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Integrating task-based and blended learning to improve sight reading and instrumental performance

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ABSTRACT

The present study aims to explore the efficacy of an instructional method combining Task-Based Learning (TBL) and Blended Learning (BL) for developing sight-reading skills and musical instrument playing among undergraduate students of Chinese traditional instrumental music. A quasi-experimental design was employed with 50 second-year students from the Sichuan Conservatory of Music, who were allocated to experimental and control groups. The experimental group received a six-phase instructional intervention with TBL activities and blended materials in 20 sessions. Post-test findings revealed the experimental group's significant improvement in both sight-reading ability and musical instrument playing, with medium to large effect sizes. The approach successfully supported technical skill acquisition, artistic expression, and self-regulated learning. The synthesis of TBL and BL has been shown to be a highly effective pedagogical approach to enhancing the technical and expressive dimensions of musical education. The six-stage model exhibited high instructional coherence and flexibility, providing valuable guidelines for curricular change in performance-oriented music education.

Contribution/ Originality: This study uniquely integrates task-based learning with a six-phase blended learning model tailored to traditional Chinese instrumental music. Unlike prior research, it systematically targets both sight-reading and expressive performance, offering a structured, technology-enhanced instructional prototype that bridges technical skill acquisition and artistic interpretation in music education.

1. INTRODUCTION

Beginning in the 20th century, there has been a large-scale modernization of Chinese traditional instrumental music, and its professionalization has increasingly become a characteristic of its contemporary identity. It is a defining change for a formalized pattern, a move away from its traditionally conventional origins (Zheng, 2025). Following Max Weber's modernity theory, that is, the ideas of "differentiation" and "autonomy," the modernization of folk music can be understood as a structural change rather than a linear progression. Chinese traditional instrumental music has progressively established a formal educational system, adopted professional stage performance practices, and embraced modern creative methods.

This evolution spans from grassroots inheritance to standardized instruction, from informal self-entertainment to professional stage performance, and from simple adaptations of traditional pieces to original compositions informed by creative intent. The modern structure of traditional instrumental music has gradually taken form. In terms of

education, an integrated professional training system has emerged, extending from higher education institutions to affiliated primary and secondary schools. In the realm of performance, a professional framework organized around concerts and dedicated ensembles has been established. In terms of composition, large-scale concertos and works in contemporary styles have continued to emerge (Lee & Zhang, 2021).

Despite the remarkable achievements in the professionalization of traditional instrumental music, persistent challenges remain in teaching practices, particularly concerning value orientation, the use of indigenous resources, and historical awareness. In terms of value orientation, Chinese folk music has long shifted between being politically instrumentalized and shaped by market-oriented utilitarianism, without establishing a stable foundation of artistic autonomy and professional integrity. The residual influence of traditional notions such as "music as a vehicle for moral instruction" and the brief emergence of "pure art" ideals has not resulted in a lasting or autonomous framework of artistic values.

With respect to the use of indigenous resources, despite China's rich heritage of traditional musical culture, most of these resources remain limited to documentation and archival preservation, with few mechanisms for revitalization or integration into teaching practices. Consequently, they have yet to be effectively transformed into core components of a professional curriculum system (Tang, 2021). Regarding historical consciousness, current pedagogical models frequently rely on fragmented elements of Western music education while overlooking the developmental logic of Chinese music and the formation of cultural identity. These issues have collectively contributed to a divergence from indigenous pedagogical principles, resulting in curriculum content that lacks cultural depth and a talent cultivation model that fails to fully reflect a strong national cultural identity.

Sight-reading ability and musical instrument performance are essential competencies for students majoring in Chinese traditional instrumental music. These abilities play a critical role in enhancing both professional proficiency and the expressive quality of artistic performance. Sight-reading training enables students to quickly understand and accurately perform unfamiliar musical scores, thereby improving learning efficiency and performance quality within limited rehearsal time. However, in most higher education curricula, sight-reading ability has not yet been systematically incorporated into core courses. As a result, students frequently encounter problems with rhythmic accuracy and pitch control in both classroom learning and stage performances (Howell, 2016).

