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THE MAIN PROBLEMS OF VOCATIONAL AND TECHNICAL EDUCATION IN KAZAKHSTAN: THE IMPACT OF DUAL TRAINING ON THE QUALITY OF STAFF TRAINING

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ABSTRACT

Purpose. This research aims to explore how dual education introduced as part of the state policy of modernizing the education system enhances academic performance and increase students' satisfaction with learning outcomes in Kazakhstani technical and vocational education and training (TVET) institutions. *Methodology.* A survey involving 523 students from TVET institutions in Almaty city was conducted for this purpose. Using the SPSS software, the survey data were analyzed to investigate two hypotheses. The first hypothesis proposes that students in dual education systems achieve superior academic results, thereby potentially enhancing their success in the labor market compared to students in non-dual education systems. Hypothesis 2 suggests that dual education students report higher satisfaction with their learning outcomes and greater confidence in their employability compared to students in non-dual education systems.

Originality / value of the research. This study serves as a methodological trial to explore how dual education affects the quality of education in TVET institutions. It also aims to assess the impact on students' satisfaction with their learning outcomes and their confidence in employability.

The findings indicate that students in dual education programs exhibit greater confidence in their job market prospects, higher satisfaction with their educational outcomes, and superior academic achievement compared to those in traditional (non-dual) education.

Keywords: Dual education, vocational and technical education, TVET institutions, practical trainings, education in Kazakhstan, work-based education.

INTRODUCTION

As part of the state policy of social modernization, advanced management mechanisms are being actively introduced in the educational system of Kazakhstan. One of such mechanisms can be called dual education. Since its inception in 2012, dual education in Kazakhstan has seen some progress, with several technical and vocational education and training (TVET) organizations now operating under dual learning principles. This approach divides students' study time between classroom learning (school-based education – SBE) as per the curriculum, and practical skill development at enterprises, companies, and other production facilities (work-based education – WBE). Despite these efforts, the development of Kazakhstan's dual education system in TVET has been somewhat limited over the past 11 years. As of March 2022, dual education is implemented in 536 TVET organizations across the country, encompassing 166 specialties and 445 qualifications in fields such as Metallurgy, Construction, Agriculture, Production and Installation, Service, Economics, and Transport [1].

However, the percentage of students engaged in dual education remains around 19 %. Although the dual system has gained traction in TVET institutions, particularly in the East Kazakhstan, Karaganda, and Pavlodar regions, many TVET organizations in other areas continue to operate as traditional educational establishments, focusing primarily on theoretical education.

There are significant challenges facing the vocational and technical education (TVET) system worldwide, largely due to the growing preference for higher education over vocational and technical training. In certain European countries, particularly those operating under the Bologna Process for higher education, concerns

have arisen about potential disadvantages faced by TVET institutions in competition with bachelor's degree programs [2; 3].

One primary concern is the increasing enrollment in higher education among young people across many European nations. For instance, in Germany, national policies aimed at raising higher education participation from 34 % to 40 % by 2007 have led to a decline in student intake at TVET institutions, particularly in an aging population. Over recent decades, the number of school leavers pursuing higher education has grown rapidly. Consequently, employers are increasingly worried about potential shortages of highly skilled labor, as fewer youths opt for vocational and technical education while more continue into universities. In Germany, for example, the proportion of young people entering universities rose from 30.2 % in 2000 to 53.9 % in 2017 [3, p.5].

There is also a concern that bachelor's graduates may overshadow TVET graduates in the job market, thereby reducing the attractiveness of TVET for school leavers. Research by Hippach-Schneider et al. involved interviewing HR departments in Germany, England, and Switzerland to explore how TVET graduates might be displaced by bachelor's graduates during recruitment [2, p.15]. The findings indicated that while employers value the practical skills and vocational background of TVET graduates, there is also a recognized need for analytical skills and research capabilities typically associated with university graduates. Some respondents expressed interest in employees who possess a blend of practical and academic expertise, emphasizing the importance of expanding hybrid education models, such as colleges of advanced vocational studies or universities of applied sciences. In summary, the challenges facing the TVET system include increasing competition from higher education, concerns about the relevance of TVET skills in a rapidly evolving job market, and the need to bridge the gap between practical and academic knowledge to meet employer demands effectively.

