

# DEVELOPMENT OF PROFESSIONAL COMPETENCE OF MINING EXECUTIVES ACCORDING TO THE CONCEPT OF THE LEARNING ORGANISATION

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**Introduction/background:** The paper analyses the practical application of the learning organisation concept in the Polish mining industry - on the example of Polska Grupa Gornicza S.A.

**Aim of the paper:** The aim of the paper is to identify measures towards the development of the professional competence of mining executives, in line with the concept of the learning organisation.

**Materials and methods:** Case study on the example of Polska Grupa Gornicza S.A., desk research.

**Results and conclusions:** The paper contains a model developed by the author for the development of the competencies of mining executives according to the concept of a learning organisation, which includes a series of four-stage activities that take into account a comprehensive approach to the development of the personnel potential of managers in the mining industry.

**Keywords:** learning organisation, executives, competences.

## 1. Introduction

The 21st century is characterised by fast-moving technological, cultural, social changes. Companies have to cope with many problems: the conditions in which they operate are changing rapidly, competition is growing, and customer tastes are changing. All this forces constant change within organisations, which, in order to survive, must constantly adapt to the changing reality, and often even anticipate these changes. Therefore, the success of an organisation depends to a large extent on the ability to create a dynamic organisation, capable of adapting to constantly changing market conditions. Such an organisation should be flexible, creative, able to acquire, collect and put into practice knowledge. The achievement of such proficiency is primarily determined by competence, which is the result of innovation, learning and the accumulation and sharing of knowledge by all employees of the company. This means

that managers will also have to devote more and more time to improving their competences. This is because they are responsible for shaping role models, organisational change and learning new ways of doing things. They are also responsible for initiating and promoting knowledge management solutions within the company.

The paper analyses the practical application of the assumptions of the learning organisation concept in the Polish mining industry - on the example of Polska Grupa Gornicza S.A. The paper also contains a model developed by the author for the development of the competencies of mining executives according to the concept of a learning organisation, which includes a series of four-stage activities taking into account a comprehensive approach to the development of the HR potential of managers in the mining industry.

## **2. The essence of the learning organisation concept**

The concept of organisation and management called the 'learning organisation' took shape in the 1990s. The process of transformation of enterprises towards a learning organisation takes place when they undertake actions that adapt to new environmental conditions, which are characterised by an increase in the level of competence and requirements of employees, changes in technology or the need to achieve an optimal organisational and management model (Mikula, 2001, p. 28). The learning organisation is characterised by a new image of internal organisation and new processes to achieve the desired goals.

In such an organisation, the following assumptions are made (Lasseey, 1998, p. 2):

- future of the organisation depends on all its participants,
- individuals can learn in different ways,
- employees are encouraged to learn, innovate and contribute to the future of the organisation,
- conditions are created for the development of employees.

A learning organisation is an organisation that continuously expands its possibilities to create its own future. In a learning organisation, learning adaptation techniques must be linked to learning to find new solutions, learning to expand our creative capabilities (Senge, 1998, p. 26).

A learning organisation can be defined as one whose every member is engaged in identifying and solving problems, ensuring that it grows, learns and achieves its goals based on continuous experimentation, change and improvement. Such an organisation is oriented not towards achieving high performance in the traditional sense (as improving economic parameters) but towards solving problems (Rokita, 2003, p. 113).

According to P. Senge (Senge, 2012), a learning organisation is one that is able to continuously strengthen its capacity to shape its own future. According to this concept, a learning organisation is a place where people continually develop their capacity to achieve the goals they are genuinely striving towards. Involving all employees in the process of improving the organisation ensures that the organisation develops authentically. In this situation, change is natural, there is no resistance to it and often the employees themselves are the originators of change.

In a learning organisation, the effectiveness of the management subsystems that comprise knowledge management, competence and talent management, change management, quality management and information and communication management, which combine the above elements into a coherent whole, are at the forefront of the analysis. An important role in a learning organisation is played by managers, whose task is to create conditions for acquiring and sharing knowledge within the enterprise and to integrate the above management subsystems into a coherent whole. These subsystems have common areas of influence in which processes, mainly of an informational nature, operate. In view of the above, managers should treat the management system of a learning organisation as a whole, and consider information and communication management as a management subsystem integrating all its elements.

In summary, it can be said that the learning enterprise attributes a major role to the management and culture of the organisation (Dworzecki, 2000, p. 312), and its characteristic feature is the acceptance of change as a permanent phenomenon, conditioning the development of the enterprise.

### **3. The concept of a learning organisation in Polska Grupa Górnicza**

Polska Grupa Górnicza (PGG) is the largest mining company in Europe and the largest hard coal producer in the European Union (Wikipedia, 2023), currently employing over 36,000 people (Kacprzak, 2022).

