Article

Transforming Piano Tuition: A Cross-Arts Approach Inspired by "Peter and the Wolf"

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ABSTRACT

This study explores the impact of interdisciplinary pedagogies combining music and other art forms on elementary piano students. Using action research, we assessed eight students and their parents through pre-, post-, and follow-up tests (June 2022–May 2023). The intervention incorporated story narratives, movement, music creation, and visual art, with data from field notes, diaries, video recordings, focus groups, and surveys. Qualitative data were analyzed through theoretical coding, and quantitative data via descriptive statistics. Results showed positive outcomes, particularly in addressing home practice challenges. This study underscores how interdisciplinary approaches reshape student attitudes, enhance learning outcomes in music education, and foster a sense of accomplishment.

INTRODUCTION

A recurring observation among some music students is that even after correction in several lessons, they continue making the same mistakes, that is, they appear less able to transfer their learning into a cohesive framework or identify relationships between different concepts. Students who lack a thorough

understanding of their instruments' technical aspects often struggle to apply previously learned knowledge or approaches to resolve their problems. Further, when parents become aware of their child's home practice problems, they experience difficulties in identifying credible solutions to the problems from among the vast amount of information available online. Despite the time, patience, and effort parents put into finding solutions to these issues, they experience little success.

However, some children can extract musical concepts and skills from varied sources, such as musicians' background stories, and seamlessly transfer these concepts into instrumental mastery. Traditional imitation instrument tutorials involve rote learning or sequacious mimicry. However, this practitioner-oriented study sought to determine pedagogical innovations to encourage conscious learning and produce effective outcomes. We used an action research methodology to analyze shifts in students' learning, self-motivation, participation, and commitment in a music-related context. The study was guided by two questions:
(1) What are the reflections of students and their parents on a cross-arts instructional approach to learning a musical instrument?
(2) How do cross-arts interventions influence musical instrument learning?

Exploring these questions will aid our comprehension of specific practices in music education and demonstrate the importance of innovative teaching methods in broader pedagogical discourses. Through this study, we seek to provide valuable insights in the field to promote improvements in future instructional design and practices.

THEORETICAL FRAMEWORK

We consulted previous studies to construct the overall research framework (Figure 1). The first subsection explores the theory of immersion learning (2003) in music education, the second subsection discusses the effects of cross-disciplinary teaching, the third examines a possible cross-disciplinary arts module to foster student commitment in foundation instrument courses, and the final subsection examines music creation and its application as an assessment tool.

Figure 1: Research structure
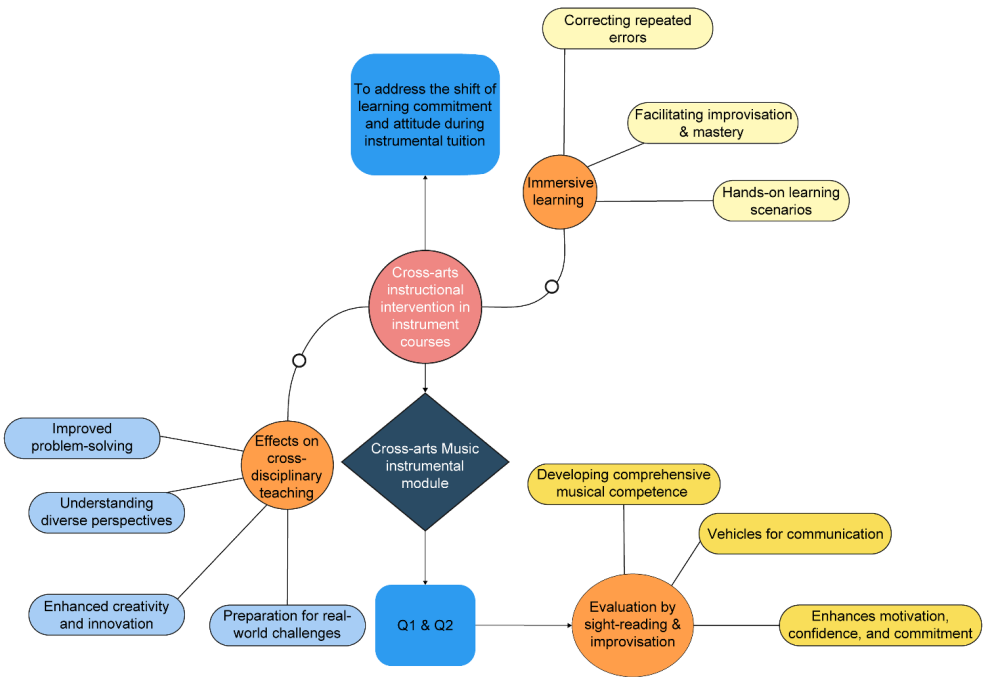
Music education through immersion learning

Anderson (2003) defined immersion as a learning approach in which students are immersed in real conditions to address practical issues. It was introduced in Montreal in 1965 for second language learning (Duibhir, 2018) to help learners more quickly acquire the target language (Ní Dhiorbháin & Ó Duibhir, 2017).

Similar to language learning, immersion can be used in music learning to correct errors. Drotos (2023) suggested that immersing oneself in a particular genre could facilitate improvisation and mastery. Immersive learning is also possible using new technologies such as virtual and augmented reality, which provide hands-on learning experiences to students (Doyle, 2021).

