

THE DESIGN OF THE UNIVERSITY-BASED CURRICULUM OF "LANGUAGE ACQUISITION" BASED ON GARDNER'S MULTIPLE INTELLIGENCES THEORY*

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Abstract

This study employed a Design and Development (D&D) mixed-methods approach to design and implement a university-based course entitled "*Language Acquisition*," grounded in Gardner's Theory of Multiple Intelligences (MI). The objectives were: (1) to integrate MI Theory into curriculum design to enhance linguistic and cultural learning; (2) to implement and evaluate the "*Language and Wind*" course as a practical application of the MI-based model; and (3) to construct a diversified evaluation system aligned with the curriculum. The participants were 132 undergraduate students and 10 instructors from Guangxi University of Foreign Languages, selected through purposive sampling. Four instruments were employed: a knowledge test, competence rubric, attitude questionnaire, and structured interviews with classroom observations. Quantitative data were analyzed using descriptive statistics, paired-sample *t*-tests, and Pearson's *r*, while qualitative data underwent thematic analysis following Braun and Clarke's framework.

The findings revealed that the MI-based curriculum effectively achieved all three objectives. Integrating MI Theory enhanced students' linguistic, cognitive, and cultural learning. The implementation of the "*Language and Wind*" course improved engagement, creativity, and teamwork through project-based learning. The diversified evaluation system ensured fairness, inclusivity, and motivation. Overall, the study highlights that MI-based curriculum design supports academic achievement and dialectal cultural preservation in higher education.

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Introduction

The preservation of regional dialects in China has become a growing concern in both cultural and educational contexts. In Guangxi, dialects such as Guilin Hua are rapidly diminishing among younger generations due to urbanization, mass media influence, and the nationwide dominance of Mandarin. Although the Chinese government has emphasized dialect protection, most initiatives remain symbolic and lack effective integration into higher education (Han, 2023). Universities, as essential platforms for fostering cultural awareness and linguistic competence, have yet to establish pedagogical frameworks that link dialect preservation with modern language instruction (Wang, 2023).

Conventional university language curricula tend to prioritize linguistic accuracy and grammatical mastery, relying mainly on linguistic and logical intelligences. While effective for standard language learning, such approaches overlook the multidimensional capacities essential for dialect learning, including interpersonal, musical, spatial, and bodily-kinesthetic intelligences. This limitation has led to students' weak emotional connection, cultural empathy, and creativity in using their native dialects.

Gardner's (1983) Multiple Intelligences (MI) Theory provides a theoretical foundation to address these challenges. Dialect learning is inherently multimodal—combining rhythm, tone, expression, and social interaction. Therefore, MI-based instruction can transform dialect education from a cognitive task into a holistic cultural experience.

This study aims to design and evaluate a university-based *Language Acquisition* curriculum grounded in MI Theory to enhance students' understanding, engagement, and cultural identity related to the Guilin Hua dialect. The research also seeks to offer a practical model for integrating local culture into higher education, thereby supporting China's broader mission of cultural sustainability and innovation

Research Question

1. How to integrate Gardner's Multiple Intelligences Theory to design the course "Language Acquisition" in order to stimulate students' interest and participation in Guangxi's local dialect and culture?
2. How to apply the theory of multiple intelligences to optimize the course of "Language Acquisition" in order to improve students' language expression, cultural understanding and interpersonal communication skills?
3. How to construct diversified assessment methods to measure the specific impact of the "Language Acquisition" course on the protection and inheritance of Guangxi local dialect culture?

Research Objectives

1. Integrate Gardner's Multiple Intelligences Theory for curriculum design of the course "Language Acquisition".
2. Practicing the "Language and Wind" course.
3. Constructing a diversified evaluation system based on the curriculum model to assess the "Language and Style" course.

Literature Review and Research Framework

1 Research Status of Multiple Intelligences Theory

The Multiple Intelligences Theory (MIT) proposed by Gardner (1983) redefined human intelligence as diverse and multifaceted, identifying eight types—linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic—and later adding existential intelligence. Since its introduction, MI theory has greatly influenced global education, promoting curriculum innovation, student-centered learning, and diverse assessment methods.

Internationally, MI theory has been widely applied in language, art, and cross-cultural education, while in China it has mainly guided basic education reform. Research in higher education, especially related to dialect and cultural curriculum design, is still limited. Chinese and foreign scholars agree that integrating MI theory enhances learning motivation and creativity. Aguayo (2021)



and Mustari (2024) emphasized the roles of musical and spatial intelligences in dialect learning, while Saddhono (2021) explored multilingualism and identity in Southeast Asia, offering insights for Guangxi's education context.

