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### Using Mixed Methods to Study Emotional Intelligence and Teaching Competencies in Higher Education

Education is one of the largest factors in the development of an independent country, especially for such a young country (22 years of independence) as Kazakhstan. The Bologna process was accepted in Kazakhstan only three years ago. This has created a new paradigm in education: competence-based education. Joining the western system of education has caused the changes in teaching characteristics and style. The modern system encourages teachers to be more mobile, which requires qualities such as emotional intelligence and communication competence. The purpose of this article is to examine the extent to which the competence-based approach has been implemented in the education system of Kazakhstan in terms of mixed methods research approach. The paper outlines the design of the study on emotional intelligence and teaching competence.

**Keywords:** Higher education; emotional intelligence; teaching; competence-based approach; mixed methods;

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#### Жоғарғы оқу білім оқытушылардың компетенциялары және эмоциялық интеллекттерін зерттеуге арналған микс-тәсілдерін қолдану

Білім тәуелсіз мемлекеттің ең ірі даму факторларының бірі болып табылады, әсіресе Қазақстан сияқты жаңадан көрінген (тәуелсіздікке 22 жыл толды) елдер үшін. Болония процесі Қазақстанда үш жыл бұрын қабылданды. Бұл білім жүйесінде жаңа парадигма құрды: құзыреттілік тәсіл. Батыс білім беру жүйесіне кіру оқыту процессінің сипатын және стилін өзгертті. Қазіргі кездегі жүйе мұғалімдерден бейімделгіш, ұтымды болуын, және де эмоциялық интеллект пен коммуникативтік құзырет секілді қасиеттерді талап етеді. Мақалада микс-әдістер тәсілдемесі арқылы Қазақстан білім беру жүйесінде құзыреттілік тәсілінің жүзеге асырылуының дәрежесін зерттеу жоспары баяндалған.

**Түйін сөздер:** Жоғарғы білім, эмоциялық интеллект, құзыреттілік тәсіл, микс-әдістемелер

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#### Использование микс-метод исследования для изучения эмоционального интеллекта и компетенции преподавателя в высшей школе

Образование является одним из крупнейших факторов в развитии независимого государства, особенно для такой молодой страны (22 лет независимости), как Казахстан. Болонский процесс был принят в Казахстане только три года назад. Это создало новую парадигму в образовании: компетентностный подход в образовании. Вступление в западную систему образования вызвало изменения в характере и стиле обучения. Современная система побуждает учителей быть более мобильными, и требует таких качеств, как эмоциональный интеллект и коммуникативная компетентность. Цель этой статьи заключается в изучении степени реализованности компетентностного подхода в системе образования Казахстана посредством такого исследовательского подхода как микс-методы.

**Ключевые слова:** высшее образование, эмоциональный интеллект, обучение, компетентностный подход, микс-методики

Education is one of the largest factors in the development of any country. The choice of this topic is very important and relevant for such a young country as Kazakhstan. President Nursultan Nazarbayev of Kazakhstan, in his address to the nation, “Strategy 2050,” pays special attention to the development of higher education and science and speaks of their restructuring. Today, the technological revolution and the global economic picture necessitate a new level of science and innovation. In this time of development, the innovative high school teacher should be a person of strong professional and pedagogical qualities, relevant skills and competencies, and appropriate social and psychological traits.

In 2010, Kazakhstan joined the Bologna process. The Bologna process is the process of convergence and harmonization of higher education systems in Europe with the aim of creating a common European Higher Education Area (EHEA). The main objectives of the Bologna Process:

- facilitate mobility of students, graduates and higher education staff;
- prepare students for their future careers and for life as active citizens in democratic societies, and support their personal development;
- offer broad access to high-quality higher education, based on democratic principles and academic freedom [1].

The Bologna Declaration contains several key provisions. These provisions include:

- Adoption of a system of easily and comparable degrees.
- Adoption of two-cycled education system: undergraduate and graduate.
- Establishment of a system of credits such as in the ECTS system.
- The development of mobility of students and teachers.
- Promotion of European co-operation in quality assurance.
- Promotion of necessary European dimensions in higher education [1].

In recent years, the system of higher education in Kazakhstan has been redesigned based on these key provisions. This has created a new paradigm of education: competence-based education [2]. In Kazakhstan’s system of education the term “competence” has appeared only recently but has not been applied widely.

For many decades, Kazakhstan’s education system was dominated by the Soviet education system

where the traditional approach was the old KAS approach. According to KAS, education in general can be reduced to three main dominant areas: knowledge, abilities and skills (KAS). This traditional approach in professional education is focused on the concept of “professional qualifications.” These professional qualifications show the level of formal education or readiness of the “trainee” regardless of the field of study. In other words, the graduate has demonstrated general professional knowledge and has a state certificate that confirms this. But this qualification does not guarantee the worker’s ability to change his quantitative and qualitative characteristics to meet the changing professional demands [3]. In our dynamic world, this old system is insufficient, because the main requirements to graduate are the “ability to be competitive, [and] to have professional and personal competencies” [2].

