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### **SCIENTIFIC VECTOR OF VARIOUS SPHERE' DEVELOPMENT: REALITY AND FUTURE TRENDS**

held on February 20<sup>th</sup>, 2026 by

NGO European Scientific Platform (Vinnytsia, Ukraine)  
LLC International Centre Corporate Management (Vienna, Austria)

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МІЖНАРОДНИЙ НАУКОВИЙ ЖУРНАЛ

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# EXPERIMENTAL VERIFICATION OF THE METHODOLOGY FOR PREPARING FUTURE ARTS EDUCATORS FOR VOCAL-PEDAGOGICAL SELF-DEVELOPMENT

Liu Zhiguo 

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**Summary.** *The article highlights the course of the experimental verification of the effectiveness of the methodology for preparing future arts educators for vocal-pedagogical self-development during the ascertaining and molding experiments. In particular, the diagnostic framework, pedagogical conditions, stages, and results of the implementation of the specified methodology are presented.*

**Keywords:** *methodology, preparation, future educators, art profile, pedagogical conditions, vocal-pedagogical self-development.*

**Introduction.** The modern system of higher art education places increasing emphasis not only on the acquisition of professional knowledge and skills, but also on the ability of future educators to engage in continuous self-development. Vocal-pedagogical training plays a crucial role in shaping a competent arts educator, as it combines artistic expression, methodological awareness, and reflective practice. Therefore, the issue of developing effective approaches that foster vocal-pedagogical self-development among future educators becomes especially relevant in contemporary educational discourse.

**Analysis of research and publications.** Contemporary research demonstrates a growing scholarly interest in the problem of professional and creative self-realization of future music teachers and arts educators, particularly within performance and pedagogical training. Studies by Liu Xuan [1] and Zhu Peng [2] emphasize the importance of pedagogical conditions and motivational factors that support students' readiness for independent methodological and performance self-improvement, highlighting the role of structured educational environments and targeted instructional strategies. Shi Shuchao's work [3] further expands this perspective by identifying the structural components of professional and performance self-realization among students-vocalists, underlining the interconnectedness of artistic skills, reflective abilities, and personal initiative. Collectively, these studies indicate that while significant progress has been made in

understanding the mechanisms of self-development in music education, the issue of comprehensive methodological support for vocal-pedagogical self-development of future arts educators remains insufficiently explored and requires further experimental verification.

**The purpose of the study.** The article is aimed at experimental verification of a specially designed methodology for preparing future arts educators for vocal-pedagogical self-development.

**Research results.** With the aim of determining the qualitative state of future arts educators' preparation for vocal-pedagogical self-development, an ascertaining experiment was conducted during the first and second semesters of the 2022–2023 academic year and the first semester of the 2023–2024 academic year on the basis of the Educational and Scientific Institute of Musical and Performing Arts and Socio-Cultural Practices of the State Institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky".

The experimental part of the study involved 56 future arts educators (specialization "Vocal") and 5 instructors of professional disciplines responsible for future vocal teachers' training. The ascertaining stage prepared the organization and implementation of the molding and control stages of the experimental research work. At the ascertaining stage, the criteria, indicators, and levels of future arts educators' preparation for vocal-pedagogical self-development were determined; the stages of the experiment and its diagnostic methods were developed, and the first control test was conducted. Diagnostic activities were carried out within the educational components of the curriculum of the Educational and Professional Program "Musical Art," specialty 025 "Musical Art," specialization "Vocal".

Since the *worldview-motivational component* in the structure of preparedness of future arts educators for vocal-pedagogical self-development represented the sphere of value orientations and ideals, encompassed the purposeful orientation of the personality and interests in the field of vocal art and pedagogy, the *value-intentional criterion* was defined for its assessment.

The *indicators of the value-intentional criterion* were formulated as follows: the degree of formation of the value orientations and ideals in the field of vocal art and pedagogy; the level of motivation for vocal-pedagogical self-development; the degree of ability for purposeful vocal-pedagogical self-development. For each indicator, signs of manifestation were determined, which influenced the selection of effective diagnostic methods and corresponding creative tasks.

At this stage of the ascertaining experiment, the following methods were used: a survey to clarify the degree of formation of value orientations and ideals in the field of vocal art and pedagogy; a questionnaire to identify the level of motivation of future arts educators for vocal-pedagogical self-development; a diagnostic card to determine the degree of students' ability to purposeful vocal-pedagogical self-development. During the diagnostic process and the completion of creative diagnostic tasks by students, pedagogical observations of master's students were conducted. They detailed the qualitative level of future arts educators' preparation for vocal-pedagogical self-development according to the value-intentional component.

Since the *cognitive-technological component* in the structure of future arts educators' preparation for vocal-pedagogical self-development presupposed



students' theoretical awareness regarding vocal-performing self-development, practical skills to productively self-develop in the process of vocal-performing activity, as well as the methodological capacity to optimize vocal-pedagogical instruction, the *cognitive-praxeological criterion* was formulated for its assessment.