In Kazakhstan, similar to many countries worldwide, the vocational and technical education system faces significant challenges and requires substantial improvements. The current state of the Kazakhstani TVET system reflects a crisis that demands urgent reform. Let's delve into the most critical issues.

Firstly, the primary concern revolves around the quality of education. Many TVET institutions in Kazakhstan unfortunately do not meet the necessary standards, and the quality of learning within them needs enhancement. This issue is often attributed to the fact that these institutions primarily admit students with lower academic achievements, often from socially and economically disadvantaged backgrounds [4; 5]. Ling also notes that in developing countries, including Kazakhstan, TVET establishments are generally considered inferior compared to other levels of the educational system [6]. This perception is compounded by inadequate requirements and standards for hiring technical and vocational education teachers [7; 8]. Improving the professionalism and conduct of these educators is seen as crucial to raising the educational standards in TVET organizations. Additionally, the lack of teacher motivation due to relatively lower salaries compared to their counterparts in general education institutions exacerbates the quality issues in Kazakhstani TVET. This disparity in salaries discourages TVET teachers from investing in professional development and improving their teaching standards [9]. Similar challenges have been observed globally, such as in India and Denmark, where vocational educators face inadequate rewards and stressful work conditions. Moreover, TVET teachers are often burdened with heavy workloads that extend beyond regular workdays, impacting their ability to effectively engage in professional development activities and deliver quality education [10]. This overload further undermines the overall educational experience within TVET institutions. In brief, addressing these systemic issues related to educational quality, teacher motivation, and workload is crucial for revitalizing the Kazakhstani TVET system and ensuring it can effectively prepare students for the demands of the modern job market.

Moreover, as noted by Sirk, et al, enhancing the professional competence of teachers in vocational and technical education (TVET) requires fostering skills in building professional collaborations [11]. Social interactions and close professional ties positively influence teacher development and enhance their effectiveness in the classroom. Chesnut and Burley emphasize that teachers who are passionate about their profession and deeply committed to it tend to continue developing professionally [12]. However, enthusiasm alone is insufficient without adequate financial motivation. The quality of teaching methods directly impacts the educational and professional outcomes of students. Students who receive low-quality education are less likely to succeed and meet market demands upon graduation.

Another critical factor contributing to the low educational standards in Kazakhstani TVET institutions is the curriculum design of many programs. Currently, numerous TVET programs in Kazakhstan are heavily theoretical and lack practical components. It is essential to incorporate practice-oriented disciplines into the curriculum to better prepare students for the demands of the labor market. Competence-based vocational education, which emphasizes the development of practical skills and competencies, is particularly relevant in this context [13].

Furthermore, a significant challenge faced by TVET in Kazakhstan lies in its student demographics. A majority of TVET students are individuals who performed poorly in traditional schooling and opted not to pursue higher education through the national education exam required for domestic universities. While some TVET graduates transition successfully into the workforce, others struggle to secure meaningful employment, contributing to the ranks of youth who are neither in employment, education, nor training (NEET).

Several authors [14; 15; 16] highlight the significant impact of parental involvement on students' academic achievements. They argue that students whose parents are actively engaged in their education demonstrate higher motivation and achieve better results in both STEM subjects and the humanities. Shi and Bangpan emphasize that many participants in technical and vocational education and training (TVET) come from disadvantaged backgrounds and benefit greatly from enhanced engagement in their academic journey [17]. Improving the social environment and fostering quality engagement within TVET institutions can enrich students' cultural capital, encompassing acquired knowledge, practical skills, and socio-emotional competencies. However, the perceived value of this cultural capital often hinges on the reputation of the TVET establishments, which can vary significantly in terms of educational quality.

Achatz, et al discuss the effectiveness of «transition measures», such as additional training courses that complement vocational education either in firms or schools. These measures aim to enhance the practical skills of apprentices, thereby improving their employability in the labor market, especially for students with lower academic attainment [18].

In many countries, including Kazakhstan, the dual education system implemented in both TVET institutions and higher education is recognized as a leading educational approach. This system has demonstrated effectiveness in mitigating youth unemployment and integrating young people into the labor market, particularly those who did not thrive in traditional school settings [19]. Overall, enhancing parental involvement, improving the social environment within TVET institutions, implementing transition measures, and promoting dual education systems are essential strategies to support the success and integration of disadvantaged youth in the educational and labor sectors. These efforts aim to foster a more inclusive and supportive educational environment that prepares students for meaningful careers and lifelong learning.

