

UDC 378:373.3.016:811.161.2'276.6]37.015

doi: 10.15330/jpnu.9.1.139-145

INTERDISCIPLINARY COORDINATION IN THE PRIMARY SCHOOL TEACHER AND EDUCATOR TRAINING SYSTEM

IRYNA HUMENIUK, TETYANA BLYZNYUK

Abstract. The article highlights the problem of realization of interdisciplinary connections in the process of preparation of future primary school teachers and educators of preschool educational institutions. The emphasis is placed on the need to apply a competency-based approach to ensure the mobility and adaptability of graduates of pedagogical institutions of higher education in compliance with international educational standards. The semantic characteristics of the concept of "interdisciplinary coordination" are analyzed in order to linguistically substantiate the choice of terminological tokens from a number of synonyms and to build a hierarchy of the studied concepts. Interdisciplinarity is inherent in the holistic process of forming the components of the competency paradigm in the training of specialists in the pedagogical field. From the standpoint of the competence approach, interdisciplinary coordination involves creating conditions for the synthesis of knowledge and experience of behavior in a professional context. The classification distribution of interdisciplinary coordination in accordance with the methods and directions of its implementation in the system of training future primary school teachers and educators is carried out. The signs of regressive and progressive interdisciplinary coordination and the practical aspect of their implementation within the educational and professional programs "Primary Education" and "Preschool Education" are determined. The system-synergetic connections between the blocks of academic courses by types of interdisciplinary coordination within the studied specialties are visualized. The emphasis is placed on the dynamics of quantitative and qualitative indicators not only within one type of interdisciplinary coordination, but also between them within the axis in response to public demands. The advantage of progressive horizontal interdisciplinary coordination in the training of preschool education specialists has been established. Implementation of an interdisciplinary approach in the methodological system of education is a determining condition for the effectiveness of the formation of competencies of future specialists in the pedagogical field.

Keywords: competence, competence approach, interdisciplinarity, methodical system of education, professional speech, synergetics.

1. INTRODUCTION

Global trends in training of competitive pedagogical specialists focus Ukrainian education on interdisciplinary learning in the context of a competency-based approach that brings it closer to international educational standards, ensuring the mobility of freelance graduates and their ability to perform long life learning.

The specifics of pedagogical activity reflects contemporary global transformations of the professional space, which cause semantic and structural changes in the professional profile of primary school teachers and preschool educators. The latter, according to T. Blyznyuk, definitely are "a key and integral element of the teaching / learning ecosystem. That is why it is important to familiarize them with present generation competencies and skills so that students can experience the best of the technologies available now. This simply pushes the need for professional development programs where they can get better acquainted with the innovative teaching-learning pedagogies as well as enhance their personal thinking abilities" [2, p. 94]. Accordingly, in the system of training future teachers there is a need to form such competencies that will allow professionals to always be innovative and interesting for students, motivated for continuous self-improvement, ready for a change and unpredictable teaching/learning situations [3]. Hence, appears deep responsiveness of the need of the issue of qualitative preparing future primary school educators "for innovative activities and the use of new methods and technologies in teaching, aware of new educational trends. A modern educational establishment is an institution of competences. In addition, competency-based learning is not an easy challenge for schoolteachers and university academic staff. Taking into account the principles of competency approach, the essence of education is the development of abilities and skills that will contribute to independent problem solving in different activities based on the use of social experience" [2, p. 94].

The dynamics of public demand today is not able to provide any narrow subject area. The formation of competencies defined within the purpose and final results of any course cannot be carried out in the context of a single academic discipline. Their systematic manifestation is the result of the complex application of acquired skills, experience of effective implementation of knowledge in the process of mastering the full cycle of mandatory and optional components of the educational and professional program. Therefore, we believe that the formation of components of the competency paradigm in the training of primary school teachers is characterized by interdisciplinarity which is manifested not only in the integration of different sciences, but also in the use of innovative forms, methods and digital technologies of education.

