

The role of improvisation in piano performance: Cultivate creativity and musical performance

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Abstract. Improvisational education not only enhances the musical literacy of performers but also plays an indispensable role in stimulating creativity and enhancing musical expression. This article focuses on the role of improvisational accompaniment in piano performance, aiming to explore its specific value in music creation and expression ability cultivation. The research results demonstrate that improvisational accompaniment training can significantly improve piano learners' musical expression and creativity. In the practical process, learners not only need to master the basic laws of harmony, rhythm, and melody but also need to quickly conceive and express music according to different music styles and contexts. This process greatly exercises their creative thinking and improvisational processing abilities. Through the training of improvisational accompaniment, students are not only able to interpret music based on fixed sheet music but also actively engage in musical interpretation, resulting in a significant enhancement of their expressive power.

1 Introduction

Piano performance has attracted more and more attention and publicity in the field of music in recent years. Improvisational education not only improves the musical literacy of performers but also plays an indispensable role in stimulating creativity and enhancing musical expression. In the process of practice, learners not only need to master the basic rules of harmony, rhythm, and melody but also quickly conceive and express music according to different musical styles and situations, which greatly exercises their creative thinking and improvisational processing ability. Through the training of improvisational accompaniment, students are not only based on a fixed staff, but also can actively interpret the music, and their expressiveness is significantly enhanced.

In the traditional piano teaching system, score performance and technical training have long occupied a dominant position, and teachers usually guide students to perform immersive and reductive performances of works in a standardized and standardized way. Although this teaching method helps to consolidate students' basic skills, it also limits the development of students' musical creativity and musical expression to a certain extent. In recent years, with the change in the concept of music education and the deformation of various examinations,

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more and more music educators and learners have begun to realize the necessity of the expression process of improvisation in the process of music learning, the expression of improvisation has gradually attracted attention and become an indispensable part of modern teaching. In fact, not only in the teaching and learning of piano but now more and more musical instruments are also paying more attention to the form of musical improvisation. Improvisation, as a form of practice based on harmony, rhythm, and melody improvisation, is not only a concentrated embodiment of musical literacy but also a natural expression of the performer's personality and emotion. The brain is more sensitive to its mistakes when playing a score, but improvisation allows the musician to be more flexible. Either way, musical collaboration requires the brain to monitor, adjust, and understand the partner's intentions in real-time [1]. Different from simple solo piano performance, improvisational accompaniment requires the performer to use auditory judgment, music theory knowledge, and performance skills comprehensively, and improvise the accompaniment content according to a specific melody or situation, and this improvisational and creative training is an important foundation for the formation of musical expression. In fact, in the Western music education system, improvisational accompaniment is regarded as one of the basic skills, especially in developed countries such as the United States, the United Kingdom, and Germany, piano teaching emphasizes the overall ability training of "listening", and improvisational training runs through preschool education, basic education and even the curriculum of higher music colleges. In contrast, piano teaching in China started late in improvisational accompaniment, and the curriculum less involved free accompaniment and creative practice, resulting in many students lacking the ability to express and create independently, even if they have reached a high level of technical proficiency. That's why it's so important to learn to improvise well. How to integrate improvisational accompaniment into the piano learning process through systematic teaching has become an urgent problem to be solved in music education. At the same time, several studies in recent years have pointed out that improvisation is closely related to the development of creativity. Many related theoretical studies provide solid theoretical support for the teaching of improvisational accompaniment. In general, the in-depth discussion of the role of improvisational accompaniment in piano learning, especially the practical value of cultivating students' creativity and expressiveness, will not only help to improve the existing piano teaching system but also provide a theoretical basis and practical path for the construction of a student-centered music education model that emphasizes the development of comprehensive ability.

