

# Perspectives on the Present State and Future of Higher Education Faculty Development in Kazakhstan: Implications for National Human Resource Development

Dinara Seitova<sup>a</sup>

<sup>a</sup>Bang College of Business, KIMEP University, Almaty, KAZAKHSTAN

#### **ABSTRACT**

The article aims at examining the present state of higher education faculty development in Kazakhstan in the context of multidimensional nationwide development reforms and exploring implications for the National Human Resource Development of the country. For the purpose of this research, theoretical human resource development (HRD) and perspectives of the National Human Resource Development (NHRD) were identified and a qualitative research methodology and the case study method were used, which included interviewing of 20 faculty members from two large universities of national status in Kazakhstan. The research findings indicate that: (1) there is a need to update professional expertise of higher education faculty members; (2) there is a lack of systematic and consistent approach to faculty development in higher education and (3) there is a link between implementation of higher education reforms and higher education faculty development, whereas the latter shapes implications for NHRD in Kazakhstan. In addition, the absence of faculty development model in higher education negatively affects implementation of HE reforming, whereas compliance with the international standards of higher education implied by the Bologna process is required. Adopting Western model of HE does not imply 'blind' copying. The new HE system has to be tailored to Kazakhstan's context, which will open a constructive dialogue between academia and the Ministry of Education and Science (MES) as well as reduce resistance to change.

KEYWORDS
Kazakhstan; Post-Soviet Transitioning Society; NHRD;
Higher Education Reform Policy; Faculty
Development; Multidimensional Government
Reforming Initiatives

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Email: dinara\_1999@yahoo.com

# Introduction

Kazakhstan is the world's ninth-largest country by land area; it is situated in the heart of Eurasian continent, bounded by the Russian Federation in the north, China in the east, Kyrgyzstan and Uzbekistan in the south, and the Caspian Sea and Turkmenistan in the west. After the collapse of the USSR in the early 1990s, Kazakhstan entered the international arena as an independent state with vast

## **CORRESPONDENCE** Dinara Seitova

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and rich natural resources, an underdeveloped industrial infrastructure and related economic deficiencies, a stable but rigid political structure, and a relatively small population of 17 million.

While part of the Soviet Union, Kazakhstan was the second largest Republic after the Russian Federation as to the territory and played a significant role in socio-economic, agricultural, science and technology development sectors as well as in geo-political terms. For more than fifty years, Kazakhstan's resources were put to use, making strategically vital contributions as directed by the Soviet government. In addition to dedication of resources, Kazakhstan has a history of scientific and technological advancement. The space center "Baykonur" and the nuclear weapon testing sites with the world's first nuclear reactor were located in Kazakhstan.

# Historical Overview and Government Reforming Initiatives Since Independence

In the early 1990s, during the first stages of Kazakhstan's independence, there was a dramatic decline in the country's economy. Many key factories and production companies were shut down, leaving thousands of people unemployed. Those who stayed employed were not paid regularly. The country was constantly shaken by high escalating rates of inflation. As the economy collapsed, so did the social system of the country. State financial funding for education at all levels and research and development systems were ceased. The quality of all education system significantly decreased (NRC NA, 2007).

The early stages of Kazakhstan's independence from the Soviet Union were characterized by the external and internal brain drain. Many talented scientists, researchers, doctors, educators and representatives of other occupations with high level of skills left the country. The socio-economic upheaval meant that many Kazakhstani professionals had to move away from their high skilled professions for which they were trained in order to provide for their families (NCED, 2012).

According to the National Research Council of the National Academies (NRC NA, 2007), Kazakhstan entered the post-Soviet era of independence with a strong cadre of world leaders in science and technology. The workforce had highly technical expertise in atomic energy, space research, and other highly-skilled workforce segments. Since the early 1990s, a large number of key scientific researchers left the country or shifted away from fields in which science and technology expertise could be utilized. Over this time period, the average age of the remaining scientific and academic workforce has risen significantly, and educational standards at both secondary and university levels have declined (NCED, 2012).

Furthermore, the process of transition to a market economy underlined the disadvantages of the centrally planned economy. Since the former Soviet political and socio-economic system represented one of the largest centralized planned economies in the world history, Kazakhstan as well as other former Soviet Union Republics, developed deep socio-economic interdependencies. Prior centralized economic master planning and related socio-economic dependence of each country was characterized by narrow specializations in a number of economic activities practiced by each Soviet Republic. As a result, Kazakhstan successfully developed its agricultural sector (mostly grain, wheat, cotton), animal breeding and livestock, natural resources extraction industries (oil, gas, coal, iron, minerals, chromite, lead, zinc, copper, uranium, bauxite, gold, silver, phosphates, etc.).