2. RESULTS AND DISCUSSION

Interdisciplinary coordination is not a new concept in pedagogical science, but the diversity of its content has led to a variety of views and interpretations, which is reflected in the synonymous nominations "interdisciplinarity", "interdisciplinary relations", "Interdisciplinary approach to learning", etc. The choice of terminology in our study is based on the semantic characteristics of the phenomena "connection" and "coordination", "discipline" and "subject". The concept of "connection" as a "relationship between various factors, phenomena, events based on interdependence and interdependence" [11], contains static features. The term "coordination" in the sense of "agreement, reconciliation, establishing a relationship, interaction in the activities of people, between actions, concepts" [10] implies the dynamics of a change. Since we consider the model of teaching the discipline as a system-synergetic formation, sensitive to external influences and internal transformations, which involves permanent coordination between the elements, the token "coordination", in our opinion, fits the context the best. Academic course/discipline (in higher education institution) in the normative sense is a "pedagogically adapted system of concepts about phenomena, patterns, laws, theories, methods, etc. of any field of activity (or a set of different fields of activity)" [13] and subject (in institutions of general secondary education) as "the foundations of relevant science or art: knowledge, skills and abilities that have a general educational character and meet the purpose of teaching and educating students of a certain age group" [4, p. 222] have different levels of scientific and research development. This leads to their use at different educational levels. Thus, in the context of our study, we consider it appropriate to

use the concept of "interdisciplinary coordination" in view of its semantic and methodological relevance.

The purpose of the article is to reveal the potential of interdisciplinary coordination in the process of training future primary school teachers and educators of preschool education on the example of the methodological system of teaching the course "Ukrainian language for professional purposes".

In the scientific literature, the analyzed term has received various interpretations: "permanent dynamic multilateral connection..." [5], "established mutual coherence of the content of education with academic disciplines..." [12, p. 358], "interpenetration, synergy of different disciplines, their mutual enrichment..." [14, p. 228], "mutual enrichment of approaches and methods of different disciplines" [14, p. 228]. Based on the development of the scientific information space of the problem, we offer a definition of the concept of "interdisciplinary coordination of the Ukrainian language for professional purposes". It is the process of coordinating the content, methods and forms of teaching "Ukrainian language for professional purposes" with other components of the educational-professional program on the basis of interdisciplinary relations for the purpose of complex formation of the competencies defined in it. From the standpoint of the competence approach, interdisciplinary coordination involves creating conditions for the synthesis of knowledge and experience of behavior in a professional context. Interdisciplinary integration as a higher level of interdisciplinary coordination is a manifestation of the creation of a single educational space in order to study a holistic set of disciplines and the formation of competencies.

Thus, based on the analysis of scientific sources [8], a hierarchy of the concepts under study is built: establishing interdisciplinary links / harmonization of content, methods and forms in interdisciplinary coordination / integration of disciplines in a single educational space.

Interdisciplinary coordination is based primarily on the identification of interdisciplinary links in the content of the course, which depends on many factors: general parameters of the educational standard, details in the work program, didactic approaches, etc. The decisive role in this process, in our opinion, is played by the role of the teacher, his/her vision of the implementation of interdisciplinarity in the methodological system of teaching the discipline. For example, the disclosure of language and speech functions can be done by linearly formulating the main provisions or disclosing each function in context, you can consider situations in which specific functions are identified, justifying them from the perspective of other disciplines, and reproduce a fragment of professional communication, taking into account linguistic, psychological, pedagogical aspects, i.e., to profile the content component in an interdisciplinary context. Each of the submitted options will correspond to the work program of the course "Ukrainian Language for Professional Purposes", but will lead to different levels of competencies formation.

The given example of interdisciplinary coordination, which is used to solve the problems of a particular course by attracting information from other components of the educational and professional program, belongs to the horizontal variety. Horizontal links between disciplines can have regressive and progressive features. Regressive interdisciplinary coordination involves making connections through the use of already known course material. Progressive interdisciplinary coordination lays the groundwork for the study of subsequent courses. Examples of progressive interdisciplinary coordination of the Ukrainian language in the professional field: the use of innovative forms of classes (lecture-visualization, lecture with planned errors) as a projection to the course "Pedagogical Innovations"; information and research projects as a form of presentation of results in connection with such disciplines of the educational-professional program as "Pedagogical Skill and Creativity of the Teacher", "Pedagogical Innovation", etc.

