THE SPECIFIC DEVELOPMENT OF PIANO TECHNIQUE AT SECONDARY EDUCATIONAL INSTITUTIONS OF CHINA AND RUSSIA: COMPARATIVE ANALYSIS

INTRODUCTION

The development of technical skills in the process of teaching pianists at colleges is an important stage in forming their professional skills and virtuoso techniques in the future. This allows to better realize the composer’s creative ideas while interpreting a musical piece, serves as the basis for sight-reading and improvisation, as well as reveals new expressive possibilities of the piano. Starting from the first piano lessons, much attention is paid to the development of finger and complex actions, motor and coordination skills, strengthening hand and wrist muscles, stretching and performing endurance.

The Russian music colleges have developed their own traditions of teaching pianists and forming piano technique, so many foreign countries send their students to the Russian colleges and universities. According to the latest research, China is the pioneer of music education. An assessment criterion is not only the number of students in the Chinese music schools, colleges and universities or graduates who became winners of international competitions and play in the best orchestras in the world (LI, 2017; XU, 2011; WATERS, 2014). If compared to Western countries, China’s teaching methods are more rigorous but quite efficient. Thus, the leading scholars in the field of pedagogy and education take them into consideration. For several centuries, music education and music as a whole had been influenced by the Chinese traditions and pedagogical principles of different countries. In the context of globalization, music education has developed through the selection and synthesis of international and intercultural approaches to teaching (GAIDAI, 2014; SYUN, 2004; YAN, 2018). Within the professional training of pianists at colleges, China formed its own system of working with musical pieces in the process of mastering their technical, artistic and aesthetic potential.

METHODS

In modern piano pedagogy and piano technique, a large pedagogical experience has been accumulated for the development of the pianist’s technical skills. The issue of technical development has received a theoretical justification in the Russian and foreign studies. In addition, practical recommendations have been offered for developing the piano technique of college students.

O.F. Shulpyakov (1986) strived to reveal the fundamental laws of the musician’s upbringing (improving performing skills while expressing musical images). Such scholars as F. Steinghausen, G. Kogan, K. Martinsen, etc. described numerous elements of performing skills and methods of their development. When this issue is rethought in practical pedagogical activity, it reveals specific methods of developing technical skills of future pianists. Methodological recommendations are effective due to the integral training system based on certain didactic goals and objectives.

Methods for studying the professional training of pianists at secondary educational institutions are as follows: the analysis of theoretical works and scientific innovations in the field of music and piano pedagogy (PEREVERZEVA, 2018); performance analysis (EGURNOVA, 2020); the hermeneutic method of learning music (AKSENOVA et al., 2020); active and game-based learning technologies (PEREVERZEVA et al., 2020a, 2020b); the generalization of teaching practice and the assessment of statistical data, in particular, the performance indicators of students attending the Chinese music colleges. According to statistics (BRAHMSTEDT; BRAHMSTEDT, 1997; HO; LAW, 2004; PARSAF; SPIEGELMAN, 2012), the academic performance of the Chinese college students in large cities has been steadily growing over the past 20 years. Thus, the Chinese system of musical education draws the attention of teachers.
and practitioners from all over the world. Despite a wide range of studies, the methodological base on which the Chinese musical and pedagogical system is built remains an understudied area.

**RESULTS**

In the Russian music colleges, piano students should master motor-technical, sound-motor, metro-rhythmic, note-oriented, auditory and art-figurative skills in the process of learning. In this list, motor-technical skills are of paramount importance, i.e. the actual piano technique. Technical components within the methodology of teaching piano playing are traditionally divided into finger and complex techniques. Thus, A. Birmak (1973) offered the following gradation of piano technique:

- Finger (all types of finger actions);
- Complex: octaves, chords, skips, tremolo.

This classification is the most common in modern piano pedagogy and is the basis for the main directions of improving the performer’s technical skills.