To compare the impact of dual education versus traditional (non-dual) education in Kazakhstani institutions of Technical and Vocational Education and Training (TVET), we conducted a study aimed at assessing the quality of education and students' satisfaction with learning outcomes. In this paper, we outline our findings based on a survey conducted among TVET students enrolled in both dual education (DE) and non-dual education (NDE) systems. In our study, students enrolled in traditional education are referred to as «NDE students», while those in dual education are referred to as «DE students». The survey aimed to validate the following hypotheses:

Hypothesis 1: The academic performance of DE students is higher compared to NDE students. This hypothesis suggests that students in the dual education system achieve better academic results, potentially enhancing their success in the labor market post-graduation. Dual education is expected to elevate academic performance by integrating practical skills development alongside theoretical knowledge, thereby preparing graduates as competent specialists.

Hypothesis 2: DE students report higher satisfaction with learning outcomes and greater confidence in their employability compared to NDE students. This hypothesis posits that students who have experienced dual education, with its emphasis on practical skills alongside theoretical education, are more content with their educational experience and perceive themselves as more market-ready. This satisfaction is expected to stem from the dual education's alignment with industry needs, providing graduates with tangible skills that enhance their employability.

By validating these hypotheses through our survey data analysis, we aim to demonstrate how dual education in Kazakhstani TVET institutions contributes positively to both the quality of education and students' perceptions of their readiness for the labor market. These insights underscore the potential benefits of dual education in bridging the gap between academic learning and practical skills development, thereby better preparing students for successful careers in their chosen fields.

METHODOLOGY

The research methodology employed in this study integrates both quantitative and qualitative approaches to assess the impact of dual education on the quality of education and students' satisfaction with learning outcomes. Qualitative methods involved conducting surveys among respondents to gather primary information through targeted questioning. On the other hand, quantitative analysis was conducted using the SPSS program to process and interpret the survey data.

The survey was conducted among students from four Technical and Vocational Education and Training (TVET) organizations in Almaty City, Kazakhstan. These institutions offer both dual education and traditional (non-dual) education programs. The participating institutions include Almaty Automobile and Road College, Economic College at Narxoz University, Almaty State College of New Technologies, and Almaty State College of Energy and Electronic Technologies.

The survey targeted respondents aged 18-20, comprising 52 % male and 48 % female students. Approximately 48.6 % of respondents were enrolled in dual education programs, while 51.4 % were in traditional education programs. The study covered 12 specialties, such as Transportation and Traffic Management, Construction and Operation of Roads and Airfields, Sewing Production and Clothing Modeling, Thermal Power Plants, Finance, Logistics, Management, and Computer Engineering and Software. Data collection took place over 18 days using paper-based questionnaires, yielding a total of 523 responses. After conducting field control to ensure data validity and survey integrity, 27 incomplete or inaccurately completed questionnaires were discarded. This left 496 questionnaires for analysis.

The questionnaire comprised 14 questions covering respondents' college affiliation and program, age, gender, GPA, overall satisfaction with college education, satisfaction with school-based education (SBE) and work-based education (WBE), intentions for employment in their specialty field, the perceived importance of practical skills for employment, and opinions on the adequacy of dual education versus SBE alone. Responses were rated on a Likert scale ranging from 'strongly disagree' to 'strongly agree'. In conclusion, this mixed-methods approach allowed for a comprehensive exploration of how dual education impacts educational quality and student satisfaction in Kazakhstani TVET institutions. The integration of both qualitative insights and quantitative data analysis provides a robust basis for understanding the nuances of educational practices and their outcomes in the context of vocational and technical education.

RESULTS AND DISCUSSION

Based on the analysis conducted to explore Hypothesis 1, which compares the Grade Point Averages (GPAs) of students in dual education (DE) and non-dual education (NDE) programs in selected Kazakhstani TVET colleges, the findings support the hypothesis. Here are the key results derived from the survey data:

– **Higher GPA Achievement in Dual Education (DE):** Among the surveyed students, 59 % of DE students achieved an average GPA of A, compared to 37 % of NDE students (Figure 1). The average GPA for DE students was reported as 3.0, while NDE students had an average GPA of 2.8. The overall average GPA for all surveyed students, combining both DE and NDE, was calculated at 2.9.