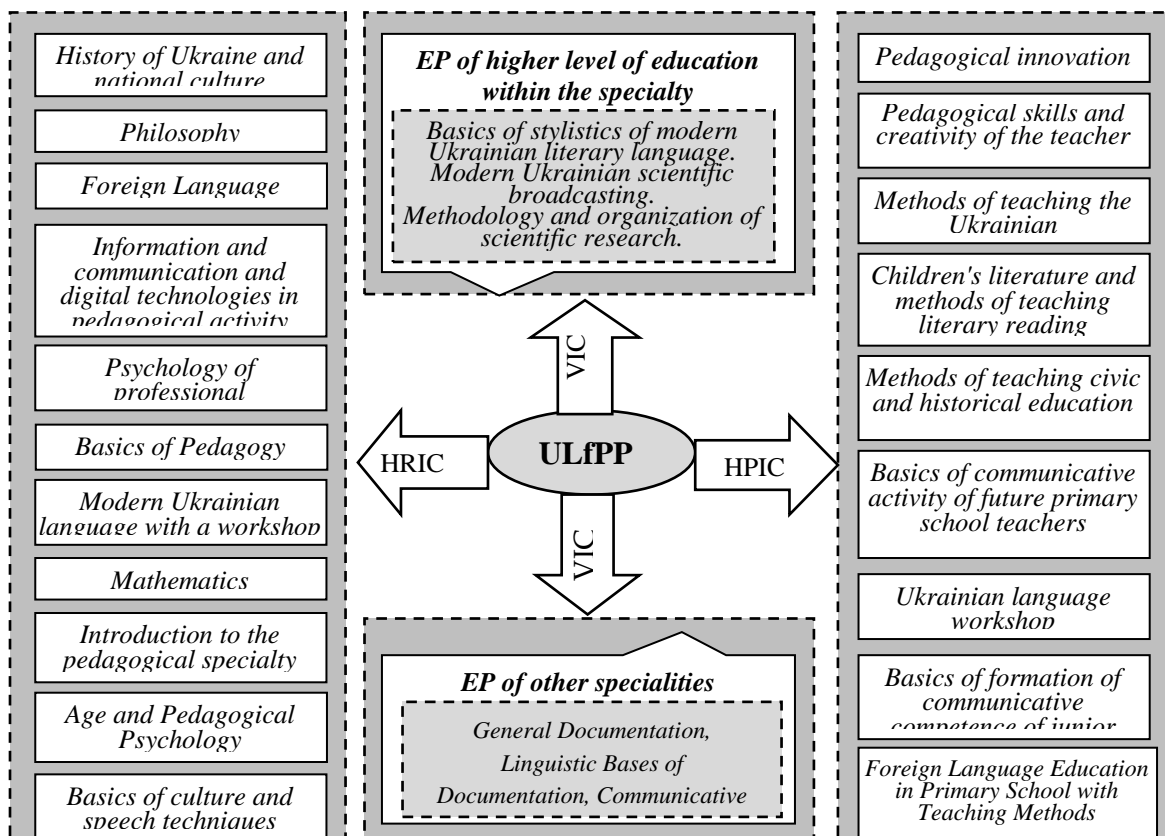
It should be noted that horizontal interdisciplinary coordination is also realized through mastering and applying types of cognitive activity, which is manifested in the ability to organize, plan and control their activities (entrepreneurial competence) [6], use logical thinking

(generalization, proof, comparison, etc.), present results and more. For example, working with terminology, establishing ways to create terms, especially in foreign languages [7], develops skills of analysis and analogies that contribute to mastering a foreign language. Perfect example of the analyzed idea might be easily traced in the process of teaching the following academic courses "Methods of Foreign Language Teaching", "Foreign Language for Professional Purposes", "Foreign Language Education in Primary School with Teaching Methods," and others. The formation of general skills and abilities of oral and written professional speech in the process of teaching "Ukrainian language for Professional Purposes" is coordinated with pedagogical disciplines, in particular: "Didactics", "Pedagogical skills and creativity of teachers", "Theory and Methods of Education", "Fundamentals of Pedagogy".

Vertical interdisciplinary coordination involves the use of interdisciplinary links with components of the educational-professional program of the second (Master's) level of higher education in the same specialty and field of knowledge that motivate further education and self-improvement, or, if necessary, with components of educational programs of other specialties, which allow to expand and deepen the issues of the course. For example, analysis of stylistic features of the text while working on the topic "Styles of modern Ukrainian literary language in professional communication" as a basis for studying the course "Stylistics of Modern Ukrainian Literary Language" in the educational program of the second (Master's) level of higher education 013 Primary education; expanding the content of the topics "Business Papers as a Means of Written Professional Communication", "Documentation on Personnel and Contract Issues" by establishing links with the courses "General Documentation", "Linguistic Bases of Documentation" and other educational and professional programs.