At the same time, the cultivation of musical instrument performance often emphasizes technical skills while placing comparatively less importance on musical expression, stylistic interpretation, and stage presence. The development of performance competence requires the integrated development of technical fluency and interpretive understanding of the repertoire. It also necessitates the cultivation of confidence and control in live performance settings. Therefore, in curriculum design, integrating sight-reading training with performance practice through sequenced instructional tasks and authentic performance experiences can effectively support students in building a solid foundation of professional ability and developing more emotionally compelling artistic expression (Siow, 2015).

Over the last few years, task-based learning (TBL) and blended learning (BL) have become more popular in tertiary education. They both have clear benefits for applied disciplines such as the arts. TBL uses real-life tasks to help students build knowledge and practical expertise through problem-solving. It focuses on authentic learning that involves all participants, which enhances student motivation, collaboration, and creativity (Ozverir, 2015). BL combines face-to-face classroom learning with web-based digital content. This approach offers learners more independent study schedules, improved content, and more personalized instruction (Hrastinski, 2019). In music education, TBL supports the synthesis of music theory, technical skills, and interpretive understanding in real musical performance tasks. At the same time, BL provides good support for instrumental learning with multimedia content, web-based demonstrations, and independent practice rooms. By combining these two methods, not only are the teaching resources used more effectively, but various modes of learning are also offered. This is a valid approach for increasing the quality and efficiency of instrumental music teaching.

Included in the study was the development of an instructional methodology that incorporated TBL and BL to maximize students' sight reading and its effect on improving students' musical instrument performance. The research will also have two major guiding inquiries: (1) Can this instructional approach have any significant effects on students' sight reading? (2) What significant contributions does this method offer to the enhanced musical performance of students?

2. LITERATURE REVIEW

2.1. The Role of Sight-Reading Ability in Music Education

Sight-reading ability refers to the immediate capacity of traditional instrumental performers to interpret and perform musical notation in real time when presented with unfamiliar scores. It serves as a critical indicator of a performer's comprehensive musical literacy and professional competence. Performers must identify elements such as pitch, rhythm, fingering, and dynamics quickly and accurately, while conveying expressive intent. This process demands a high level of coordination among the eyes, brain, and hands. In traditional Chinese instrumental music, numbered notation is the predominant system. Some students, lacking experience in reading staff notation, often encounter difficulties when attempting to sight-read modern works featuring complex modes and polyphonic structures, ultimately impacting both their performance quality and learning efficiency.

Elliott (1982) stated that sight-reading ability has something to do with high levels of technical facility and rhythm. He pointed out that this combination results in the decoding of rhythmic patterns required for sight reading. After his seven variables emerged, it was felt that the most contributing variables were academic achievement and performance skills. Thompson (1987) showed that sight reading's technical dimension varied greatly due to performing different musical instruments, flute performers. Salzberg and Wang (1989) have further compounded typical challenges that string instrument sectional students face in reading rhythm and have provided empirical evidence on instrument-specific differences. It is important to emphasize that each instrument has a rhythm that may differ in training approaches from one to another, and all these issues reflect ways in which technology is inextricably woven into musical practice.

As far as existing literature reveals, sight-reading instructions seem to be continuously emphasized in music education, claiming the same importance as curriculum design for talent cultivation. Daniels (1986) studying sight reading in mixed high school choirs, concluded along with numerous others that the acquisition of sight reading ability depends both on individual differences and on instructional variables such as the environment of a school, its curricular structure, and even the expertise of its teachers. Banton (1995) suggested that auditory and visual feedback improve sight reading skills. Lehmann and Ericsson (1993) and Waters, Townsend, and Underwood (1998) working with expert pianists, found that the ability to sight read depended not only on training and experience but also on complex cognitive processes such as perceptual integration, attention control, and motor coordination. To complement the aforementioned delineation of sight-reading ability development, Gromko (2004) created a predictive model in which reading comprehension and rhythmic auditory skills predict performance. The perspective of Hayward and Eastlund Gromko (2009) gave further emphasis to the multisensory nature of sight reading, which incorporates the auditory, visual, spatial, and kinesthetic systems. Kopiez and In Lee (2008) demonstrate through integration the importance of early musical exposure and systematic training; they identify inner hearing and performance flexibility (e.g., speed of vibrato) as two of the primary factors contributing to the improvement of sight-reading ability.

