# Pedagogical conditions for the development of performing skills by clarnetists in distance learning conditions

Condições pedagógicas para o desenvolvimento de habilidades de execução por clarnetistas em condições de aprendizagem à distância

# Condiciones pedagógicas para el desarrollo de habilidades escénicas por clarnetistas en condiciones de enseñanza a distancia



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# **ABSTRACT**

The article is devoted to the pedagogical problem of creating conditions for the performing skills development among clarinet students in the context of distance learning. The relevance of the research topic lies in the fact that in the format of distance learning to play the clarinet, pedagogical conditions are needed that differ from traditional methods. The clarification of these issues with the help of empirical research will bring research in this area to a new methodological level. The research materials are evaluation sheets of pedagogical observation in two groups of 1st year students of the music university in distance learning. The general sample of students was 750 people. The representative sample was 75 people selected by mechanical sampling. The research methodology is based on a systematic approach and includes the methods of the general scientific group (analysis, synthesis, induction, deduction); as well as special methods: content analysis of scientific literature, the method of included pedagogical observation, the method of statistical analysis. All obtained qualitative results were converted into a quantitative format and processed using the special program. As a result, the author came to the following conclusions: for the successful formation of performing skills in playing the clarinet, it is necessary to create an interactive environment, use digital technologies and clearly set educational tasks, the solution of which contributes the development of performing skills by students.

Keywords: Pedagogical conditions. Musical culture. Performing skills. Distance learning.

# **RESUMO**

O artigo é dedicado ao problema pedagógico de criar condições para o desenvolvimento de habilidades performáticas entre alunos de clarinete em contexto de ensino a distância. A relevância do tema de pesquisa reside no fato de que no formato de ensino a distância para tocar clarinete são necessárias condições pedagógicas que diferem dos métodos tradicionais. O esclarecimento dessas questões com a ajuda da pesquisa empírica levará a pesquisa nessa área a um novo patamar metodológico. Os materiais de pesquisa são fichas de avaliação de observação pedagógica em duas turmas de alunos do 1º ano da universidade de música em ensino a distância. A amostra geral de alunos foi de 750 pessoas. A amostra representativa foi de 75 pessoas selecionadas por amostragem mecânica. A metodologia de investigação assenta numa abordagem sistemática e inclui os métodos do grupo científico geral (análise, síntese, indução, dedução); bem como métodos especiais: análise de conteúdo da literatura científica, método de observação pedagógica incluído, método de análise estatística. Todos os resultados qualitativos obtidos foram convertidos em um formato quantitativo e processados usando o programa especial. Como resultado, o autor chegou às seguintes conclusões: para a formação bem-sucedida de habilidades performáticas em tocar clarinete, é necessário criar um ambiente interativo, usar tecnologias digitais e tarefas educacionais claramente definidas, cuja solução contribui para o desenvolvimento de desempenho de habilidades pelos

**Palavras-chave:** Condições pedagógicas. Cultura musical. Habilidades performáticas. Ensino a distância.

#### **RESUMEN**

El artículo está dedicado al problema pedagógico de crear condiciones para el desarrollo de habilidades interpretativas entre los estudiantes de clarinete en el contexto de la educación a distancia. La relevancia del tema de investigación radica en que en el formato de enseñanza a distancia para tocar el clarinete se necesitan condiciones pedagógicas diferentes a los métodos tradicionales. La clarificación de estos temas con la ayuda de la investigación empírica llevará la investigación en esta área a un nuevo nivel metodológico. Los materiales de investigación son fichas de evaluación de observación pedagógica en dos grupos de estudiantes de 1er año de la universidad de música en modalidad a distancia. La muestra general de estudiantes fue de 750 personas. La muestra representativa fue de 75 personas seleccionadas por muestreo mecánico. La metodología de investigación se basa en un enfoque sistemático e incluye los métodos del grupo científico general (análisis, síntesis, inducción, deducción); así como métodos especiales: análisis de contenido de la literatura científica, el método de observación pedagógica incluida, el método de análisis estadístico. Todos los resultados cualitativos obtenidos se convirtieron a un formato cuantitativo y se procesaron utilizando el programa especial. Como resultado, el autor llegó a las siguientes conclusiones: para la formación exitosa de habilidades interpretativas para tocar el clarinete, es necesario crear un entorno interactivo, utilizar tecnologías digitales y establecer tareas educativas claramente, cuya solución contribuye al desarrollo de habilidades interpretativas por parte de los estudiantes.

**Palabras clave:** Condiciones pedagógicas. Cultura musical. Habilidades interpretativas. Educación a distancia.

# **INTRODUCTION**

The relevance of the research topic lies in the fact that among the musical instruments, most vividly and convincingly represent the universalism and modern culture diversity, the clarinet occupies one of the leading places. The historical clarinet development over the course of three centuries can serve as an illustrative example of the purposeful conquest of various repertoire-style

spheres and geographic spaces (countries, regions, continents), which has now culminated in a worldwide «expansion» in the spirit of cultural globalization processes.

At the turn of the 18th-19th centuries, the clarinet in Europe was considered a full-fledged instrument of orchestral, chamber-ensemble and solo music-making. During this period, major virtuoso performers stood out, improving not only the technique of playing the clarinet, but also its design. In particular, I. Muller should be noted, who improved the mouthpiece, having a significant impact on the timbre palette, simplified the process of playing the clarinet and expanded the range. R. Albert, in particular, believes that with I. Muller, having actually created a new model of the clarinet, a period begins that can be called the «golden age» of this instrument (DiMatteo et al., 2021). In the 19th century, the clarinet continued to improve, sometimes borrowing constructive innovations from other wind instruments. Thus, the flutist of the Munich Court Chapel T. Böhm invented a system of annular valves, which was used on the flute (Yilmaz et al., 2020). After that, Professor of the Paris Conservatory G. Klose and music master L.-O. Buffet successfully adapted this system to the clarinet. Their modification was called «Boehm's clarinet», or «French clarinet» (Roulston et al., 2015).

The French clarinet school, whose founder is I. Beer, has taken a special place in the history of musical culture. Many French composers created music for the clarinet, in particular, making a significant contribution to the development of the clarinet concerto genre (in this regard, we can name E. Soler, M. Jost, Ch. Duvernoy, J. C. Lefebvre, J. F. Dacosta and others) (Changzhi and Black, 2018). Along with this, prominent instrumental masters of the 19th century, who worked in France, took part in the further improvement of the clarinet design (Changzhi and Black, 2018). The modern clarinet also has penetrated the folk music of various regions.

This trend in the field of musical art pushes many performers who are simultaneously engaged in pedagogical practice to present the essence and features of instrumental skill, develop and substantiate the theoretical and methodological foundations for teaching beginner musicians to play the clarinet (Liu, 2020). Almost all such methods are focused on learning to play related musical instruments. At the same time, their relationship, the similarity of which each author understands and interprets in his own way, depending on the chosen tools, as well as on the theoretical and methodological aspects and organizational features of the implementation of the methodology (Ning, 2021). In the context of quarantine due to COVID-19 and mass distance learning in music universities, it seems relevant to consider the possibility of developing performing skills when learning online (Mätzener, 2021). To this end, it is necessary to consider certain pedagogical conditions.

An analysis of the scientific and pedagogical literature suggests that today there is no single approach to the pedagogical conditions concept. It is known that the term «pedagogical conditions» has developed and changed over time, acquiring and losing certain features. The article is devoted to the consideration of this concept, the analysis of its components.

Approaches to the definition of the concept of "pedagogical conditions" are described, various interpretations of conditions that change over time are given. Particular attention is paid to modern interpretations of the concept of "pedagogical conditions", the components of this concept and their significance in modern science are considered in detail.

The study and analysis of the results of numerous scientific and pedagogical studies shows that in the theory and practice of pedagogical science there are various types of pedagogical conditions: organizational-pedagogical, psychological-pedagogical, didactic conditions (Yilmaz et al., 2020; Conesa et al., 2021).

All of these types logically expand and complement the term «pedagogical conditions», and also make the pedagogical process more comfortable and productive. During the periods of formation and development of science in general and pedagogical science in particular, the concept under consideration and its components were transformed. Pedagogical conditions were also

ambiguously interpreted in the works of domestic teachers. So, a number of specialists, developing and concretizing ideas about the organizational and pedagogical conditions for the development and functioning of educational processes, presented these conditions not only and not so much as a set of certain opportunities that contribute to the effective solution of educational problems, but also considered it necessary to include in the definition of the concept under consideration its focus on the necessity and importance of the development of the procedural aspect of the pedagogical process from the position of management. The study of approaches to the definition of the concept of «pedagogical conditions» (Ahmed et al., 2021; Berezin, 2021) allows to conclude that this term has the following characteristic features:

- 1) scientists consider pedagogical conditions as a set of possibilities of the educational and material-spatial environment, the use of which helps to increase the efficiency of a holistic pedagogical process;
- 2) a set of measures of the impact, characterized as psychological and pedagogical conditions, is aimed primarily at the development of the personality of the subjects of the pedagogical system (teacher, student and other participants), which ensures the successful solution of the problems of a holistic pedagogical process;
- 3) the main function of psychological and pedagogical conditions is the organization of such measures of pedagogical interaction that ensure the transformation of specific characteristics of the development, upbringing and education of the individual, that is, they affect the personal aspect of the pedagogical system.

Improving professional skills and performing abilities of playing the clarinet, the musician acquires the status of a unique performer and achieves a wide demand among listeners (Abrams, 2006). However, this requires tireless painstaking work, systematic complex classes using modern methods and technologies, a conscious and creative approach to the educational and training process, continuous self-improvement and an experimental search for personal style in performing technique, instrumental sound, artistic expressiveness, concert performance imagery.

# **MATERIALS AND METHODS**

As materials for the study, assessment papers of pedagogical observation were used in two groups of 1st year students in a music university at distance learning. The general sample of students was 750 people. The representative sample was 75 people selected by mechanical sampling. Two groups of 25 people participated in the experimental sessions. We also formed a control group of 25 people, in which experimental classes were not conducted.

To obtain materials, we conducted experimental online classes according to the V.G. Podayurov's method (Moscow State University of Culture and Arts). Pedagogical observation was carried out in experimental classes, during which we use Clarinet Concerto by Copland, Clarinet Concerto No. 2 by Weber, Clarinet Sonata No. 2 in E flat by Brahms and Sonata for Clarinet and Piano by Bernstein and Rhapsody in Blue by Gershwin. To verify the results of the performance skills of 1st year students, we used music lessons with Sonatina for Clarinet and Piano by Arnold; Clarinet Concerto by Finzi and Symphony No. 5 by Shostakovich.

Our classes were conducted video communication: group classes - in the form of video-conferencing lessons based on the Skype platform, individual - in the form of online communication between the teacher and the student using various popular instant messengers (Skype, Viber, WhatsApp). Almost everything is like in the classroom, only remotely. It turns out that playing the clarinet online is not so easy, but still possible.

Classes were held under the following pedagogical conditions:

1) creation of an interactive learning environment with the help of tasks for the development of performing skills;

- 2) setting goals for the development of performing skills;
- 3) creation of an individually-oriented class schedule using digital technologies.

Great importance in the conduct of pedagogical supervision was given to didactic principles and attitudes in their modern interpretation in accordance with the requirements of distant education:

- intellectual concentration, conscious control of the executive apparatus;
- economy of physical efforts, simplification of motility, reduction of the number of muscular movements of the face;
- aestheticization of the performing process, the formation of a favorable image, a spectacular image of a concert musician.

We have studied three criteria for performing skills:

- 1) intelligent component;
- 2) physical component;
- 3) aesthetic component.

The material was collected in several stages, conditioned by the research logic and objectives. The empirical study was carried out in three stages.

Table 1. Stages and timing of empirical research.

Empirical research stages	Survey schedule
Research of methodological background	1-17. 10. 2021
Survey (pedagogical observation)	18-20. 10. 2021
Collecting and analysis of the material	21-30. 10. 2021

The research methodology is based on a systematic approach and includes the methods of the general scientific group (analysis, synthesis, induction, deduction); as well as special methods: content analysis of scientific literature, the method of included pedagogical observation, the method of statistical analysis using the advanced analytics program Neural Designer.

During the survey, all obtained data were analyzed using the Neural Designer program and converted into a graphical format of diagrams for perception clarity.

Each criterion of social responsibility was assessed by an average score, which made it possible to bring all results into a 10-point scale and thereby translate qualitative data into quantitative ones.

Table 2. Methods for assessing students' groups result.

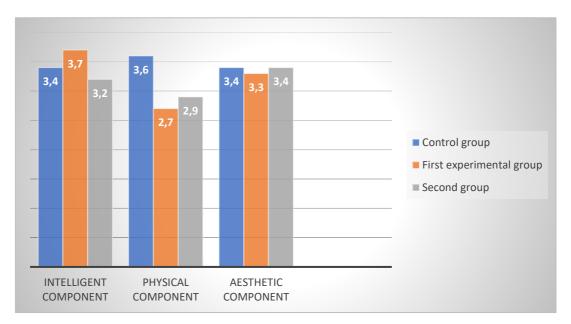
Criterion	Rating scale for performing skills
Intelligent component	1-3 low; 4-6 average; 7-10 high level
Physical component	1-3 low; 4-6 average; 7-10 high level
Aesthetic component	1-3 low; 4-6 average; 7-10 high level

This analysis technique made it possible to summarize the assessments of 75 students for each of the analysis criteria. The method of analysis proposed by us made it possible to translate the qualitative results of pedagogical observation into quantitative data.