– **Percentage of Above-Average Performers:** A significant majority (89.4 %) of DE students had above-average academic performance, exceeding the average performance rate of 79.7 % among NDE students.

These findings suggest that students enrolled in dual education programs tend to achieve higher academic performance compared to their counterparts in traditional non-dual education programs within Kazakhstani TVET institutions. The data supports the hypothesis that the academic performance of DE students is superior to that of NDE students. This conclusion underscores the potential benefits of dual education systems in enhancing students' academic outcomes, potentially better preparing them for success in the labor market by combining theoretical knowledge with practical skills development.

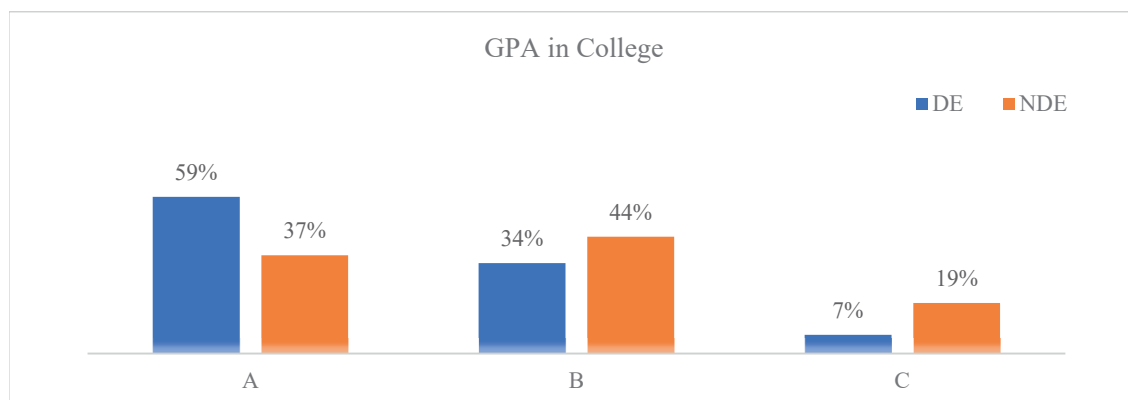


Figure 1 – Students' academic performance

Note – compiled by the authors

To determine if there was a significant difference in Grade Point Averages (GPAs) between dual education (DE) and non-dual education (NDE) students, a paired t-test was performed. The results indicated:

- The t-value was -36.005 with a degrees of freedom of 495.
- The p-value obtained was 0.000, which is less than the standard significance level of 0.05.
- A 95 % confidence interval for the difference in mean GPAs between DE and NDE students was (-3.219, -2.886).

Since the p-value (0.000) is significantly lower than 0.05, there is strong evidence to reject the null hypothesis and accept the alternative hypothesis. This means there is a statistically significant difference in the average GPA between DE and NDE students. Specifically, DE students on average achieved higher GPAs compared to NDE students, supporting the notion that dual education positively impacts academic performance.

Regarding *Hypothesis 2*, it can be noted that the assessment of students' satisfaction with college learning outcomes between DE and NDE students showed:

- Among NDE students, 91 % reported being satisfied with their college education outcomes.
- For DE students, the breakdown of satisfaction ratings was as follows: 40 % rated their satisfaction as «good», 22 % as «excellent», and 33 % as «satisfactory». In total, 95 % of DE students expressed satisfaction with their college education outcomes.
- 9% of NDE students and approximately 5 % of DE students reported dissatisfaction with their college education.

The survey results clearly show that a higher percentage of DE students (95 %) were satisfied with their college education outcomes compared to NDE students (91 %). This difference in satisfaction levels supports Hypothesis 2, indicating that DE students, who benefit from the dual education approach blending theoretical and practical learning, perceive greater satisfaction with their educational experience and readiness for the labor market. In short, both hypotheses were supported by the survey data and statistical analyses conducted. Dual education not only enhances academic performance, as evidenced by higher GPAs among DE students, but also increases students' satisfaction with their educational outcomes compared to traditional non-dual education settings. These findings underscore the effectiveness of dual education in improving educational quality and student satisfaction in Kazakhstani TVET institutions (Figure 2).

Based on the results of the paired t-test conducted to investigate the relationship between non-dual education (NDE) and dual education (DE) formats and satisfaction with the quality of education at college, the following findings were obtained:

- **Statistical Analysis:** The paired t-test yielded a t-value of -29.523 with 495 degrees of freedom. The resulting p-value was 0.000, which is well below the conventional significance level of 0.05. A 95 % confidence interval for the true difference in mean satisfaction levels between NDE and DE students was calculated as (-1.963, -1.718).

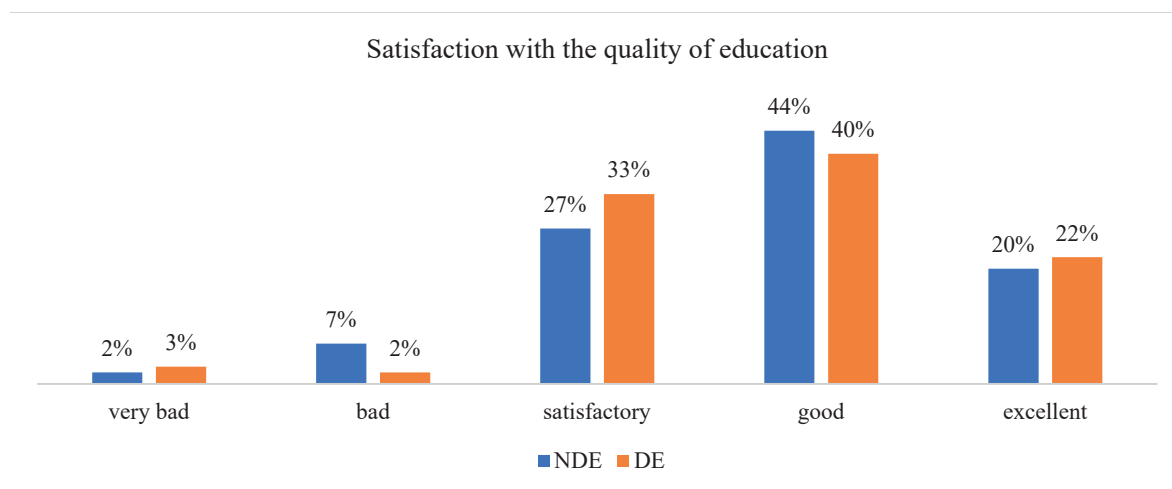


Figure 2 – Students' satisfaction with education

Note – complied by the authors

The low p-value (0.000) indicates strong evidence to reject the null hypothesis and support the alternative hypothesis. Therefore, there is a statistically significant difference in satisfaction with the quality of education at college between NDE and DE students. Specifically, DE students reported higher satisfaction levels compared to NDE students, indicating that the dual education format, which integrates practical skills through work-based education (WBE), contributes positively to students' overall satisfaction with their educational experience.

– **Additional Insights:** Among DE students, only 4 % expressed dissatisfaction with work-based education (WBE), highlighting a high level of contentment with this aspect of their educational program (Figure 3). Despite their generally positive satisfaction with traditional education outcomes, 93 % of NDE students acknowledged the importance of introducing dual education. This suggests a recognized need among NDE students to enhance their education with practical skills development offered by DE programs.

In summary, while NDE students generally reported satisfaction with their college education outcomes, the introduction of DE programs, particularly with a focus on WBE, is seen as crucial for developing practical skills. DE students showed significantly higher satisfaction with the quality of education, particularly in terms of practical learning experiences. These findings underscore the importance of integrating dual education approaches to meet the educational and career readiness needs of students in Kazakhstani TVET institutions.