2.2. Factors Contributing to the Enhancement of Musical Instrument Performance

In the field of music education, musical instrument performance is a vital skill that reflects students' perception of musical works, their ability to express feelings, and the conveyance of their artistic individuality. Traditional musical aesthetics are often more concerned with the structural and stylistic character of compositions, thereby

neglecting the performer's active role in the re-creation of music. Musical performance expressivity comes from the performer's control of melody, rhythm, tempo, and harmony, which are all combined with an emotional charge. Each performer is given the freedom to bring the paintbrush of personal aesthetic experience and interpretative insight to the canvas of symbolic musical content, working against written notation as they transform it into expressive artistry that is infused with meaning by their own conceptions and the incidence of their transformations upon those of others; performers can create a very personal expression with which they want to be identified. When regarded as the main objective of music instruction, performance ability may lead to a student-centered approach to teaching that is multidimensional rather than purely technical, ensuring an appreciation, emotive, and expressive framework for itself and thereby developing students' artistic literacy and creative potential.

Recent research on musical instrument performance has further reinforced its cognitive, developmental, and pedagogical foundations. Waters et al. (1998) mentioned that perceptual identification, attentional regulation, and motor coordination in sight reading illustrate the operation of complex cognitive systems. Bailey and Penhune (2010) demonstrated that kids receiving systematic training before the age of seven have superior levels of performance on tests of auditory perception and visuomotor coordination and that early training can impact the development of long-term performance skills. Parbery-Clark, Skoe, Lam, and Kraus (2009) hypothesized that musical training enhances auditory discrimination and working memory and thus directly contributes to enhanced performance control. Using electroencephalography and electromyography, Kondratenko and Bazanova (2011) and Kondratenko, Bazanova, and Petrenko (2016) identified established levels of musical performance closely linked to physiological characteristics, thus providing neurophysiological evidence for performance capacity. Gonzalez-Sanchez, Dahl, Hatfield, and Godøy (2019) identified "movement fluency" as a critical performance capacity parameter, centering on motor coordination and implying technological tools to measure it. Pedagogically, Beauchamp and Breeze (2022) proposed that teachers counterpose technical pedagogy with performance-based mentoring in the integration of performance tasks within authentic learning contexts to develop students' stage presence and expressive skills.

2.3. Research on Task-Based Learning (TBL)

Traditional methods emphasize rote memorization or passive learning. In the TBL method, students are involved with real-life assignments requiring critical thinking, teamwork, and problem-solving skills. Hence, these tasks suit modern education that emphasizes value-based skills for 21st-century success: critical thinking, creativity, and teamwork.

TBL has been applied across different disciplines, including language studies, nursing, chemistry, and health sciences. Cheung et al. (2003) created the SPACE Online Universal Learning (SOUL) platform, combining TBL with the principles of Total Quality Management (TQM) and highlighting its applicability and effectiveness in online settings. In nursing education, Mennenga (2013) compared TBL with lecture-based formats and showed that TBL significantly increased student engagement and exam scores. The study concluded that TBL is as effective or superior to lecture-based formats in facilitating student learning. Likewise, Zhou, Huang, and Tian (2013) examined the impact of TBL on the analytical skills of high school students in chemistry and concluded that TBL students exhibited significantly better analytical skills than those taught conventionally.

The effectiveness of TBL in facilitating student engagement and academic achievement has been the focus of extensive research. For instance, Zhaochun (2015) found that the use of TBL in a professional English writing course in China led to a notable enhancement in the students' writing ability, which signifies that TBL can be used effectively to resolve issues commonly encountered by language learners. Likewise, Inoue and Candlin (2015) established that TBL enhanced problem-solving skills among novice translators and their understanding of the translation process. Besides, Miller, Khalil, Iskaros, and Van Amburgh (2017) demonstrated that TBL not only enhanced learning effectiveness among pharmacy students but also improved their perceptions of the learning environment. The

research emphasized the critical roles of responsibility and teamwork in fostering an effective and positive learning environment.