*The indicators of the second criterion* were defined as follows: the degree of theoretical awareness of future arts educators regarding vocal-pedagogical self-development; the level of ability for vocal-technical self-development; the level of methodological capacity of a teacher-vocalist. The identified indicators were specified through signs of their manifestation, which additionally influenced the content of the diagnostic methods and creative tasks recommended at this stage of the ascertaining experiment.

In particular, at this stage of the ascertaining experiment, in order to diagnose students' preparation according to the cognitive-technological component, the following tools were applied: a test-quiz to identify the degree of theoretical awareness regarding personal vocal-pedagogical self-development; a diagnostic card for self-assessment of the level of ability for vocal-technical self-development; a creative diagnostic task to determine the level of methodological capacity of an educator-vocalist. Expert teachers conducted pedagogical observations of the creative and pedagogical self-presentation of future arts educators, which specified the qualitative level of preparation for vocal-pedagogical self-development according to the cognitive-technological component.

Considering that the *competence-presentational component* in the structure of future arts educators' preparation for vocal-pedagogical self-development was directly manifested through the individual's projection of oneself into the professional future, and therefore was associated with competence in self-presentation in performing activity; the ability to design vocal-performing self-development; and the ability to design professional-pedagogical self-development, the *projective-productive criterion* was formulated for its assessment.

Thus, the *indicators of the third criterion* were defined as follows: the degree of ability for self-presentation in vocal-performing activity; the level of ability to design vocal-performing self-development; the level of ability to design professional-pedagogical self-development. The indicators of the third criterion were specified through the signs of manifestation of each of them, which influenced the content of the selected diagnostic methods and creative tasks.

For the diagnostic measurement of the levels of future arts educators' preparation for vocal-pedagogical self-development according to the competence-presentational component, the following were applied: a creative diagnostic task to identify the degree of ability for self-presentation in vocal-performing activity; a questionnaire to determine the level of ability to design vocal-performing self-development; a diagnostic card to identify the level of ability to design professional-pedagogical self-development.

Taking into account that the *reflective-resultative component* in the structure of preparation of future arts educators for vocal-pedagogical self-development was directly manifested through evaluative actions regarding the quality of the educational process, observation of one's own vocal-pedagogical self-development, the ability for vocal-pedagogical self-realization, and the assessment of one's own

vocal-pedagogical self-development, the *introspective-acmeological criterion* was formulated for its assessment.

The indicators of the fourth criterion were defined as follows: the level of ability to observe one's own vocal-pedagogical self-development; the degree of ability for vocal-pedagogical self-realization; the level of ability to assess one's own vocal-pedagogical self-development. The indicators of the fourth criterion were specified through the signs of manifestation of each of them, which influenced the content of the substantiated diagnostic methods and creative tasks.

For the diagnostic measurement of the levels of future arts educators' preparation for vocal-pedagogical self-development according to the reflective-resultative component, the following were applied: a questionnaire to identify the degree of ability to observe one's own vocal-pedagogical self-development; a survey to determine the level of ability for vocal-pedagogical self-realization; a diagnostic card to reveal the degree of ability to assess one's own vocal-pedagogical self-development.

In the process of substantiating the qualitative parameters of the diagnostic research, four levels of future arts educators' preparation for vocal-pedagogical self-development were generalized: initial, low, sufficient, and high.

The quantitative processing of the results of pedagogical observations, surveys, questionnaires, creative diagnostic tasks, and diagnostic cards required calculating the arithmetic mean value of the overall characteristics of the levels of future arts educators' preparation for vocal-pedagogical self-development at the ascertaining stage of the experiment. The generalized results are presented in Table 1.

Table 1

**Average values of the groups of criteria for assessing the levels of future arts educators' preparedness for vocal-pedagogical self-development (ascertaining stage)**

Levels	Criteria			
	Value-Intentional	Cognitive-Praxeological	Projective-Productive	Introspective-Acmeological
	1	2	3	4
High	8,93	8,93	14,29	10,71
Sufficient	21,43	26,79	21,43	23,22
Low	26,79	30,36	26,79	30,36
Initial	42,86	33,93	37,5	35,71

Developed by the author

Thus, the initial level of future arts educators' preparation for vocal-pedagogical self-development indicates the presence of worldview-motivational, cognitive-technological, competence-presentational, and reflective-resultative learning problems of students in this direction. In order to improve the quality of the educational process of future arts educators, it is necessary to implement an experimental methodology for their preparing for vocal-pedagogical self-development.

The purpose of the *molding stage* of the experimental research (2024–2025 academic year, first semester of 2025) was to verify the effectiveness of the



experimental author's methodology for preparing future arts educators for vocal-pedagogical self-development. At the beginning of the molding stage, we monitored the academic progress of master's students in vocal training after their distribution into the control group (CG – 28 persons) and the experimental group (EG – 28 persons). The average values of the groups of criteria for assessing the quality of future arts educators' preparation for vocal-pedagogical self-development were determined. The foundation of our methodology was formed by four pedagogical conditions.

