- 10 Baturin K. A. (1989). Problema otsenibania i otsenki v obshei psikhologii [The problem of assessment and assessment in general psychology]. Voprosy psikhologii Questions of Psychology, 2, p.81-89.
- 11 O.I. Dudkina, A.A. Burkitova, P.H. Shakirov. Formativnoe otsenibaniev nachalnoi shkole. Prakticheskoe posobie dlya uchitelya [Formative assessment in primary school. A practical guide for teachers] (2012). Bilim, p.89.
- 12 O.I. Mozhaeva, A.S. Shilibekova, D.B. Ziedenova. Guidelines for criteria-based assessment for primary school teachers: a teaching manual (2016). Nazarbayev Intellectual Schools, Astana, 48 p.
- 13 Curriculum "Russian language" (for schools with the Russian language of instruction). Grade 4 [Uchebnyi plan «Russkii yazyk» (dlya shkol s russkim yasykom obycheniya)] (2019-2020). Astana: AOO NIS, 252 p.
- 14 Kriterii otsenki znanii obuchayshihcya, utverzhdennye prikazom Ministra obrazovaniya i nayki RK [Criteria for assessing students' knowledge, approved by order of the Minister of Education and Science of the Republic of Kazakhstan] (21.01. 2016), № 52.
- 15 Sbornik zadanii formativnogo otsenivaniya po predmetu «Russkii yazyk» (s russkim yazykom obucheniya) 4 klass [Collection of tasks for formative assessment in the subject "Russian language" (with the Russian language of instruction). 4th grade] (2019). Nur-Sultan, p.80.
- 16 Metodicheskie rekomendatsii po summativnomu otsenivaniu po predmetu «Russkii yazyk» (s russkim yazykom obucheniya) 4 klass [Methodical recommendations on summative assessment in the subject "Russian language" (with the Russian language of instruction). 4th grade] (2019). NurSultan, p.63.

МРНТИ 14.35.09

10.51889/2673.2022.80.60.006

\*Sabirova D.A.<sup>1</sup>, Moldagali M.B.<sup>2</sup>

<sup>1</sup>The George Washington University, Washington D.C., the USA

<sup>2</sup>Abai Kazakh National Pedagogical University, Almaty, Kazakhstan

<sup>1</sup>PhD, dsabirova91@email.gwu.edu;

<sup>2</sup>Doctoral student, mmoldagali@list.ru

# THE IMPLEMENTATION OF DUAL-ORIENTED TRAINING INTO THE HIGHER EDUCATIONAL INSTITUTIONS (PEDAGOGICAL SPEACIALTIES): PROBLEMS AND PROSPECTS

#### Abstract

This article discusses the problems and prospects for introducing a dual education system in pedagogical higher educational institutions. The key idea of dual training is the preparation of specialists with double institutional consolidation of vocational education programs, which involves two guiding vectors: theoretical training of specialists within the walls of a university or college, and practical training in natural conditions of production, business and company under the control of employers. On the example of the implementation process of dual-oriented training of future foreign language teachers, more precisely, future teachers of the Russian language and literature, at Abai KazNPU (Kazakhstan), a qualitative and quantitative analysis of educational programs, interviews and surveys with students, and representatives of different educational institutions were

presented. The results of the article showed that introducing elements of dual education in pedagogical universities are complex and multifaceted, but, at the moment, it has a positive effect on future pedagogical specialists as it makes the preparation process easier and more productive.

**Keywords:** dual-oriented education, elements, pedagogical specialties, problems, future pedagogical specialists, educational program

\*Сабирова Д.А. $^{1}$ , Молдагали М.Б. $^{2}$ 

 $^{1}$ Джордж Вашинтон университеті, Вашингтон, АҚШ  $^{2}$ Абай атындағы Қазақ ұлттық педагогикалық университеті, Алматы, Қазақстан  $^{1}$ PhD, dsabirova91@email.gwu.edu;  $^{2}$ докторант, mmoldagali@list.ru