2.4. Research on Blended Learning (BL)

Since traditional classroom instruction combined with online materials and opportunities for online interaction is generally accepted as blended learning (BL), the environment provides a high degree of freedom to learners in terms of where they want to learn, when they want to study, and how they want to proceed with their learning. Due to the uncertainty in defining BL, Graham (2013) considered it difficult to evaluate the effectiveness of the BL approach. It is recognized, however, that BL improves student performance over purely online or purely face-to-face instruction.

Various models of BL have been outlined, each with its unique features and application. Graham, Woodfield, and Harrison (2013) enumerated several of the key models employed in higher education institutions, K–12 schools, and corporate training, including the flipped classroom, rotation model, and flex model. All these models are designed to address specific educational needs and settings, reflecting the adaptability of BL. Evidence has demonstrated that this approach enhances learning and increases satisfaction among instructors and students. For instance, Futch, DeNoyelles, Thompson, and Howard (2016) identified "comfort level" as a key predictor of successful BL courses and found successful integration of face-to-face and online components significantly enhances student success. Similarly, Zhang and Dang (2020) developed a model for investigating the central determinants of technology-supported learning, focusing specifically on instructional design and the quality of technology. Clark and Post (2021) found that students who engaged actively in the online and face-to-face components of the blended learning setting demonstrated improved academic performance.

3. METHODOLOGY

3.1. Research Design

The design adopted in this study was a quasi-experimental design, aiming to examine the effectiveness of an instructional approach that integrates TBL and BL to develop sight-reading ability and the performance of Chinese traditional instrumental music students. This design, which offers the advantage of comparison validity, is especially suitable for the educational context where random assignment is impractical.

The instruction for the intervention involved 20 sessions over one academic semester. Participants in the experimental group were taught in a course uniquely designed based on TBL principles and complemented by BL approaches, including face-to-face teaching and online courses with interactive learning resources such as video demonstrations, electronic scoring systems, and real-time feedback mechanisms. Students in the control group received traditional instruction, emphasizing the acquisition of technical skills and teacher-led rehearsals with minimal use of digital tools or student-led activities.

The design of the study considered two main dependent variables: sight-reading ability and performance on a musical instrument. The standardized evaluation criteria were administered to both the experimental group and the control group before and after the treatment, focusing on sight reading and performance quality. Quantitative data were complemented by observation records and student feedback, thereby providing a broader understanding of instructional outcomes.

3.2. Participants

This research was conducted on a population of 137 undergraduate students who specialize in Chinese traditional instrumental music at the Sichuan Conservatory of Music. A total of 50 students were randomly selected and divided equally into an experimental group and a control group, each comprising 25 students. All subjects, being second-year students, had either completed or were enrolled in basic courses in music theory and instrumental technique, with

experience in sight reading and basic instrumental performance. Regarding gender distribution, the experimental group consisted of 10 males and 15 females, while the control group included 11 males and 14 females, demonstrating nearly equal gender distribution in both groups.

3.3. Instructional Design

The instructional model employed in the present study is an integration of TBL and BL, with the goal of enhancing students' sight-reading capabilities and playing musical instruments. The model is structured, cyclical in nature, and comprises six primary phases: (1) integration of the teaching and learning model, (2) content selection and course planning, (3) execution of teaching strategies, (4) feedback and evaluation, (5) adaptation on an individual basis, and (6) long-term sustainability of the results (Figure 1).

