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Integrating Continuing professional development with Education system reform in Kazakhstan

Abstract: In the past few decades, the central position of teachers ensuring the quality of education has become increasingly acknowledged internationally. This article considers the reformation of education policy trends regarding teachers' education in Kazakhstan. State policy in the country recognizes education as a priority for social and economic development, with a focus on strengthening the practical training of teachers. It also addresses the challenges faced by state teachers and examines the significant changes to the structure and delivery of teacher education in Kazakhstan since 2011. The paper concludes with a discussion of the author's concerns and recommendations for the future of initial teacher education, with specific reference to the Kazakhstani education system.

Keywords: Continuing Professional Development, professional development, teacher education, education reforms.

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Introduction

The term Continuing professional development (CPD) refers to teachers' learning, support, and activities throughout their careers. Global Monitoring Report on Education for All reports governmental, non-government, and educational organizations worldwide prioritize CPD. "An educational system is only as good as its teachers. It is vital to unlock their potential to make learning more effective. Research indicates that teacher support improves education quality." In all educational establishments, professional development is an important component that enhances teaching and learning quality (Opfer & Pedder, 2011). It is also increasingly recognized that it has a significant impact in promoting and sustaining teacher quality. Thus, the concept of continuous professional development has become an integral part of teacher training, school reform, and academic discourse in recent years (Padwad, 2022). To prepare effective teachers for the 21st century, teacher educators must always be at the top of their game. Only if they can sustain their continuing professional development (CPD) is it conceivable. It entails formal, non-formal, and informal activities that aim to develop the teacher educator's intellectual abilities (cognitive domain), self-confidence, attitude, values, and interest (affective domain), and skills and competencies (psychomotor domain) for personality development and to fulfil the responsibilities of the teaching profession in accordance with the changing times and needs of the prospective teachers and society. Teacher educators typically begin their CPD upon entering the profession and continue it throughout their careers. There are two popular CPD routes for teacher educators: externally planned and mandated programmes and self-initiative. Number of researchers Al Neaimi (2007), Mann (2005), Richard & Farrell (2005), demonstrate that self-initiatives, like external initiatives, play an essential role in the professional development of teacher educators.

There is an extensive body of literature regarding continuing professional development that suggests well-structured, appropriately organized CPD, that can result in significant improvements in teacher practice, institutional improvements, and student outcomes (Bartleton, 2018; Gasanova et al., 2020). Despite these, perceptions, policies, and practices in CPD, especially in Kazakhstan, remain severely

underexplored. For this reason, this paper demonstrates Kazakhstan's education policy, trends, and issues in teacher education reforms by analyzing a few successful practices from high-performing countries and relevant literature.

Research question

The research question that this study follows:

- What CPD policies and practices should be explored in teacher education in Kazakhstan?

Literature Review

As Kennedy (2014) noted, the literature review on CPD has steadily increased in recent years due to the correlation between teachers' quality and learners' outcomes. Some fields, such as engineering, medicine, and law, have maintained pace with the challenges of their practices through a commitment to continuous professional development. Between theory and practice, there is a glaring discrepancy in education and language education, primarily because teachers lack sufficient professional development. There has been considerable discussion about the reasons for this wide gap (Burns, 2016):

1. Policy on teacher education is unclear and vague,
2. Lack of support for CPD management initiatives,
3. Pre-and in-service government programs play an excessively important role in career advancement
4. There is a mismatch between the CPD offered to teachers and the needs of the teachers.
5. Teachers have a heavy workload.
6. Imbalance between work and life for teachers,
7. Teachers are responsible for a variety of administrative and clerical tasks.
8. Teachers do not have enough time and resources.
9. Teachers aren't motivated to take part in CPD.

OECD research conducted in 23 countries revealed that teachers and schools lack both professional and financial resources. Despite such constraints, Wang et al. (2011) research into Continuous Professional Development (CPD) has demonstrated that teachers continue to develop professionally in a variety of ways, both in collaboration with others and individually. CPD providers must provide courses and programs that are relevant and productive. This is undoubtedly the best way to develop professionals through effective CPD. CPD programs could also develop apathy and negativity among participants. A course may be required by their employer or to meet regulatory requirements. CSO (2015) (Cross Stratum Optimization) notes three significant benefits that CPD provides professionals, but not for the development of "reliable and responsible professionals". The whitepaper suggests that "CPD would enhance career prospects" through improved salary packages. Secondly, this would lead to a higher level of commitment from individual employees, which would be beneficial to the employer. In addition, it takes into account the learning styles of employees. As a result, CPD benefits both individuals and employers (Yang et al., 2015).

Finland, Ontario, and Singapore have been able to attract and retain highly effective teachers in part because teaching is a profession that many individuals desire to enter and remain in. In contrast to many other nations, teaching in these three jurisdictions is appealing to academically gifted youth, who remain in the profession rather than seek out more lucrative employment. In Finland, for example, college students surveyed in 2008 ranked teaching as the best profession (Darling-Hammond et al., 2011). This attractiveness is, in some ways, a cultural phenomenon. Leaders in these jurisdictions have frequently emphasised the importance of teachers, thereby elevating the profession's standing. In 1966, when Singapore had just attained independence, the then-Minister of Education, Ong Pang Boon, stated that "the future of each and every one of us in Singapore is determined in large part by what our teachers do in the classroom" (Darlin-Hammond, 2013).

Before entering the profession, a different form of degree is awarded in Finland and Singapore, which is the primary distinction between the two countries' teacher education systems. In Finland, every teacher holds a master's degree. Universities and associated teaching practice institutions provide

research-based, master's-level teacher education. The high levels of critical thinking and research skills possessed by Finnish teachers prepare them to deal with uncertainty (Sarvi, 2022).

A challenge in Finland is the lack of coordination between diverse stakeholders supplying in-service teacher education. Individual teachers are responsible for their own professional development under the Finnish system. On the other hand, such freedom of choice can be instrumental in retaining teachers. Teachers maintain their motivation because they can study more subject areas and explore new teaching pathways. Furthermore, Finnish teachers are free to choose where they desire to teach, and principals are responsible for recruiting teachers. By granting teachers a great deal of autonomy, the Finnish system encourages their ongoing professional development.

Similarly, teachers in Singapore also submit applications individually for in-service education and curriculum-related training. Other forms of professional development are permitted if they are relevant to the subjects they teach. The school staff developer seeks to align a teacher's preferences with the school's strategic objectives for deployment purposes; therefore, teachers' developmental needs are contingent on fulfilling the pragmatic requirements of schools. Research-based teacher education in Finland emphasises personalised professional development for lifelong learning (Sarvi, 2022).

Challenges of Teacher Education in Kazakhstan

In terms of teacher preparation and development, Kazakhstan faces many common challenges. We live in a globalized world where global forces shape health, economics, and social well-being, and social mobility. To keep up with global trends and changes, countries must have highly educated citizens. In terms of responsive trends, there are two general points of view. There is a camp of researchers, educators, and policymakers who think the next step in education reform should focus on curricula standardization, a high-stakes test, and STEM (Science, Technology, Engineering, and Mathematics) initiatives. Therefore, the other groups of educators argue that schools should concentrate on fostering diverse talents, the ability to think creatively, critically, and entrepreneurially. Also, the current curriculum and testing do not reflect right-brain skills or global competencies. The “knowledge society” therefore places a high value on student and teacher performance and emphasizes developing 21st-century skills for all students (Zhao, 2018). In terms of standardization, comparative studies at an international level such as TIMSS and PISA, mostly stimulate and support the first point of view. Every four years, TIMSS (Trends in International Mathematics and Science Study) measures student achievement in mathematics and science. TIMSS aims to improve STEM teaching, but PISA (Program for International Student Assessment) makes a much bolder claim. In accordance with the OECD, which administers PISA, this test assesses students' readiness for the future challenge (OECD, 2010). Today's schools face a wide range of internal diversity issues, such as linguistics, ethnicity, culture, religion, socioeconomic class, gender, race, inclusion, and some other special rights. It is the educator's responsibility to prepare a teaching force capable of producing a diverse range of teaching opportunities. As a result of globalization processes, teachers are under additional pressure to prepare students for a constantly changing world by providing 21st-century skills and helping them develop a lifelong learning mindset. Teacher education programs prepare teachers for teaching in a globalized world. These programs' focus has traditionally been on the local contexts of the schools they serve. Any of this will be possible without broader reforms in the recruitment, selection, and training of teachers (Kulakhmetova, et al., 2015).

CPD at National Education Reforms

It has been reported that over 50% of university graduates and over 64% of secondary specialized education graduates change professions immediately after graduation in some parts of our country. Organizing their professional career is a huge challenge for many young people. Thus, education must be promoted throughout a person's life to ensure its flexibility, diversity, and accessibility. There are concerns regarding quality and efficiency in Kazakhstan as initial teacher education is highly specialized, there are no specific assessments to determine teaching potential, and institutions of teacher education do not have much autonomy in designing their programs. There are only two opportunities for teachers to participate in external professional development training every five years, suggesting that the current framework for

teacher professional development is inadequate. There are substantial opportunities for professional development in Kazakhstan schools, and principals play a more prominent role in instructional leadership than on average in OECD countries.

