



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

**ScienceDirect**

Energy Procedia 128 (2017) 406–410

Energy

**Procedia**

[www.elsevier.com/locate/procedia](http://www.elsevier.com/locate/procedia)

International Scientific Conference “Environmental and Climate Technologies”, CONECT 2017,  
10–12 May 2017, Riga, Latvia

## Challenges of securing the human resources for implementation of industry innovative projects in Kazakhstan

Larissa Bozhko\*, Abdrakhman Naizabekov

*Rudny Industrial Institute, 50 let Oktyabrya Street, 38 Rudny 111500, Kazakhstan*

---

### Abstract

The aim of this paper is to identify problematic issues and develop proposals for improving the personnel training system for execution of the projects of the State Program for Industrial and Innovative Development of the Republic of Kazakhstan for 2015–2019. The research is based on the use of methods and techniques of logical, systemic, structural and functional and comparative analysis. In response to performed operations, proposals to improve the system of training for technical personnel were made. A set of tools providing a targeted choice of management decisions and management methods aimed at improving the efficiency of personnel training for enterprises in the real sector of the economy is proposed.

© 2017 The Authors. Published by Elsevier Ltd.

Peer review statement - Peer-review under responsibility of the scientific committee of the International Scientific Conference “Environmental and Climate Technologies”.

*Keywords:* management; system; industrialization; personnel training; education; partnership; basic universities and colleges

---

### 1. Introduction

In 2003, the Republic of Kazakhstan embraced the Strategy of Industrial and Innovative Development of the Republic of Kazakhstan for 2003–2015, which was a systemic document forming the integral and comprehensive economic policy of the state for the period up to 2015 and setting specific directions for industrial and innovative development [1].

---

\* Corresponding author.

*E-mail address:* [bogkoll@rii.kz](mailto:bogkoll@rii.kz)

The State Program on Forced Industrial and Innovative Development for 2010–2014 aimed at ensuring a stable and balanced growth of the economy through the diversification and increase of its competitiveness was adopted in the Republic of Kazakhstan in 2014 [2].

In 2015, the State Program for Industrial and Innovative Development of the Republic of Kazakhstan for 2015–2019 was adopted. The aim of the second stage of industrialization is to encourage the diversification and increase the competitiveness of manufacturing industry [3].

An effective implementation of the State Program for Industrial and Innovative Development for 2015–2019 is possible only if its breakthrough projects are provided with competitive personnel in the field of engineering and technologies.

It could not be denied that advanced training of specialists is a priority area for the country's education. But at the same time, it is necessary to note many problems related to the training of engineering and technical personnel:

- The corporate governance model is not fully implemented in the activities of Kazakhstan universities, there is no effective model of systemic relations with the business environment;
- There is a critical need to update the educational and laboratory base of higher educational institutions performing the training of technical personnel;
- An innovative infrastructure is underdeveloped that does not allow to carry out the commercialization of the results of scientific and technical activities of teachers and university students of higher educational institutions effectively.

The topicality of staffing issues of the projects of the State Program for Industrial and Innovative Development of the Republic of Kazakhstan is driven by the need to improve existing approaches to personnel training in the current educational system of the country.

## 2. Research methodology

Now authors can state with certainty that the training of engineering and technical personnel and science as specialized fields of activity lose their efficiency and become less competitive without mutual integration and close interaction among themselves, as well as with the real sector of the economy.

Specialists in the educational environment believe that improving the system of personnel training will remove many problem issues in the education system, industrial sustainability and nature protection [4–7].

The issue of modernization of the system of training personnel in higher education institutions remains a matter of considerable debate in foreign studies. There are several opinions on this issue. One of them denies the possibility of transferring the principles and methods of functioning and management, contained in the corporate world, to the training system. The representatives of the other direction recognize that modern higher education is de facto a subject of market relations and cannot fail to adopt the rules of the game and market laws [8–10].

The implementation of novel approaches to personnel training, business partnerships and education are reflected in the research of Russian scientists, such as E. O. Solomatina, M. Kudinova, Y. M. Mirkin [11–13].

It should be noted that studies of the problems of personnel training in the Republic of Kazakhstan are not numerous and mostly belong to the representatives of universities positioning themselves as experts in the field of education [12, 13].

Currently, Kazakh scientists pay more attention to the study of practical experience of foreign universities [14–16].

System analysis of scientific literature, periodicals, legislative acts in the field of personnel training made it possible to formulate the following contradictions between the necessity to improve the training system and fragmentation, the sporadic nature of its scientific and methodological support; the requirement of rationale for partnership development in relation to the country's educational institutions [17].

The aim of the present study is the issue spotting and proposal generation on the development of personnel training system to implement the State Program for Industrial and Innovative Development of the Republic of Kazakhstan for 2015–2019.

The key objective of the study touches upon the basics of developing a personnel training mechanism, considering the specifics of the sixth technology revolution, which is developing faster than the previous ones. The specific nature

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات