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DEVELOPING RESEARCH COMPETENCE OF PRE-SERVICE EFL TEACHERS

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ABSTRACT

Action research has become an integral part of a teaching practitioner's professional activity improving the quality of teaching and contributing to innovations in the educational system. To be able to conduct action research efficiently, a graduate from a teacher training university should not only realize the significance of action research for their personal and professional development but also be equipped with the necessary methods and techniques and have an enquiry stance.

*The **purpose** of the article is to highlight the features of the process of developing students' research competence while their studying for a Bachelor's and Master's degree at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The described model appeared as a result of the implementation of the new national curriculum in methods of teaching English as a foreign language.*

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The **methodology** of the study involves both a critical analysis of the models of action research currently employed in teacher education and empirical methods investigating our own daily activities as educators (observation and the participants' structured interviews). Structured interviews of 20 student teachers were taped, transcribed and analysed by the research educators engaged in the study.

Results. The authors described the principles and stages of developing students' research competence at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The results of the structured interviews prove the significant role of action research in teacher education. In the course of their training, the students gradually become aware of the challenges of action research, ways to overcome them and the relevance of it for teachers' professional and personal growth.

Conclusions. The suggested system of developing pre-service teachers' research competence proved its obvious benefits for educating reflective practitioners able to become agents of change.

KEYWORDS: Action Research, Enquiry Stance, Pre-Service Teacher Education, Pedagogical Reflection, Research Competence.

INTRODUCTION

Rapid changes in the economic and social development of modern society, globalization tendencies in all the spheres of human life, information boom and digitization of culture lead to new challenges in outlining the content and rethinking the organization of education. Certain innovations that emphasize competence approach, student-centeredness, learning through doing are being introduced into the modern system of higher education.

The competence approach to organizing the educational process and defining the essence of learning involves a shift from retranslating knowledge to converging the process of learning with scientific research. This results in the acquisition of practical social experience and mastery of general and professional competences needed for responding to future professional challenges.

The realization of student-centeredness turns the student into an active subject of educational activity, who is self-realized in

the process of acquiring knowledge and developing abilities and skills of its application, accumulating experience in formulating goals and choosing ways to achieve them using self-reflection and self-assessment.

The idea of "learning through doing" put forward by an American social philosopher J. Dewey (1933) envisages combining mental and practical activities for carrying out educational, research, creative and other types of activities, modeling one's own professional activities, going beyond traditional solutions, rejecting clichés and stereotypes.

Competency approach that prevails in the organization of modern system of higher education involves the formation of a range of general and professional competencies. For future foreign language teachers, these professional competences include psychological-pedagogical, linguistic, and professional-methodological ones.

Research competence is viewed as a general competence needed by

specialists of any profession. On the other hand, it can be considered a component of psychological-pedagogical, linguistic and professional-methodological competences, depending on which field of their professional activity a teacher explores.

The **purpose** of the article is to highlight the features of the process of developing students' research competence while studying for a Bachelor's and Master's degree at the Department of Foreign Philology of H.S. Skovoroda Kharkiv National Pedagogical University. The described model appeared as a result of the implementation of the new national curriculum in methods of teaching English as a foreign language (Typova..., 2020).

Interpreted generally, the term research competence denotes the following abilities of a teacher a) the ability to adopt a stance of enquiry and to organize one's work according to it; b) the ability to search for information and apply the results of available research in one's teaching practice; c) the ability to independently plan and carry out practical research (Andriessen, 2014).

The **methodology** of the study involves both a critical analysis of the models of action research currently employed in teacher education and empirical methods investigating our own daily activities as educators (observation and the participants' structured interviews). Structured interviews of 20 student teachers were taped, transcribed and analysed by the research educators engaged in the study.

CONTEXT OF THE STUDY

This study was conducted in the context of the Bachelor's degree programme for teacher education, namely the one designed by the Faculty of Foreign

Philology at H.S. Skovoroda Kharkiv National Pedagogical University. According to it, action research constitutes a separate module in the course of Methodology.

Student teachers start their research at the beginning of the seventh term of their training programme when they have a series of sessions and work out their research plans. Student teachers are free to choose a topic related to the challenges in their own school practice.

After that, during their teaching practice at school, they have a possibility to verify their hypothesis and find answers to their research questions. Supervision of student teacher research takes place mostly at the university. Discussion and interpretation of findings take place in the seminars during the eighth term, at the end of which the students make public presentations of the results of their research.

THEORETICAL FRAMEWORK

Research competence is viewed as one of the key competencies of the 21st century. In the modern world, research competence becomes one of the integral features of a successful personality, who adapts to rapid changes, continuously self-develops, and finds adequate responses to the challenges of the post-information society.

It is worth mentioning that research competence should be inherent not only to the scholars who are directly involved in research activities, but also to all practitioners who daily analyze real-life situations of the educational process and address various issues that arise.

Most educationalists interpret research competence as an amount of knowledge, acquired as a result of cognitive activity, a range of methods and techniques to carry it out, and certain value orientations,

motivation and an enquiry stance (Oolbekkink-Marchand et al, 2022).

Describing the essence and content of research competence, M.S. Holovan and V.V. Yatsenko (2012) single out the following structural components of it:

- 1)** a motivational-axiological component, which includes a system of professionally relevant motives for conducting research activity and conscious appreciation of it;
- 2)** a cognitive component, presented by a system of scientific knowledge of professional and interdisciplinary character and cognitive enquiry skills;
- 3)** a practical component that embraces a set of adopted research methods and techniques and skills of their implementation in teaching;
- 4)** an evaluation and reflection component, which is based on systematic evaluation of one's own achievements, their comparison with the goals to be achieved, and the desire for self-improvement (Holovan, & Yatsenko, 2012).

Nowadays action research has become a structural part of teacher education curriculum in many countries (Vaughan, & Burnaford, 2016). Addressing the challenges of the modern system of pre-service teacher education many scholars view action research as a means to bridge the existing gap between theoretical knowledge and practice (Burns, 2009; Kemmis, 2009; Bissonnette, & Caprino, 2014).

On the one hand, students are not always aware of the theoretical basis of each educational activity and experience difficulties in linking teaching practices to the corresponding theories (Ax, Ponte, and Brouwer, 2008). On the other hand, thanks to action research student teachers are involved in creating new knowledge, rather than transmitting what they

already know (Kirkwood, & Christie, 2006; Leung, 2009).

Educationalists believe that action research enhances both teacher research literacy and the reflective and analytical capabilities of pre-service teachers (Lattimer, 2012). Cochran-Smith et al. (2009) claim that by doing action research, teacher candidates become life-long learners who ask research questions and continuously reflect on their teaching practices.

Along with professional development, Oolbekkink-Marchand, van der Steen, and Nijveldt (2014) distinguish two more goals of action research: school development resulting in improved classroom practice of the teacher researchers themselves and the whole school community, and constructed new knowledge that can be shared with others and employed in different contexts. Thus, by conducting action research teachers manifest themselves as agents of change (Ulvik, & Riese, 2016).

Summarizing the views of researchers and our own experience of developing students' research competence, we can single out the following basic principles of organizing this process: step-by-step progression; continuous development; cyclic character; pedagogical and psychological support; care for students' interests and inclinations; students' free choice of research topics; compliance with research requirements; compulsory fulfillment of the assumed responsibilities; correlation with the departments' research topics.

Let us consider these principles in more detail.

The principle of step-by-step progression means that the process of acquiring knowledge and practical skills of research activity begins at school and continues in

a higher education institution. It also involves transition from less complex to more complex types of work, from basic to more sophisticated methods and techniques, from group projects to individual research, from information search to independent formulation of a hypothesis and its experimental verification.

The principle of continuous development is revealed in widening the scope and increasing the complexity of research work that starts with summarizing focused observations during school practice and noticing a bottleneck of teaching; continues with making presentations at seminars and conferences, working at bachelor's qualification paper and culminates in a master's research.

Cyclic character is manifested in the fact that a student-researcher, gradually advancing in exploring a topic, goes through several stages that correlate with certain scientific stages of a research cycle (establishing the starting point, designing an intervention and its implementation, data collection and analysis, reflection, evaluation and review of the problem in relation to data) and are periodically repeated at each subsequent level.

Cyclic character is associated with the principles of step-by-step progression and continuous development and, together with them, reflects the dynamics of the process of student research competence formation.

Throughout the entire period of study at a higher education institution, pedagogical and psychological support is provided by academic supervisors, teachers of methodology and of other professionally oriented disciplines, practice supervisors, and school mentors.

This support is necessary for enabling a student to outline the topic of the research, to go through its individual stages (a systematic search for information resources, selection of methods and research tools, data collection and their interpretation, interpretation and dissemination of the results).

It is important that such support is not coercive and is based on partnership relations with students. This support becomes even more significant during teaching practice as it facilitates student teachers' practical experience acquisition, expanding their professional knowledge and developing their teaching skills and abilities (Nebytova, 2022).

Caring for students' interests and inclinations and ensuring the student's free choice of research topics reflect the idea of student-centeredness and make another basis for creating each student's individual educational trajectory. On the other hand, students' autonomy envisages responsibility for their own research work, compulsory fulfillment of the obligations assumed, compliance with the requirements for the research and the deadlines for its implementation.

RESULTS

Analyzing our experience of organizing action research of pre-service teachers at our university we think it relevant to distinguish the following stages of developing students' research competence:

- 1) preparatory stage, during which students accumulate information about the main research areas related to their future profession, prepare essays, presentations, do group projects while studying the subjects on the 1st year curriculum;

2) information search stage, during which teaching practice begins in the form of focused observation of certain aspects of a teacher and students' activities in the classroom. By this time, the students are already engaged in the initial modules of Methodology course, where they get basic knowledge through reflecting on their learning experience, making guided discovery, and participating in experiential activities (learning through doing).

All this enables them to identify the problem areas in the organization and implementation of the educational process, write reflective essays and perform problem-solving tasks;

3) orientation stage, which involves familiarization with other educators' experience of conducting research (using case-study method), with the requirements for student research, main stages of the research cycle, ways of formulating hypotheses and phrasing research questions, methods of data collection and their interpretation.

This stage starts in the third year of studies and goes on up to the beginning of the fourth year when the students, in the course of a separate module of Methodology curriculum, design a detailed plan for their own action research. These plans are peer reviewed and then discussed with their supervisors;

4) executive stage, which includes direct implementation of the research plan during school practice, development of research tools and other materials and carrying out an intervention (a methodological experiment);

5) analytical stage during which the students perform qualitative and quantitative analysis of the collected data,

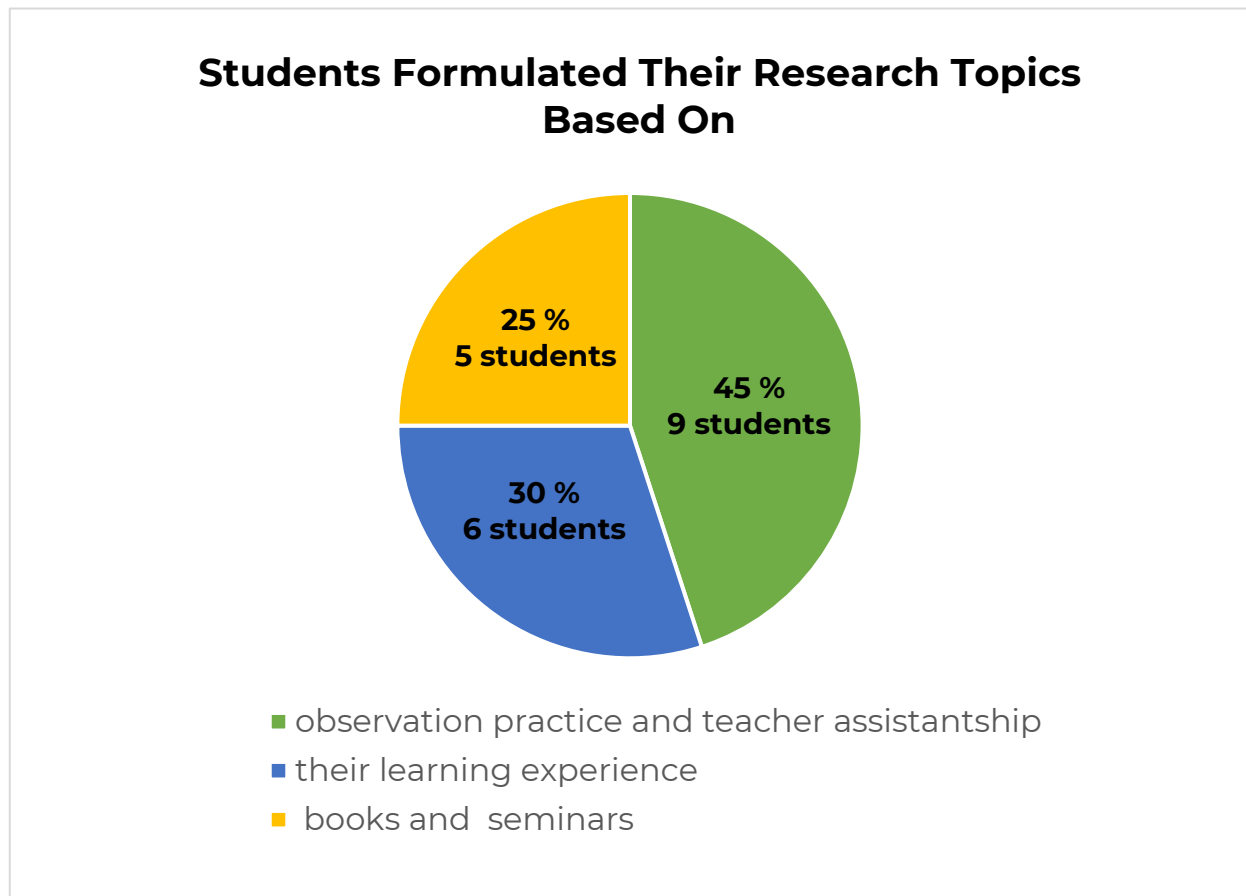
come up with answers to problematic questions, and summarise their findings in a qualification paper. This stage also includes dissemination of research results through presentations at seminars, meetings of special interest groups, student conferences;

6) generalizing stage that starts in the first year of a master's programme. At this stage student's research activity acquires a qualitatively new level, the subject of research expands, investigation becomes more profound, new experiments are conducted, and the results are reflected in scientific publications (articles and theses) as well as in a master's graduation paper.

To find out what kind of challenges the students face while doing action research and the level of future teachers' awareness of the significance of action research for their personal and professional growth, the authors conducted structured interviews with twenty fourth-year students studying for a Bachelor's degree in teaching English as a foreign language. The results of these interviews can be interpreted as follows.

The first question of the interview was *How did you come up with the issue for the research? Why do you want to study this topic?* (Fig. 1).

The reason for choosing the research topic for 30% of the students (6 students) was rooted in their learning experience at school and university, e.g. "I want to study this issue because learning English was focused only on grammar in my school, which caused me to have problems with pronunciation and speaking. I would like to make sure that my students do not have such problems".

Figure 1*Students' motives for formulating their research topics*

The reason for choosing the research topic for 30% of the students (6 students) was rooted in their learning experience at school and university, e.g. "I want to study this issue because learning English was focused only on grammar in my school, which caused me to have problems with pronunciation and speaking. I would like to make sure that my students do not have such problems".

25% (5 students) answered that reading about the topical issues in the books on methodology and having discussions in the seminars prompted their choice of the research topic, e.g. "The topic had been chosen because of its relevance. There is a problem of teacher talking time prevailing over student talking time. This issue reduces learners' opportunities to acquire speaking skills. Moreover, the present

situation leads to boredom, distraction and losing concentration".

The second question was *How easy was it to ask SMART research questions? Why? What challenges did you meet while planning your research?*

All the students agreed that asking research questions was one of the most challenging points. However, the use of Think – Pair – Share model in the seminars and the sample analysis of the research questions formulated by researchers helped them to rephrase their initial versions and make them more SMART. Some students emphasized the significance of wording their SMART research questions since the quality of their research largely depended on that.

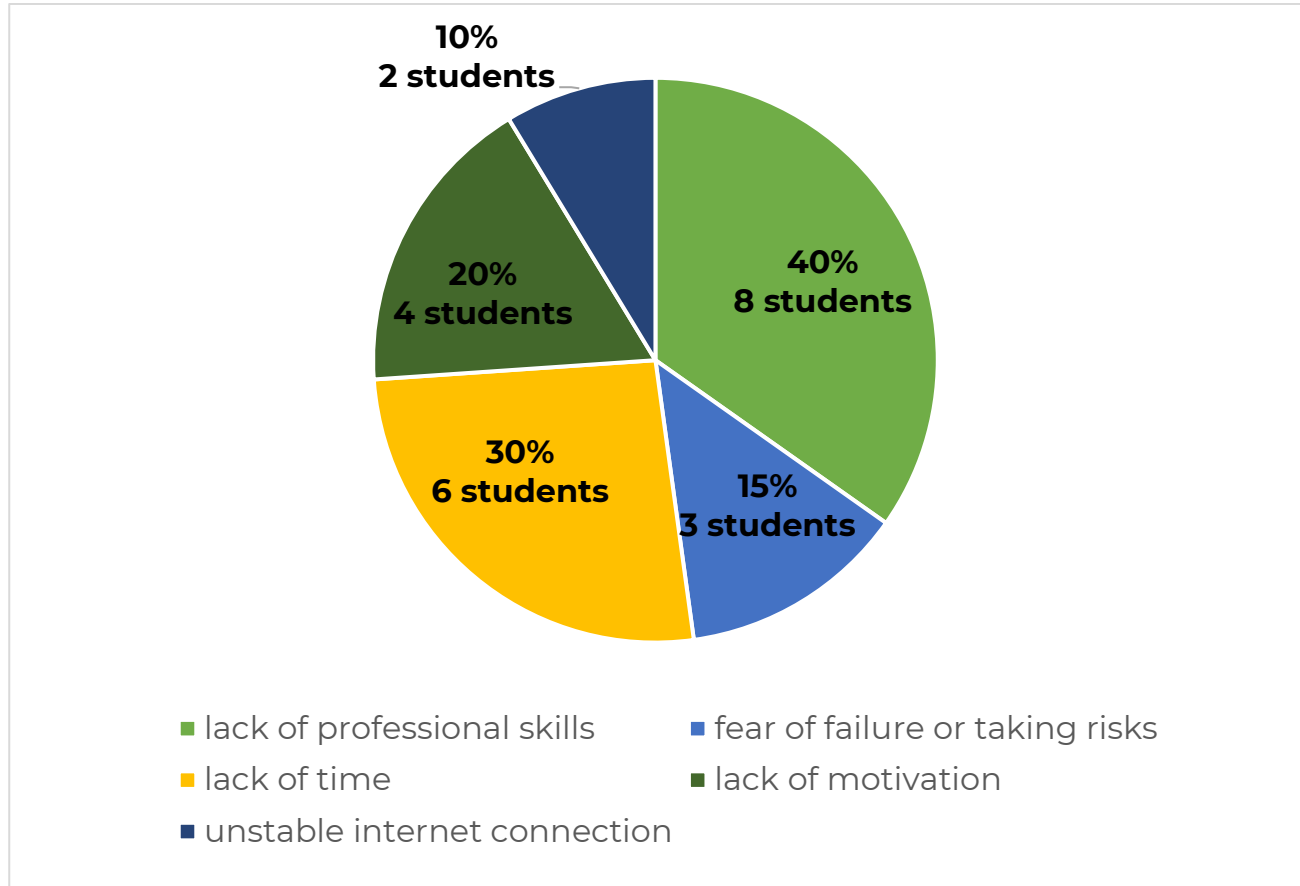
Answering the third question *What challenges did you meet while*

implementing your research plan? How confident were you?, many students

named more than one reason, so the total does not equal 100 %. (Fig.2)

Figure 2

The challenges students met while implementing their research plan



40% (8 students) mentioned the lack of various professional skills: poor time management, inability to effectively organize group work, little experience in classroom management etc. Personal qualities, e.g. being an introvert, having fear of failure or taking risks were mentioned by 15% (3 students). 30% (6 students) answered that extra time was needed to introduce new types of activities since schoolchildren had not done them before. 20% (4 students) commented on the lack of children’s motivation to participate in the experimental research. 10 % (2 students) referred to unstable internet connection at their school.

Most students felt not very secure at first but their confidence increased in the course of the experiment. As one student said, “Observation practice and teacher assistantship prepared us to assume the role of a teacher: we already knew our students, their preferences and learning styles, usual classroom procedures and their effectiveness”. Some students also mentioned that their confidence rose due to the school mentors and university supervisors’ adequate support.

In their answers to the fourth question *What challenges did you meet while analyzing and interpreting the data?*, most students agreed that they

experienced difficulties in selecting the most relevant research tools and in designing questionnaires and observation sheets, conducting interviews etc.

For some students the process of data collection turned out more time-consuming than they had expected. Some had to change the initial version of the designed questionnaire and had to design a new one to obtain more reliable data.

Asking the fifth question *Did conducting action research change any of your views and personal qualities? In what way?*, the authors wanted to find out if doing action research influenced the students' personalities.

All the students answered this question affirmatively saying that action research contributed to their flexibility of thought, helped to avoid standardized thinking and developed both their in-action and on-action reflective abilities.

Students got reassured that classroom practice can offer a lot of research questions which do not always have one and the only correct solution. Collaboration with school mentors, university supervisors and peers makes action research more successful.

Summarizing all the answers, we can conclude that, on the whole, the students demonstrated positive attitude to doing action research and realized its relevance for their personal and professional development.

DISCUSSION

Formation of research competence is a long process which largely depends on creating a favourable pedagogical environment in an educational institution, joint efforts of the dean's office, teaching staff of the departments, and student scientific society. Acquisition of knowledge and practical research skills

begins at school while participating in project work and coping with other information search tasks. This process continues in a higher education institution in the form of classroom research, focused observation, conference reports, and course and graduation papers. Action research becomes an integral component of professional growth of a practicing teacher.

The process of developing students' research competence will be more successful if it correlates with the research experience of the teaching staff and the areas and topics of their current research. Thus, a new model of partnership between teachers and students is born.

CONCLUSIONS

The authors are well aware of the fact that action research has become an essential part of teacher education curricula in many countries. In Ukraine, the significance of action research in educational practice is widely acknowledged nowadays. Though its theoretical foundations, principles and structural components are well described, there are few publications that analyse the practical implementation of them in a specific educational context. Our University was among the first educational institutions in Ukraine that introduced action research as a compulsory part of Bachelor's and Master's programmes of pre-service English teacher education. We believe that the analysis of our experience is worth studying and sharing and we would like to make it publicly available for fellow professionals to review, learn from and build on.

The described stages correlate with how the process of professional and methodological training of future EFL teachers is organized according to the new Methodology of Teaching English

curriculum developed as part of the international project "New Generation School Teacher" of the Ministry of Education and Science of Ukraine and the British Council in Ukraine. The suggested system of developing research competence of higher education graduates does not claim to solve all the problems in the organization of future EFL teachers' education. However, in our opinion, its benefits are obvious.

Firstly, training organized in this way promotes the development of reflection, which is a necessary tool for the formation of professional autonomy. Secondly, the acquired research skills, the ability to appropriately use various methods and tools, and the accumulated practical experience will be useful in our students' future professional activity. The graduates demonstrate greater confidence and can justify what and how they teach and why. Thirdly, the developed research competence transforms a teacher from a passive observer into an agent of change who does not only copy traditional methods, but is constantly searching for

better ways of teaching, initiating and introducing new technologies and techniques. Fourthly, as a result of their conscious enquiry stance, teachers actively participate in the dissemination of their own teaching experience and learn the experience of others at seminars, conferences, professional associations meetings and through publications in professional periodicals.

Thus, the suggested system of developing pre-service teachers' research competence is a sufficiently reliable tool for ensuring constant personal and professional growth and contributing to improving the level of teaching English throughout the country.

We firmly believe that one of the main tasks of higher education institutions is training of teachers who can systematically reflect and critically analyze the educational process and their own activities in it, make objective self-evaluation and apply effective methods to research various aspects of educational activity.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ФОРМУВАННЯ ДОСЛІДНИЦЬКОЇ КОМПЕТЕНТНОСТІ МАЙБУТНІХ УЧИТЕЛІВ АНГЛІЙСЬКОЇ МОВИ

Дослідження власної педагогічної діяльності, яке стало невід'ємною частиною професійної кар'єри педагога-практика, покращує якість викладання та сприяє інноваціям у системі освіти. Щоб мати можливість ефективно проводити такі дослідження, випускник педагогічного університету повинен не лише усвідомлювати їх значення для свого особистого та професійного розвитку, але також володіти необхідними методами та прийомами і мати власну дослідницьку позицію.

Мета статті – висвітлити особливості процесу формування науково-дослідницької компетентності студентів під час здобування ступенів бакалавра та магістра на факультеті іноземної філології Харківського національного педагогічного університету імені Г.С. Сковороди. Описана модель з'явилася в результаті впровадження нової типової програми з методики навчання англійської мови як іноземної.

Методологія дослідження передбачає як критичний аналіз моделей дослідження власної педагогічної діяльності, які зараз використовуються в підготовці вчителів, так і емпіричні методи дослідження повсякденної діяльності авторів як педагогів (спостереження та структуровані інтерв'ю учасників). Структуровані інтерв'ю з 20 майбутніми вчителями були записані, транскрибовані та проаналізовані педагогами-дослідниками.

Результати. Автори описали принципи та етапи формування дослідницької компетентності студентів на факультеті іноземної філології Харківського національного педагогічного університету імені Г.С. Сковороди. Результати структурованих інтерв'ю доводять значну роль дослідження власної педагогічної діяльності у підготовці вчителів. У ході навчання студенти поступово усвідомлюють виклики дослідження власної педагогічної діяльності, шляхи подолання труднощів та значущість проведення таких досліджень для професійного та особистісного зростання вчителів.

Висновки. Запропонована система розвитку дослідницької компетентності майбутніх вчителів довела свою очевидну користь для підготовки рефлексивних практиків, здатних стати агентами змін.

КЛЮЧОВІ СЛОВА: дослідження власної педагогічної діяльності, дослідницька позиція, підготовка майбутніх вчителів, педагогічна рефлексія, дослідницька компетентність.

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