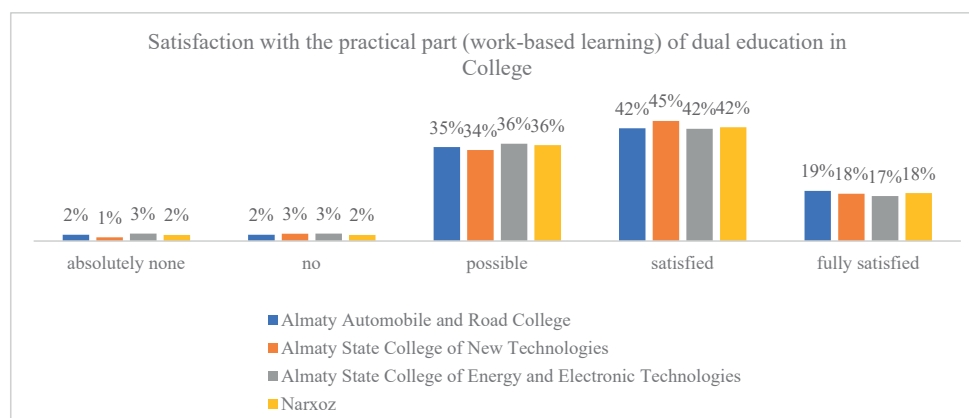


Figure 3 – Students' satisfaction with WBE

Note – complied by the authors

Based on the analysis of the need for theoretical knowledge and practical skills for employment among both dual education (DE) and non-dual education (NDE) students in Kazakhstani TVET institutions, the following conclusions were drawn: 39 % of NDE students believe that theoretical knowledge obtained through school-based education (SBE) is needed in the labor market. Among these, 10 % rated theoretical knowledge as «very much needed». 41 % of NDE students were unsure about the necessity of theoretical knowledge for employment. As for DE students, it should be noted that 72 % of DE students emphasized that practical skills acquired through their education play a significant role in securing employment. Only 20 % of DE students expressed uncertainty about the importance of practical skills. Moreover, a majority of both DE (64 %) and NDE (53 %) students recognized the importance of acquiring both theoretical and practical knowledge for employment. Approximately one in three (33 %) NDE students acknowledged the importance of SBE despite recognizing the significance of practical skills. In contrast, 22 % of DE students acknowledged the importance of SBE, suggesting a more focused appreciation for practical skills.

The findings indicate a nuanced understanding among students regarding the importance of theoretical knowledge and practical skills for employment. DE students, benefiting from their dual education format, generally express greater confidence in the role of practical skills in securing employment. However, both DE and NDE students agree on the value of integrating theoretical and practical knowledge. This alignment suggests that while practical skills are highly valued in the job market, theoretical knowledge obtained through SBE remains relevant and complementary. This dual perspective highlights the comprehensive approach needed in vocational and technical education to adequately prepare students for successful careers (Figure 4).

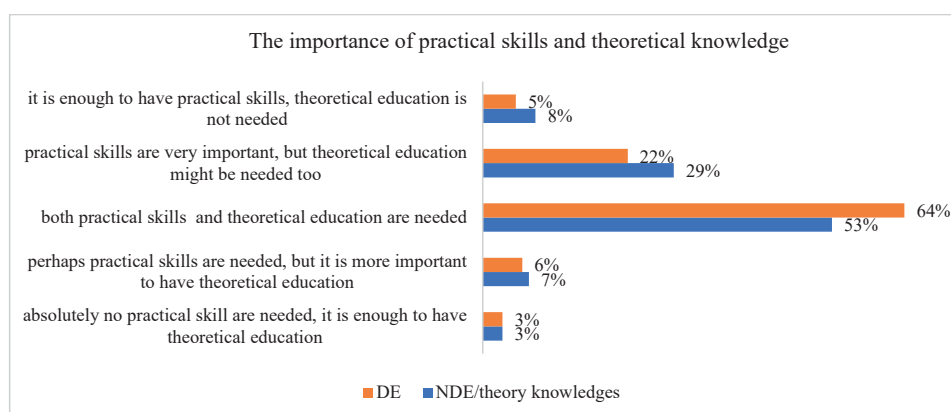


Figure 4 – The importance of practical skills and theoretical education

Note – compiled by the authors

Based on the analysis of survey responses from dual education (DE) and non-dual education (NDE) students in Kazakhstani TVET institutions, several conclusions can be drawn regarding their confidence in employment prospects and the importance of practical skills: DE students generally feel more confident about their employability compared to NDE students. This confidence stems from the practical skills they acquire through the dual education framework, which they perceive as highly valuable in the labor market.

NDE students recognize the importance of both practical skills and theoretical knowledge, but there is a notable uncertainty among 41 % of NDE students regarding the necessity of theoretical knowledge for employment. In contrast, DE students overwhelmingly emphasize the importance of practical skills acquired through work-based education (WBE), with 72 % highlighting its significance.

A paired t-test was conducted to compare the perceived importance of practical skills between DE and NDE students. The results showed a statistically significant difference ($t = -22.922$, $p = 0.000$), indicating that DE students attribute significantly higher importance to practical skills than NDE students. This supports the notion that the dual education format effectively enhances students' practical skillset compared to traditional NDE.

Dual education in Kazakhstani TVET institutions emerges as a robust educational approach that enhances students' practical skills and confidence in their employability. DE students' strong endorsement of practical skills underscores the effectiveness of WBE in preparing them for the demands of the labor market. This comparative advantage over NDE students highlights the importance of integrating practical learning experiences into vocational and technical education to better meet industry needs and students' career aspirations [20].

The beneficial effects of dual education on students' satisfaction with educational quality and their employability have been extensively researched and verified by scholars like Louis and Maier [21; 22]. Louis conducted a survey of 926 participants in Taiwan's vocational training dual system to assess student satisfaction. Using an empirical model, Louis found that satisfaction with school-based learning, internship experiences in enterprises, and personal engagement positively correlated with overall satisfaction among students in the dual vocational training system. Furthermore, the research revealed that satisfaction with school-based learning, enterprise internships, and personal engagement were positively associated with students' intentions to remain in their current jobs [21, p.12].

Maier confirmed the hypothesis that students in dual education programs exhibit greater confidence in their future employment prospects. By acquiring both theoretical knowledge and practical skills through industrial internships, dual education students demonstrated increased confidence in their ability to succeed in the job market. Maier's study, which surveyed 278 respondents, highlighted similar career advancement opportunities between graduates of Technical and Vocational Education and Training (TVET) programs who pursued further advanced training and those who completed bachelor's and master's programs at universities of applied sciences, including prospects for positions such as company project managers [22, p.8].

CONCLUSION

The research findings suggest that adopting dual education is crucial for addressing various challenges faced by TVET institutions in Kazakhstan. According to the study, dual education has the potential to enhance the quality of education in these institutions by increasing student satisfaction and their confidence in future career prospects. This approach is appealing to youth as it emphasizes practical skill development, which is seen as essential for improving the qualifications of young professionals and enhancing their competitiveness in the job market.

The survey results indicate that students in dual education programs are more content with their learning outcomes and feel more assured of their employability due to their advanced practical skills compared to those in predominantly theoretical programs. Given these benefits, there is a strong case for Kazakhstani TVET institutions to fully transition to a dual training model. Achieving this transition will require the development of mechanisms to further promote dual education within Kazakh colleges. In this regard, to promote the growth of dual programs in TVET institutes for school graduates, the Kazakhstani government should expand state grants dedicated to dual education. These grants should encompass not only school-based learning but also practical training within enterprises. An essential factor in enhancing the appeal of dual education is the provision of scholarships to students. Currently, students enrolled in TVET programs under state grants in Kazakhstan receive a monthly scholarship of 31.4 thousand tenge (approximately 70 US dollars), alongside full coverage of their training expenses [23]. Therefore, introducing additional scholarships specifically for dual education students, who combine academic study with internships in enterprises as part of work-based education (WBE), will undoubtedly increase the attractiveness of dual education in TVET institutes for young individuals. Despite dual education's decade-long presence in Kazakhstan, it has only reached 19 % of TVET students, leaving the remaining 81 % in traditional educational pathways. The primary challenge hindering the expansion of dual education is its limited accessibility. To address this, Kazakhstan's dual education system must broaden its learning platforms to facilitate the development of practical skills among TVET students. In cases where apprenticeship opportunities within enterprises are scarce, particularly for disadvantaged youth, alternative models such as non-enterprise workshops organized by training centers within TVET institutions or workshops conducted by governmental, non-profit, or social enterprises under subsidized programs could provide valuable experience. Establishing such training centers at Kazakhstani TVET institutions and organizing workshops through non-profit initiatives will effectively broaden the reach of dual education among TVET students.

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ҚАЗАҚСТАНДАҒЫ КӘСІБИ-ТЕХНИКАЛЫҚ БІЛІМ БЕРУДІҢ НЕГІЗГІ МӘСЕЛЕЛЕРІ: ДУАЛДЫ ОҚЫТУДЫҢ КАДР ДАЙЫНДАУ САПАСЫНА ӘСЕРІ

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АНДАТПА

Зерттеу мақсаты. Бұл зерттеу мемлекеттің білім беру саласын жаңғырту саясатының аясында енгізілген дуалды білім берудің академиялық үлгерімді көтеруге және қазақстандық техникалық және кәсіптік білім беру (ТЖКБ) оқу орындарында студенттердің оқу нәтижелеріне қанағаттануын арттыруға қалай әсер ететінін зерттеуге бағытталған.

Әдіснамасы. Осы мақсатта Алматы қаласындағы ТЖКБ оқу орындарының 523 студенті қатысқан сауалнама жүргізілді. SPSS бағдарламалық құралын пайдалану арқылы сауалнама деректері екі гипотезаны зерттеу үшін талданды. Бірінші гипотеза дуалды білім беру жүйесіндегі студенттердің жоғары оқу нәтижелеріне қол жеткізуін, осылайша дуалды емес білім беру жүйесіндегі студенттермен салыстырғанда олардың еңбек нарығындағы жетістіктерін әлеуетті түрде арттыратынын топшылайды. 2-гипотеза дуалды емес білім беру жүйесіндегі студенттермен салыстырғанда дуалды білім алатын студенттер өздерінің оқу нәтижелеріне көбірек қанағаттанғанын және жұмысқа қабілеттілігіне сенімдірек екенін айтады.

Зерттеудің бірегейлігі / құндылығы. Бұл зерттеу дуалды оқытудың ТЖКБ ұйымдарындағы білім сапасына қалай әсер ететінін зерттеуге арналған әдістемелік сынақ ретінде қызмет етеді. Ол сондай-ақ студенттердің оқу нәтижелеріне қанағаттануына және жұмысқа қабілеттілікке деген сеніміне әсерін бағалауға бағытталған.

Зерттеу нәтижелері екі гипотезаны да растады, яғни дуалді білім беру бағдарламаларындағы студенттердің дәстүрлі (дуалды емес) білім берудің студенттерімен салыстырғанда өздерінің еңбек нарығының болашағына сенімділігін, білім беру нәтижелеріне қанағаттанушылығын және жоғары оқу жетістіктерін көрсететінін атап көрсетті.

Түйін сөздер: Дуалды білім беру, кәсіптік және техникалық білім беру, ТЖКБ мекемелері, практикалық тренингтер, Қазақстандағы білім беру, еңбекке негізделген білім беру.

ОСНОВНЫЕ ПРОБЛЕМЫ ПРОФЕССИОНАЛЬНО-ТЕХНИЧЕСКОГО ОБРАЗОВАНИЯ В КАЗАХСТАНЕ: ВЛИЯНИЕ ДУАЛЬНОГО ОБУЧЕНИЯ НА КАЧЕСТВО ПОДГОТОВКИ КАДРОВ

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АННОТАЦИЯ

Цель исследования. Целью данного исследования является изучение влияния дуального образования, которое внедрялось в рамках государственной политики модернизации образования, на улучшение академической успеваемости и повышение удовлетворенности студентов результатами обучения в казахстанских учреждениях технического и профессионального образования (ТиПО).

Методология. С этой целью был проведен опрос 523 студентов учреждений ТиПО города Алматы. С помощью программного обеспечения SPSS данные опроса были проанализированы для проверки двух гипотез. Первая гипотеза предполагает, что учащиеся в системах дуального образования достигают более высоких академических результатов, тем самым потенциально повышая свой успех на рынке труда по сравнению со студентами, которые обучаются в традиционной (недуальной) системе ТиПО. Гипотеза 2 предполагает, что студенты с дуальным образованием отмечают о более высокой удовлетворенности результатами своего обучения и большей уверенности в своих возможностях трудоустройства по сравнению со студентами, обучающимися в системах недуального образования.

Оригинальность / ценность исследования. Данное исследование представляет собой методологическую попытку изучить, как дуальное образование влияет на качество образования в учреждениях ТиПО. Целью исследования также является оценка влияния на удовлетворенность студентов результатами обучения и их уверенность в возможности трудоустройства.

Результаты исследования подтвердили обе гипотезы, то есть студенты, обучающиеся по программам дуального образования, демонстрируют большую уверенность в своих перспективах на рынке труда, более высокую удовлетворенность результатами своего образования и более высокие академические достижения по сравнению со студентами, обучающимися по традиционному (недуальному) образованию.

Ключевые слова: Дуальное образование, профессионально-техническое образование, учреждения ТиПО, практические тренинги, образование в Казахстане, обучение на рабочих местах

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