# **RESULTS**

A preliminary survey of the level of performing skills according to the calculation method proposed by us gave the following results (Figure 1).

Figure 1. The results of a preliminary assessment of the level of performing skills in the control and two experimental groups (compiled by the author using the Neural Designer program)



As can be seen in Figure 1, prior to the series of experimental sessions, the level of performing skills of 1st year clarinet students was at a low level. To change the situation for the better, we conducted a series of experimental sessions on individual and group plans. During the online classes, students played both solo and synchronously via Skype in the online conference mode.

The interactive learning environment, created by us as a pedagogical condition, has become a leading factor in the successful implementation of the set learning objectives.

Based on the results of the experimental classes in the first group of students, we obtained the following results (Figure 2).

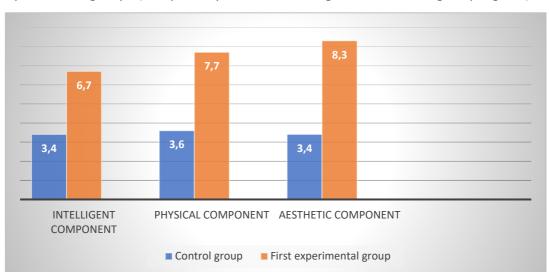
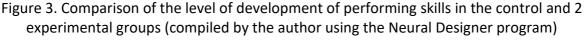
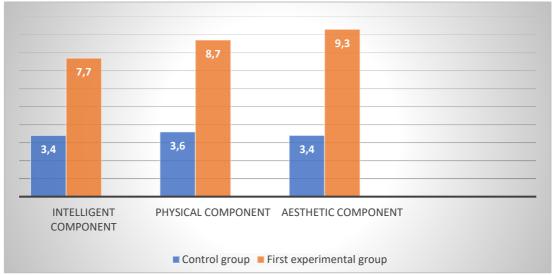


Figure 2. Comparison of the level of development of performing skills in the control and 1st experimental groups (compiled by the author using the Neural Designer program)

As shown in Figure 2, in the experimental group, the performance skills, thanks to the use of the pedagogical conditions we have listed, have grown from an average to a high level. There were no changes in the control group.





As can be seen from the data, presented in Figure 2, positive changes also occurred in the second group of students, compared to the control group. At the same time, the performing skills, developed with the help of the pedagogical conditions and experimental classes proposed by us, were fixed in the subsequent educational process in the context of distance learning.

Thus, we can say that in a number of pedagogical conditions for distance learning music, special attention should be paid to the creation of an interactive learning environment.

# **DISCUSSION**

Our results are confirmed in the works by such authors as Ahmed et al., (2021), Xu (2021), V. Baadjou et al., (2017), Belcher (2021).

Our observations obtained during the experimental studies are consistent with the results presented in the studies by Coca (2021), Conesa et al., (2021), and Coyle et al., (2021).

Confirming our thesis, DiMatteo et al., (2021), Giordano and Thacker (2020), in their studies proved the importance of the aesthetic component in the formation of performing skills when playing the clarinet.

New methods for developing performing skills in the context of distance learning in music universities are presented in the works by such authors as Liu (2020), and Lott (2021).

From a methodological point of view, the works of Liu (2020), Yatsui et al., (2021), and Yoon (2021).

Nevertheless, despite the extensive historiography, it is necessary to expand the boundaries of the topic study by conducting a series of empirical studies.

# **CONCLUSION**

Based on the results of the study, the following conclusions can be drawn:

- 1) The formation of performing skills is a constant process of self-improvement of the performer in his playing style: from the physical to the aesthetic component.
- 2) In the development of performing skills, a special role is played by the pedagogical condition for creating an interactive learning environment. Within the framework of such distant classes, it became possible to create quartets for clarinet players, as well as to perform a solo program on a competitive basis. The students especially appreciated the possibility of synchronized concerts, which were held for us using Clarinet Concerto by Finzi and Symphony No. 5" by Shostakovich.
- 3) For the successful development of performing skills among 1st year students of a music university, it is necessary to clearly set educational objectives aimed at developing the physical and intellectual components of the performing arts.