## ЖОҒАРЫ ОҚУ ОРЫНДАРЫНДА (ПЕДАГОГИКАЛЫҚ МАМАНДЫҚТАР) ДУАЛЬДЫ БАҒДАРЛЫҚ ОҚЫТУДЫ ЕНГІЗУ: МӘСЕЛЕЛЕРІ МЕН КЕЛЕШЕГІ

#### Аңдатпа

Бұл мақалада педагогикалық жоғары оқу орындарында дуалды оқыту жүйесін енгізудің мәселелері мен келешегі қарастырылған. Дуальды білім берудің негізгі идеясы мамандарды екі бағыттағыш векторларды қамту негізінде даярлау, яғни университет немесе колледжде мамандарды теориялық дайындықтан, ал өндірістің нақты жағдайларында оқыту, бизнес және компания жұмыс берушілердің бақылауында практикалық дайындықтан өту. Абай атындағы ҚазҰПУ (Қазақстан) болашақ орыс тілі мен әдебиетінің оқытушыларының білім беру бағдарламасында дуальды бағдарлық оқытуды енгізу негізінде, сапалы және сандық анализ жасалынды. Мақаланың нәтижелері бойынша педагогикалық университеттерде дуальды білім беру элементтерін енгізу процесі күрделі және көп өлшемді болып табылады, бірақ қазіргі уақытта болашақ педагогикалық мамандарға жақсы, оң әсер ететіні көрсетілді.

**Түйін сөздер:** дуалды бағдарлық оқыту, элементтер, педагогикалық мамандықтар, мәселелер, болашақ педагогикалық мамандар, білім беру бағдарламасы

## \*Сабирова Д.А. $^{1}$ , Молдагали М.Б. $^{2}$

<sup>1</sup>Университет Джорджа Вашингтона, Вашингтон, США
<sup>2</sup>Казахский национальный педагогический университет имени Абая, Алматы,
Казахстан

<sup>1</sup>PhD, dsabirova91@email.gwu.edu;

<sup>2</sup>докторант, mmoldagali@list.ru

## ВНЕДРЕНИЕ ДУАЛЬНО-ОРИЕНТИРОВАННОГО ОБУЧЕНИЯ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ (ПЕДАГОГИЧЕСКИЕ СПЕЦИАЛЬНОСТИ): ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ

#### Аннотация

В данной статье рассматриваются проблемы и перспективы внедрения системы дуального обучения в педагогических высших учебных заведениях. Ключевая идея дуального обучения — это подготовки специалистов с двойным институциональным закреплением программ профессионального образования, что предполагает два направляющих вектора: теоретическая подготовка специалистов в стенах вуза или колледжа, и практическая подготовка в реальных условиях производства, бизнеса, компании под

контролем работодателей. На примере реализации дуально-ориентированного обучения будущих учителей иностранных языков, точнее будущих учителей русского языка и литературы, в КазНПУ имени Абая (Казахстан), был представлен качественный и количественный анализ образовательных программ, результатов интервью и опросов со студентами, и представителями вуза и школ. Результаты статьи показали, что процесс внедрения элементов дуального обучения в педагогических вузах сложный и многоаспектный, но, на данный момент, имеет положительный эффект на будущих педагогических специалистов так, как делает процесс подготовки проще и продуктивнее.

**Ключевые слова:** дуально-ориентированное обучение, элементы, педагогические специальности, проблемы, будущие педагогические специалисты, образовательная программа

**Introduction.** Dual training combines learning in the educational institution with obligatory phases of industrial training and professional practice in the company (institution) with the provision of jobs and remuneration for the trainees. During the training, the company (organization), the educational institution and the trainee have equal responsibility [1]. In this case, it is a dual training at an educational institution, so the organizational process of dual education takes place between university- student-school.

The main goal of dual training is to prepare a qualified and competent graduate who has acquired the basic skills to work in educational institutions [2]. In simpler terms, to prepare a professional who will engage in the work from day one and perform it at a high professional level. In addition, dual training involves the formation of an order of employers of Kazakhstan for specialists with certain skills and knowledge.

The term "dual-oriented training" was presented by Abdigapbarova U.M. which "harmonizes the content and organization of education at the university and other educational institutions of the Republic of Kazakhstan" [3, 168]. Also, we understand that a dual system of education cannot be fully implemented into the educational process of future pedagogical specialists, so this term can mean using the elements of dual training that can be implemented as an intro phase of the dual system of education.