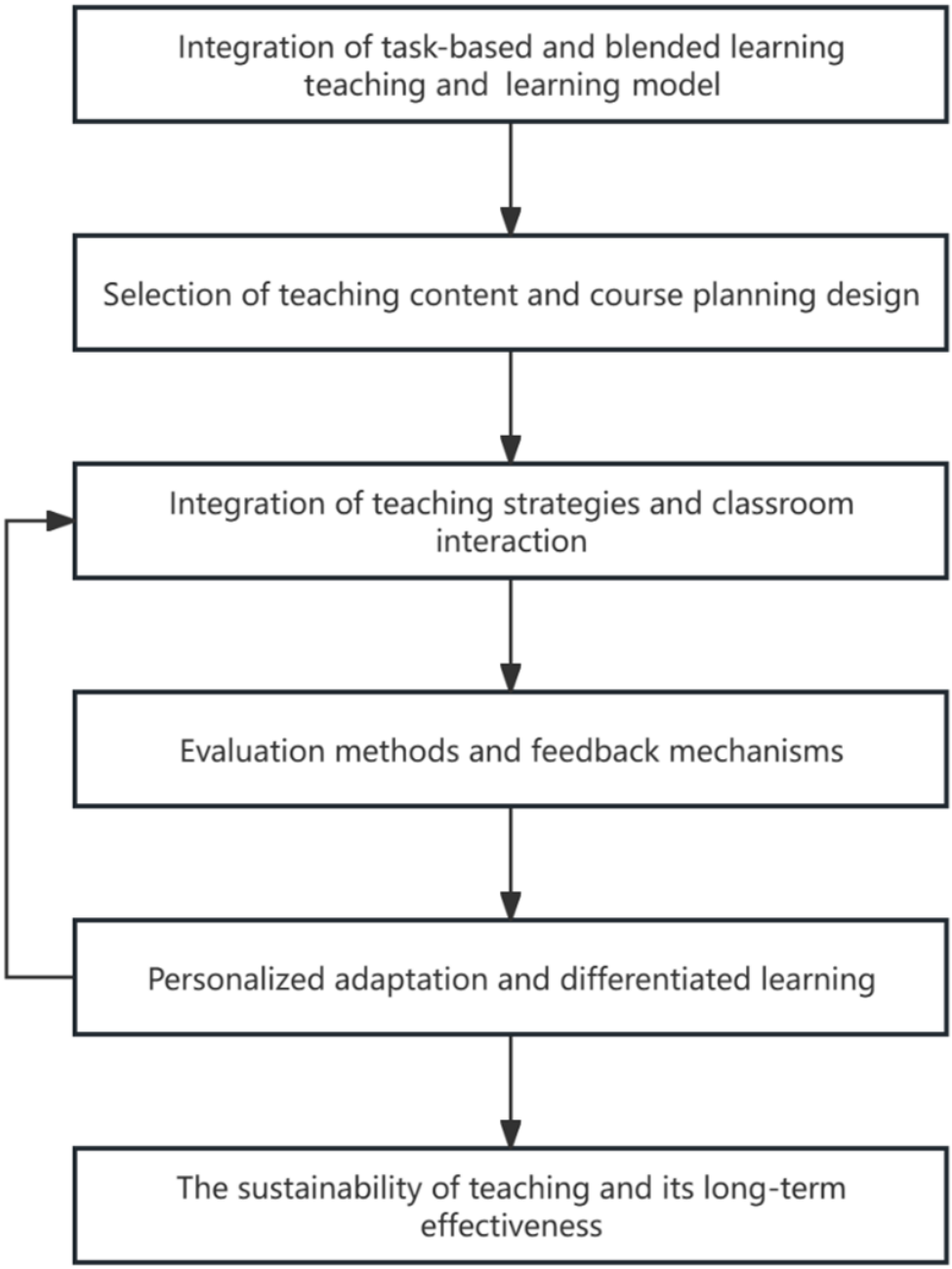

Figure 1. Instructional model based on task-based and blended learning.

In the intervention stage, instruction was scheduled for one academic semester, with 20 sessions planned for 60 minutes each. At this stage, a hybrid teaching model involving TBL and BL was established to directly relate to the learning objectives designated for the module. Finally, the instructional materials and lesson plans were carefully selected or designed to enhance the gradual development of musical knowledge and skills in performance.