In Polska Grupa Górnicza, the 2018 the 'Learning Organisation' programme was launched - the first formalised undertaking of its kind in the mining industry in Poland (My Zawodowcy, 2023). As part of this initiative, the company is involved in a number of projects to develop new technical as well as organisational solutions and to continuously improve its workforce. PGG wants to be an organisation that constantly adapts to the changing conditions (economic, market, natural) on which the company's operations depend (NetTG, 2022).

A team of 33 engineers is responsible for the 'Learning Organisation' programme at PGG, which is supported by other company employees and by the Department of Information Technology and Telecommunications. Partners in this initiative are Towarzystwo Ubezpieczeń Wzajemnych Polski Zakład Ubezpieczeń Wzajemnych and PZU LAB (GIPH, 2023).

"Learning organisation" is the name of the concept for the development of Polska Grupa Gornicza S.A., starting with technological development, including innovation while taking into account the development of employees' professional competence. Given the rapid changes in the Company's operating conditions, it is necessary to constantly strive for excellence and adapt to these changes through (Akademia PGG, 2023):

- ensuring continuous improvement of participants, i.e. that they acquire new skills and action patterns,
- looking for new opportunities to achieve the desired results,
- creation, acquisition and transfer of knowledge,
- modifying behaviour in response to new situations.

In order to realise the aforementioned objectives, it is necessary to continuously improve the competencies of the employees of Polska Grupa Gornicza S.A. through the use of various forms to use the experience of all employees of the organisation to create new knowledge and educate (PGG Academy, 2023):

- experiential learning,
- self-education,
- learning from external entities,
- teaching future staff,
- learning by studying,
- learning with and from others,
- learning from the environment.

As a modern company, Polska Grupa Gornicza wants to be an organisation that constantly adapts to changing economic, market and natural conditions. Its basic premise is to develop and improve the company's operations and to have suitably qualified employees.

#### **4. Competence development of mining managers according to the concept of the learning organisation**

The directions of change at Polska Grupa Gornicza S.A. that have been set require continuous improvement of executives have been developed and a decision has been taken to build a competency model, in the first instance for key managerial positions.

In modern companies, the competence model is one of the basic tools in the human capital management process. The competency model developed and implemented is a set of competences for the company, allowing it to achieve its goals and tasks. In addition, it constitutes a basic instrument for managing personnel processes for managers, from internal recruitment to the shaping of career paths and training.

The decision to build a competency model by in-house specialists provides the opportunity to prepare tools to determine the level of competences of employees adapted to the specifics of the mining industry. Necessary for this activity was the creation of an internal base of assessors, prepared to conduct competence diagnosis sessions. Ultimately, competency testing in the form of workshops and tasks, using a variety of tools, questionnaire surveys and competency interviews, will guide the entire process to identify reserve personnel for key management positions (Akademia PGG, 2023).

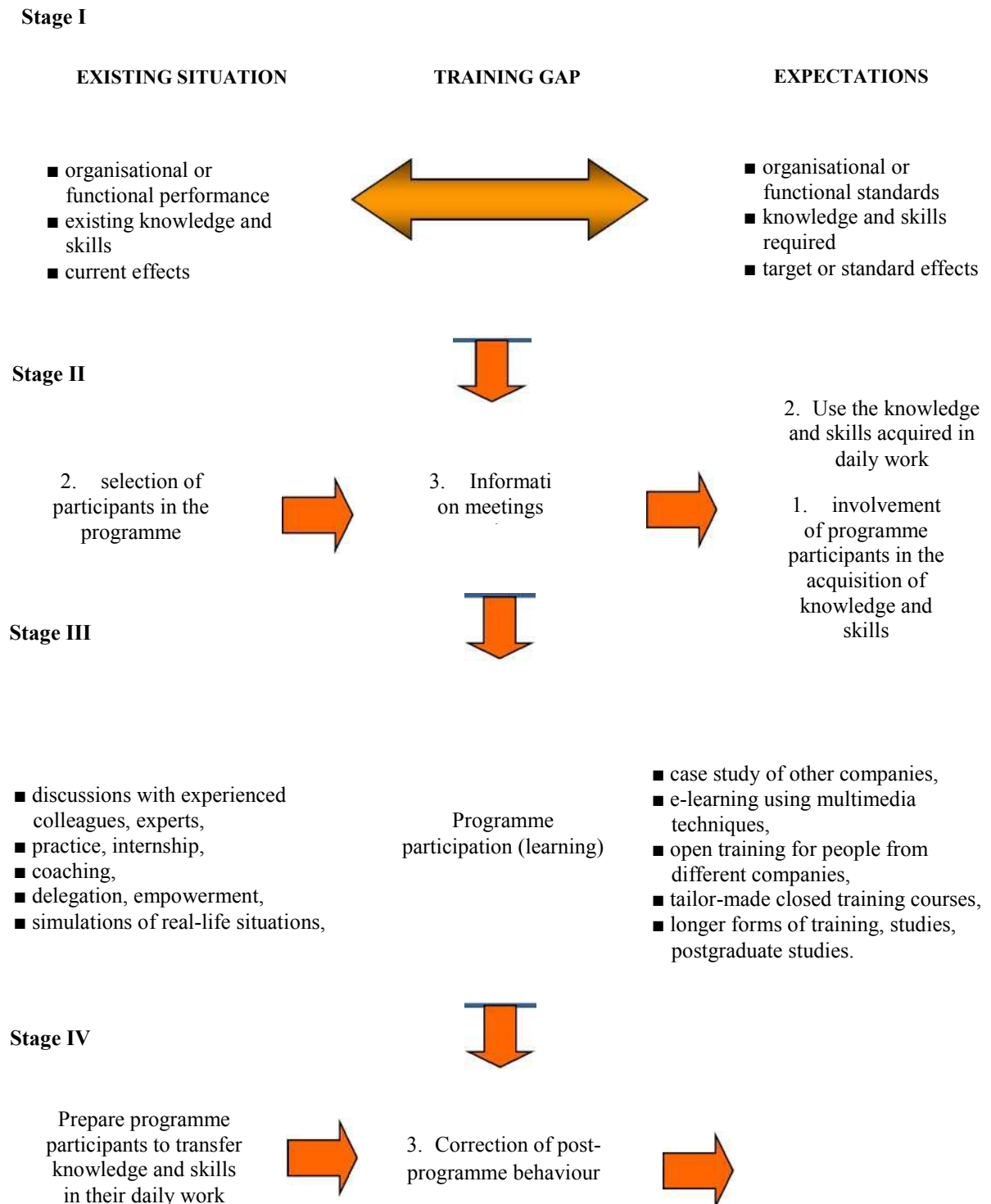
Taking into account the comprehensive approach to the development of the human resource potential of mining managers and long-term development plans, the author proposes the measures included in the model for the development of the competencies of mining managers according to the concept of the learning organisation, shown in Figure 1.