The aim of the article is to describe the process of realization of dual system of education for future language teachers, more precisely for future Russian language and literature teachers, to identify the different perspectives of dual training and to analyze its difficulties in order to make the process of preparation of future pedagogical specialists easier and more productive.

**Methods.** Qualitative and quantitative methods were used in the study. The qualitative method was used to collect the theoretical materials related to the dual education system in higher educational institutions in Kazakhstan and the specific educational programs of the "Russian language and literature" specialty. The quantitative method was used to analyze the materials collected through surveys among 3rd and 4th year students studying in the academic year 2021-2022, and interviews with methodologists (professors of the Department of Russian Language and Literature), mentors (school teachers), school administrations, the "Mansap" Department, and university administration.

Research results. The implementation of a dual education system will have an impact on society if three parties work together: corporate organizations, educational institutions, and government agencies with the power to direct resources in a way that will benefit all parties. The introduction of dual education also demonstrates the positive dynamics of growth and improvement of the issue of enhancing the quality of specialist professional training and the alignment of graduates' created competencies with the actual needs of practice and production. Kazakhstan has been developing a Roadmap for the growth of dual education since 2015 with the help of the National Chamber of Entrepreneurs "Atameken". The National Chamber of Entrepreneurs and the Trier Chamber of Crafts (Germany) have been collaborating on an on-the-job training project since

2015. In Kentau, a newly formed German-Kazakh professional center, dual education models from Germany, Austria, and Switzerland are used as models.

We view the dual-oriented training system as one method for enhancing the efficacy of professional training. This notion has been interpreted in the pedagogical literature in terms like "a specific pedagogical system", "a special form of organizational technology", "pedagogical principle", and "an education system that combines education in an educational institution with periods of industrial action" [4]. German researchers (A. Shelten, K. Stratman, etc.) highlight that the dual system ensures close interaction between vocational training and industry, prompt responsiveness to changes in its needs, and consideration of development trends. [5].

More than 15 universities and colleges, the Ministry of Education and Science of the Republic of Kazakhstan and Independent Agency for Quality Assurance in Education are participate in the KAZDUAL project, which is a large-scale project investigation of the issue of adopting a dual education system that started on January 15, 2021.

Currently, Kazakhstan's higher education reform is mostly focused on enhancing its competitiveness. The reforms include institutional renewal of the primary functions of universities in addition to structural modifications. As mentioned in the State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020–2025, which was approved by Resolution of the Government of the Republic of Kazakhstan No. 988 dated December 27, 2019, one of the main focuses of contemporary state policy in the area of education is to concentrate on preparing students for the future, with the priority being "involving employers in personnel training" [6].

Dual training assumes that the specialist is trained in two directions at the same time – theoretical and practical. Most often, dual education is very advanced in technical professions, and 1/3 of the training time the student receives basic knowledge at university, and 2/3 refines the skills and receives practically significant knowledge in the production and training enterprise [7,8]. The goal of training at the university is to enhance educational programs, which will raise the standard of vocational education and improve graduates' competitiveness. Leading experts in Almaty were drawn to the Department of Russian Language and Literature to improve the quality of professional training for specialists.

The educational program (EP) "Russian language and Literature" consists of 240 ECTS. The General Education cycle consists of 56 academic credits. 51 of these academic credits are allocated to the disciplines of the mandatory component: Modern History of Kazakhstan, Philosophy, Kazakh (Russian) language, Foreign language, Information and Communication Technologies (in English), Physical Culture, Socio-political knowledge Module (political science, sociology, cultural studies, psychology). Basic disciplines – 112 (Kazakh language, Pedagogy, Digital technologies in education, Methods and technologies of distance learning, National education, Inclusive education, etc.), and profiling – 60 (Modern Russian language, History of Russian literature, methods of teaching the discipline, introduction to linguistics, introduction to literary studies, etc.)

If we look at the educational program of specialty 6B01702 - Russian language and literature of the academic year 2018-2019 [9] (Table 1), we can see that there are 3 types of training: pedagogical, which is not counted and is mostly oriented, pedagogical and production training in the 7th semester and 8th semester, and takes only 1/8 (9%) of the total educational process during 4 years, which is not enough for future educational specialist to be fully prepared.