#### REFERENCES

Abrams, A. (2006). The Clarinet in the Classical Period. Notes, 62(3), 729-730.

Ahmed, Y., Telmer, C. A., & Miskov-Zivanov, N. (2021). CLARINET: Efficient learning of dynamic network models from literature. Bioinformatics Advances, 1(1): vbab006.

Baadjou, V. A. E., Van Eijsden-Besseling, M. D. F., Verbunt, J. A. M. C. F., De Bie, R. A., Geers, R. P. J., Smeets, R. J. E. M., & Seelen, H. A. M. (2017). Playing the clarinet: Influence of body posture on muscle activity and sound quality.

Medical problems of performing artists, 32(3), 125-131.

Belcher Y (2021). Fatigue and recovery patterns of the mouth muscles used to play the clarinet. In book: Gamification: Concepts, Methodologies, Tools, and Applications. 2021. – P.2063-2112.

Berezin V.V (2021). On the method of working with the classical quintet of wind instruments at the university. Musical art and education, 1: 136-148.

Changzhi H, Black M.R. (2018). Historiographic essay on the outstanding Chinese clarinetists, teachers, methodologists and performers. Bulletin of the Kemerovo State University of Culture and Arts, 42: 83-90.

Coca, G. (2011). A PROFILE SKETCH IN THE MIRROR OF ONE WORK: SINUS FOR CLARINET SOLO BY CRISTIAN MISIEVICI. Studia Universitatis Babes-Bolyai-Musica, 56(2), 287-303.

Conesa, I. M., Conesa, M. B. M., Conesa, E. M., & Ferrer, M. B. C. (2021). Perfeccionamiento de la calidad del triple picado en el clarinete implementando las tecnologías. 3 c TIC: cuadernos de desarrollo aplicados a las TIC, 10(4), 33-61

Coyle, W. L., Wong, E. Y., Gabriel, J. D., & Kaplan, C. N. (2021). A computational method to determine transition times for soprano and bass clarinet players. The Journal of the Acoustical Society of America, 150(4), A211-A211.

DiMatteo, A. L., Neubauer, J., Lott, D. G., Zacharias, S., Murry, T., & Chen, W. (2021). High Speed Video Observations of Vocal Fold Kinematics While Playing a Clarinet. Journal of Voice. In press. https://doi.org/10.1016/j.jvoice.2021.07.024

Giordano, N., & Thacker, J. W. (2020). Navier-Stokes-based model of the clarinet. The Journal of the Acoustical Society of America, 148(6), 3827-3835.

Liu Y (2020). Actual trends in the development of the performing art of playing the clarinet in the music of the twentieth century. Manuscript, 3: 151-162.

Lott M (2021). The Clarinet Quintet in Classical and Romantic Chamber Music. In book: The Clarinet. P.178-207.

Mätzener H. (2021). Clarinet Didactics. Second Editon. London, 224 p.

Ning XU (2021). Discussion on the Construction of Cloud Platform for Clarinet Teaching in Mobile Terminal. Conference: International Conference on Computers, Information Processing and Advanced Education (CIPAE). 2021, P. 96-114.

Roulston, K., Jutras, P., & Kim, S. J. (2015). Adult perspectives of learning musical instruments. International Journal of Music Education, 33(3), 325-335. <a href="https://doi.org/10.1177%2F0255761415584291">https://doi.org/10.1177%2F0255761415584291</a>

Xu, N. (2021, May). Discussion on the Construction of Cloud Platform for Clarinet Teaching in Mobile Terminal. In 2021 International Conference on Computers, Information Processing and Advanced Education (CIPAE) (pp. 205-208). IEEE.

Yatsui, K., Yamada, C., Yoshida, Y., & Yatsui, T. (2021). Improving sound of clarinet by coating lacquerware (Wajimanuri). Japanese Journal of Applied Physics, 60(10), 107002.

Yilmaz, C., Bostancı, Ö., & Bulut, S. (2020). Effect of Respiratory Muscle Training on Pitch Range and Sound Duration in Brass Instrument Players and Singers. Journal of Voice, 36: 76-82. <a href="https://doi.org/10.1016/j.jvoice.2020.04.012">https://doi.org/10.1016/j.jvoice.2020.04.012</a>

Yoon H (2021). About the Background and the First Fruition of Clarinet, Accepted in the Mannheim School Symphony. Journal of the Musicological Society of Korea, 24(2): 11-35.

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