The first condition (actualization of positive motivation for vocal-pedagogical self-development of future arts educators) was implemented at the first, *adaptive-orientational stage* of the molding experiment. The second condition (intellectualization and technologization of the process of preparation for vocal-pedagogical self-development) dominated at the second, *informative-developmental stage* of the experiment. The third condition (stimulation of self-presentational and self-projecting activities in the process of vocal-pedagogical training) was activated at the third, *molding-competence stage*. The fourth condition (extrapolation of performing-pedagogical self-realization in the acmeological perspective) was introduced at the fourth, *acmeological-realization stage*. The logic and sequence of the defined stages of the molding experiment were determined by the structural components of future arts educators' preparation for vocal-pedagogical self-development – worldview-motivational, cognitive-technological, competence-presentational, and reflective-resultative.

The purpose of the first stage of the experiment was to activate in future arts educators a stable positive motivation regarding worldview positions, values, and ideals of vocal-pedagogical self-development, as well as the desire to realize vocal-pedagogical values. At the second stage, an important role was assigned to the systematic formation of knowledge concerning vocal-pedagogical self-development and to the activity-based and methodological aspects of students' preparation for it. At the third stage, it was planned to achieve the goal of acquiring by future arts educators the knowledge, skills, and abilities related to self-presentation and self-design of vocal-pedagogical self-development. The fourth stage aimed at improving students' abilities of prospective comprehension of the dynamics of self-observation, self-realization, and self-assessment of their own vocal-pedagogical self-development.

The implementation of these stages of the methodology was ensured through the application of a complex of methods. In particular, they included: scaling of future arts educators' professional ideals, conversations about individual motives and goals of vocal-pedagogical self-development, elaboration of a personal self-development plan, comparison of pedagogical biographies of outstanding vocalists-teachers, analysis of a vocal piece from the positions of "I am a performer" and "I am a teacher" (first stage); case studies, vocal-pedagogical design, algorithmization of independent vocal-pedagogical self-development, master classes (second stage); presentation of creative projects, individual design of a trajectory of vocal-pedagogical self-development, modeling of educational and pedagogical situations (third stage); analysis of one's own performances and lessons, a portfolio of professional vocal-

pedagogical growth, correction of the individual trajectory of vocal-pedagogical self-development (fourth stage).

The comparative results of the assessment of the initial and final measurements of the molding experiment are presented in Table 2.

Table 2

Comparative data on the levels of s of future arts educators' preparedness for vocal-pedagogical self-development (initial and final measurements)

Diagnostic Measurements	Groups /Levels	High	Sufficient	Low	Initial
Initial Measurement	EG	10,71	25,00	28,57	35,72
	CG	10,71	21,43	28,57	39,29
Final Measurement	EG	32,14	42,86	17,86	7,14
	CG	10,71	25,00	39,29	25,00

Developed by the author

To assess the statistical significance of the differences between the results of the experimental and control groups after the molding experiment, Fisher's criterion  $\varphi^*$  (Fisher's angular transformation) was applied.

Thus, the results of the molding experiment demonstrated that the developed experimental methodology for preparing future arts educators for vocal-pedagogical self-development proved its effectiveness.

**Conclusions.** The conducted experimental research confirmed the effectiveness of the proposed methodology for preparing future arts educators for vocal-pedagogical self-development. The consistent implementation of specially defined pedagogical conditions and stage-by-stage methodological support contributed to positive qualitative and quantitative changes in students' worldview-motivational, cognitive-technological, competence-presentational, and reflective-resultative components of preparedness. The comparative analysis of the initial and final diagnostic measurements, as well as the statistical verification of the obtained results using Fisher's criterion, demonstrated a significant increase in higher and sufficient levels of preparedness in the experimental group in contrast to the control group. This indicates that the introduced methodological system ensures purposeful professional growth of future arts educators and enhances the overall quality of their professional training.

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## **ЕКСПЕРИМЕНТАЛЬНА ПЕРЕВІРКА МЕТОДИКИ ПІДГОТОВКИ МАЙБУТНІХ ВИКЛАДАЧІВ МИСТЕЦЬКОГО ПРОФІЛЮ ДО ВОКАЛЬНО-ПЕДАГОГІЧНОГО САМОРОЗВИТКУ**

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***Анотація.** У статті висвітлено перебіг експериментальної випробування ефективності методики підготовки майбутніх викладачів мистецького профілю до вокально-педагогічного саморозвитку в ході констатувального та формувального експериментів, зокрема презентовано діагностичний апарат, педагогічні умови, етапи і результати застосування означеної методики.*

***Ключові слова:** методика, підготовка, майбутні викладачі, мистецький профіль, педагогічні умови, вокально-педагогічний саморозвиток.*

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