Kazakhstan's education system was well-developed and centralized under Soviet rule and faced political, economic, and social changes after the Soviet Union's dismissal. Kazakhstan has implemented three stages of education reform since then. The educational reformation process can be divided into three stages: As part of the first phase (1991–2000), international donors called for a reduction in public education expenditures. It is during the second stage of the project (2001–2010) that Kazakhstan's education was integrated into the "international educational space," standards of assessment were established, and the higher education system was restructured so that it could join the European Higher Education Area (Bologna process). High-quality teachers are essential to the success of education reforms. During the first and second stages of reform, teacher education was rarely emphasized, but in recent years its importance has increased. The Kazakhstan education strategy 2011–2020 aims to develop a training system and professional development for Kazakhstan's pedagogical staff (Tastanbekova, 2020).

The "SPED for 2011–2020" program aimed to disseminate best practices from NIS to all secondary schools throughout the country through teacher education reform. Under the auspices of NIS, 14 Centers of Excellence (CoE) were established in May 2011. A program for teacher professional development and trainer accreditation was commissioned by the Kazakh government in August 2011 by Cambridge University Faculty of Education and Cambridge International Examinations. A three-level in-service teacher training program was initiated by the CoE in January 2012. According to the authors, the cascade model was used to reach as many teachers as quickly as possible (Turner et al., 2015). It is estimated that there are over 300,000 school teachers, but 14 CoE were unable to reach all of them. Government Resolution No.232 issued in February 2012 reorganized 17 regional training institutes for in-service teachers into Orleu Centers ("climbing the mountain") for professional development. A two-week professional development course was required every five years for teachers to maintain their qualifications at these 17 regional institutes. There were three stages of teacher development in Kazakhstan, starting in the classroom and working up to senior teachers and middle leaders. During the basic course, teachers learn how to lead classroom learning processes; during the intermediate course, teachers learn how to lead teaching processes within the school system; and in the advanced course, teachers learn how to lead learning processes within school districts. By doing so, Kazakhstan's young people will become global learners in the 21st century. A network of professional development centers will provide leadership throughout Kazakhstan to facilitate the development process (Wilson et al., 2013). As originally planned, 70,000 teachers would go through the program each year, and by the beginning of the 2016–2017 school year, all teachers (325,184 in 2016) would complete both levels. The Ministry of Education and Science, however, reports that only 52,500 teachers have achieved this goal in 5 years from 2012. Even though the program is free, the attending teachers cover all travel and living expenses during the periods of off-site study. Due to the significant gap between urban and rural areas, financial incentives are promised and should be paid from local budgets, but in practice, payments may be delayed or even canceled. Consequently, CPD "Orleu" have started 3-week intensive courses to prepare teachers for the introduction of new educational content since May 2016 due to the inability to achieve the goal of an initial plan (Wilson et al., 2013).

Teachers and Changes in teacher policies in Kazakhstan

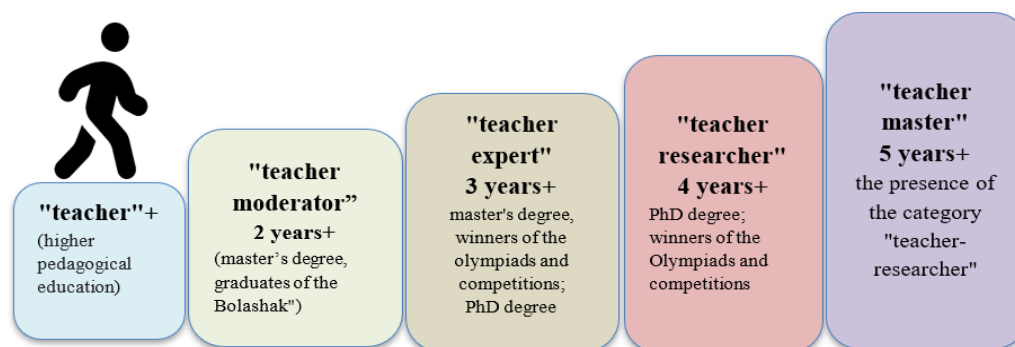
Table 1. Enrolment and graduation in ITE (2018). Source: OECD (2020)

	Number of students newly enrolled in 2018	Total number of students enrolled in 2018	Number of graduated students in 2018	Expected graduation in 2019
Universities	47 057	149 028	38 321	44 113
Colleges	20 346	74 607	20 151	N/A ¹

In Kazakhstan in 2018–2019, more than 90% of teachers had a degree from a college or university (see Table 1). But only 2% of teachers have a master's degree (Ministry of Education and Science, 2018),

and 91% of these degrees are bachelor's degrees. Kazakhstan's teaching job path has had five stages since 2018: teacher, moderator teacher, expert teacher, researcher teacher, and master teacher (Table 2).