Each lesson was organized into three instructional phases: the pre-task, the task implementation, and the post-task reflection and feedback. Online and offline components existed. Online modules on the university website provided sight-reading videos, interactive software, scoring rubrics, and real-time feedback tools to support students' independent preparation prior to in-class lessons. Offline lessons centered around task-based activities such as group work, simulated performances, peer feedback, and teacher feedback, which enabled students to apply their skills to actual performance contexts. In the fourth stage, systematic evaluation methods and feedback mechanisms are integrated for observing progress; thus, the fifth stage involves adaptation and differentiation of the learning situation with respect to individual needs, ultimately manifesting into personalized instructional support. Furthermore, in the sixth stage, sustainability is emphasized with reflective learning habits and performance feedback loops reinforced toward the transfer of musical skills in the long term.

The reverse of the above was the case with control group subjects, whose sincere instruction procedure mainly included teacher-led demonstrations and in-class practice, without any digital aids or student-focused activities.

3.4. Research Instruments

Two unique measuring instruments were implemented to study students' abilities in sight reading and performing on musical instruments, respectively: the Sight-Reading Ability Evaluation Scale and the Musical Instrument Performance Assessment Scale. These instruments were developed within the constraints of existing standards for measuring music education and were based on extensive literature. For content validity considerations, three experts in music education were asked to critically review the items in the scales. Content validity reviews enhance the scientific rigor and relevance of the assessment criteria. Before actual scoring in an assessment, a preliminary scoring session was held with all evaluators to compare their interpretations of the evaluation criteria and scoring rubrics, thereby improving scoring consistency. Pre-tests and post-tests were administered to the experimental and control groups to obtain results that could indicate whether certain instructional methods influenced student performance.

The Sight-Reading Ability Evaluation Scale was developed to assess the extent to which students are able to accurately interpret and perform unfamiliar scores within a given time. It has four dimensions: rhythm recognition, pitch accuracy, continuity, and dynamic expression. Each dimension contains a 25-point rating, for a total of 100 points. The evaluation involves individual sight-reading tasks, and the final score is the average of assessments by the course instructor and an outside evaluator.

The Musical Instrument Performance Assessment Scale was created to comprehensively assess students for technical execution and artistic expression in a staged performance. This instrument is composed of five domains: pitch and rhythm accuracy, technical execution, expression of emotions, style interpretation, and stage presence. Each domain consists of a 20-point score, totaling 100 points. Assessment is conducted through a simulated stage performance, in which a panel of evaluators uses standardized rubrics to score each domain, minimizing subjectivity and ensuring score comparability among all students.

3.5. Data Analysis

Data analysis of the study was performed using SPSS 26.0 software. To assess the impact of instructional intervention on students' sight-reading ability and musical instrument playing ability, pre-test and post-test scores of the experimental and control groups were statistically compared.

In determining the homogeneity of the two groups before intervention, pre-test scores were subjected to an independent samples t-test to establish baseline equivalence. In analyzing the effects of the instructional intervention, paired samples t-tests were conducted on score changes from pre- to post-test data within each group to determine the statistically significant effect of the instructional approach within each group.

Besides, an independent samples t-test was utilized to compare the post-test scores between the experimental and control groups. This test aimed to determine whether the instructional design, which integrated TBL and BL, was significantly more effective than the traditional model in improving students' sight-reading ability and musical instrument performance. The significance level was set at 0.05.

3.6. Ethical Approval

This study strictly adhered to ethical guidelines for research involving human participants. Prior to the formal commencement of data collection, ethical approval was obtained from the relevant ethics committee.

4. RESULTS

4.1. Pre-Test Group Comparison

As shown in Table 1, no significant differences were found between the experimental and control groups in either sight-reading ability or musical performance before the intervention. For sight-reading ability, the control group ($M = 82.72$, $SD = 3.565$) and the experimental group ($M = 82.68$, $SD = 4.049$) showed no significant difference ($p > 0.05$). Similarly, for musical performance, the control group ($M = 71.12$, $SD = 4.096$) and the experimental group ($M = 70.76$, $SD = 5.182$) did not differ significantly ($p > 0.05$). These results indicate that the two groups were comparable at baseline, providing a solid foundation for analyzing the effects of the instructional intervention.