The competence-based approach differs from the KAS approach. Serikov (2003) and Prilepina (2008) describe the competence-based approach as one that reorients the traditional educational paradigm with the preferred translation of ready knowledge and skills to create the conditions for a university student to master complex skills and abilities. They are described as readiness to independence, responsibility, productive activity, flexibility and ambiguity in solving personal and professional problems in the modern informational age [4,2].

However, the education system in Kazakhstan has no single clear definition of the competence-based approach. To examine the extent to which the competence-based approach has been implemented, we have chosen the mixed methods research approach. Mixed methods research approach allows the researcher to better understand complex issues and develop a more complete understanding of the topic. Mixed methods research involves the collection and analysis of both quantitative and qualitative data and its integration [5].

The purpose of this article is to examine the extent to which the competence-based approach has been implemented in the education system of Kazakhstan in terms of mixed methods research approach.

Teaching is defined as a special kind of social activity focused on transferring the accumulated knowledge, culture and experience of mankind from the older generation to the younger generation enabling their personal development and preparation for the implementation of certain social roles

in society [6]. In modern times, teaching in higher education is presented as a multi-faceted and multi-dimensional reality. Today's educators are expected to create a dynamic environment where the students can explore, create, and understand new ways of thinking and learning. Such high requirements, so needed by society, can only come from highly trained, competitive specialists. Therefore, highly skilled teachers are one of the most important investments for any country.

Teaching is an activity focused on managing the cognitive activity of the student, in which there is a transfer of information, training and learning activity and stimulation of cognitive interest.

The educational process in higher education is complex and has its own features because of the convergence of scientific and educational process. Teachers often have to be an active researcher in their field of specialization. Important principles in higher education focus on all-round development of the future specialist, information and technical support of the educational process, and continuous improvement of higher education in accordance with current and projected trends in science [7].

Currently, the professional culture of university teachers is determined by knowledge of modern trends, policies, technologies, higher education and their application in the practice [7]. Therefore, the identity of the teacher plays a big role in his professional work. The style and effectiveness of the teacher depends on the teacher's self-evaluation of their professional practice i.e., their identity. Of particular significance in the teacher's professional character are dominant features such as social activity, a willingness to work with students, self-control, the ability not to get lost in critical situations, honesty, knowledge and pedagogical practice [7].

Teaching competencies based on the competencies knowledge rating scale has been shown to be highly reliable (Cronbach alphas indices  $> .90$ ) and valid in revealing differences among groups of professional teachers [8,9].

The well-known British expert in the field of education development, Alan Mortiboys (2011), argued that teaching activity consists of two main elements: subject knowledge and teaching methods [10]. He explained that the process of teaching activity has a third critical component without which the process loses its integrity and effectiveness. This component is called "emotional intelligence" (EI). In his view, emotional intelligence is that very im-

portant ingredient that makes the process of teaching highly effective. Numerous studies demonstrate that the application of emotional intelligence in the educational and teaching processes allows the teacher to effectively develop their skills, abilities, competencies, and promote the application of the most appropriate strategy [11,12,13,14,15].

Emotional Intelligence as a term first time appeared in the works of Mayer and Salovey [16]. They defined emotional intelligence as "the ability to monitor one's own and others' feelings and emotions to discriminate among them and use this information to guide one's thinking and actions" [16].

Goleman (1998) developed this idea and introduced the model of emotional intelligence focused on the workplace [17]. His approach is closely related to productivity and personal successfulness on the workplace. Bar-On (1997) presented his test on emotional intelligence. Emotional Intelligence appears in it as a trait, but not as an ability or competence [18].

Currently, there are three models of emotional intelligence:

- Ability model (Mayer, 1990).
- Mixed model (Goleman, 1998).
- Trait model (Bar-On, 1997).

We follow the understanding of emotional intelligence as the ability to identify, access [and understand] the emotions of oneself and of other people to build more effective communications and relations.