The development of piano technique is a complex and gradual process based on a set of muscular (physical) and volitional (psychological) skills of the performer and personality traits as a whole. To form piano technique, a musician needs vivid imagery, the ability to "experience" the performed repertoire, understand and feel the pulsation and movement of a musical piece. Thus, the development of technique and musicality is a single process, where each component of professional skills is indivisible from the other and requires an integrated approach to its mastering.

The basis of piano technique is laid by the pianist’s movements. At the same time, the development of technical skills aims at providing a teacher with such conditions that would facilitate the performance of musical and artistic-aesthetic tasks (STOLBOUSHKINA; PEREVERZEVA, 2019).

Piano technique is formed on the basis of musical pieces and instructions accumulated by music schools over centuries. Thus, the etudes of such composers as Gedike, Berkovich, Lemoine and Czerny that combine artistic and technical tasks have a special methodological value. These etudes are very popular among college students and win their affection due to imaginative and expressive melodic passages, clear rhythm and inner impulse, which allows them to overcome technical difficulties without undue effort.

Taking into account the need to update the existing repertoire and introduce contemporary music into the training of pianists and their public performances, we need to mention one of the avant-garde music styles called minimalism (PEREVERZEVA, 2018). Thanks to the looping technique used by composers of this direction, the performance of individual piano pieces does not cause difficulties for pianists (students of music schools). For example, Terry Riley’s “In C” can be played by a single pianist who repeats the sounds of each pattern and moves from the 1st to the 53rd. These patterns contain from one to several sounds that do not cause any technical problems, therefore the piece can serve as a didactic material for the development of piano technique. The study of this composition is most effective together with the use of game-based technologies (PEREVERZEVA; SHEVCHUK, 2019). The improvement of technical skills at primary school has several directions:

- Mastering passages and figurations;
- Learning how to perform touches;
- Learning how to perform octaves;
- Mastering chords with varying degrees of stretching;
- Mastering skips;
- Developing the tremolo technique.
The process of teaching piano technique in the Russian colleges is based on such principles of piano performance as:

1. The principle of naturalness. It helps avoid the unnatural position of the performer’s hands and body that causes the state of fatigue and complicates the process of playing the piano.

2. The principle of frugality. It implies an economical approach to "performing movements". Interchanging muscle tension and relaxation, a musician should isolate muscle tension. When making any movement, it is necessary to control that the remaining muscles are not clamped and remain free. The performer needs to ensure that the strongest muscles carry the main load, and the weakest ones are loaded the least.

3. The principle of expediency. This principle stipulates that motor activity should not be formal and stereotyped in the course of playing.

Let us consider modern approaches to the development of piano technique at music colleges substantiated by the leading teachers. A.A. Schmidt-Shklovskaya (1985), a representative of the Leningrad piano school, emphasized that the artistic result of performing a musical piece depends on the development of the pianist’s movements and their physiological expediency. Her pedagogical system aims at developing piano skills and considers both natural and physiological features of the pianist’s hand.

A.A. Schmidt-Shklovskaya claimed that the potential of any method for the development of piano technique would be realized in case of the following pedagogical conditions:

- Using various forms of work in the course of piano lessons;
- Mastering different skills and various types of activities in the process of playing the piano and in the course of piano lessons;
- Promoting active forms of obtaining new knowledge in the course of piano lessons.

Piano technique in primary school is improved through a number of instructive exercises, including:

- Mastering simple formulas;
- Overcoming the current, non-standard technical difficulties in the musical pieces under study;
- Working on improvisational models based on a specific type of finger or complex actions.

The Chinese music colleges focus on the acquisition of not only basic music theory but also solid performance skills in accordance with the practice-oriented approach. The development of finger actions during piano lessons is mainly based on the performance of scales, arpeggios, passages and touches (staccato, non-legato, the coherent performance of notes). To perform octaves, a musician needs to stretch the hand muscles. It is recommended to start this training at junior school with the sixth interval since it is more convenient for stretching. This also increases the risk of muscle clamping. To avoid this problem, octaves should be played with exaggerated wrist movements.