Thus, the general idea of interdisciplinary coordination of "Ukrainian Language for Professional Purposes" with the analyzed examples can be reproduced using a structural-logical scheme in accordance with the specialty (Fig. 1).

As can be seen from Fig. 1, blocks of disciplines by types of interdisciplinary coordination do not constitute static unity, because they, as well as for the whole methodological system of teaching "Ukrainian Language for Professional Purposes", have synergistic features: change in quantitative and qualitative indicators in response to public demand.



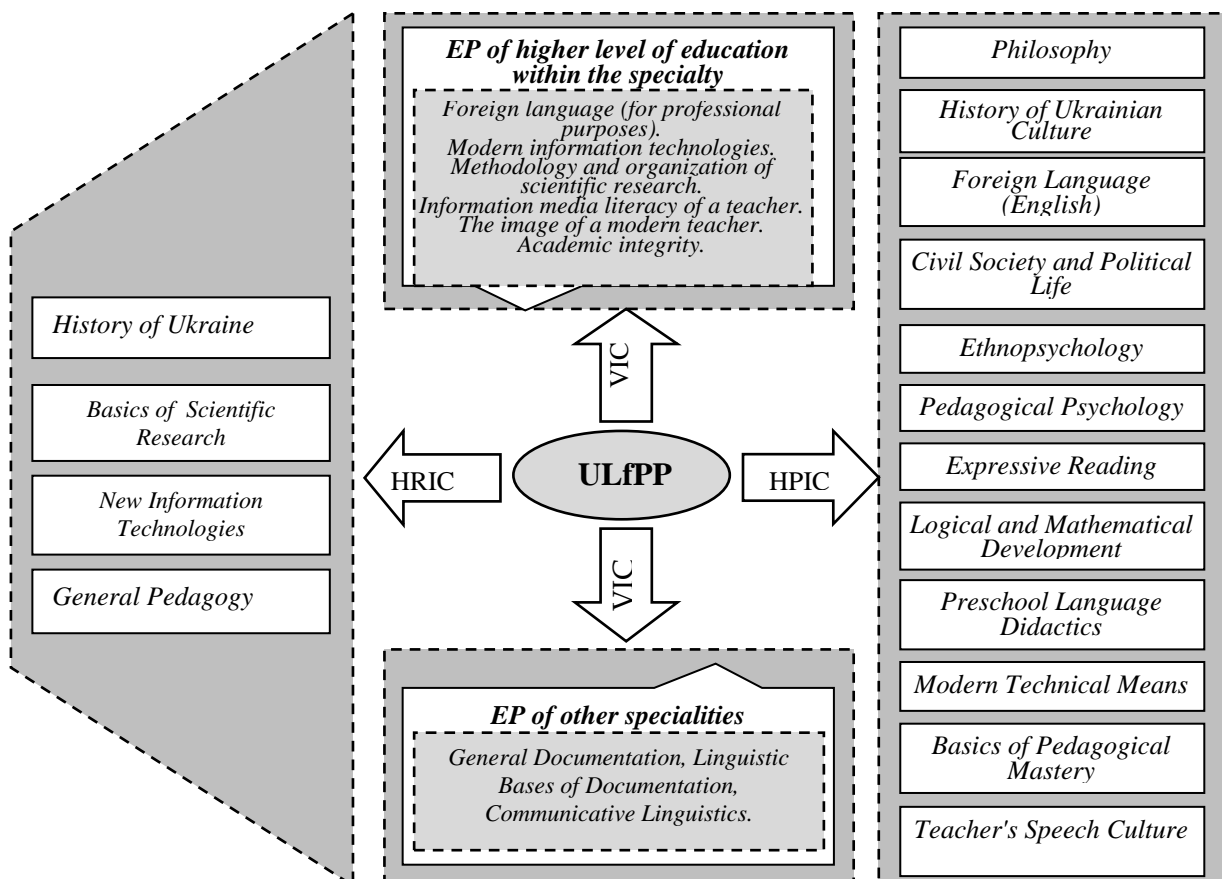
HRIC – horizontal regressive interdisciplinary coordination,
 HPIC – horizontal progressive interdisciplinary coordination,
 VIC – vertical interdisciplinary coordination.

Fig 1. Structural - logical scheme of interdisciplinary coordination of “Ukrainian Language for Professional Purposes” (ULfPP) specialty 013 Primary Education

Source: based on: [10].