Table 1. Pre-test comparison of sight-reading ability and musical performance between experimental and control groups.

Variable	Mean	SD	df	t	p	Cohen's d
Sight-reading ability						
Control group	82.72	3.565	24	0.204	0.840	0.041
Experimental group	82.68	4.049	24			
Musical performance						
Control group	71.12	4.096	24	1.25	0.223	0.25
Experimental group	70.76	5.182	24			

4.2. Post-Test Differences Between Experimental and Control Groups

As presented in Table 2, independent samples t-tests were conducted to compare the post-test performance of the experimental and control groups. In sight-reading ability, the experimental group ($M = 83.44$, $SD = 4.154$) outperformed the control group ($M = 82.84$, $SD = 3.567$), and the difference was statistically significant ($p < 0.05$). Similarly, in musical performance, the experimental group ($M = 71.92$, $SD = 5.107$) achieved higher scores than the control group ($M = 71.20$, $SD = 4.093$), with the difference also reaching statistical significance ($p < 0.05$). These results suggest that the instructional approach combining TBL and BL was more effective than the traditional method in enhancing both sight-reading ability and musical instrument performance.

Table 2. Post-test comparison of sight-reading ability and musical performance between experimental and control groups.

Variable	Mean	SD	df	t	p	Cohen's d
Sight-reading ability						
Control group	82.84	3.567	24	-2.216	0.036**	0.443
Experimental group	83.44	4.154	24			
Musical performance						
Control group	71.2	4.093	24	-2.295	0.031**	0.459
Experimental group	71.92	5.107	24			

Note: ** at the 5% level.

4.3. Within-Group Improvement in the Experimental Group

Table 3 presents the results of the within-group comparison of the experimental group. Both musical performance and sight-reading ability improved significantly after the instructional intervention. Specifically, the mean score for sight-reading ability increased from 82.68 (SD = 4.049) at pre-test to 83.44 (SD = 4.154) at post-test. This difference was also significant ($p < .001$) and was supported by a large effect size (Cohen's d = 1.051), indicating a practical enhancement in students' ability to interpret and perform unfamiliar musical scores under time constraints.

Similarly, musical performance also showed considerable improvement following the intervention. The average score increased from 70.76 (SD = 5.182) to 71.92 (SD = 5.107), resulting in a statistically significant difference ($p < .001$) and an extremely large effect size (Cohen's d = 1.686). This result indicates that students not only made technical progress but also demonstrated greater expressive ability and stage presence.

Together, these findings provide strong evidence of the effectiveness of the mixed Task-Based and BL educational approach in facilitating concrete progress in both the technical and artistic aspects of musical performance.

Table 3. Pre-test and post-test comparison of sight-reading ability and musical performance within the experimental group.

Variable	Mean	SD	df	t	p	Cohen's d
Sight-reading ability						
Pre-test	82.68	4.049	24	-5.253	0.000***	1.051
Post-test	83.44	4.154	24			
Musical performance						
Pre-test	70.76	5.182	24	-8.43	0.000***	1.686
Post-test	71.92	5.107	24			

Note: *** represents significance at the 1% level.