Table 1. The Educational Program of the specialty 6B01702 – Russian language and literature of 2018-2019 academic year

Names of disciplines/other educational	TS EC	Semesters							
activities		I	II	III	IV	V	VI	VII	VIII
Educational training	4		2		2				

Pedagogical training	4			4		
Production training	15				8	7

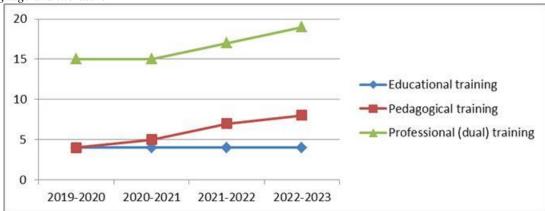
According to the survey conducted in 2018, within the framework of the Republican project "Dual-oriented training as a condition for improving the professional training of a future teacher", under the guidance of Prof. U. Abdigapbarova, among 1760 graduates of Abai Kazakh national pedagogical University, Kazakh State Teacher Training University, L. N. Gumilev Eurasian National University, E. A. Buketov KarSU, S.Altynsarin Arkalyk State pedagogical Institute, Aktobe State Pedagogical Institute and South Kazakhstan University, 84% of respondents stressed about the lack of training hours and asked for increasing them and creating greater integration between school and university [10].

As a result, in 2019, Abai University implemented the elements of dual training in the university to prepare competent future teachers. The main expected outcomes were:

- Reduction of unemployment;
- Broadening the scope of interaction, building a social partnership;
- Strengthening international cooperation;
- Bridging the gap between theory and practice;
- Formation of a new psychology of the future worker;
- Social adaptation of graduates;
- Development of a program of electives according to the interests and needs of students [3].

By analyzing the Educational Programs of the specialty 6B01702 – Russian language and literature of 2019-2020, 2020-2021, 2021-2022 and 2022-2023 academic years [11] (Figure 1), we can see the growth of the ECTS numbers in training hours.

Figure 1. The comparative analyze of the training hours at Educational Programs of specialty 6B01702 – Russian language and literature



**Discussion**. The increase in hours offered future professionals the opportunity to spend more time in school and deepen their theoretical knowledge under the guidance of methodologists and mentors.

According to the university administration, 4th year students go through this procedure:

- in the 2 weeks before the training, seminars on "Updated educational content in schools" are held by university professors or by the National Centre for Higher Studies "Orleu";
  - the department "Mansap" finds the possible school where the student can do training;
  - signing of the agreement student school university;
- the departments hold an orientation conference for the students, where the methodologist presents the training plan;
- the student is given the specific tasks to complete by the end of the training, such as creating a teaching model, conducting an educational event, or playing the role of a classroom teacher, ect.;

- during the training, mentor and methodologist help students to deal with the problems in the teaching process and provide them with psychological support;
  - the final conference, where students present their reports.

Methodologists must be teachers of the discipline "Methodology", doctors of pedagogical sciences, PhD doctors whose subjects are related to teaching methods, and mentors must be teachers with more than 5 years of experience, with a high level of national examination certificate, with several international and state awards, etc.

During the survey of the methodologists, the advantages and disadvantages of dual training and the current problems were identified. In general, the professors note these advantages of the dual education model:

- 1. students' practical knowledge is in a high level;
- 2. the diploma theses are better compared to previous years because the methodology is strong and well prepared;
- 3. 99 percent of students find a job after graduation, and half of them stay at the schools where they were trained;
  - 4. students are very supported by the school administration and school mentors;
  - 5. students are psychologically ready to become teachers.

But there are also disadvantages, such as 1) forgetting the theoretical knowledge at the end of the 4th year because they spend a lot of time in school and skip the university courses (the reason is the work in school); 2) low results in the national pedagogical tests, where most of the questions are theoretical; 3) great teaching pressure for the university mentors because of the large number of students (2021-2022, 25 students for 1 mentor; 2022-2023, 15 students for 1 mentor).

We also conducted interviews with school administrators and mentors at Municipal Public Institution School №144, №135, 96, 75, Lyceum №134, Municipal Public Institution №12, Municipal Public Institution Specialized Lyceum School № 90, Gymnasium № 79. According to school administrators, dual training provided them with the opportunity to select the best trainees to begin and continue their educational careers, but due to the curriculum at the university, they must change the school schedule or find a substitute. The mentors described the 4th year training students as very creative, competitive and full of work tension. Some of the mentors mentioned the students' lack of self-confidence and glossophobia (fear of public speaking) at the beginning of the training, which they overcome at the end of the academic year.

We decided to conduct a survey with open questions among 90 3rd and 4th year students of "Russian Language and Literature" and "Russian Language and Literature in Schools with a Non-Russian Language of Instruction". The survey showed the students' perspective on dual education, its advantages and disadvantages, and the problems they face.

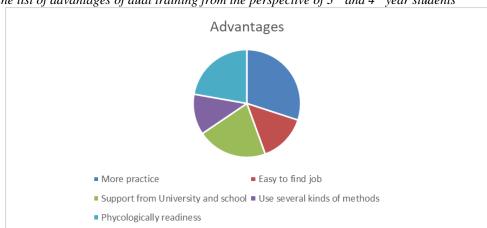


Figure 2. the list of advantages of dual training from the perspective of 3<sup>rd</sup> and 4<sup>th</sup> year students

Most students mentioned benefits (Figure 2) related to 1) more practice; 2) easier job search; 3) physiologically ready to start work; 4) applying methods they learned in university to real-world classes; 5) support from methodologists and mentors. Some mentioned several advantages only once, such as learning to socialize with colleagues and having a good address CV. From the students' point of view, the biggest disadvantage of dual education is the difficulty of combining studies and training at school.

**Conclusion.** In summary, the analysis of the different perspectives of the participants in the dual training model (university (administration and methodologist) — student — school (administration and mentor)) has shown that there are specific problems in the creation of the study plan suitable for each participant of the training and a lack of professional methodologists and mentors. But the change in the calendar for the academic year 2022-2023, in which the University has tried to combine theory and practice for a suitable schedule and increase the number of mentors and methodologists, shows that the University pays great attention to the training of future professionals.

The Abai KazNPU worked on developing a system for independent expert commissions to evaluate the quality of the university's training of specialists. The department head receives diploma projects that have been approved by the department for defense. Teachers in training and school teachers evaluate diploma projects. The department's diploma projects focus on finding practical solutions to issues that match the educational program's characteristics. Additionally, employers are required to join the state attestation commission. Moreover, nowadays Abai University has several research programmes funded by Erasmus+ (KAZDUAL project "Implementation of Dual System in Kazakhstan") and DAAD (Pedagogical Professionalism and Internationalization - Dialogue with the Post-Soviet Islamic Education Space), which deal with Dual Education System.

Thus, we understand a particular innovative trajectory of the organization of higher professional education when we refer to the training of specialists using elements of dual training. This trajectory includes a well-coordinated interaction between an educational institution and a pedagogical university that is intended to train specialists in a specific field with the qualification level required by the employer. The basic tenants that guide the dual education system are: parity between humanistic and value orientations, competency approach, formation and growth of professional activity, and socio-professional relationships.

#### References

- 1. Abdigapbarova U.M., Zhienbayeva N.B. (2020) Normative and practical grounds for the implementation of dual-oriented learning: a textbook. [Normativno-prakticheskie osnovanija realizacii dual'no-orientirovannogo obuchenija] / U.M. Abdigapbarova, N.B. Zhienbayeva. Almaty. 88 p.
- 2. Zhienbayeva N.B., Abdigapbarova U.M., Tapalova O.B. (2020) Conceptual foundations of student-centered learning in the structure of dual-oriented education of the Republic of Kazakhstan [Konceptual'nye osnovy studentocentrirovannogo obuchenija v strukture dual'no-orientirovannogo obrazovanija Respubliki Kazahstan] / Handbook. Almaty, 90 p.
- 3. Abdigapbarova U.M., Zhienbayeva N.B., Smanova A.A., Aitenova E.A. (2020) History, theory and practice of dual training in the system of professional education: monograph, B&M Publishing, San Francisco. 214 pp.
- 4. Zemlyansky V. V. (2012) Theoretical aspects of dual target training of specialists [Teoreticheskie aspekty dual'noj celevoj podgotovki specialistov] / V. V. Zemlyansky, Ya. V. Kanakin // Questions of modern science and practice. V. I. Vernadsky University, №1. 104–110 pp.
- 5. Yesenina E. Yu. (2014) On the model of vocational education by taking into account the experience of Germany and Finland [O modeli professional'nogo obrazovanija s uchetom opyta Germanii i Finljandii] / E. Yu. Yesenina // Vocational education. Stolica. № 11, 17–20 pp.

- 6. Law of the Republic of Kazakhstan about changes and additions to some legislative acts of the Republic of Kazakhstan on the expansion of academic and managerial autonomy of higher education institutions URL: https://online.zakon.kz/Document/?doc\_id=39633866 (Assessed on 20/09/2022)
- 7. Zhienbayeva N.B., Abdigapbarova U.M., Tapalova O.B. (2020) Professional training of a modern teacher in the context of dual-oriented learning [Professional'naja podgotovka sovremennogo uchitelja v uslovijah dual'no-orientirovannogo obuchenija] / Handbook [text]. M.: Publishing House «PERO», 136 p.
  - 8. Educational Program of 6B01702 Russian language and literature 2018-2019
- 9. Muhambetaliev Kh., Kasymova A. Kh.. (2016) The Introduction of Elements of Dual Education System: Experience, Problems, Prospects. Indian Journal of Science and Technology, Vol 9(47), DOI: 10.17485/ijst/2016/v9i47/99711, December
- 10. Kravchenko O. L., Borisyuk I. Y., Vakolia Z.M., Tretyak O.M., Mishchenia O. M. (2020) Models of Introduction of Dual Professional Education/International Journal of Higher Education Vol. 9, No. 7. http://ijhe.sciedupress.com
- 11. Educational Programs of 6B01702 Russian language and literature 2019-2020, 2020-2021, 2021-2022, 2022-2023

МРНТИ 14.11.03

10.51889/2853.2022.87.13.007

 $*Мәмбетова М.Қ., ^1 Калбирова Т.Н.^2$ 

 $^{1,2}$  Әл-Фараби атындағы ҚазҰУ Алматы, Қазақстан  $^{1}$ Филология ғылымдарының кандидаты, доцент м.а., mmanshuk@gmail.com  $^{2}$ аға оқытушы, kalbirovatol@mail.ru

## ҚАЗАҚ ЖӘНЕ ФРАНЦУЗ ТІЛІНДЕГІ ӨЛШЕМ АТАУЛАРЫНЫҢ ҚОЛДАНЫСТЫҚ ЕРЕКШЕЛІКТЕРІ

#### Аңдатпа

Мақалада өлшем бірлігінің қалыптасуы, оның қолданыстық сипаты, өлшем атауларының семантикалық топтары қарастырылады. Ғаламның тілдік бейнесін құраушы бір бөлшегі – өлшем атаулары – жалпы адамзаттық ұғымға негізделген әрі ұлттық түсінік ретінде көрініс табатын құбылыс. Кез келген нәрсенің белгілі бір көлемде өзіндік өлшемі бар. Яғни, өлшемсіз дүниенің болуы мүмкін емес. Өлшем атаулары қоғам дамуының нәтижесінде қалыптасып, дамып отырады. Мақалада кеңістікті, арақашықтықты, көлемді, терендікті өлшейтін өлшем атауларының ұзындықты, халық өмірімен байланыстылығы, сондай-ақ адамзат баласы ертеден-ақ қандай да бір мөлшерді болжап, бағамдауда алдымен өлшем жөнінде ұғым-түсініктерін қалыптастырғандығы, түйсік арқылы арақашықтықты, көлемді, тереңдікті шамалап өлшеп отырғандығы қамтылған. Қазақ және француз тілдеріндегі «өлшем» ұғымы философиялық категориялардың бір бөлігі ретінде және тілдік категория ретінде зерттеледі.

**Кілт сөздер**: өлшем, өлшем атаулары, ұзындық өлшемдері, қашықтық өлшемдері, көлем өлшемдері, салмақ өлшемдері, қазақ және француз тілі.