According to the National Research Council of the National Academies (NRC NA, 2007), exporting is a key to Kazakhstan's current economic success, with oil, gas and minerals leading the way; Kazakhstan is the world's sixth-largest producer of grain, including wheat, barley and rice. Historically, the other economic sectors in Kazakhstan, such as processing, heavy and light industries, were underdeveloped or partially developed and depended on other Soviet Republics.

Kazakhstan's shift to the market-based economy involved inevitable societal consequences, including severe economic decline in the 1990s. Kazakhstan's Human Development Index (HDI) ranking among 175 countries dropped from the 54th in 1993 to the 76th in 2005 (ERK, 2005). During the first decade of independence, Kazakhstan remained in the group with medium HDI largely due to the high educational levels and relatively satisfactory condition of the health of its population. The important post-Soviet legacy was a well-educated population with a literacy rate of almost 99 percent. According to UNDP (2005), the main reason for an 84% decrease in HDI was economic decline. As clear challenges combined with a more stabilized governmental structure through the 1990s, Kazakhstan's leaders began the formation and implementation of reform initiatives aimed at improving the general welfare and progress of the nation.

The realities of globalization, that have become increasingly evident during the emergence on an independent Kazakhstan, underline the importance of a knowledge-based economy, which implies utilization of competitive knowledge, skills and advanced technology. These global demands influenced the development strategies for Kazakhstan's positioning in the international arena. Internal development and reforms have focused on strengthening the market economy status through development of political, economic, and legislative infrastructures at all levels. Reform policy formation reflects a desire for national striving to embrace and introduce the best international practices and standards in all spheres (NCED, 2012).

For a new independent state in transition, reforming political and socioeconomic structures coupled with globalization required an alignment and substantial upgrade of knowledge, skills and expertise of human resources in all spheres, government, business, industry and non-for-profit sectors of the country. Therefore, Kazakhstan's contextual historical background, such as the socioeconomic transition from a socialist to a free market economy, and globalization trends for a knowledge-based society driven by advanced technology, simply required "training and retraining of employees at both national and organizational levels" (Bates, 2002).

Importance of the Problem: Higher Education Reforming as the Central NHRD Strategy

It is not surprising that higher education (HE) reform policy serves as a central NHRD strategy of Kazakhstan. As Harbison and Myers (1964) stated, the national development needs to be oriented towards improvement of educational systems of the country. Moreover, HRD is the process of increasing the knowledge, the skills and the capacities of all people in a society; whereas the primary level of HRD is the formal education that includes various forms of secondary and higher education institutions. For this reason, being the first and most fundamental level of HRD, the higher education fulfils the role of the central NHRD strategy in the frame of national development policies in Kazakhstan.

As a result, the first step undertaken by the government in laying out a

foundation for the higher education reforming as the central NHRD strategy was joining the Bologna Convention in 2010 (EACEA, 2010). The Bologna Convention is an initiative of the leading European countries, which agreed to establish and design a framework ensuring comparability in the standards and quality of higher education qualifications.

The Bologna process provided Kazakhstan with an opportunity for integration into the international education and research arena. The Bologna Convention was signed by 49 countries and aims to reform the higher education system in order to create overall convergence at the international level. The purpose is to establish a common framework of academic programs, credit system and equivalent degrees to enable cooperation in teaching and research, and enhance the mobility of students, faculty and researchers as well as increase the employability of graduates (EHEA, 2014).

Furthermore, the National Conception of Education Development in Kazakhstan (NCED, 2012) was passed in 2005 for the period of 2005-2010 and prolonged for the next period of 2011-2020, which continued strengthening the role of the entire education system reforming with the emphasis on higher education, as the central NHRD strategy for Kazakhstan. NCED aims to improve performance of all educational levels through integration of organization, process and individual domains. This new legislative document consists of separate laws that encompass all levels of Kazakhstan's educational system and stipulates the necessity of a step-by-step transition to the Western model of higher education in accordance with the Bologna process. More specifically, this includes: adoption of comparable degrees and introduction of three academic levels of higher learning system (bachelor, master and PhD programs); transition to the credit hours system; promotion of student and faculty mobility through international cooperation; promotion of cooperation in academic quality assurance and lifelong learning; and promotion of students participation in the HE administration (EHEA, 2014).

According to the Ministry of Education and Science of Kazakhstan (MESK, 2013), adoption of comparable degrees and introduction of three academic levels of HE (bachelor, master and PhD programs), transition to the credit hours system and promotion of student and faculty mobility through international cooperation in compliance with the Bologna requirements were successfully launched. However, the development and introduction of the doctorate level academic programs are still in progress.

In light of National Conception of Education Development in Kazakhstan, higher education in Kazakhstan is viewed as the most fundamental liaison between academia, research and innovation in industry and business of the country. It was believed that integration of these three components represents the concept of a national innovation system that will to better establish Kazakhstan successfully in the global arena. As a result, the NCED and Bologna Process immediately gain stature as they led to the foundation of major NHRD related policies by establishing and fulfilling national development strategic goals required for further sustainable development.

Owing to the nature, HE institutions carry the responsibility for dispensing knowledge, producing highly skilled labor and research output to meet the economic needs promoting progress. Historically, in the periods of social transformation, HE institutions take on the fundamental role in the processes of social change and development through facilitation of new cultural values,

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training and socializing members in a society (MESK, 2005).

Kazakhstan is no exception and higher education plays a fundamental role in NHRD policy, whereas higher education faculty is the driving force in implementing such vitally important national development tasks, which in the long run have profound implications for future sustainable development.

In such manner, higher education faculty members are framed as both change agents and active participants, who are directly involved and responsible for the accomplishment of the higher education policy as a part of NHRD strategy. In other words, college and university faculty are the gatekeepers of higher education reform. They largely define the character, quality, productivity, and relevance of each institution and the HE system as a whole (Chapman, 2009).

# Relevant Scholarship

McLean, Osman-Gani and Cho (2004) outlined five models of NHRD: centralized, transitioning, government initiated, decentralized/free market, and a small nation. In such a manner, Kazakhstan is identified as a transitioning and developing country, moving from the centralized model to government initiated or decentralized model; and therefore, the formalized development of its human resources is considered as essential priority for successful transition from the socialist to the market-based economy.

Furthermore, according to McLean et al. (2004), HRD is viewed in the frame of a national policy, which is based on the national priorities and needs specific to each country. In the context of Kazakhstan's transitioning society, the main role of the government is to establish and manage NHRD plans through development, initiation and coordination of HRD policies at all levels. As a result, in accordance with national priorities and socio-economic needs, Kazakhstan's government has formulated multidimensional reforms that included NHRD as an integral part of the national development strategy that focuses on sustainable development.

As Alagaraja and Wang (2012) state, the effectiveness of HRD is likely to be enhanced when countries adopt a holistic approach, which considers the dynamic impact of social, political, cultural, and economic systems on education and labor markets.

Likewise, the central motif running through all multidimensional reforms in Kazakhstan is building the capacity of human resources to accomplish strategic national goals in all socio-economic spheres. The multidimensional government reforming initiatives in Kazakhstan comprehensively reflect overall strategic national development goals that strive to build a sustainable and efficient socioeconomic system. In such manner, these initiatives shape and reflect the nature of NHRD policy in Kazakhstan. As a result, NHRD has the potential to serve as a mechanism for addressing key developmental issues that affect nations across the world (McLean and Lynham, 2006).

Additionally, one of the most significant implications for globalization is that the leaders of developed and developing countries around the world realize that economic growth and development is equated with societal development and human capital skills formation (Wilson, 2012.). Since NHRD encompasses the development of human resources via profound socio-economic reforming policies that are also based on the globalization development trends, the socio-economic development of Kazakhstan is directly linked to the nation's ability to acquire and utilize technical and socio-economic knowledge, whereas the globalization tendency for knowledge-based society supports expediting reformation processes

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(Chapman and Austin, 2002).

In the context of Kazakhstan, the strategic national development initiatives determined the so-called mechanism for implementing such grand tasks of critical importance necessary for sustainable development of Kazakhstan, which historically proved to be the crucial prerequisite for successful accomplishment of strategic national priorities throughout the world – it is the higher education system.

Therefore, the HE reforming policies serve as a fundamental base for NHRD strategy of Kazakhstan. According to Harbison and Myers (1964), the national development needs to be oriented towards improvement of educational systems of the country. HRD is the process of increasing the knowledge, the skills and the capacities of all people in a society; whereas the primary level of HRD is the formal education that includes various forms of secondary and higher education institutions. For this reason, being the first and most fundamental level of HRD, the higher education fulfils the role of the central NHRD strategy in the frame of national development policies in Kazakhstan.