5. DISCUSSION

This study investigates whether the instructional model combining TBL and BL has any effect on improving sight-reading ability and musical instrument performance among undergraduate students majoring in Chinese Traditional Instrumental Music. The results reveal that the combined TBL-BL teaching model is indeed beneficial in developing each skill with medium to large effect sizes, demonstrating its practical value in higher music education. These outcomes support previous research suggesting that learning is more effective when learners engage in task-based experiences with flexible online support (Means, Toyama, Murphy, & Baki, 2013). Furthermore, the study identified some processes through which the model contributes to the development of cognitive-oriented skills, performance, and motivation engagement. There was a statistically significant improvement in the sight-reading abilities of students in the experimental group after the treatment. Therefore, students in the experimental group surpassed the control group in the post-test regarding sight-reading ability. The highest possible gain was achieved through the TBL structural format combined with comprehensive BL support. Sight reading is a demanding skill that involves decoding rhythms, integrating audiovisual information, and rapidly activating procedural memory (Zhukov & McPherson, 2022). Students were then able to acquire sight-reading skills through knowledge activation before the task, live practice, reflection, and feedback after the task, within realistic performance environments, and refine strategies for dealing with unfamiliar scores. Additionally, the online modules, which included video demonstrations, scoring rubrics, and real-time feedback, allowed students to prepare on their own and address any errors prior to class, thereby fostering self-regulation and expediting learning. This concurs with Gromko (2004)'s results, who suggested the role of rhythmic and auditory processing in sight-reading skills.

Instrumental performance showed that the experimental group demonstrated a marked improvement, especially in emotional expression, stylistic interpretation, and stage presence. The sartorial and artistic aspects require equal attention in conducting proficient musical performances (Hallam, 1998). Task-based activities aim to be set in authentic performance scenarios so that students can bridge technical skills with artistic interpretation into an expressive performance style and engaging stage presence. Peer evaluation and feedback from the instructor promote

critical reflection and increase aesthetic appreciation, thereby aiding in establishing clear expression objectives and a distinctive performance identity. These results align with the findings of Liu, Hwang, Tu, Yin, and Wang (2023) who maintained that authentic learning settings provided for deeper engagement and emotional communication in music. Furthermore, these tasks enabled students to begin working on music interpretation from multiple perspectives, deepening their musical understanding and increasing their confidence on stage. In the intervention, blended learning (BL) appears to have received essential instructional and time-management support. Time-outs for computerized recording and digital tools allow students to work independently with immediate feedback purposes. Thus, enabling the consolidation of technical skills and their procedural memory. This is considered advantageous within the world of music learning for repeated exposure, individualized learning, and constant reinforcement (Hrastinski, 2019). Video demonstration, interactive tools, and digital scoring systems enriched both qualitative and quantitative instructional content. According to the self-determination theory, the autonomy-supporting learning environment improves motivation and long-term engagement in learning (Deci & Ryan, 2000). This is the underlying psychological mechanism of these study findings; hence, learners had increased their active participation considerably in the entire learning process. Multimodal input auditory, visual, and kinesthetic, formed a stable knowledge network that promoted long-term memory retention and transfer of the acquired skills (Paivio, 1990).

From instructional and sustainable perspectives, the model was coherent and adaptable across all six phases of teaching. The procedure involved the integration of the model, planning of content, strategic instruction, feedback adjustment, individual instruction, and reinforcement, providing a framework of structure for the execution of lessons. Reflective assignments and digital tracking mechanisms allowed instructors to shift directions during the process for fine-tuning to increase response time and precision in instruction. This highly structured and flexible framework presents valuable implications for the sustainable delivery of performance-based music instruction in higher education. Supporting this viewpoint is the previous research of Graham et al. (2013), emphasizing that a well-coordinated BL framework sets the foundation for ongoing curricular innovation and pedagogical advancement.

Thus, it can be said that the integration of TBL and BL was effective for skill development among students. This facilitated the achievement of instructional goals by engaging cognitive functions, increasing motivation, and nurturing expressive capabilities. Based on technical practice in tandem with authentic learning environments, students established reflective, autonomous, and expressive musical capabilities. The study provides both theoretical comprehension and supporting evidence for curricular reform and academic practice in music education. Inferences indicate the need for authentic, task-based learning embedded within technology-enhanced environments in professional musical training.

6. CONCLUSION

Findings from the study suggest that an instructional model combining TBL with BL confers improvements in sight-reading and performance skills within Chinese traditional music education. The approach fosters technical and expressive qualities through a structured task framework and a more flexible digital support mode. The results indicate that learner-centered instruction with the integration of technology contributes to performance competence, motivation, and self-regulation in students. This six-phase model serves as a prototype adaptable for curriculum design and offers practical perspectives for solving pedagogical problems in higher music education.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
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