Mastering chords is an important component of the pianist’s technical skills (ANUFRIEVA; GALKINA, 2019). It is worth mentioning that the chord texture is a significant means of musical expression and plays a major role in creating the artistic image of a particular musical piece (BORISOVA; PEREVERZEVA, 2019). To perform chords easily and dynamically, it is necessary to play consonances at different dynamic levels, i.e. to highlight one, then another, then the third sound, constantly controlling hand tension.

The leading pianists recommend mastering all technical exercises, starting with slow tempo and piano dynamics. This helps to avoid tightness in the muscles of the arm and hand, as well
as find the necessary sensations to perform exercises at a faster pace. Piano technique should be formed starting from an early age (4-5 years). Its formation will allow to polish finger and complex actions in middle and high school age.

**Figure 1.** A five-year-old Chinese analyzes the play before mastering it

The work on musical technique is divided into several stages. Each stage focuses on the repetition of technical exercises and rote memorization. This approach forms a sense of responsibility and a conscious choice of music as a professional activity, as well as strengthens one’s discipline and willingness to overcome difficulties. The table below compares different approaches and indicate the main methodological principles used in Russia and China. Innovative pedagogical methods used in schools, colleges and universities increase the effectiveness of the learning process. Their choice was influenced by the call of the political figure and reformer Deng Xiaoping “to seek modernization, seek connections with the world and seek the future” (HO; LAW, 2020, p. 405).

**Table 1.** The basic methodological principles of teaching pianists used in Russia and China

| Methods and principles for developing piano technique in Russia | Methods and principles for developing piano technique in China |
|---------------------------------------------------------------|---------------------------------------------------------------|
| Individualized teaching                                      | The rigorous nature of teaching methods                        |
| An integrated approach to the development of motor-technical, sound-motor, metro-rhythmic, note-oriented, auditory and artistic-figurative piano skills | The special development of motor and technical skills (finger and complex actions), which allows to freely use the instrument and achieve expressive performance |
| Step-by-step learning from simple to complex with due regard to natural and physiological characteristics of the pianist’s hand | Purposeful work on the performance of scales, arpeggios, passages, touches, octaves and chords |
| The development of piano technique based on both musical pieces and instructions | The predominance of exercises, etudes and the multiple repetition of the most difficult tasks |
| The principle of naturalness, frugality, expediency, integral perception and mastery of a musical piece | The process of mastering piano technique is necessarily divided into several stages, each of them focuses on the repetition of technical exercises and rote memorization |

**Source:** Search data.

**DISCUSSION**

In the 21st century, piano teachers faced the need to update the existing forms and methods of developing piano technique at the level of secondary education; create alternative pedagogical approaches to teaching; introduce activities into the educational process that could meet the needs of modern society in forming a harmonious personality of a new
The specific development of piano technique at secondary educational institutions of China and Russia...

generation. To optimize the technical education of musicians at primary school, modern teachers use various pedagogical approaches. One of these approaches is the implementation of an “inseparable” training system that presupposes the connection of performing, creative and theoretical activities (GAIDAI, 2014; LI, 2017).

This approach to teaching young pianists is offered by the authors of modern pedagogical repertoire - O. Getalova and S. Slonimskii. They developed their own teaching methods as practicing composers and teachers creating albums for college students (ANUFRIEVA; POKIVAILOVA, 2020). S. Slonimskii’s pioneering vision on the didactics in musical colleges is reflected in the following principles:

- To use vivid and visible images characterized by modernity and relevance;
- To pay attention to rhythmic education with the use of complex and rhythmic formulas untypical of the traditional school repertoire;
- To show young musicians the sound of modern harmony;
- To use non-standard techniques for playing the piano;
- To expand the register range of easy piano songs.

The foundations of O. Getalova’s didactics are as follows:

- The principle of visibility;
- The relevant and accessible content of program pieces;
- The use of various performing techniques at the middle stage of training
- The development of the creative potential of a young musician;
- A combination of playing and practical performance.