Table 2. Teacher certification model. The author's design is based on the official statistics



The new State Programme for the Development of Education and Science aims to enhance teacher working conditions and basic and continuing education. The Ministry of Education and Science (MoES) organized a public debate on the draft law that meets the purpose with teachers, university faculty, public officials, and parents (Government of Kazakhstan, 2019). Changes include:

- Creating alternative paths into teaching for those with discipline degrees (e.g., physics, maths, history) but no teaching credentials.
- Legally recognizing and rewarding mentors.
- New working conditions, including income increases (2020-25) and fewer teaching hours (specified for each level of education).
- Awarding "Best Teacher" and Master's salary increases

Kazakhstan also implemented professional teaching standards in 2017 and a new career system for teachers in 2018. Previously, there were four categories of teachers, but there are now five (see section above), each corresponding to a distinct set of teacher competencies. The new system includes novel teacher evaluation mechanisms. Kazakhstan aims to consolidate its initial teacher education system as part of its efforts to improve the quality of education. Currently, the Committee for Quality Assurance in Education is assigned to devising licensing requirements for ITE institutions. In accordance with the new school curriculum, the World Bank is developing 30 study programmes for the education major (26 at the bachelor's level and four at the master's level). Then, ITE institutions will be able to adjust these to their own requirements and capabilities (World Bank, 2017, as cited in OECD, 2020).

Emerging issues around teacher education

For the Government of Kazakhstan, improving the prestige of the profession of teaching and the quality of education is a national priority. In the secondary education system, several innovations have been introduced, including three-level teacher professional development courses (Kulakhmetova, et al., 2015). Regarding the teacher status and teacher development, the following issues remain:

- Lack of clear professional standards and poor teacher training quality;
- Low status and prestige of Kazakhstan's teaching profession;
- Low-quality candidates are recruited;
- Teacher demand and supply are not properly planned;
- Initially-trained teachers do not meet the government's ambitious plans;
- Special education teachers lack specialist training;
- Newly qualified teachers' mentoring and induction are not related to professional standards;
- Changes are not part of the attestation system;
- Teachers' salaries and schedule systems are fragmented and complicated.

As well as standards for attestation and teacher education, regular teacher evaluations, and the development of formal professional development plans, standards also exist for attestation and teacher education. The lessons learned from around the world:

- In addition to being technicians, teachers should be seen as professionals who exercise judgment;
- Recruiting talented individuals is the first step in getting good teachers;
- Teaching in challenging environments requires strong pedagogical and content training based on research;
- A successful teacher education program emphasizes clinical practice.

Each of the high-performing countries refines its education system continuously. Recently, Singapore has sought to strengthen Professional Learning Communities (PLCs) through which teachers can collaborate to improve classroom practices. For practicing teachers, The Finnish government considers strengthening induction and professional development. The survey of Ontario's teachers found that teacher preparation gaps existed in some areas, including classroom management and teaching special needs students. The province is revamping its induction program. In Pearson's 2012 report, high-performing schools set high standards, and set clear expectations "with a lot of professional responsibility within a collaborative work organization at the front line."

Conclusions and Recommendations

In conclusion, it should be noted that modernization of the educational system demands renewal of the system of improving teachers' qualifications – the main character of the educational process. Teacher preparation and development are an essential part of National education reform. The result of this research has shown that Continuing Professional development is board term and cannot be addressed only to Initial teacher education or pre-service training. The existing relevant literature describes the reasons for the research gap between theory and practice. International studies suggest Kazakhstani policymakers raise the quality of initial teacher education and support early teachers' careers. Furthermore, research highlights the importance of attracting and recruiting highly-qualified specialists in the teaching field. Since 2018, the Ministry of Education and Science requires all teaching staff employed at educational institutions to certify their qualification at Quality Assurance centers every 5 years. In Kazakhstan's system, the attestation and professional development process is mandatory and controlled by the education authority. Comparatively, Singapore and Finland provide autonomy for teachers to pursue their continuing professional development independently. Flowingly, arising issues on teacher education are discussed and lessons from high-performing countries are shown as recommendations. The OECD suggests that states find out what school educators need and set up incentives to meet those needs. This can be done by surveying ITE alumni and teacher trainees in schools, surveying teacher educators and mentors, and making and funding long-term plans for professional development. These projects should put an emphasis on national education goals and build the ability to train people in all of the areas of competence outlined in the standards. It is important to find institutions with the knowledge and skills to develop training in the areas that have been selected, and funds should be required for the development and execution of these courses.

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