2. Research Status of Local Dialect Culture in Guangxi

Guangxi, as a Zhuang autonomous region, has rich linguistic diversity including Zhuang, Cantonese, Guiliu Hua, and Hakka. These dialects embody regional history, culture, and ethnic traditions. Previous studies have mainly focused on dialect distribution and linguistic structure, but university-level teaching often lacks theoretical design and student engagement.

With growing emphasis on intangible cultural heritage, Guangxi's dialect education has gained attention. Universities have begun integrating dialect culture into general courses and fieldwork activities to strengthen identity and pride. However, teaching and evaluation remain limited in scope. Wang (2023) and Yang (2021) emphasized the value of Guangxi's linguistic diversity and oral traditions, while scholars have highlighted dialects as tools for communication and cultural inheritance. Research has warned of gradual dialect loss, and studies have linked language education with everyday life to foster practical use. Han (2023) and other scholars noted the decline of dialect use among younger generations and urged systematic curriculum design for preservation, supported by digital tools such as dialect corpora and speech recognition technology.

3. Combination of Multiple Intelligences Theory and Local Dialect Cultural Education

Applying Gardner's theory to Guangxi's dialect education moves beyond rote learning and promotes holistic student development. Research focuses on three areas: curriculum design, teaching strategies, and evaluation systems.

Studies have suggested incorporating MI theory into dialect course design by using folk songs, poetry, and storytelling to stimulate linguistic, musical, and interpersonal intelligences. Yang (2021) and researchers have advocated role-playing, field research, and community engagement to improve observation, communication, and teamwork, while scholars have proposed process-based and diversified assessment—creative projects and group performance—to reflect multiple intelligences.

Western evidence supports these findings. Gardner (1999) showed that MI-based teaching enhances intercultural understanding, as in Brittany's bilingual revitalization program integrating folk culture into language education. This model provides valuable insight for Guangxi's multi-ethnic context—Zhuang, Han, Yao, Miao, and Dong—where MI-oriented dialect teaching can preserve endangered languages, enhance cultural inclusiveness, and foster global awareness

.4. Research Status and Innovation of the Language Acquisition Course

Language Acquisition, a school-based course on Guangxi's local dialect and culture, aims to deepen students' understanding through field investigation and experiential learning. Studies by Xu (2020) show that the course enhances research and critical thinking skills through social practice activities, while researchers have noted a lack of systematic integration of Multiple Intelligences (MI) Theory. Scholars also identified challenges such as insufficient resources and imperfect evaluation systems in applying MI-based teaching.

Integrating Gardner's theory provides a new model emphasizing practice and innovation. Yang (2021) and researchers have suggested combining dialect songs, drama, and storytelling to develop linguistic, musical, and bodily-kinesthetic intelligences while strengthening cultural identity. Studies have proposed multi-sensory learning—listening, speaking, and performing—to increase engagement, and scholars have emphasized ongoing evaluation to ensure sustainability.

By integrating MI theory with dialect education, the Language Acquisition course supports the inheritance of Guangxi's dialect culture and students' multiple intelligences, bridging theory and practice while fostering educational innovation and cultural preservation.

Research Framework

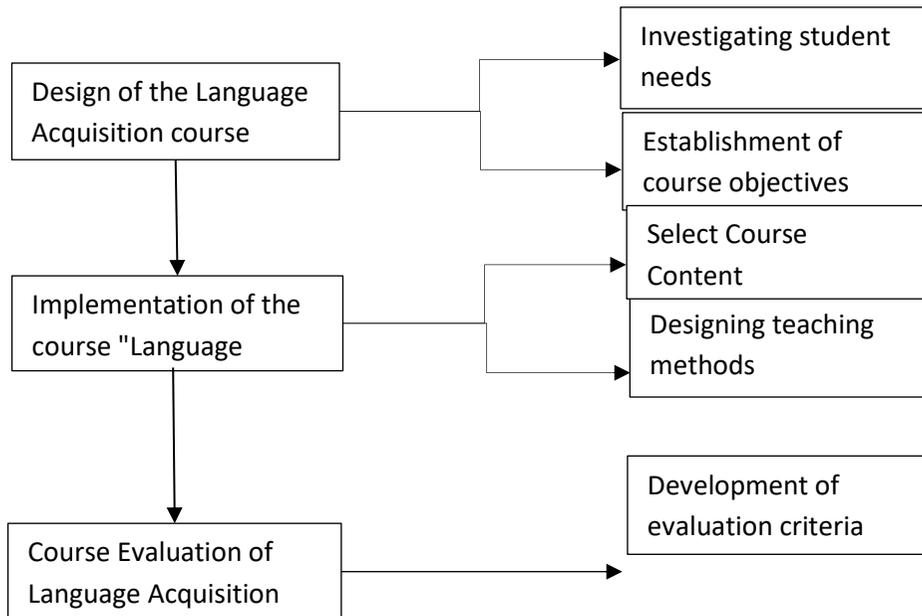


Figure 1 : Research Framework

Methodology

This study employed a **mixed-methods approach** integrating quantitative and qualitative data to develop and evaluate a university-based *Language Acquisition* curriculum grounded in Gardner's Multiple Intelligences (MI) Theory for the preservation of the *Guiliu Hua* dialect. The methodology is described in four sections: participants, research design, instruments, and data analysis.

1. Participants

The study involved **132 undergraduate students** and **10 instructors** from the College of Arts and Letters, Guangxi University of Foreign Languages. Participants were selected through **stratified random sampling**, based on students' academic year and exposure to dialect use (frequent, occasional, or minimal). All participants had completed at least one general Mandarin course prior to the study to ensure comparable linguistic backgrounds.

2. Research Design

The research followed a **quasi-experimental single-group pretest-posttest design**, supplemented by qualitative data from interviews and classroom observations. The intervention lasted for **12 weeks**, during which students engaged in three integrated modules: *Recognizing Dialects*, *Exploring Dialect Culture*, and *Practical and Creative Expression*. The design aimed to measure changes in students' knowledge, engagement, teamwork, and creativity related to dialect learning.

3. Instruments and Validation

Four main instruments were used:

3.1 Knowledge and Understanding Test – 20-item multiple-choice test assessing conceptual understanding of dialect culture.

3.2 Competence Rubric – evaluating teamwork, creativity, and communication on a 5-point scale. Content validity was verified by three experts in language education (CVI = 0.92).

3.3 Attitude Questionnaire – 15 Likert-scale items assessing motivation and engagement (Cronbach's α = 0.87).

3.4 Structured Interviews and Observations – used to capture student and teacher reflections during implementation. The qualitative tools followed a semi-structured protocol to ensure consistency and reliability.

4. Data Collection

Data were collected over a period of one academic semester through both quantitative and qualitative methods. The quantitative phase involved administering the Knowledge Test, Competence Rubric, and Attitude Questionnaire to 132 students before and after the course implementation. The qualitative phase included semi-structured interviews with 10 teachers and classroom observations across four project sessions.

All data collection procedures were conducted under ethical research guidelines, with participants providing informed consent. The integration of multiple data sources ensured triangulation and enhanced the validity and credibility of the study findings.

5. Data Analysis

Quantitative data were analyzed using **descriptive statistics** (mean, standard deviation) and **inferential statistics**, including **paired-sample t-tests** to compare pretest and posttest scores and determine the significance of improvement. Additionally, correlations between engagement, teamwork, and learning outcomes were examined using Pearson's *r*.

Qualitative data from interviews and observations were analyzed through **thematic analysis** following Braun and Clarke's six-phase model. Emerging themes were triangulated with quantitative findings to strengthen the credibility and validity of interpretations.

Ethical approval was obtained from the university research committee, and all participants provided informed consent. The combination of quantitative rigor and qualitative depth ensures a comprehensive evaluation of the MI-based curriculum's impact on dialect learning and cultural preservation.

Results

This section presents the key results of the study, highlighting the

1. Integration of Gardner's Multiple Intelligences Theory into Curriculum Design

The integration of Gardner's (1983) Multiple Intelligences (MI) Theory provided the foundation for developing a learner-centered curriculum. Quantitative analysis revealed significant improvement in students' understanding of dialect culture after implementation ($t(131) = 9.45, p < .001$).

Table1 Integration of Gardner's Multiple Intelligences Theory into Curriculum Design

Focus Area	Curriculum Application	Mean (SD)	<i>t</i>	<i>p</i>
Cultural Foundations	Incorporating dialect stories, music, and cultural exploration into lessons	4.52 (0.46)	8.92	< .001
Autonomous Development	Encouraging self-directed projects and reflective journals	4.60 (0.41)	9.17	< .001

Social Participation	Designing group and community-based activities	4.48 (0.44)	9.01	< .001
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All dimensions showed statistically significant improvement. Students demonstrated deeper cultural appreciation, greater independence in learning, and enhanced teamwork skills, confirming that integrating MI theory effectively connects cognitive and cultural development.

2. Implementation and Practice of the “Language and Wind” Course

The “Language and Wind” course emphasized project-based and experiential learning. Students engaged in fieldwork, group projects, and performances that connected theoretical knowledge with practical application. Correlation analysis showed strong relationships between engagement, teamwork, and creativity ($r = .72, p < .01$).

Table 2 Implementation and Practice of the “Language and Wind” Course

Activity Type	Description	Mean (SD)	<i>r</i>	<i>p</i>
Visiting Teaching Method	Field visits and interviews with local communities	4.58 (0.42)	.69	< .01
Project-Based Learning	Group projects and short videos on dialect culture	4.63 (0.39)	.74	< .01
Cultural Presentation	Storytelling and performance-based activities	4.70 (0.36)	.72	< .01

The results indicate that hands-on learning and collaboration significantly improved students’ engagement and creativity. Through community interaction and group performance, students developed confidence in communication and a deeper sense of cultural identity.

3. Construction of a Diversified Evaluation System

A diversified evaluation framework was developed to align with the MI-based curriculum, combining formative and summative assessments. Student feedback reflected a high level of satisfaction ($M = 4.68, SD = 0.43$).

Table 3 Diversified Evaluation System Based on MI-Oriented Curriculum

Evaluation Dimension	Method and Tools	Mean (SD)
Formative Assessment	Attendance, participation, group reports, peer feedback	4.70 (0.40)
Summative Assessment	Final projects, video presentations, teacher evaluation	4.65 (0.45)
Combined Evaluation	Integration of teacher and peer assessments	4.69 (0.41)

The evaluation system effectively reflected multiple learning outcomes and encouraged fairness and inclusivity. Students perceived the assessment process as motivating and supportive of both personal growth and sustained engagement.

Summary of Findings

The results confirmed the successful achievement of all three research objectives:

1. The MI-based curriculum integrated cultural, linguistic, and social learning dimensions effectively.
2. The “Language and Wind” course promoted active, authentic, and creative learning experiences.
3. The diversified evaluation system enhanced fairness, inclusivity, and motivation for continuous learning.

Overall, the integration of multiple intelligences, experiential learning, and multidimensional evaluation enhanced students’ engagement, creativity, and appreciation of dialect culture in higher education.

Discussion

The findings indicate that integrating Gardner’s (1983) Multiple Intelligences (MI) Theory into a university-based language curriculum enhanced students’ understanding, engagement, and creativity in dialect learning. The discussion below interprets the results based on the three research objectives.

1. Integration of MI Theory into Curriculum Design

The curriculum effectively applied MI Theory by integrating linguistic, interpersonal, intrapersonal, and creative intelligences into instructional activities. Learning through storytelling, performances, and community interviews promoted experiential learning and strengthened students' cultural understanding and motivation. The MI-based design not only enriched academic learning but also fostered appreciation of dialect culture and local identity.

2. Practice of the “Language and Wind” Course

Implementation emphasized project-based and fieldwork learning. Students conducted dialect research, group projects, and cultural presentations that connected theory with real-life contexts. These experiences developed critical thinking, teamwork, and creativity, reflected in the strong correlation between engagement and collaboration ($r = .72$). The MI-based model thus supported both cognitive and emotional growth essential for dialect preservation.

3. Construction of a Diversified Evaluation System

A comprehensive evaluation system combining formative and summative assessments was established. Class participation, peer feedback, and final projects were used to assess diverse intelligences and competencies. This inclusive framework ensured fairness, authenticity, and motivation, while accurately reflecting student progress. Overall, diversified evaluation enhanced learning outcomes and reinforced the sustainability of dialect education in higher education.

Suggestions

Based on the study's results and limitations, the following recommendations are proposed:

1. Future Research Design

Future studies should employ longitudinal quasi-experimental designs with both experimental and control groups to validate the sustained effects of MI-based dialect curricula.

2. Assessment of Behavioral Outcomes

Incorporate performance-based and behavioral assessments to evaluate students' real-world application of dialect learning, teamwork, and creativity.

3. Cross-Institutional and Cultural Validation

Implement and test the curriculum across multiple universities and dialect regions to enhance generalizability and explore the adaptability of MI pedagogy across cultural contexts.

4. Integration with Community and Family Contexts

Strengthen collaboration with local communities, families, and cultural organizations to encourage authentic use and intergenerational transmission of dialects.

By enhancing methodological rigor and promoting long-term evaluation, future research can extend the foundation laid by this study to develop sustainable strategies for dialect preservation and culturally responsive education.

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