Focusing on the theme of "The Importance of Improvisational Accompaniment in Piano Learning: Cultivating Creativity and Expressiveness", this study aims to explore the specific application of improvisational accompaniment in piano teaching, the promotion of students' musical ability, and how to effectively improve students' creativity and expressiveness through scientific teaching strategies. Focusing on the theme of "The Importance of Improvisational Accompaniment in Piano Learning: Cultivating Creativity and Expressiveness", this study aims to explore the specific application of improvisational accompaniment in piano teaching, the promotion of students' musical ability, and how to effectively improve students' creativity and expressiveness through scientific teaching strategies.

2 Creative and performance thinking

Depending on the research, musical improvisation, particularly in piano accompaniment, has emerged as a critical element in modern music education. While traditional classical piano training has long emphasized technical precision, sight-reading, and interpretation of written

scores, recent pedagogical shifts recognize the importance of cultivating creativity and expressiveness—two qualities at the heart of improvisation. Improvisational accompaniment, which requires musicians to create spontaneous harmonic, rhythmic, and melodic content in real-time, fosters a deep understanding of musical structure, enhances aural skills, and encourages personal expression [2].

Psychological research further supports the cognitive and emotional benefits of musical improvisation. Engaging in improvised accompaniment allows pianists to enter a “flow” state, where their focus is heightened, creativity is uninhibited, and performance becomes more emotionally authentic.

Moreover, improvisation enhances communication skills, both in solo and ensemble contexts. When accompanying others, pianists must be attentive, responsive, and able to adjust harmonically and rhythmically to real-time musical cues. This interaction cultivates collaborative sensitivity and broadens one’s expressive capacity—skills essential not only to professional musicians but also to future educators.

In light of these factors, studying the role of improvisational accompaniment in piano education is essential. It not only supports the development of more expressive and creative performers but also aligns music training with the evolving demands of the 21st-century musical landscape. This research seeks to explore how improvisation can be more systematically integrated into piano curricula and how it contributes to nurturing creativity and expressiveness in pianists of all levels.

3 The history and development of musical improvisation

3.1 History

In the old Christian churches, there were not so many rules and regulations to stipulate and limit the standards of improvisation, nor were they constrained and influenced by various forms of ideology. The musical narrative of the 19th century was almost entirely devoid of practical music, and in particular left the organ in a place of academic scarcity. In fact, improvisational accompaniment is an indispensable part of learning to play any instrument. Although many times the performers do not consider it to be an improvisational performance, it is a form of musical performance that is only available on particularly important occasions, such as inauguration ceremonies or ceremonies [3].

3.2 Development

Improvisation has an extremely long and rich tradition in the history of music, and its history and development can be roughly divided into the following phases:

First, in the musical practice of ancient Greece and the Middle Ages, improvisation was the norm. For example, bards and church musicians often improvise melodies or flowers during performances. Although the Gregorian chant has a fixed melody, the singer often improvises a certain degree of embellishment depending on the occasion. Then, between the Renaissance and Baroque periods (c. 1400-1750), improvisation reached its peak in these two periods. Players of harpsichords (e.g., harpsichord, organ) often improvise harmonies based on basso continuo. Composers such as Bach were not only excellent writers but also improvised, often improvising fugues and preludes in churches. In the Classical period (c. 1750-1820), although the structure is more defined, improvisation is still widely used, especially in solo music. The cadenza of the Piano Concerto is usually improvised by the player

(e.g. Mozart, Beethoven). Beethoven was also known for his improvisational skills as a young man. In the Romantic period (19th century), improvisation began to decline, and musicians gradually valued the "work" written by the composer. However, many pianists such as Liszt, Chopin, Clara Schumann, etc., still retain the improvisational tradition, especially in private salon concerts. the tradition of improvised pipe organs in churches continues.

From the 20th century to the present day, classical music, improvisation is gradually marginalized and replaced by faithful reproduction of the composer's text. About jazz, however, improvisation is central-jazz players improvise melodies based on chords. In recent decades, the classical music world has begun to re-examine improvisational traditions, especially in historically informed performance.

Improvisation has been an important form of musical expression since ancient times, but its status, form, and degree of importance have changed in different eras. From sacred church music to virtuoso solo performances, to free-form jazz styles, the riffs show the musicians' instant talent and profundity.

4 The role of improvisation accompaniment

The improvisation of the piano is not completely "messed up", but the result of the collaboration of multiple areas of the brain, both control and free play! It seems to be free, but in fact, there are rules; A brain network that controls the mind and a brain network that spontaneously creates works together to allow piano learners to play methodically and improvise [4]. As an important practical form of piano learning, improvisation accompaniment not only improves the performer's musical expressiveness but also plays an irreplaceable role in stimulating creativity. Traditional piano teaching mostly focuses on the complete reductive performance of music scores and the training of technical skills. However, in this process, students are often prone to falling into mechanized practice and often ignore the understanding of the connotation of music and the freedom to express emotions, which makes some works unable to be well interpreted. Improvised accompaniment opens another door for piano learners, giving them the ability to create and express themselves independently so that they can truly "conversate with the music" during the performance and achieve the fusion of "heart and sound". From a creative perspective, improvisation accompaniment requires the player to make judgments on harmony, rhythm, and melody in an instant express it. This improvisational training helps improve the brain's rapid response and imagination. Especially in the teaching process, purposefully guiding students to improvise creation, can not only exercise their music perception and thinking agility, but also enhance their understanding and application of music theory knowledge such as harmony and mode, and thus upgrade their comprehensive music literacy. In terms of expressiveness, improvisation accompaniment emphasizes a "sense of life" and "emotional expression". Compared with the mode of playing strictly according to the music score, improvisation emphasizes the individual emotional investment and style of the performer. In improvisation, piano learners not only need to grasp the rhythm and structure of the music, but more importantly, they must integrate their emotions into it to make the music vital. This training method helps students break through the "technical barriers" of performance and enhance the appeal and artistic charm of their musical expression. The practice of improvisation accompaniment in music education also reflects the contemporary educational concept - attaching importance to students' personality development and comprehensive ability cultivation. It encourages students to take the initiative to think and explore actively in their learning, forming a virtuous cycle of independent learning and creation, thereby improving overall musical literacy. This has realistic and long-term significance for future students who want to engage in music education or performance.

Overall, studying the role of improvisation accompaniment in piano learning can not only provide new ideas and methods for current piano teaching but also help promote the update and practice of music education concepts. It has important practical significance and academic value for cultivating comprehensive music talents with creativity and expressiveness. As an important part of music education, piano improvisational accompaniment has a direct impact on students' musical expression and creativity. The application of practical pedagogy in this field has injected new vitality into the traditional piano teaching model. By emphasizing the pedagogical philosophy of "learning by doing", this approach allows students to hone their skills in a real performance environment, transforming abstract music theory knowledge into vivid musical practice. In the implementation process, teachers have created a rich learning experience for students by carefully designing a variety of performance scenarios, including solo, ensemble, and accompaniment to vocal or other instruments. This contextualized teaching method not only helps students master the basic skills of improvisational accompaniment but more importantly, cultivates their musical sensitivity and adaptability. In the process of practical teaching, the setting of the improvisation session is particularly crucial. The teacher asks the students to improvise on the piano on the spot and gives real-time guidance and suggestions during the performance. This instant feedback mechanism enables students to recognize their shortcomings at the first time and make timely adjustments under the professional guidance of teachers. Through repeated practical exercises, students gradually develop an intuitive grasp of musical elements such as harmony, rhythm, and melody, so that they can be more confident and fluent when improvising. At the same time, this training method also helps students overcome the tension of the stage and cultivate a good psychological quality of performance. It is worth noting that practical pedagogy not only focuses on the improvement of individual skills but also places special emphasis on the development of collaborative skills in ensemble and accompaniment situations, which is of great significance for students' future musical development, to ensure the effectiveness of practical teaching methods [5].

4.1 How improvisation promotes the development of creativity

It is beneficial for brain development. The research illustrates when children engage in music improvisation, the brain's reward system is necessarily activated. These areas are rich in dopamine, which is closely related to motivation, pleasure, and learning ability. When children freely create melodies or rhythms, the brain sees it as an exploratory behavior and releases dopamine as a reward to motivate them to continue participating in music activities. In terms of cognitive improvement, improvisation requires quick decision-making, which helps enhance attention, memory, and problem-solving abilities. When children engage in music improvisation, the brain's reward system is significantly activated, mainly including the striatum, ventral tegmental area (VTA), and prefrontal cortex (PFC). These areas are rich in dopamine, which is closely related to motivation, pleasure, and learning ability. When children freely create melodies or rhythms, the brain sees it as an exploratory behavior and releases dopamine as a reward to motivate them to continue participating in music activities. In terms of cognitive improvement, improvisation requires quick decision-making, which helps enhance attention, memory, and problem-solving abilities.

For most people who care about emotional regulation, music creation can help children express their emotions, reduce unnecessary worries, improve their psychological resilience, and cultivate strong psychological resilience from an early age. Improvisational music creation is not only an artistic expression but also a natural reward behavior of the brain. By

optimizing some rigid and singular teaching methods, we can help children cultivate creativity and musical expression, cognitive ability, and social skills in a happy environment, laying a foundation for their lifelong development [6]. As a dynamic form of music composition, improvisational accompaniment plays multiple and important roles in music practice. It can break through the limitations of fixed musical scores, cultivate musicians' improvisation ability and musical expression, and make performance more flexible and personalized. In the field of music education, improvisational accompaniment is an effective means to train harmony perception, rhythm grasp, and musical structure understanding, especially for learners of accompaniment instruments such as piano and guitar. In performance practice, it enhances the interactivity and adaptability of the music, enabling the performer to make on-the-fly adjustments to the live situation and the performance of the collaborators. Improvisational accompaniment can also promote emotional expression and communication in music therapy, which has shown unique effects in clinical applications. From a cognitive point of view, this form of music exercises comprehensive musical abilities such as auditory training, rapid reflexes, and creative thinking [7].

4.2 Harmony innovation

Harmony innovation is mainly reflected in the breakthrough and recreation of traditional harmony in improvisational accompaniment. Rather than sticking to conventional functional harmony, the performer freely uses techniques such as transposition, chord extension, substitution chords, or jazz harmony according to the mood and style of the melody to create a more expressive and tense accompaniment effect. For example, in pop or jazz styles, by adding ninth chords, thirteenth chords, or tonal blurring, improvised accompaniment not only enhances the layering of the music but also stimulates the player's imagination, making the music more modern and personal. A brilliant theory that showed that a "music map" can unlock secrets of modern harmony. If musical harmony is like building blocks, traditional harmony is like putting it together step by step according to a manual, while geometric harmony theory is like giving composers a three-dimensional musical map, allowing them to freely explore new combinations of sounds. The most amazing thing is that this set of theories uses mathematics to prove that as long as these changes conform to the law of symmetry (there is an internal logic like a snowflake pattern), even if the traditional rules are broken, the ears will not find it unpleasant, but will find it "strange but interesting". Just as GPS navigation can lead us to new routes, geometric harmony theory has helped composers find new worlds beyond traditional tonality—which is why modern music, jazz, and film scores can have so many amazing harmonies while still being aurally plausible. To put it simply, it turned "playing the piano" into a "high art"[8].

4.3 Melodic variation

Melody diversity is a crucial element in music creation and performance, determining the attractiveness and depth of emotional expression of music. Simply put, melodic diversity refers to making music sound richer and less repetitive through changes in pitch, rhythm, ornamentation, and structure. For example, if a song uses the same few notes repeatedly from beginning to end, it will quickly become monotonous; But if high and low pitch variations, flexible rhythm combinations, or using different melodic directions in different paragraphs are added, the music will become vivid and interesting. It is significant in melodic variation. A scholar focused on melody research, he used AI to analyze different melody variant modes of 3000 compositions and he found the melody is a very important part of music creativity

[9]. The innovation of melodic variation in piano accompaniment is embodied in the reprocessing and extension of the melody through rhythm, pitch, tonal pattern, ornamentation, or reconstruction syntax on the basis of retaining the basic structure of the original melody. This treatment not only enriches the expressiveness of the accompaniment but also enhances the interactivity and artistry of the music. For example, adding jumps, syncopated rhythms, or modulo variations to repetitive passages can avoid monotony and increase auditory appeal. Especially in improvisational accompaniment, melodic variations can also be adjusted in real time according to the expression of the singer or performer, making the accompaniment more creative, dynamic, and flexible.

4.4 Rhythmic freedom

In piano improvisational accompaniment, the use of rhythmic freedom reflects strong expressiveness and flexibility. The performer can stretch and compress the rhythm according to the melody mood, such as using rubato to enhance the breathing and expressiveness of the music; At the same time, it can also improvise to create rhythmic patterns, such as syncopated rhythms, dotted rhythms, etc., to give more layers and stylistic colors to the accompaniment. In addition, the free rhythm can also break the traditional bar constraints, making the passage flow more natural and smooth. This rhythmic freedom makes the improvisational accompaniment more individual, dynamic, and musically intense.

4.5 The improvement of musical expression by improvisation

Improvisational accompaniment has a unique and far-reaching value in improving musical expression. It breaks the constraints of a fixed beat map, allowing the player to flexibly adjust the harmony, rhythm, and texture according to the mood of the scene, the direction of the melody, and the performance of the singer, to get closer to the meaning of the music. Through improvisation, the accompanist not only enhances the layering and dynamics of the melody, but also creates moments of tension at the climax, transition, or pause of the music, enhancing the overall expressiveness. At the same time, the improvisational accompaniment stimulates the emotional engagement of the performer, making him more active in "speaking" to the music, resulting in a more infectious and personalized interpretation. At the same time, the improvisational accompaniment significantly enhances the emotional expression of the music through its flexibility and creativity. The performer can adjust the harmony color, rhythm density, and dynamic changes in real-time according to the emotional direction of the melody so that the accompaniment is more suitable for the music content. For example, adding harmonic extension and soft rhythm to lyrical passages can render warm and delicate emotions; In intense passages, strong rhythmic and harmonic clashes enhance tension and impact. Improvisational accompaniment breaks the limitations of mechanical performance, allowing the player to express his inner emotions more realistically, and interact and resonate with the main theme. This emotional, real-time creation not only enhances the depth of musical expression but also allows the listener to feel a more sincere and vivid musical experience.

5 Practical Applications of Improvisational Accompaniment in Piano Performance

Improvisational accompaniment is a vital skill that enhances a pianist's versatility, creativity, and expressiveness. In the context of piano accompaniment, improvisation allows musicians to move beyond the boundaries of written scores and engage in real-time musical interaction.

This ability is particularly significant in educational settings, live performance environments, and collaborative musical contexts. The following discusses several key ways in which improvisational accompaniment is practically applied in piano performance.

Improvisational accompaniment plays a crucial role in music education, particularly for piano teachers working with students in voice, instrumental, or general music classes. Teachers frequently need to accompany exercises, warm-ups, or student pieces without the benefit of full arrangements. In these cases, the ability to quickly harmonize a melody or follow a student's playing using improvised chord progressions enables more effective instruction and encourages a supportive learning environment. The teaching of improvisational accompaniment in music is a comprehensive educational process that integrates theory, practice, and creativity, and it presents diversified teaching forms and development trends in different educational environments. In the traditional music education system, the teaching of improvisational accompaniment is usually based on harmony, and through systematic theoretical explanations and step-by-step practical training, students can master the accompaniment skills from basic chord connections to complex harmonic progressions. Teachers will guide students to start with simple tonal music and gradually transition to more challenging jazz, pop, and other modern music styles of improvisational accompaniment, with special emphasis on the auditory training of harmonic colors and the cultivation of keyboard improvisational responses. In the educational environment of professional music colleges, improvisational accompaniment courses tend to be more rigorous academic and systematic, and the curriculum usually includes multiple professional modules such as classical harmony, jazz harmony, and accompaniment texture design, requiring students not only to master standardized accompaniment techniques but also to develop personalized improvisational expressions. This type of teaching environment has professional teaching facilities and teachers and can provide students with multi-dimensional practical opportunities such as piano accompaniment, vocal accompaniment, instrumental accompaniment, etc., and test their learning results through regular recitals or workshops. In contrast, music classes and social music training institutions in ordinary schools pay more attention to the practicality and popularization of improvisational accompaniment, and the teaching content is often based on popular song accompaniment and simple arrangement, aiming to cultivate learners' musical interest and basic accompaniment ability. Some people find new methods to better teach improvisation, for example, the triangle interactive teaching model to form a system that emphasizes the transfer between teachers and students in a digital environment [10].