Virtual education platforms offering immersive learning opportunities have emerged as pedagogical practice alternatives following the COVID-19 pandemic. Although this paper does not discuss the implications of using virtual technologies in music education, such immersive approaches provide insights into developing instructional music curriculum. NPR Travels is an example of an immersive

educational trip for fans of public radio, history, music, and astronomy (Arslanian, 2022). Creating immersive learning environments can minimize distractions and enhance student learning in this uncertain, technology-driven era. The incorporation of immersive learning techniques through innovative technologies offers a dynamic, interactive learning environment tailored to diverse learning styles and preferences, ultimately enhancing the effectiveness of music education (Allaniyazov, 2024).

Cross-disciplinary learning

Cross-disciplinary learning provides a holistic, comprehensive understanding of a subject by integrating knowledge and skills from various disciplines (Jacobs, 1989). It fosters metacognitive skills, innovative thinking, and problem-solving abilities, and prepares students for complex work environments (King et al., 2024; Ivanitskaya et al., 2002; Pascarella & Terenzini, 1991). However, some scholars argue that discipline-specific approaches offer a more structured framework for developing specialized knowledge (Amundsen & Wilson, 2012 ;Hirsch, 2011; van Dijk et al., 2023).

Critics of cross-disciplinary learning are concerned with superficial learning and the challenge of developing in-depth understanding of multiple disciplines (Lipman, 1982; Zygouris-Coe, 2014). Nonetheless, Ho (2001) suggests that experts employ breadth-first searches and explore various paths before delving deeper, allowing them to generate diverse solutions before narrowing down options (Davila et al., 2013). By fostering collaboration and innovation, breadth-first searches and horizontal thinking can be seen as extensions of cross-disciplinary problem-solving (Klein, 2018). Kim et al. (2024) and Wayman (2021) discuss how including rhetorical gestures and techniques can be employed to create convincing stories, evoke listener emotions, and enhance musical performances. Cross-disciplinary learning focuses on strengthening four main abilities: problem-solving, understanding diverse perspectives, enhanced creativity and innovation, and preparation for real-world challenges (Klein, 2005, 2022). In other words, it encourages learners to draw from multiple disciplines to address complex and diverse perspectives, nurtures creativity, and develops cross-disciplinary knowledge integration, collaboration, and adaptability. Sheppard and Broughton (2020) assert that when music and dance are integrated into education, different parts of the brain are engaged, enhancing cognitive abilities, creativity, and overall learning experiences. Therefore, cross-disciplinary approaches can foster social interaction, teamwork, and self-expression and contribute to holistic learning and academic success. The incorporation of context from different disciplines, such as a museum context, enhances the ability to navigate uncertainty and develop metacognitive practices, which are crucial for effective teamwork and self-expression in complex environments (Kim et al., 2024). Mountain (2022) suggests

that the amalgamation of insights from various disciplines, such as cognitive sciences, communication, and art, enriches music exploration and impoves comprehension of sonic perception, temporal dynamics, and the meaning of musical expression.

Cross-arts module for an immersive music pedagogical approach

Integrating different art forms can help students address pain points when learning musical instruments. Arts integration in education began with Herbert Read's (1893–1968) reflections on social suffering after World Wars I and II, which led to the use of the arts for social expression (Read, 1948). Anderson (2003) claims that using art as a learning strategy can act as windows and mirrors that allow for personal and social expression, that is, because the arts can provide holistic and metaphorical perspectives, their inclusion in education can promote understanding and deeper learning (Bhukhanwala et al., 2017). When teachers incorporate local cultural stories into the perception of musical instruments, they evoke emotional connections to these sounds, thus sparking curiosity about the acoustic environment. This, in turn, stimulates students' interest in the interaction between the community's environment and the sounds it produces, thereby encouraging active learning (Su, 2024).

To facilitate cross-arts practices, it is important to consider the benefits that can be derived from various art forms. Bonaccorso (2001) defines the arts as a collection of disciplines that encompass painting, sculpture, theater, music, dance, and poetry. Anderson (1990) categorizes the arts into four esthetic aspects; mimetic, emotionalist, pragmatic, and formalist; the first three relate to external connotations that represent specific themes induced by concepts, feelings, or life experiences. For example, René Magritte's paintings or Nikolay Rimsky-Korsakov's orchestral works can depict themes from classical Arabian literature, such as Scheherazade. The formalist esthetic, however, focuses on the inner structure of the artwork, as exemplified in Wagner's concept of "Absolute Music," which is isolated from human concerns (Bonds, 2014; Ginsborg, 2017; Pederson, 2009).

The United Nations Conference on Trade and Development (UNCTAD, 2010, p. 7) classified the arts into visual arts, including painting, sculpture, photography, and antiques and performing arts, including live music, theater, dance, opera, puppetry, and circus. Understanding the distinct esthetic categories of these different art forms can help identify suitable cross-arts combinations and innovations for music pedagogy. Therefore, incorporating diverse art forms into music education can address learning challenges, and recognizing categories of esthetic art forms can help identify the pedagogical approaches needed when developing cross-arts modules.

Music-making through improvisation as an assessment

School students primarily engage in receptive musical activities, with traditional music training generally focusing on performance; this approach tends to overlook other aspects of musical perception (Hogenes et al., 2016; Wiggins & Espeland, 2012). Audiation, that is, giving meaning to a sound, plays a crucial role in music thinking (Gordon, 2009). However, performance proficiency alone cannot accurately assess a student's audiation capabilities, which involve understanding rhythm, tone syntax, and patterns (Pallonetto et al., 2022). Willoughby (2021) argues that comprehensive musicianship enhances the ability to compose, perform, and listen to music. However, to better foster creative practice competencies, active music creation needs to be integrated into education (He et al., 2023).

Whether through performing, composing, or improvising, music-making is a creative process (Wiggins & Espeland, 2012). Music composition is similar to creative writing as it involves expressing ideas and emotions within certain contexts (Hogenes et al., 2014; Ruthmann, 2007) through music notation or improvisation and allows for the expression of ideas and emotions beyond words (Self, 2017). The development of these creative outlets is vital to musical communication and the development of musical competencies.

Composing is often considered a deliberate creation and improvisation is spontaneous (Kratus, 1994; Şuteu, 2020; Webster, 2003; Wiggins, 1993). However, many view improvisation as being integral to the composition process (Davies, 1992; Faulkner, 2003; French, 2005; Green, 2005). Krevel & Žnidaršič (2024) further states that improvisation allows for the spontaneous generation of musical ideas, which can then inform and enhance the composition process. Regardless of the approach, original music creation conveys the composer's expressive intentions through texture, melody, rhythm, and tonality (Wiggins & Espeland, 2012). Music-making also encompasses social and cultural dimensions because its creations are influenced by the sociocultural contexts experienced by the composer. Involvement in collaborative peer music creation enhances motivation, commitment, and confidence (Vygotsky, 1981). Bilalovic Kulset and Halle (2020) found that music-making can influence student learning engagement by encouraging positive emotions and developing a sense of community in staff. Eichorn et al. (2020) found that the use of musical improvisation to motivate participants to work with medical professionals with knowledge vital to patient care led to increased empathy, more open communication, and active listening. Ng et al. (2022) found that immersing music education students in collaborative creative music-making that specifically incorporates the use of Shubailan with a mobile device positively influences learning engagement, motivation, and outcomes. Krevel & Žnidaršič (2024) identified improvisation not only integral to

the creative process in music but contributes profoundly to students' musical development, confidence, and enjoyment in learning.

METHODOLOGY

Because of the uncertain and turbulent post-pandemic era, to examine, reflect on, and develop an innovative instructional strategy for professional music teaching practice, we sought a methodological approach that allowed us to identify the complexities of the process. Wagemans and Witschge (2019) defined action research as dynamic and applicable to investigating complex and vibrant teaching and learning environments. Action research requires researchers to test theories in practical settings, receive feedback on experiences, adjust theories based on feedback, and repeat the process (Avison et al., 1999). Ivankova and Wingo (2018) suggested that cyclical action and reflection processes in action research mean that both quantitative and qualitative methods can be applied to obtain comprehensive, transformative insights from multiple stakeholders. Therefore, this study used action research to identify the social interference factors and variables that can lead to commitment problems when mastering a musical instrument.

Research design

This study focused on piano learning fundamentals through a cross-arts pedagogical intervention implemented in Tainan, Taiwan, between June 2022 and May 2023. The research followed a threefold procedure: (1) Pre-test data were collected through interviews with parents regarding their expectations and attitudes toward individual piano lessons during the first two weeks of the new term. (2) Post-test data were gathered from student feedback on the cross-arts instructional approach, which introduced musical themes from "Peter and the Wolf." This feedback assessed the participants' motivation and identified challenging skills. (3) Follow-up data were collected four weeks after adding improvisational training to weekly lessons, culminating in a concert on Mother's Day in May 2023, where participants improvised based on the learned repertoire. Participants
This research targeted elementary-stage instrumental learners from the first author's music studio. The study involved eight elementary students, aged 6 to 10 years, who had been learning piano for less than 6 years and possessed basic proficiency. The participants' families were middle-class and supported their children's weekly one-on-one 50-minute piano lessons. To ensure confidentiality, all participants (children and parents) were assured that their identities would be protected. Parents were informed about the research process and signed consent forms.
Five participants were assigned pseudonyms: Amy, Betty, Coco, Denise,

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and Eric. Ally did not participate in the final stage due to relocation, and Yetta and Zoe, who had previously taken 2 years of piano lessons with a different teacher, joined the first author's music lessons 2 months before the follow-up test. Yetta and Zoe served as the control group, and the remaining participants formed the experimental group.

Amy and Betty had started piano lessons 18 months prior to the intervention, while Coco had been learning for over 5 years. Denise and Eric have been playing for 4 and 3 years, respectively.

Cross-arts music instructional design

The cross-arts module piano tuition design incorporated Prokofieff and Haacken's (1968) "Peter and the Wolf." The module (Figure 2) was implemented over 3 months in the first 20 min of each weekly lesson. In the first week, the students were introduced to the orchestral version of "Peter and the Wolf" and familiarized with its characters, music, and narration. Based on their piano proficiency and personal preferences, students were assigned to one of the seven characters. In weeks 2–4, the students were given visual representations and listening exercises associated with their assigned character's theme, created visual representations on paper, and incorporated their auditory experiences using colored pens. The last 10 min of each session involved clapping the character's rhythmic theme pattern on the piano.

The subsequent weeks focused on embodied movement and piano performance. The instructor demonstrated each participant's assigned character's theme, guiding them to embody the character through movement and develop their own dramatic actions. The last 10 min were dedicated to sitting at the piano and transferring the embodied movements into technical piano performances.

During the final weeks, the participants focused on refining their piano techniques and melodic and rhythmic patterns. They performed their assigned character's themes while the teacher accompanied them with dance-like movements to encourage the participants to reflect on their performances and other potential narrative interpretations that could be made to the original Peter and the Wolf story. The fusion of storytelling, visual arts, listening, movement, musical literacy, and piano technical skill development provided a holistic approach to instrument learning.

Figure 2: *Cross-arts music instrumental module intervention flowchart*
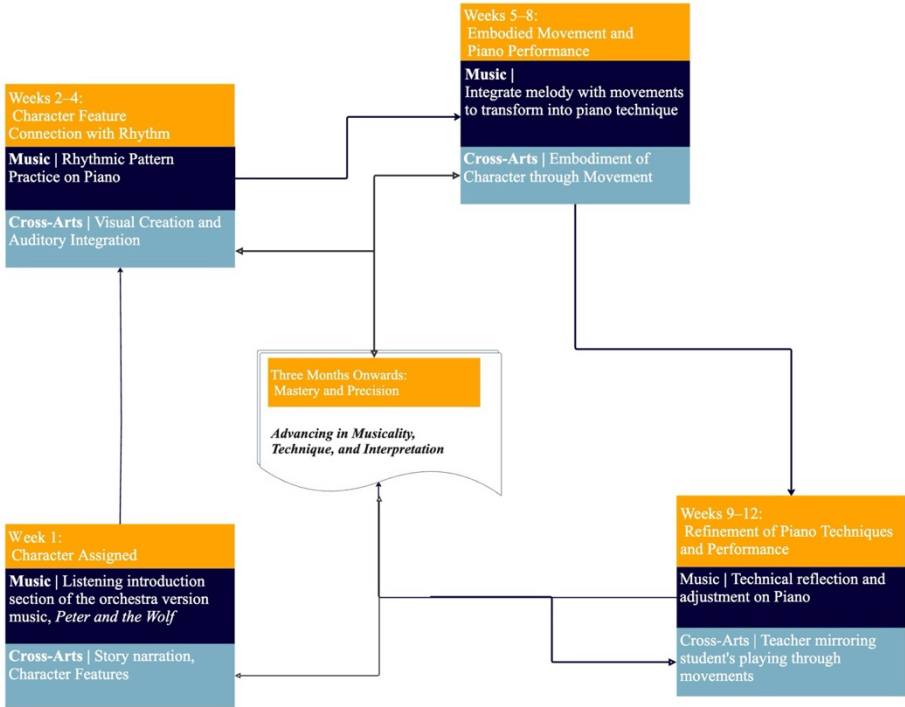
Data sources and collection measures

We collected the pre-test data through open-ended face-to-face interviews with the parents in which they were asked questions about their attitudes and expectations toward piano learning. We also used semi-open questionnaires to collect feedback on the participants' perceptions of the cross-arts instructional approach. The participants' reflections and interactions were captured through direct observation, video recordings, and field notes. Participants also kept learning diaries to record any discoveries and reflect on the lessons and their musical development.

To assess the effectiveness of learning using cross-arts instruments, we conducted an assessment competition that also included improvisation and sight-reading. Improvisation tests a student's ability to demonstrate proficiency using stored musical competencies, and sight reading evaluates students' recognition of previously learned musical concepts, rhythmic recognition, reading achievement, audiation skills, and performance ability (Gromko, 2004).

Specifically, participants were required to use one sight-reading excerpt (Figures 3–6) from the adapted version (Prokofiev, 1936) of *Peter and the Wolf* and

improvise using assigned notes in C major along with a designated backing track accompaniment. Two experts assessed the improvisation performances and the participants' application of the instructed rhythmic patterns.

Figure 3: Sight-reading excerpt A

Figure 4: Sight-reading excerpt B

Figure 5: Sight-reading excerpt C

Figure 6: Sight-reading excerpt D

Results and Data Analysis

This section presents the diagrams and descriptive responses from the pre-test, post-test, and follow-up test based on the qualitative and quantitative questions included in the data collection sources and instruments.
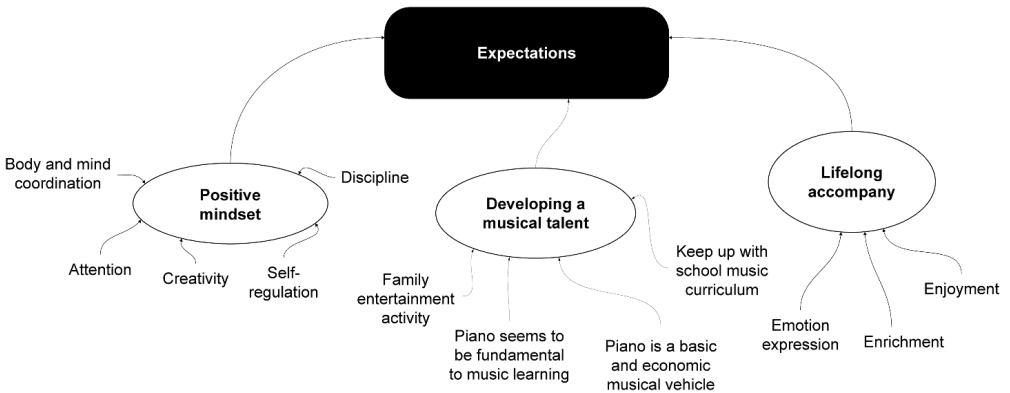
Pre-Test findings

Thematic coding was conducted to synthesize the parents' in-depth interview responses. Coding is a method used to identify and label key themes, ideas, patterns, and concepts in textual data (Hesse-Biber & Leavy, 2010). Figure

7 shows the results of the coding analysis on the parents' expectations of piano lessons.

The parental expectations derived from the analysis included a positive mindset, nurturing musical talent, and music as a lifelong companion. Most interviewees found that piano learning promoted self-discipline, improved learning attention, trained body and mind coordination, helped develop an appreciation of musical properties, and contributed to better school music class performances. One respondent also hoped their child could play in ensembles with other relatives in family entertainment activities. All the parents also considered piano playing to be a lifelong form of self-expression that would allow their child to connect with others through music.

The analysis of parental attitudes after each lesson revealed that over half of the participants provided positive reinforcement to motivate their child to regularly practice; however, most claimed that although their child was willing to take piano lessons, they were generally inattentive when practicing after the lessons. One parent confesses that every time they asked their child to practice, they almost ended up quarreling. However, most parents encouraged their children or gave them tangible rewards when they practiced the piano properly. Overall, the parents generally had positive attitudes toward their children's piano lessons and provided steady support to their children during their piano learning journey.
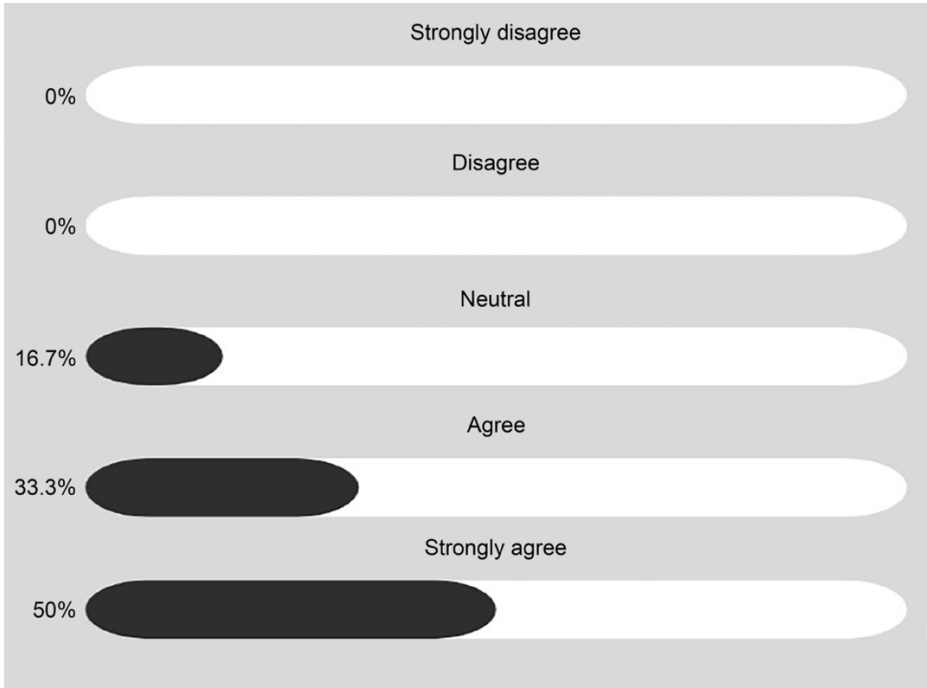
Figure 7: Parental expectations of their child's instrument learning

Post-Test findings

A quantitative survey (Figure 8) was administered to the experimental group after the 10-month pedagogical intervention on the cross-arts piano project was completed.

Figure 8: Student comments on the viability of the cross-arts music pedagogy

To gain a deeper understanding of the experimental participants' perspectives on the cross-disciplinary music pedagogy interventions, we asked about the reasons behind their choices for each option, for which they gave the following comments: "it allows for imagination and an understanding of the storyline in the music"; "this learning approach is such fun and makes a deeper impression, making the music easier to play in [my] mind"; "music combined with drawing and drama facilitate hard skills"; "once the teacher asked me to draw whatever color for the music, which ignited my motivation and engaged [me] in my piano learning"; and "the cross-arts intervention helped me develop a more nuanced and sophisticated understanding of musical concepts and techniques." The student who chose the neutral option said that she neither disliked nor had any particular feelings toward this learning approach as they always just followed the teacher's instructions.

Each participant kept a weekly music practice journal to document their practice sessions and reflect on their discoveries and achievements after each session. The following are some of the participants' observational notes.

> I noticed a significant improvement in my finger dexterity while practicing scales. The use of Lego during the lesson[s] allowed me to establish a pattern and sequence in my hand movements. It's exciting to feel my fingers moving smoothly and effortlessly across the keys. (Denise)

> I had a breakthrough moment during my practice today. While playing a piece, I realized once I followed the teacher's raising movement, my body automatically reacted to the rest symbol, reminding me to pause and anticipate the next beat. It was a physical response that I didn't even consciously consider before. It's amazing how muscle memory and body movements can help me remember when to come in after a rest! (Amy)

> When learning another new piece, Beethoven's *Für Elise*, I also employed the learning method inspired by the *Peter and the Wolf* curriculum, starting with the background story of this work. It has deepened my understanding of the piece. I discovered that it follows an ABACA form, with distinct sections and a memorable theme that repeats. Understanding the structure and the composer's intentions has given me a new perspective on how to interpret and express the emotions embedded in the music. (Betty)

> Previously, I couldn't quite grasp the technique for bouncing between notes. However, after taking the *Peter and the Wolf* cross-arts music training, while I was instructed to portray Peter's joyful expression by acting movement, I felt my entire arm understanding how to play those staccatos accurately. (Coco)

> Additionally, we also made the following observation notes:

> "Ever since portraying the role of Grandfather in *Peter and the Wolf*, I've noticed that Eric no longer fears dotted notes and can play them correctly almost every time:" and "once leading Ally to move her pace along with the rhythm of the Wolf theme sequence several times, I was surprised that she could distinguish the length of semiquavers and quavers, and apply her understanding into playing."

Follow-up test results

The follow-up test consisted of two parts: (a) sight-reading excerpts from *Peter and the Wolf* and (b) a 2-min improvisation with an assigned backing track. The evaluation results from the two expert assessors are shown in Figure 9. First, the follow-up test results indicated that the experimental group, which engaged in

the cross-arts music instructional module, showed significantly better improvisation skills than the control group. The average score of the experimental group was 86.6, while the control group's average score was 72.4, presenting a significant advantage for the experimental group in terms of improvisational creativity. This is particularly evident in this group's creative interpretation of the rhythmic patterns that are associated with the characters from *Peter and the Wolf*. Expert assessors noted that the experimental group performed the assigned improvisation with greater confidence but also exhibited a more nuanced understanding of the emotional and narrative elements that are embedded in the music.

By contrast, the control group, which did not receive cross-disciplinary exposure, showed a more limited improvement in their improvisational skills. Their performances were more rigid and less expressive, suggesting that the traditional approach to music education may not foster the same level of creativity and emotional engagement as other approaches. This difference indicates the effectiveness of integrating various art forms, including drawing and drama, into education because it encourages students to explore and express their musical ideas more freely.

**Figure 9:Expert evaluations of the cross-arts intervention follow-up test**
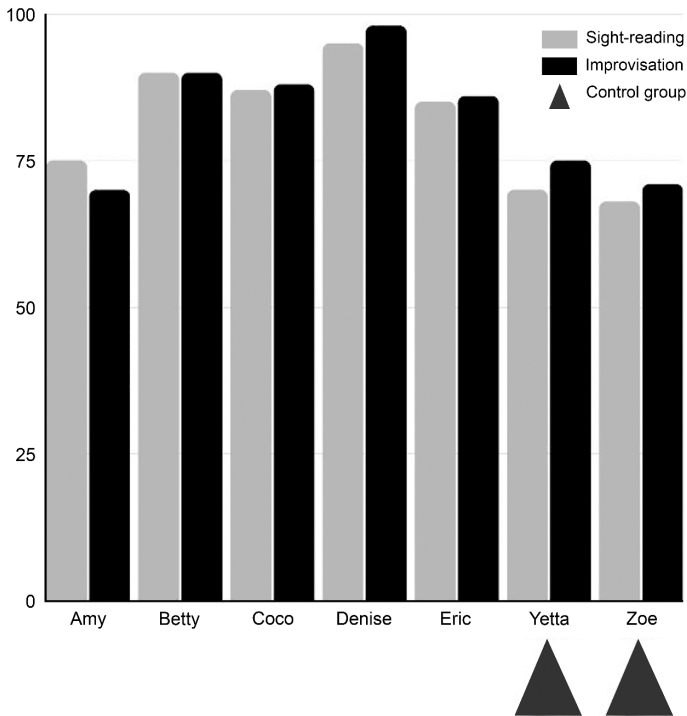
Focus group discussion findings

A focus group discussion with the two experts, participants from both the control and experimental groups and their parents was conducted after the concert-style follow-up assessment. The students' commitment to their final presentation was obvious and the proud responses from their families were also reflected in the focus group discussion. The focus group discussions revealed that the participants in the experimental group felt a stronger connection to the music that they were learning. Comments such as "this learning approach is such fun and makes a deeper impression" and "the cross-arts intervention helped me develop a more nuanced understanding of musical concepts" underscore the positive impact of the integrated curriculum on the learning experience. However, the participants in the control group did not express similar sentiments, thus indicating that they experienced a lack of engagement and emotional connection to their music practice. To gain insights into the cross-arts music learning intervention, data from the 1-h focus group discussion and final survey were synthesized and thematically coded (Figure 10) in line with Klein's (2005, 2022) conceptual framework on cross-disciplinary learning effects.

The data triangulation from the participants, their parents, and experts provided a comprehensive understanding of the multifaceted impact of the cross-arts instruction intervention on the piano learning process and a holistic view of the transformative effects of this instructional approach.

Figure 10: Theoretical coding for the impact of cross-arts instruction on piano learning
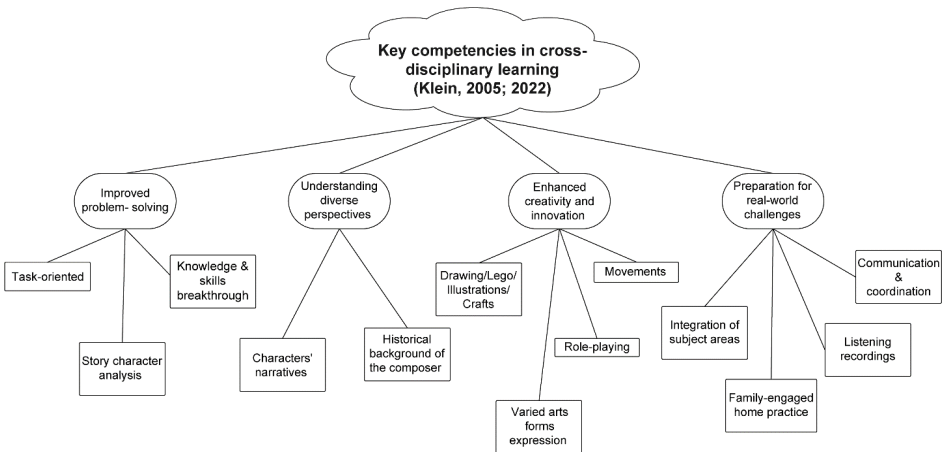
Increased musical ability and creativity

Engaging in artistic exploration through imaginative play and diverse mediums enhanced the participants' musical ability and creativity.

> I have noticed a significant improvement in my two daughters' musical creativity. They play the roles of the Bird and the Duck, dancing and singing their melodies even while taking showers. (Parent D)
>
> It's really cool to explore different arts tools, such as clay and building blocks. It allows me to use tools to figure out meters to count in [the] right way. (Student Coco)

Improved metacognition and analytical skills

The intervention improved the participants' metacognition and analytical skills as they became more attentive to detail and were better able to identify patterns and make informed decisions when working on complex musical elements.

> I've noticed my child becoming more attentive to the details and nuances of music. She can identify patterns and make informed decisions when working with complicated note clusters and rhythm. (Parent C)
>
> The cross-arts approach requires the students to analyze and interpret the music in relation to other art forms. The picture books they created developed their critical thinking skills, as they had to make connections and evaluate the impact of various artistic elements. (Expert B)
>
> Previously, I used to practice from start to finish in one go and then stop. However, after studying Peter and the Wolf, I noticed that the composer's use of dotted rhythms resembled the way my grandfather walks. This made me want to start practicing the unique rhythms first. (Student Eric)

Greater understanding and appreciation of diverse perspectives and cultures

Exploring empathetic compositions such as Prokofiev by integrating different art forms enhanced the participants' understanding and appreciation of diverse perspectives and cultures.

> While searching for Prokofiev's background and stories, I became conscious that Prokofiev was such a sweet and thoughtful person that he wrote a mere left-hand piece for his pianist who broke his right hand during the war. (Betty)
>
> The integration of different art forms exposes students to various cultural perspectives. It helps them understand and appreciate the diversity in music and its connection to different cultures. (Expert A)

Enhanced communication and collaboration skills

Cross-arts music lessons enhanced communication and collaboration skills and fostered productive teamwork and enjoyable musical experiences.

> Since my younger daughter joined the cross-arts music lessons, although both daughters still have arguments when they are together, whenever they practice music, they collaborate and enjoy themselves. This allows me to save time working on my business. (Parent A)
>
> I've learned to listen to others' ideas, express my own thoughts, and work as a team to present a whole piece of music. (Student Denise)

Integrative framework for real-world problem-solving

Using the integrative framework, the students independently explored recordings to enhance their piano playing and demonstrated rhythmic awareness, creative expression, and real-world problem-solving skills in their everyday activities, such as cooking.

> My daughter now requests me to find different music recordings for her to listen to before bed so that she can easily catch the piano playing melodies, such as the Duck's theme. (Parent B)
>
> On several occasions while I was cooking, my child eagerly invited me to join in tapping pots, imitating the rhythm of a hunter, showcasing a newfound sense of rhythmic awareness and creative expression. (Parent D)

Improved academic performance and achievement

The cross-arts instrument training enabled the participants to apply concepts learned during piano lessons to other subjects such as math. Overall, participants had significantly improved music and academic performances.

> The school music teacher wanted her to showcase her talent, assuming that she was too shy to perform. However, to everyone's surprise, she played the theme of the Wolf and stunned her classmates. (Parent E)
>
> On one occasion, he achieved the highest score on a math test and told me it was because those concepts had been covered in his piano lessons with the teacher. (Parent C)

DISCUSSION AND CONCLUSION

This study highlights the significance of a cross-arts pedagogical approach to music education. This approach fosters students' musical abilities, creativity, and critical thinking. In terms of artistic exploration and imaginative play, students exhibited a deeper comprehension of musical concepts, thus enhancing their metacognitive and analytical skills. Parental feedback also showed increased attention to musical details and patterns, which underscores the broader benefits of

interdisciplinary integration for developing analytical and interpretive abilities across disciplines.

These findings align with immersive learning methodology (Anderson, 2003), which posit that students acquire deeper understanding when engaged in meaningful, experiential conditions. The cross-arts approach has created immersive learning environments in which students are actively engaged with multiple artistic disciplines, reinforcing learning through interconnected real-world experiences. Moreover, this study reflects interdisciplinary learning effects (Klein, 2005), whereby integrating various art forms can deepen subject comprehension, cultivate creativity, and enhance collaborative learning, which are all essential elements for contemporary education.

Integrated Themes

Students' interpretations of *Peter and the Wolf* in piano performances provided an immersive experience in which each character was expressed using distinct instrumental themes. The narrative frameworks grounded learning in a meaningful context, becoming aligned with immersive learning principles by drawing a connection between musical rhythms and melodies in storytelling. This practical application enhanced both musical engagement and retention while demonstrating the effectiveness of integrated themes in fostering creative expression. Higher education instructors could apply similar narrative-driven approaches to enhance student involvement.

Comprehensive Understanding

The study showed that students' study of techniques such as slurs, accents, chords, and arpeggios was enhanced with the portrayal of emotional expressions tied to character roles. Linking technical proficiency with emotional storytelling enabled students to bridge theoretical and practical understanding, reinforcing interdisciplinary learning effects. This approach enriches musical ability and emotional interpretation, producing valuable strategies for teacher training programs to assist future educators in connecting technical instruction with artistic expression.

Cross-Arts Methods

The integration of music, literature, and visual arts allowed students to explore characters, create illustrations, and analyze story narratives through multisensory, interdisciplinary processes. This aligns with Klein's theory, which highlights the cognitive benefits of the synthesis of knowledge across disciplines. Students demonstrated enhanced creativity and critical thinking skills through multimodal learning experiences. These findings indicate the potential for higher education curricula in adopting cross-arts methodologies that promote exploration, collaboration, and deeper subject engagement.

Collaborative Learning

      Collaborative activities, such as group performance and creative projects, fostered teamwork, listening, and leadership skills in students. Immersive, real-world tasks required negotiation of roles and meaningful contributions to shared goals, producing a dynamic learning environment. This collaborative process not only reinforced social and musical skills but also illustrated the value of interdisciplinary integration to cultivate collective problem-solving abilities. For higher education, embedding collaborative projects in curricula can help students prepare for team-oriented professional environments.

Integrated Learning Portfolios

      The development of thematic portfolios, inspired by *Peter and the Wolf,* provided a reflective space for students to consolidate their performances, story analyses, and artistic expression. These portfolios demonstrate how immersive, interdisciplinary learning can foster both technical achievement and critical reflection. Through documenting their progress, students could engage with music education as a holistic, integrated process connecting cultural, historical, and creative insights. Portfolios, therefore, provide a robust assessment model for higher education that emphasizes both processes and products.

Challenges and Practical Considerations

      The cross-arts approach proved effective, but challenges including time constraints, uneven participation, and resource limitations emerged. These concerns highlight the importance of flexibility in instructional design, reflecting adjustments based on student feedback, and interdisciplinary collaboration with educators from other fields. Teachers' ability to immerse students in meaningful, experiential activities while balancing resources remains key for the success of cross-arts modules.

      Despite its effectiveness, the study was limited by its relatively small sample of eight elementary students, which limits its generalizability to larger populations. Qualitative feedback from students and parents provided valuable insights, but the data produced are inherently subjective and may not fully reflect the method's impact on a wider scale.

Implications for Music Education

      The results underscore the transformative potential of cross-art pedagogical approaches, particularly when grounded in immersive and interdisciplinary learning frameworks. Through creating meaningful and collaborative experiences, these methods not only develop students' technical and creative skills while also cultivating critical inquiry and reflective thinking. These findings have valuable implications for elementary and higher education, where the integration of art forms can enrich curriculum design and teacher

training programs.

This study highlights that the integration of art forms into various subjects, such as mathematics, science, and language arts, enriches curriculum design and teacher training. The interdisciplinary approach proposed here goes beyond piano instruction to cover other instruments, including strings, brass, or percussion. The key to success lies in the establishment of thematic connections resonating across disciplines, incorporating narrative elements and creating shared understanding and engagement. These shared themes allow diverse fields to converge, fostering creativity, collaboration, and critical inquiry, nurturing lifelong learning and deeper emotional connections to the arts.

Conclusion

This study demonstrates that cross-arts pedagogical approaches can enhance music education by fostering creativity, interdisciplinary understanding, and emotional engagement. Immersing students in dynamic, narrative-driven, and collaborative experiences, music education transcends traditional instruction, providing a framework for future educational innovation.

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