The Chinese college students perform Hanon’s collection of etudes or exercises at a certain pace, dynamics and articulation on a daily basis. This approach gives the maximum result in the development of piano technique. The next step is to solve technical difficulties, including virtuosity, touches expressing certain images, chord technique, the purity and correctness of intonation, the freedom of performance (hand and wrist), the necessary sound production (finger technique), etc. This is the most difficult, time-consuming but necessary process, through which both a college student and a full-fledged performer go through.

The stage of solving technical difficulties is associated with the study of a large volume of material within a limited time. This is necessary for the accumulation of the repertoire and the inclusion of more complex pieces into curricula. The knowledge of technologies, rules and cause-and-effect relationships plays an important role in the implementation of these tasks. It is impossible to achieve high results without the use of technology, as evidenced by the pedagogical experience in China (JOHANSEN, 2013; LAW; HO, 2009). The main problems of pianists are mastering different types of touches, even finger playing, chord technique, cantilena singing, all kinds of hand movements and numerous performing techniques expressing the gallery of images, as well as technical problems.

Smooth finger play is the hardest challenge for college students. The main role in solving this problem is played by scales. In China, the development of this technique is also facilitated by the development of polyphonic pieces. Each line of polyphony is melodic and requires the same pressure of fingers onto the keyboard, which contributes to the evenness of playing (DOU; MANSUROVA, 2020). When it comes to cantilena for piano, it can be compared to singing. The voice has no position or finger changes. Cantilena-based piano playing consists in the desire to minimize movements when changing fingers or hand positions to achieve a "seamless" melodic line. This skill is formed in the process of playing polyphonic music. Tension in any part of the body prevents an imperceptible change in the position of the hand, therefore the second factor of efficient education is the freedom of the hand, forearm and shoulder. This task is set before students from the very first lesson and is controlled throughout the entire learning process.
It is important to select proper instrumental materials (etudes and exercises). Homotypic etudes (with one type of technique) alternate with various ones. It is advisable to learn a few lines by heart to "free" the mind from the control of text and focus on the tasks at hand. The work with future pianists from the Chinese colleges shows that learning by heart at the early stages of musical training allows to preserve mental attention and control, as well as emotional manifestations of the performer. On the contrary, this approach enhances these components (consciousness and feelings) in the process of playing and makes it more artistic. The diffusion of attention in different directions is inevitable, therefore it is important to prioritize the stages of dealing with technical difficulties.

CONCLUSION

Technical skills cannot be developed by using one method. Special work is required to encourage artistic thinking, musical and auditory representations, form a culture of muscle sensations and combine these components into a sound-motor complex. The piano technique of primary school students can be developed if the following pedagogical conditions are met:

- The consideration of psychomotor features of musicians attending piano classes;
- The proper selection of repertoire and instructions corresponding to the tasks of a lesson, artistic requirements of the aesthetic development of musicians and the age-related interests of students;
- The expansion of forms and methods in order to develop the piano technique of primary school students based on modern approaches to this issue (NAZAROV, 1969).

Materials serving as the basis for working on piano technique are as follows: instructions (special exercises), etudes containing chords, skips and other elements from musical pieces that require pedagogical consideration and contribute to the development of certain piano techniques of the performer. There are numerous ways to perform the assigned task, which accelerates the formation of piano technique. While performing exercises and etudes, the pianist should determine the most convenient and expedient movements of the arm, hand and forearm. This will help perform a certain element (chords, skips, tremolo or passages) without muscle clamps. Thus, the pedagogical process in the Russian colleges, which has a purposeful and systematic nature, ensures the effective work of future pianists on the technique that will be used in their professional career.

China is the pioneer of music education. An assessment criteria is not only the number of students in the Chinese music schools, colleges and universities or graduates who became winners of international competitions and play in the best orchestras in the world, but also the effectiveness of teaching methods that allow to achieve high results in a relatively short period of time. China has established one of the best music education systems. If compared to Western countries, China's teaching methods are more rigorous but quite efficient. Thus, the leading scholars in the field of pedagogy and education take them into consideration.