As indicated by the National Research Council of National Academies (2007), the effectiveness of the education system, particularly the higher education institutions, will be a critical determinant of the future of Kazakhstan. The country is fortunate in having highly literate population that appreciates the values of education and is eager to build on the country's advanced technology. Appropriate mechanisms for integrating education, research, and commercial activities are needed. Only with competent and committed scientists, engineers, and healthcare professionals operating in organizations that can use the products of research and that can develop competitive products Kazakhstan will be able to reach the ambitious goals that have been set (NRC NA, 2007).

# **Concept Headings**

# Purpose and Research Questions

The purpose of this article is two-fold: (1) to examine the current state of higher education faculty development in Kazakhstan in the context of multidimensional nationwide development reforms, which largely focus on reforms in higher education and (2) to explore the link between the higher education faculty development in Kazakhstan and the implications for the National Human Resource Development (HEFD) of the country. As a result, study findings are to provide an insight on issues that require closer attention of the corresponding government policy and decision makers for the future improvement of HEFD. In fact, understanding on behalf of the government policy makers of the faculty role as the driving force in successful implementation of national development plans, HE policy as part of NHRD, is strategically important for the future sustainable development of Kazakhstan.

The research focus questions were: "What is the current state of higher education faculty development in Kazakhstan in the context of government reforming initiatives?" and "What are the implications of higher education and faculty development efforts for NHRD?"

# Significance and Limitations

The significance of this study is that there was no identified research conducted to examine the state of HEFD from the faculty perspectives in the context of HE reforms as a part of multidimensional government reforming initiatives in Kazakhstan. These initiatives define as yet unresearched implications for Kazakhstan's NHRD. The findings attempt to contribute to a better understanding the NHRD in one of the largest (second after the Russian

Federation) post-Soviet transitional societies and explore the link between the government reforming initiatives in higher education and implications for NHRD.

The limitations are due to the relatively small sample of 20 participants, which means that the study findings may not be generalized to fully reflect the situation of faculty development in all state and private universities in Kazakhstan.

# Methodology

The rationale for using a qualitative research design is determined by the nature and the purpose of this study matching the characteristics of qualitative research as described by Lincoln and Guba (1985). These characteristics encompass the focus for the inquiry, fit of paradigm to focus, where and from whom data will be collected, instrumentation, data analysis, and planning for trustworthiness.

The case study approach serves the purpose allowing to examine the phenomena and intervention under study in the real-life context in which it occurred and understand the links in real-life interventions that are too complex (Yin, 2003).

Moreover, qualitative research focuses on the wholeness of experience rather than on its separate parts and enables viewing the phenomenon under study in a broad context of historical, socio-economic, cultural and international underpinnings, which contribute to a better understanding of the country's HEFD in the context of multidimensional national development initiatives and reforms in Kazakhstan.

In order to establish a legitimate validity of this qualitative study, the triangulation technique was used according to Glaser and Strauss (1967) to ensure the reliability of the study and its findings, which involved at least three methods of data collection from the field.

### Data Collection

This study is based on the perspectives of faculty members, who are the direct key agents of Kazakhstan's national higher education reform (Merriam, 2001). The reality is constructed by individuals interacting with their social worlds (Sherman and Webb, 1998), while the researcher serves as a primary instrument for data collection. Data collection techniques included semi-structured interviews, observations, documentation analyses and field notes. The interviews were conducted individually and were semi-structured with a set of preestablished questions to ensure provision of little variation in response as well as to allow for pre-establishing a coding scheme. Interviews with faculty members permit viewing the phenomena from their perspective, which enable to "gather indepth understanding of implementation degree and gain insight from those involved in the implementation" (Lincoln and Guba, 1985).

#### Data sources

The following criteria were applied for selecting the leading universities for participation in this study: (1) geographic location; (2) significant student and faculty population; (3) a wide variety of programs in different fields and (4) a well-established research mission.

As a result, two top universities of a national status in Kazakhstan were selected. Both universities launched the western higher education model in 2006. The universities represent two main geographic locations of the country – the

North and the South. The first, L.N. Gumilyov Eurasian National University (ENU), is located in Astana city, which is the capital of Kazakhstan, in the northern part of the country. ENU was established in 1996 by the decree of the President of Kazakhstan. ENU is a member of the Higher School International Academy of Sciences, the European High Schools Association, the International Association of Universities and the Eurasian Association of Universities, has signed the Bologna treaty and cooperates with more than 70 leading high schools in the world. ENU has a student population of 11,300 enrolled in both graduate and undergraduate programs, with the following breakdown of academic programs: 59 undergraduate, 36 Master's and 13 doctoral programs. The total number of faculty members is 1,700 (ENU, 2016). The University has 4 research based centers and 13 departments: Information and Technology, Natural Sciences, Economics, Philology, History, Military, Social Sciences, Law, Mechanics and Mathematics, International Relations, Journalism, Transport and Energy, Architecture and Construction, Physics and Technical Sciences.

The second university is Al-Farabi Kazakh National University (KAZNU), which is located in the city of Almaty in the southern part of the country. KAZNU University was founded in 1934. The university has 18,000 student population with 2,000 faculty members (KAZNU, 2016.). The University has 7 research based centers and 13 departments: mechanical-mathematical, physics, biology, chemistry, geography, journalism, international relations, oriental studies, politic science and philosophy, economics, law, and preparatory for foreign citizens.

The faculty members from these leading and largest higher education institutions happen to represent historically the majority and the best of Kazakhstan's faculty members and students. The criteria for selection of faculty members for interviewing were determined by the strategic priorities identified by Kazakhstan's government in terms of socio-economic development and largely focus on the list of the most demanded specialists in such areas as Engineering, Computer Technologies and Information Systems, Biotechnology, all applied sciences related to Mathematics, Physics, Biology, Chemistry, Agriculture and Medicine. Moreover, the Government defined the faculty members with advanced academic degrees and substantial teaching and research experience as the core group of highly qualified professionals, who play the key role in higher education reforming as well as in training and development of less experienced higher education faculty members. Historically, there were differences in the academic degrees between the post-Soviet Kazakhstan and Bologna requirements, which are associated with higher education reforming. As a result, the core group of highly qualified faculty members includes higher education faculty members with PhD degree of Kazakhstani equivalent and faculties with original academic degrees of the Candidate of Sciences and Docent, which had been awarded before the collapse of the USSR. Academic degrees of the Candidate of Sciences/Docent are considered to be equivalent of PhD degrees.

Therefore, the selection criteria of the faculty members for interviewing were as follows: (1) the discipline taught by a faculty member should be on the priority list of disciplines; (2) faculty member should have at least ten years of working experience at the university; (3) faculty participants should have a PhD degree; and (4) representatives of both genders should be identified. According to the priority list, there are about 400 faculty members in total who teach in the priority area disciplines. However, it was determined that only 20 faculty members fully met the established criteria, which resulted in an even breakdown of ten faculty

members from each university. The table with information about the study participants is provided below.

As a result, two groups of faculty interviewees represented the key change agents, who are directly involved in the HEFD and whose capacity is essential for the higher education reforming overall, as well as for the overall national development.

Table 1. Age, Gender, Degree, Area of Specialization, Years in Higher Education

Q-ty of		Gender	Academic	Area of Specialization	Years in
Participants	Age	Gender		Area of specialization	Higher
ruiticipuits			Degree		Education
	<b></b>	44 1	DI D	1.6 (: C.T.)	
1	65	Male	PhD	Information & Technology	35
2.	59	Male	PhD	Mathematics	28
3.	70	Female	PhD	Applied Math	40
4.	50	Male	PhD	Physics	35
5.	57	Female	PhD	Microbiology	29
6.	49	Male	PhD	Applied Physics	27
7.	42	Male	PhD	Chemistry	22
8.	45	Female	PhD	Microbiology	21
9.	37	Male	PhD	Biology	10
10.	48	Male	PhD	Chemistry	13
11.	66	Male	PhD	Information &Technology	30
12.	49	Female	PhD	Information &Technology	23
13.	67	Male	PhD	Physics/Mathematics	32
14.	46	Female	PhD	Mathematics	16
15.	59	Male	PhD	Microbiology	24
16.	44	Female	PhD	Applied Physics	16
17.	43	Female	PhD	Microbiology	14
18.	38	Female	PhD	Applied Physics	10
19.	55	Male	PhD	Chemistry	20
20.	41	Male	PhD	Information & Technology	10

# **Results**

As a result of data analysis, the following key theme was identified: Challenges associated with transfer of Kazakhstan HE system to a Western model. Multidimensional government reforming initiatives implied a transfer of the entire HE system of Kazakhstan to a new system, which involved an introduction of a credit system and adoption of three levels of academic programs (bachelor, master and PhD).

Given the complexity of HE reforming, the nature, scope and requirements for faculty and universities have significantly changed. The identified key theme consists of the following three subthemes: (a) increased faculty members' workload vs. their low salary; (b) need for update of faculty professional expertise vs. the lack of support and guidance from the Ministry of Education and Science (MES) in the reforming implementation process; and c) faculty's resistance to change.

# Increased Faculty Members' Workload vs. their Low Salary

Since the HE credit system implies that a university must offer students a variety of classes such as core, electives and advanced, it resulted in a necessity to reform the whole curriculum for all academic programs and each specialization. In this regard, transfer is complicated for multiple interconnected reasons. Curriculum reform includes re-designing the coursework for all academic

programs and specializations, content revision for all courses, introduction and development of new core, elective and advanced courses for all academic programs, which resulted in a substantial increase of teaching load and preparation time for faculty members.

While the faculty members' workload in terms of teaching, administrative and research work has been increasing, the salary range remains low.

Since Kazakhstan's independence the faculty wages have not been reconciled with the real level of living expenses in the country. From time to time, the government undertakes measures to upgrade the salary ranges for faculties in all educational levels including higher education. However, all attempts fell flat as the incremental salary increases tend to be "swollen" by constantly increasing economic inflation. The monthly salary of a faculty member for both universities falls in the range of KZT 90,000-150,000 (national currency of Kazakhstan). According to the official National Statistics Agency (2010-2015) a minimum monthly wage in the country is KZT 27,000.

According to the findings such challenges are associated with a combination of constant job stress frustration, feelings of being lost and overwhelmed, lack of motivation and insufficient quality of work, which overall negatively affect the HE reforming implementation.

Need for Update in Faculty Professional Expertise vs. the Lack of Support and Guidance from MESK in the HE reforming Implementation Process

HE reforms imply curriculum re-design, full content revision for all courses and development of new courses, which require tremendous efforts from the faculty members in terms of "catching up" and mastering new knowledge.

The main concern voiced by the faculty members is the absence of a comprehensive faculty development model in higher education, which could enable faculty members to upgrade their professional expertise in teaching, research and service domains in the frames of HE reforming initiatives. Despite the fact that the first steps in HE reforming were initialized in 2005, there is still no consistent approach to faculty development.

Faculty members indicated that due to demanding teaching and research requirements, mastering new teaching and research strategies on their own becomes unconstructive. Faculty members shared their frustration with their learning "on the go" and "figuring out by the trial method" without clearly identified reforming process or without clear understanding of what and how reforming goals should be achieved. They consider such negligent tendency very harmful for HE in Kazakhstan as it only replaces the old system without offering another solid foundation.

Furthermore, it was noted by the faculty members that accidental brief seminars or training sessions on separate or selected topics related to the international standards of higher education, new teaching and learning approaches do not suffice the real needs of the faculty members in terms of professional development. Faculties identified that one of essential and integral aspects associated with quality improvement in teaching and research domains has to do with upgrading information technology expertise among faculties. Available seminars and other random training activities are not enough to update their knowledge and expertise in all required areas.

In addition, the major limitation that impedes faculty members' continuous life-long learning, professional development and cooperation with international

colleagues abroad, is the lack of foreign language proficiency. Foreign language proficiency (especially English) creates a real barrier, which reduces the learning opportunities for majority of faculty members. As a result, they do not have direct access to up-to date content of recent textbooks, teaching materials and internationally published scholarly research and literature. Such tendency leads to a tremendous dependence on translation from any foreign language into the Russian and Kazakh languages.

Unfortunately, the translation capacity of specialized or scholarly literature and textbooks is very limited and very expensive in Kazakhstan, which again prevents faculty members from beneficial knowledge exchange and learning from available networking and links with international educational and research communities worldwide.

In other words, the faculty members identified the most significant challenges associated with HE reforming, which overlap each other. Firstly, there is a need for a consistent and coherent set of faculty professional development activities that can enhance an understanding of the new HE system academic requirements and standards. As faculty members indicated, they face significant challenges in following and developing new academic and administrative standards and policies, complying with requirements and processes in terms of curriculum development, application of teaching strategies, student assessments, publishing research internationally, establishing transparent process for faculty performance evaluation and promotion.

Secondly, there is a lack of support and guidance from the MESK in the HE reforming implementation process. Lack of support and guidance from the MES on HE reforming is indicative of insufficient communication with the universities and the key players in the HE reforming, i.e. with the faculty members.

In this regard, many faculty members made comparisons of current situation with the times of the Soviet Union when all organizational and educational processes were clearly stipulated by the corresponding legislative documents. As a rule, the MES initiated all legislative laws for all levels of education including higher education. Based on the legislative acts and resolutions, the MES further officially established corresponding standardized policies and procedures for universities.

In the light of the HE reforming, faculty members are now assigned the role of key change agents without having the full capacity to do so. The challenge is rooted in an existing gap between the HE reforming policy and implementation processes, where faculty members are not properly equipped with necessary knowledge, skills and expertise to adequately interpret, comply with or implement the new requirements. Such challenges result in misinterpretation, confusion, inadequate actions and consequently undesirable outcomes. Therefore, the translation of policy was often absent or subject to ambiguous interpretation (Johnson et al., 2014).

From the faculty perspectives, the lack of support and guidance from the MES in faculty members' development and implementation of HE reforming in general, is even more obvious and sharply underlined in the context of limited capacity of faculty members to read recent textbooks, teaching materials and other scholarly literature in foreign languages. The problem with shortage of the relevant translated new materials, textbooks, research articles and literature of Western authors or an access to any international sources for faculty members represents

a large scale problem, which requires an intervention and constructive actions from the government.

# Faculty Members' Resistance to Change

Majority of faculty members think that Kazakhstan should not "blindly" borrow the Western model without questioning. They argue that the old HE system is not to be fully replaced by the Western model. According to faculty members, a synthesized model will be able to combine the best appropriate components of both systems and allow tailoring the "adjusted" model to the local context.

There is no doubt the faculty members realize that countries participating in the Bologna process are entitled to elimination of unnecessary bureaucratic policies and procedures hindering cooperation in teaching and research around the world. They fully embrace the benefits of the Bologna process in terms of overall quality improvement of HE and contribution to the development of Kazakhstan. Yet, they feel that they are forced to "blind copy" a foreign model instead of rebuilding their own HE model.

In this regard, the Bologna process does not intend to have absolutely identical higher education system around the world, because every country wants to preserve its own unique system based on its national historical and cultural roots and traditions (EHEA, 2014). In reality, the governments are expected to tailor the Bologna process requirements to the socio-cultural realities of participating countries based on the local socio-economic context appreciating their historical and cultural heritage.

Faculty members' resistance is determined by two essential factors. Firstly, the concept of academic identity is very important because "individual agents or individual actions cannot be identified in isolation from the context and traditions in which they are embedded and can be comprehended. The individual is embedded in and emerges from a history: family, communities, all of which have their own traditions" (MacIntyre, 2007).

Secondly, as Chapman (2009) argues, the major reason for faculty resistance is related to the lack of knowledge and skills needed to make changes on behalf of faculty members. Historically, the MES used to be the superior government body, which issued laws, developed detailed policies and procedures explaining each implementation process, established clearly defined goals and evaluation criteria, and regularly monitored completion and effectiveness of all processes and reforming initiatives.

Thus, at the beginning stages of profound reforming the government's facilitating role is to provide clearly outlined guidelines to the faculty members on curriculum development, teaching-learning strategies, assessment methodologies for teaching evaluation and learning effectiveness and develop required research skills, which can be included in comprehensive faculty development plans for addressing the real roots of such challenges.

#### Discussion

Research findings indicate that there is a real need to update faculty members' professional competencies in the core areas of academic profession such as teaching, research and service; update content knowledge in subject courses, teaching-learning strategies, and evaluation methodologies. In addition, the absence of faculty members' development model in higher education negatively

affects the HE reforming implementation, whereas compliance with the international standards of higher education implied by the Bologna process is required.

Since there is a gap between the HE reform policy and implementation process, the MES as a government body is responsible for broad societal transformations, has to address the need for updating and improving faculty professional expertise in a consistent and systematic manner. Comprehensive measures for professionalization the profession of a faculty member can include well formulated concepts and strategies, which are "translated" into clearly written and thoroughly developed academic and administrative guidelines, implementation process and evaluation criteria on teaching-research-service components in higher education.

Moreover, the MES is able to address the need for upgrading faculty competencies based on their training needs analysis, identifying, working out the step-by-step comprehensive development programs for faculties and ensuring training availability to all interested professionals in higher education.

There is no doubt that the "laissez-faire" policy approach led to misinterpretation and confusion of new concepts initiated by the HE reform policies. However, the lack of guidance from the MES to the universities and faculties is not simply a bad communication pattern. Lack of the HE policy analysis, design and implementation capacity partially has to do with inexperience and lack of expertise on behalf of the MES professionals.

The context of a knowledge-based society defines the prestige and social value of a career in academia, research and science. Therefore, brain drain within the country from science and academia to corporate business and industry sector requires a closer attention from the government. Low salaries, motivation and job dissatisfaction can be addressed by providing better professional growth opportunities and upgrading salaries of faculty members and academic staff (NRC NA, 2007).