Moreover, changes can occur not only within one type of interdisciplinary coordination, but also between them within the axis: we observe the migration of disciplines from HRIC to HPIC and vice versa. At the same time, such migration is not typical of the vertical axis. Thus, Fig. 2 represents the interdisciplinary coordination of “Ukrainian Language for Professional Purposes” within the specialty 012 – Preschool education.

As can be seen from Fig. 2, the study of the course “Ukrainian Language for Professional Purposes” in the educational program "Preschool Education" in the first semester [10] determines the advantage of progressive horizontal interdisciplinary coordination, thus complicating the process of forming certain competencies (linguistic, terminological, business and others) as students lack the terminological base and the necessary information basis for more intensive development of written and oral professional speech. However, this factor can be compensated by the optimal choice of areas of interdisciplinary coordination of the discipline with other components of the educational program.



HRIC – horizontal regressive interdisciplinary coordination,
 HPIC – horizontal progressive interdisciplinary coordination,
 VIC – vertical interdisciplinary coordination.

Fig 2. Structural - logical scheme of interdisciplinary coordination of “Ukrainian Language for Professional Purposes” (ULfPP) specialty 012 Preschool Education

Source: based on: [9].

3. CONCLUSIONS

Considering the above mentioned information, in the process of scientific study of interdisciplinarity, it is necessary to take into account the hierarchy of the concepts: "interdisciplinary relations" – "interdisciplinary coordination" - "interdisciplinary integration". The essence of these categories reflects the level of interdisciplinarity in the educational process.

Thus, the methodological system of teaching the course "Ukrainian Language for Professional Purposes" provides a complex interdisciplinary coordination, which is implemented within one educational and professional program as the use of materials, methods and tools of already mastered courses to achieve projected learning outcomes, and as a basis for optimizing the educational process in progression. The specificity of the analyzed discipline determines the interdisciplinary coordination with the educational program of the second (Master's) level of higher education within the specialty, as well as the involvement of the necessary components of educational programs of other specialties, if required by the competence paradigm.

Implementation of an interdisciplinary approach in the methodological system of education is a determining condition for the effectiveness of the formation of competencies of future professionals in the pedagogical field, based on the definition of the course as system-forming in the context of oral and written professional speech. Prospects for further research are seen in the study of ways of interdisciplinary integration within the educational and professional programs "Primary Education" and "Preschool Education".

REFERENCES

- [1] Blyznyuk T., Budnyk O., Kachak T. Continuity in the implementation of the competency approach in training of teachers in preschool and primary education. Continuity in the reform of the education system in the mountainous region of Ukraine: Monograph / edited by Oliyar M.; Vasyl Stefanyk Precarpathian National University. Ivano-Frankivsk. Suprun V.P., 2021, 317-328. (in Ukrainian)
- [2] Blyznyuk T. Educational innovations and technological advancement in English language teaching: training teachers for NUS. *Scientific-pedagogical journal "Educational Horizons"*, 2 (23) (2019), 19-21. Available at: <https://journals.pnu.edu.ua/index.php/obrii/article/view/2446/2898>
- [3] Budnyk O. Innovative Competence of a Teacher: best European Practices. *Journal of Vasyl Stefanyk Precarpathian National University*, 6 (1) (2019), 76–89. doi: 10.15330/jpnu.6.1.76-89.
- [4] Honcharenko S. U. *Ukrainian pedagogical dictionary*. Kyiv, 1997. (in Ukrainian)
- [5] Hryshkova R. O. Interdisciplinary coordination in the teaching of professionally oriented English and professional disciplines. *Scientific Works*, 58 (2007), 149-154. (in Ukrainian)
- [6] Humeniuk I. M. Formation of entrepreneurial competence of future pedagogical specialists. *Pedagogical Education: Theory and Practice*, 26 (2019), 52-57. doi:10.32626/2309-9763.2019–26–1.52-57 (in Ukrainian)
- [7] Humeniuk I. M. Formation of terminological competence of students in the context of teaching the discipline "Ukrainian language (for professional purposes)". *Educational space of Ukraine*, 3 (2014), 52-57. Available at: <http://194.44.152.155/elib/local/2205.pdf> (in Ukrainian)
- [8] Zverev I. D. *Intersubject communications as a pedagogical problem*. Moscow, 1994. (in Russian)
- [9] *Educational program "Preschool education" of the first (bachelor's) level of higher education specialty 012 Preschool education in the field of knowledge 01 Education / Pedagogy*. Vasyl Stefanyk Precarpathian National University. Ivano-Frankivsk, 2020. Available at: <https://kttmdiso.pnu.edu.ua/навчально-методична-робота/освітня-програма> (in Ukrainian)
- [10] *Educational and professional program "Primary education" of the first (bachelor's) level of higher education specialty 013 Primary education in the field of knowledge 01 Education / Pedagogy*. Vasyl Stefanyk Precarpathian National University. Ivano-Frankivsk, 2020. Available at: <https://kppo.pnu.edu.ua/wp-content/uploads/sites/72/2020/01/ОСВІТНЯ-ПРОГРАМА.pdf> (in Ukrainian)