Like other disciplines, the process of teaching music in the Chinese colleges focuses on repetition and rote memorization. Western teachers consider this approach to learning unproductive, but it corresponds to such Chinese personality traits as diligence, hard work and perseverance. This approach forms a sense of responsibility and a conscious choice of music as a professional activity, as well as strengthens one's discipline and willingness to overcome difficulties. The innovative pedagogical methods used in the Chinese colleges increase the efficiency of the learning process. The use of various technologies and the preference for a practice-oriented approach in the Chinese system of music education correspond to the current trends in the development of global education.

Thanks to the traditions and pedagogical principles that have developed in the Russian and Chinese music education, these countries have the highest authority in the field of piano pedagogy. Therefore, it is not surprising that their fundamental principles of developing piano technique coincide. Teachers in these countries use approaches that correspond to the intellectual and psychological personality traits of the Russians and Chinese, which increases
the effectiveness of teaching school and college students to play the piano. The intercultural exchange and mutual influence of countries in the field of musical and pedagogical technologies contributes to the further development and enrichment of their methodological toolkit and makes them leaders in the field of professional piano training.

REFERENCES

AKSENOVA, S.S.; KRUGLOVA, M.G.; OVSYANNIKOVA, V.A.; PEREVERZEVA, M.V.; SMIRNOV, A.V. Musical hermeneutics, semantics, and semiotics. Journal of Advanced Research in Dynamical and Control Systems, 2020, 12 (S3), p. 779-784.

ANUFRIEVA, N.I.; GALKINA, I.E. Formirovanie navykov igry na klavishnykh narodnykh instrumentakh v protsesse ansamblevogo muzitsirovaniya [Forming skills in playing folk keyboard instruments of students in the process of ensemble music-making]. In: Kultura, iskusstvo, obrazovanie v sovremennom mire: voprosy teorii i praktiki. The collection of scientific articles of Schnittke Moscow State Institute of Music at the Russian State Social University. Moscow: RGSU, 2019, p. 229-232.

ANUFRIEVA, N.I.; POKIVAILOVA, E.B. Pedagogicheskii potentsial muzikalnykh proizvedenii dlya detei kompozitorov KhKh veka [The pedagogical potential of musical pieces created by the composers of the 20th century for children]. Uchenye zapiski Rossiiskogo gosudarstvennogo sotsialnogo universiteta, 2020, 19 (1(154)), p. 129-136.

BIRMAK, A. O khudozhestvennoi tekhnike pianista [On artistic piano techniques]. Moscow: Muzyka, 1973, 140p.

BORISOVA, A.A.; PEREVERZEVA, M.V. Komparativistskii analiz zhanra detskogo alboma: Shuman - Chaikovsky [The comparative analysis of kid’s music albums: Schumann - Tchaikovsky]. In: Kultura, iskusstvo, obrazovanie v sovremennom mire: voprosy teorii i praktiki. The collection of scientific articles of Schnittke Moscow State Institute of Music at the Russian State Social University. Moscow: RGSU, 2019, p. 160-164.

BRAHMSTEDT, H.; BRAHMSTEDT, P. Music education in China. Music Educators Journal, 1997, 83 (6), p. 28-36.

DOU, I.; MANSUROVA, A.P. K voprosu o sovremennykh tendentsiyakh i zadachakh fortepiannogo obrazovaniya v Kitae [The modern trends and tasks of piano education in China]. Sovremennye problemy nauki i obrazovaniya, 2020, 4, p. 56-63.

EGURNOVA, A.A. Emotsionalno blagopriyatnaya atmosfera na zanyatiyakh kak sposob amplifikatsii poznavatelnoi aktivnosti [A favorable emotional climate during classes as a means of increasing cognitive activity]. Pedagogicheskie zhurnal, 2020, 10 (1A), p. 691-697.

GAIDAI, P.V. Kolledzh iskusstv Sychuanskoi konservatorii v kontekste razvitiya muzikalnogo obrazovaniya v Kitae [The Fine Arts Institute at the Sichuan conservatory of music in the context of developing music education in China]. In: Istoriya muzikalnogo obrazovaniya: novye issledovaniya. The proceedings of the All-Russian (and International) seminar of the 4th session of the scientific council on the history of music education. Saint Petersburg: Atmosfera, 2014, p. 183-188.