Moreover, teaching improvisational accompaniment to piano students can significantly enhance their musical development. It helps students internalize harmonic functions, develop rhythmic awareness, and express musical ideas more freely. By learning to accompany in various styles—such as classical, jazz, folk, or pop—students broaden their musical vocabulary and prepare for a wider range of real-world musical opportunities.

Improvisational accompaniment in these settings is highly interactive and often requires rapid shifts in style, tempo, and dynamic level. The pianist must be attuned to visual cues and capable of instant musical responses, often without prior rehearsal. This level of flexibility is only possible with a well-developed improvisational foundation.

6 Conclusion

The importance and role of improvisational accompaniment in piano accompaniment is becoming more prominent, which not only reflects the comprehensive musical literacy of the performer but also is a key means to improve expressiveness, creativity, and communication.

Traditional piano accompaniment mostly relies on beatmaps, while improvisational accompaniment emphasizes that in real-time music communication, the performer independently constructs harmony, texture, and rhythmic patterns according to the changes in melody, rhythm, and emotion, making the accompaniment more flexible and expressive. First of all, the improvisational accompaniment significantly enhances the emotional expression of the music. With the freedom to control the harmony color, rhythm density, and dynamic intensity, the player can adjust the accompaniment on the fly to bring it closer to the mood of the main theme, creating a more powerful musical atmosphere. For example, extended chords and stretch rhythms in soft melodies can express delicate and tender emotions; In the climax, the tension is enhanced by strong rhythmic and harmonic conflicts. Secondly, it greatly facilitates the creative development of the performer. Improvisational accompaniment requires the player to constantly make quick judgments between "acting" and "creating", such as choosing the appropriate harmonic direction, designing a rhythmic pattern, or performing melodic variations. This continuous process of generating musical content cultivates students' ability to associate, react, and think musically. Improvisational piano playing plays a significant role in boosting both creativity and musical expression. It is widely used in various settings such as education, stage performance, ensemble collaboration, religious services, and music therapy. While it enhances the functional aspect of piano accompaniment, it also opens up new artistic possibilities, encouraging pianists to develop a more individual, expressive, and imaginative approach to music-making.

Improvisation pushes pianists to think on their feet, react instantly to musical changes, and craft music that is both emotionally powerful and structurally sound. This spontaneous creative process deepens the pianist's understanding of musical elements like harmony, rhythm, and melody, and helps build confidence in their musical voice. Unlike strict score-based performances, improvisation allows for personal interpretation, making each performance more unique and emotionally connected. In educational settings, improvisation helps students move beyond rigid interpretations and embrace a freer, more intuitive connection with music. It also enhances their responsiveness and listening skills, especially when accompanying other performers, leading to more engaging and collaborative performances. But on stage, improvisation adds freshness and emotional authenticity, allowing pianists to respond creatively to unexpected situations and keep the performance alive and personal. In therapy and religious settings, it becomes a powerful tool for emotional communication, creating space for healing, reflection, and spiritual engagement. Historically, many great composers were also exceptional improvisers, using their improvisation as a foundation for composition. This connection shows how improvisational playing can lead to new musical ideas and deepen artistic insight. Finally, improvisational piano performance is a creative practice that enhances expression, encourages originality, and cultivates a more vibrant and meaningful musical experience for both performers and listeners.

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