- [11] *Dictionary of the Ukrainian language. Academic explanatory dictionary (1970-1980)*. Available at: <http://www.sum.in.ua/> (in Ukrainian)
- [12] Cherednychenko H. A., Shapran L. Yu. Interdisciplinary Coordination in Professional Foreign Language Learning of Future Food Industry Engineers. *Pedagogy of creative personality formation in higher and general education schools*, 53 (106) (2017), 355–361. (in Ukrainian)
- [13] Regarding normative and methodological support for the development of industry standards of higher education. Letter of the Ministry of Education and Science of Ukraine dated 31.07.2008 No 1 / 9-484. Available at: <https://zakon.rada.gov.ua/rada/show/v-484290-08#Text> (in Ukrainian)
- [14] Nikolai H. , Lynenko A., Koehn N., Boichenko M. Interdisciplinary Coordination in Historical-Theoretical and Music-Performing Training of Future Musical Art Teachers. *Journal of History Culture and Art Research*, 9 (1) (2020), 225-235. doi: 10.7596/taksad.v9i1.2434 (in English)

Address: Iryna Humeniuk, Tetyana Blyznyuk, Vasyl Stefanyk Precarpathian National University, 57 Shevchenko St., IvanoFrankivsk 76018, Ukraine.

E-mail: iryna.humeniuk@pnu.edu.ua; tetyana.blyznyuk@pnu.edu.ua

Received: 10.01.2022; **revised:** 18.02.2022.

Гуменюк Ірина, Близнюк Тетяна. Міждисциплінарна координація в системі підготовки вчителя початкових класів і вихователя. *Журнал Прикарпатського університету імені Василя Стефаника*, 9 (1) (2022), 139–145.

Стаття присвячена дослідженню проблеми реалізації міждисциплінарних зв'язків у процесі підготовки майбутніх учителів початкових класів і вихователів закладів дошкільної освіти. Акцентовано на необхідності застосування компетентнісного підходу для забезпечення мобільності й адаптивності випускників педагогічних закладів вищої освіти відповідно до міжнародних освітніх стандартів. Проаналізовано семантичні характеристики поняття «міждисциплінарна координація» з метою лінгвістичного обґрунтування вибору термінолексми з ряду синонімічних та побудови ієрархії досліджуваних понять. Міждисциплінарність притаманна цілісному процесу формування складових компетентнісної парадигми в підготовці фахівців педагогічної галузі. З позиції компетентнісного підходу міждисциплінарна координація передбачає створення умов для синтезу знань і здобуття досвіду поведінки у професійному контексті. Здійснено класифікаційний розподіл міждисциплінарної координації відповідно до способів і напрямів її реалізації в системі підготовки майбутніх учителів початкових класів і вихователів. Визначено ознаки регресивної і прогресивної міждисциплінарної координації та практичний аспект їх реалізації в межах освітньо-професійних програм «Початкова освіта» і «Дошкільна освіта». Візуалізовано системно-синергетичні зв'язки між блоками дисциплін за видами міждисциплінарної координації в межах досліджуваних спеціальностей. Акцентовано увагу на динаміці кількісних і якісних показників не тільки в межах одного виду міждисциплінарної координації, але й між ними в межах осі у відповідь на суспільні запити. Встановлено перевагу прогресивної горизонтальної міждисциплінарної координації у підготовці фахівців дошкільної освіти. Реалізація міждисциплінарного підходу в методичній системі навчання – визначальна умова ефективності формування компетентностей майбутніх фахівців педагогічної галузі.

Ключові слова: компетентнісний підхід, компетентність, міждисциплінарність, методична система навчання, професійне мовлення, синергетика.