Research findings confirm the implications of successful HEFD for NHRD. Kazakhstan's transition to the market economy involves multidimensional HE reform policies as a part of NHRD strategy, which reinforces a profound deconstruction process of socio-cultural identity of HE faculty members, university administration and the MES as social actors at the individual, professional and organizational levels. Faculty members as social actors with different socio-cultural identities are in the process of constructing a new academic identity based on the updated social values, beliefs, mentality and work styles. The process is gradual and accompanied with faculty members' resistance to change.

Needless to say, the formation of a new academic identity involves an update of faculty members' professional development, whose capacity is essential for accomplishments of the HE reform policy as the central NHRD strategy. Therefore, as an initiator of such socio-economic changes, the MES is charged with responsibility to address the needs for faculty members' professional development and overall implementation process of the HE reform policies through well formulated, clearly outlined and detailed guidelines. Once the reform policies are formulated, planned and formalized, the government has to move into the next stage of the policy implementation process that requires evaluation and monitoring the quality and effectiveness of the process (Sabatier, 1999).

According to A. Gornitzka, M. Kogan and A. Amaral (2005), reforms projecting

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a low degree change are often unsuccessful because they do not galvanize sufficient energy to overcome inertia. In case of successful HE policy implementation, the academic identity will avoid the so-called "disconnected constructions". The HE reform policies and individual socio-cultural background will not turn into countertendencies, which may lead to inefficiency of reforms or "the novelties" of the Bologna process do not become mere formalities without practical functions (Yergebekov and Temirbekova, 2012).

Therefore, adopting Western model of HE does not imply 'blind' copying. The new HE system has to be tailored to Kazakhstan's context with consideration of opinions and expertise of all social actors involved in formation of the new academic identity, which will open a constructive dialogue between academia and the MES as well as reduce resistance to change.

#### Conclusion

The multifaceted NHRD in the context of Kazakhstan is composed of multiple levels such as national, organizational and individual, which are closely interrelated and contribute to the process of academic identity formation. The faculty members' professional development is a core component in the academic identity formation process, which involves construction of new updated knowledge in academia. In fact, HE faculty members constitute a large community of highly qualified educators, scholars and scientists in all disciplines, who are capable of providing massive student population of young generations with high quality education of international standards, increasing knowledge and skills of professionals in different occupations, doing research that connects theory and practice through real applications in various businesses and industries, promoting science and technology innovation for sustainable development of the country.

As a result, Kazakhstan's capacity in making the transition from producing and exporting primarily unprocessed raw materials to producing and exporting more knowledge intensive, value added goods and services (World Bank, 2006) depends on updated professional development and capacity of higher education faculty members, researchers and academia, who are ultimately the driving force for fulfilling all strategically important goals as defined by NHRD.

After more than two decades of independence that have been marked by profound government-initiated reform policies and joining Bologna in 2010, it is indispensable to move to the next stage of the policy process and assess how these policies are being implemented by the social entities and actors in charge. Due to the complex nature of the policy process, shifts from policy implementation to policy change involve numerous policy initiatives over a period of 10-20 years (Sabatier, 1999). The policy process is usually divided into a series of stages: agenda setting, policy formulation and legitimation, implementation and evaluation.

At this point of Kazakhstan's development there is a need to start developing an understanding of what factors contribute to implementation of the HE reform policy as a part of NHRD strategy and how effectively these policies are implemented, which can be taken into consideration in the future by policy makers and higher education faculty members and staff in accomplishing goals. A distinctive feature of the educational process of modern universities in terms of intensification of educational migration is the training of international students future intellectually developed, creative professionals, focused on self-

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organization and self-development, able to create scientific development, enriching the intellectual resource of the world's economies of a new type. In the course of the study it is established that in the current international contacts, many countries consider educational migration as an element of its foreign policy aimed at strengthening of economic, cultural and political influence in the world. In addition, the provision of educational services is becoming an important export, cost effective, industries for countries with a leading position in the international market. The trends identified are confirmed by the experts' assessments: total revenues of the international education market exceeds \$ 100 billion of the United States, and the total number of foreigners, traveling annually with various educational goals abroad exceeds 5 million people (Report on international migration of United Nations population Division, 2012). At present, the greatest amount of educational services to international students is given by higher educational institutions of the USA, UK, Austria, Germany, and France. Universities of these States form and coordinate the flows of international educational migration, subordinating them to their own goals, focused on pragmatic results: economic profit; improvement of the demographic and labor structure of society due to the influx of educated young people of reproductive age; getting of new citizens integrated into society through the educational system.

#### Disclosure statement

No potential conflict of interest was reported by the authors.

#### Notes on contributors

Dinara Seitova, PhD., Assistant Professor, Bang College of Business, KIMEP University, Almaty city, Kazakhstan

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