HO, W.; LAW, W. The cultural politics of introducing popular music into China’s music education. Popular Music & Society, 2012, 35 (3), p. 399-425.

HO, W.; LAW, W. Values, music and education in China. Music Education Research, 2004, 6 (2), p. 149-167.

JOHANSEN, G. Music education and the role of comparative studies in a globalized world. Philosophy of Music Education Review, 2013, 21 (1), p. 41-51.

LAW, W.; HO, W. Globalization, values education, and school music education in China. Journal of Curriculum Studies, 2009, 41 (4), p. 501-520.
LI, Y. Kitaiskoe muzykalnoe obrazovanie v KhKh veke i ego sostoyanie na rubezhe KhKh-KhKhl vekov [The Chinese music education in the 20th century and its state at the turn of the 20th and 21st centuries]. Vestnik Kemerovskogo gosudarstvennogo universiteta kultury i iskusstva, 2017, 40, p. 225-230.

NAZAROV, I. T. Osnovy muzykalno-ispolnitelskoi tekhniki i metod ee sovershenstvovaniya [The foundations of musical-performing techniques and methods for their improvement]. Leningrad: Muzyka, 1969, 134p.

PARSAD, B.; SPIEGELMAN, M. Arts education in public elementary and secondary schools: 1999-2000 and 2009-2010. Washington: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2012, 196p.

PEREVERZEVA, M. V. Fortepiannaya muzyka kompozitorov-minimalistov v uchebnom repertuare muzykalno-pedagogicheskikh vuzov [Piano music created by minimalist composers in the learning repertoire of musical pedagogical universities]. In: Khudozhestvennoe prostranstvo kultury tretego tysyacheletiya: problemy nauki i obrazovaniya. The collection of scientific articles of Schnittke Moscow State Institute of Music at the Russian State Social University. Moscow: RGSU, 2018, p. 437-446.

PEREVERZEVA, M. V.; ANUFRIEVA, N. I.; AVRAMKOVA, I. S.; KUZNETSOVA, E. O.; SHCHERBAKOVA, A. I. Game technologies in the process of mastering theoretical musical disciplines. Revista Inclusiones, 2020a, 7(2), p. 185-194.

PEREVERZEVA, M. V.; ANUFRIEVA, N. I.; KATS, M. L.; KAZAKOVA, I. S.; UMERKAeva, S. S. Interdisciplinary approach to the mastering of the music of the 20th century. Journal of Advanced Research in Dynamical and Control Systems, 2020b, 12 (S3), p. 772-778.

PEREVERZEVA, M. V.; SHEVCHUK, L. E. Geim-teknologii v protsesse osvoeniya muzykalno-teoreticheskikh distsiplin [Game-based technologies in mastering academic disciplines of music theory]. Uchenye zapiski Rossiiskogo gosudarstvennogo sotsialnogo universiteta, 2019, 18 (4(153)), p. 131-137.

SCHMIDT-SHKLOVSKAYA, A. O vospitanii pianisticheskikh navykov. Metodicheskie ukazaniya [On forming piano technique. Methodological tips]. Leningrad: Muzyka, 1985, 70p.

SHULPYAKOV, O. F. Muzykalno-ispolnitelskaya tekhnika i khudozhestvennyi obraz [Musical-performing techniques and artistic images]. Leningrad: Muzyka, 1986, 124p.

STOLBOUSHKINA, A. E.; PEREVERZEVA, M. V. Planirovanie protsesa obucheniya. Metodika provedeniya zanyatii u detei shkolnogo vozrasta [Planning the educational process. Methods of teaching school students]. In: Kultura, iskusstvo, obrazovanie v sovremennom mire: voprosy teorii i praktiki. The collection of scientific articles of Schnittke Moscow State Institute of Music at the Russian State Social University. Moscow: RGSU, 2019, p. 325-327.

