasks are effective in deepening learners' awareness of target cultural norms and communicative styles. Furthermore, 83% of respondents indicated that gamification increased their enthusiasm and willingness to engage, in line with findings by others who reported that elements such as digital rewards and progress systems promote intrinsic motivation and learning satisfaction. Notably, 77% of learners reported improved self-assurance in language use following gamification. Teacher interviews confirmed that such methods foster intercultural receptivity, self-reflection, and empathetic interaction through collaborative activities like simulations and team-based challenges, helping learners navigate cultural differences with greater confidence.

Consequently, gamification not only develops language ability but also enhances socio-pragmatic awareness and intercultural insight, core elements of communicative competence in multilingual contexts. It strengthens learners' attitudes, understanding, and interpretive abilities by embedding linguistic practice in culturally relevant scenarios. As a result, gamified instruction serves as a progressive pedagogical strategy that prepares learners not only to master language mechanics but also to engage meaningfully in globalized academic and social settings.

A central outcome of this study is the notable increase in learner motivation and class participation through gamification. Motivation, a key component in experiential and constructivist learning, was visibly heightened as students reported greater involvement and ownership of their progress. Data revealed that 83% of participants found the learning process more enjoyable, and 77% expressed increased confidence in taking part in class activities. This affirms that gamification transcends entertainment by constructing an engaging and psychologically stimulating educational experience. Theoretically, these outcomes reflect Self-Determination Theory (Do et al., 2025; Fang & Chiu, 2025; Hanus & Fox, 2015; Jiang & Zhao, 2025), which identifies autonomy, competence, and social relatedness as drivers of intrinsic motivation—needs that gamified learning environments are well-suited to meet. Choice-driven tasks foster autonomy, structured feedback enhances competence, and cooperative engagement promotes a sense of relatedness.

Interviews with instructors further supported this, indicating that gamification helps alleviate classroom anxiety and promotes inclusivity. Previously disengaged students became more active, especially in cultural learning discussions. Nevertheless, around 17% reported discomfort with competitive mechanics such as rankings, suggesting that game design should be tailored to avoid exclusivity. In this case, collaborative rather than competitive gamification may provide a more equitable learning environment.

From an instructional standpoint, the gamification application has proven advantageous across linguistic, cultural, and emotional dimensions. Interactive activities enhance knowledge retention and significantly contribute to students' understanding of German culture—an effect acknowledged by 92% of respondents. In addition, gamified learning fosters learner autonomy, teamwork, and confidence in using the language in real-life contexts. These outcomes indicate the need for a paradigm shift in teaching, positioning instructors not just as subject-matter experts but as facilitators of engaging and immersive learning experiences.

The implications for foreign language education stakeholders are substantial. First, instructors should adopt pedagogical approaches centered on learner needs, supported by digital fluency and intercultural sensitivity. Second, curriculum frameworks should integrate language and cultural learning through task-based and experiential methods. Third, gamification is particularly effective in promoting intercultural competence, equipping learners for global communication. Fourth, instructional design must be adaptable to diverse learner profiles. Fifth, gamification contributes to sustainable learning by embedding motivation in a learner's values, emotions, and cognitive curiosity.

VI. CONCLUSIONS

The findings of this research reveal that applying gamification in foreign language education, particularly for German, offers substantial benefits for learners. Using game-like mechanisms such as achievement points, digital badges, ranking systems, and interactive exercises, gamified instruction increases learners' motivation, encourages active participation, and contributes positively to academic progress. These game elements create a learning space that balances engagement, collaboration, and constructive competition. Research from diverse educational settings affirms that such approaches can stimulate cognitive and emotional involvement, while fostering essential language skills, including intercultural communicative competence. As a result, students experience language learning in ways that are more relevant and situated in real-world contexts. Despite these advantages, the study also notes several limitations, such as fluctuating student motivation over time and the risk of misalignment between game mechanics and learners' individual preferences or needs. Accordingly, educators are encouraged to design responsive gamification strategies that align with clear instructional goals. When implemented thoughtfully, gamification can enrich the learning experience and elevate the effectiveness of foreign language education in the digital age.

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