In our view, a mixed methods research is the most appropriate way to study the issue of the relationship between the teaching competencies and emotional intelligence. Mixed methods research involves the collection and analysis of both quantitative and qualitative data and its integration. Instead of using traditional quantitative techniques in education, using mixed methods research is more powerful. It can be considered a distinct methodology apart from traditional intervention studies, or case studies or ethnographies [5,19,20]. It's known that both quantitative and qualitative research studies are very important and actual. Quantitative research is a type of research in which the researcher studies a problem that calls for an explanation; decides what to study; asks specific, narrow questions; collects quantifiable data from participants; analyzes these numbers using statistics; and conducts the inquiry in an unbiased, objective manner. In quantitative research, the data collection tends to gather quantifiable (numeric)

data collecting information from a large number of individuals. The interpretation in such studies tends to consist of comparing results with prior predictions and past research [5]. Qualitative research is a type of research in which the researcher studies a problem that calls for an exploration; relies on the views of participants; asks broad, general questions; collects data consisting largely of words (or text) from participants; describes and analyzes these words for themes; and conducts the inquiry in a subjective and reflexive manner. In qualitative research, data analysis tends to consist of text analysis, involve developing description and themes. In qualitative studies interpretation tends to consist of stating the larger meaning of and personal reflections about the findings [5]. The combination of quantitative data (Emotional Intelligence and Teaching Competencies measurements) and qualitative data (Emotional Intelligence and Teaching Competencies qualities, descrip-

tions) provide a better understanding of a research question. Previously, mixed methods research approach was not used in Kazakhstan psychology. The closest idea to the mixed methods research in Kazakhstan and Post-Soviet Psychology is the systemic approach [21,22,23,24]. The most appropriate design for this type of study is going to be the embedded mixed methods design. The embedded mixed methods design is a set of procedures for collecting one type of data (quantitative or qualitative) within a larger study that is guided by the other method (qualitative or quantitative), having the secondary dataset address a different question than the primary dataset, and using the secondary dataset to augment the implementation and/or interpretation of the primary method [5]. The embedded mixed methods design will allow us to enhance the traditional conducting of study and help to make systemic and deep interpretations and conclusions, see Fig.1.

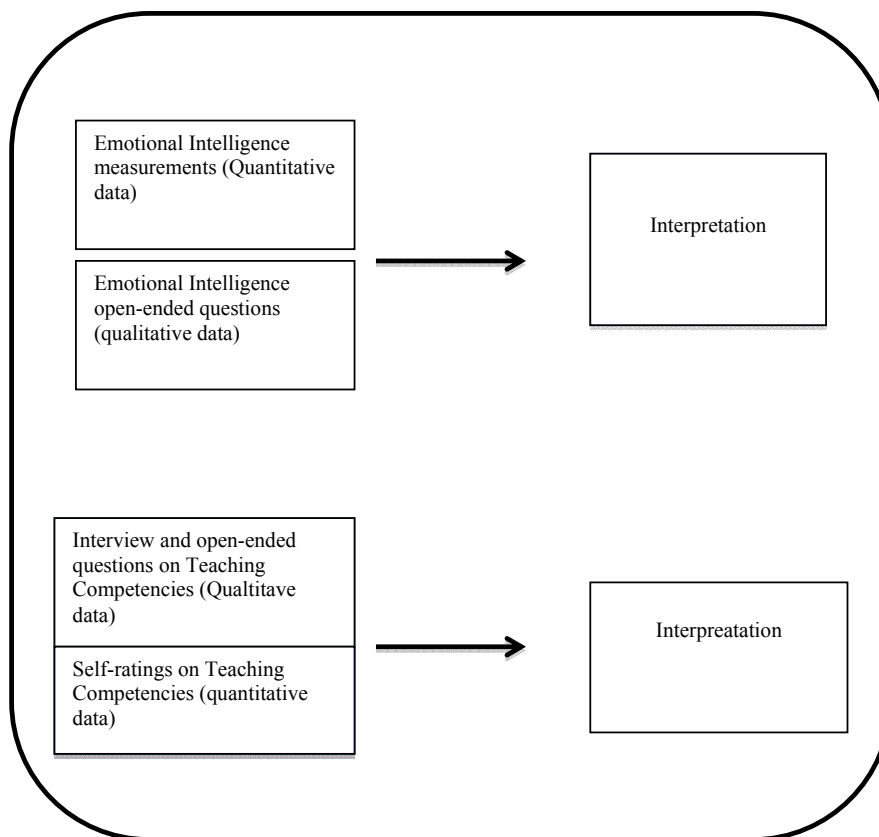


Fig.1. The embedded mixed methods design on emotional intelligence and teaching competencies study

This theoretical paper outlines the design of the study. We are using the embedded mixed methods design to explore to what extent the emotional intelligence subscales are correlated with the teaching competencies.

Historically, Kazakhstan psychology studies were not deep enough to examine the relationship of emotional intelligence and teaching in higher education through the lens of the competence-based approach. Modern innovative development requires integrative and collaborative approach to higher education. In

the western educational system, active use of emotional intelligence and other components contribute to the development of professional and pedagogical qualities, competencies, teacher - training, and improve the system as a whole. Today, in Kazakhstan psychology there is virtually no scientific work that explores the relationship of emotional intelligence, competence and teaching strategies. This study will be the first theoretical study in Kazakhstan psychology which uses the both mixed methods research approach and the systemic approach.

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