SYUN, Q. Istoriya muzykalnogo obrazovaniya v sovremennom Kitae [The history of music education in modern China]. Shanghai: Izd-vo Shankhaiskoi konservatorii, 2004. 669 p.

WATERS, S. S. Sharing global music: preserving the past, preparing for the future - a look at music education in China. Music Educators Journal, 2014, 101(1), p. 25-27.

XU, B. Kitaiskie pianisty na rubezhe KhKh-KhKhl vekov: ispolnitelskie dostizhieniya i sistema obucheniya [The Chinese pianists at the turn of the 20th and 21st centuries: performing achievements and educational systems]. Yuzhno-Rossiiskii muzykalnyi almanakh, 2011, 1(8), p. 59-68.

YAN, X. Razvitie kitaiskogo fortepiannogo obrazovaniya posle osnovaniya KNR [The development of the Chinese piano education after the establishment of the People’s Republic of China]. Shanghai: Lixin, 2005, 350 p.
The specific development of piano technique at secondary educational institutions of China and Russia: comparative analysis

O desenvolvimento específico da técnica de piano em instituições de ensino secundárias da China e Rússia: análise comparativa

El desarrollo específico de la técnica del piano en las instituciones de educación secundaria de China y Rusia: análisis comparativo

Resumo
O objeto de pesquisa é o processo de desenvolvimento da técnica de piano entre estudantes de instituições de ensino médio (escolas e faculdades) na China e na Rússia. O artigo comprova os aspectos metodológicos da formação de ações de dedos de estudantes universitários necessários para a realização de peças musicais e reside na formação profissional de pianistas em academias de música da China e Rússia. Os autores do artigo tiraram uma série de conclusões. O trabalho sobre técnica musical nas instituições de ensino secundárias chinesas e russas é dividido em várias etapas. Cada etapa se concentra na repetição de exercícios técnicos e na memorização rote. Os professores ocidentais consideram essa abordagem para aprender improdutiva, mas corresponde a traços de personalidade chinesa como diligência, trabalho duro e perseverança. O artigo discute métodos eficazes de ensino que permitem às faculdades chinesas alcançar altos resultados na formação profissional de pianistas.

Abstract
The research object is the process of developing piano technique among students of secondary educational institutions (schools and colleges) in China and Russia. The article substantiates the methodological aspects of forming finger actions of college students necessary for performing musical pieces and dwells on the professional training of pianists in music academies of China and Russia. The authors of the article have drawn a number of conclusions. The work on musical technique in the Chinese secondary educational institutions is divided into several stages. Each stage focuses on the repetition of technical exercises and rote memorization. Western teachers consider this approach to learning unproductive, but it corresponds to such Chinese personality traits as diligence, hard work and perseverance. The article discusses effective teaching methods that allow the Chinese colleges to achieve high results in the professional training of pianists.

Resumen
El objeto de investigación es el proceso de desarrollo de la técnica del piano entre los estudiantes de instituciones de educación secundaria (escuelas y colegios) en China y Rusia. El artículo corrobora los aspectos metodológicos de la formación de acciones con los dedos de los estudiantes universitarios necesarios para interpretar piezas musicales y se detiene en la formación profesional de pianistas en academias de música de China y Rusia. Los autores del artículo han sacado una serie de conclusiones. El trabajo sobre la técnica musical en las instituciones educativas secundarias chinas se divide en varias etapas. Cada etapa se centra en la repetición de ejercicios técnicos y la memorización memorística. Los maestros occidentales consideran que este enfoque del aprendizaje es improductivo, pero corresponde a rasgos de personalidad chinos como la diligencia, el trabajo duro y la perseverancia. El artículo discute métodos de enseñanza efectivos que permiten a las universidades chinas lograr altos resultados en la formación profesional de pianistas.

Palavras-chave: Pianista. Faculdade. Escola. Métodos de ensino. Tocar piano.

Keywords: Pianist. College. School. Teaching methods. Piano playing.

Palabras-clave: Pianista. Universidad. Escuela. Métodos de enseñanza. Tocar el piano.