In order to identify development needs, it is necessary to analyse the existing state of competences and to define the target state, i.e. to examine what competences managers should have after completing the training. It is important to establish a hierarchy of competences and to draw up a financial plan. Training objectives should be clear for both trainers and trainees, achievable and easy to measure.

A strategic diagnosis of the company makes it possible to identify a competence gap in the area of human resources and to select actions concerning the elimination of this gap through specific options for the development of managers' competences.

A training needs analysis should be carried out on an ongoing basis. It is a necessary activity that leads to the identification of the difference between the existing situation and the situation that should exist in the company in terms of the knowledge and skills of the employees.

Competence development plans for a company's employees are created on the basis of a comparison between model competences and existing competences in that company, which are then translated into training programmes. Decisions taken in this area depend, among other things, on what kind of competences the employees lack, i.e. whether these are competences that can be easily replaced (by carrying out a selection process) and/or whether they can be easily developed. It is therefore necessary to assess the potential of the employees on a regular basis, together with communicating the results of the assessment to the employees.



**Figure 1.** Competence development model for mining executives according to the learning organisation concept.

Source: Own study.

The objectives of projects directed at the development of human capital competencies are defined by (Rae, 2001):

- what learners should know, what they should be able to do or what attitude they should have at the end of the programme, i.e. what change should occur and what the difference between the initial and final state (outcomes) should be,
- how participants can demonstrate their acquired knowledge (conditions),
- standards that employees must meet in order to validate their new competences,
- time required to achieve these objectives (conditions).

In the essential part of the model for the development of competencies of mining executives according to the concept of a learning organisation (stage III), the author proposes the use of methods for the development of managers' competencies that are important in the process of transforming an enterprise into an intelligent organisation (Dźwigoł-Barosz, 2007, p. 94). The use of the above methods is justified by the fact that an intelligent organisation, like a learning organisation, is based on knowledge management.

An extremely important role in the whole training project is played by the supervisors of the trainees. Supervisors should understand the impact of their behaviour on the effects of the development projects implemented in the company, what benefits their involvement can bring to the organisation at each stage of the development of these projects, and what losses their lack of involvement brings to the company. At the same time, it is worth making them systematically aware of the size of the training investment, reminding them that the total cost of training is the sum of the costs: salaries of trainers, travel of participants to the training, accommodation, food, salaries paid to participants for the duration of the training, and the cost of lost benefits related to the non-performance of work by those participating in the training (Sosińska, 2007, p. 94).

## 5. Conclusions

The business environment in which Polish enterprises operate, including those in the mining industry, necessitates the implementation of management concepts that increase the competitiveness of enterprises. This possibility is provided by a learning organisation, which adapts to changes in its environment faster than other enterprises.

Through the introduction of new solutions and projects such as the learning organisation, it is possible to provide companies with managers with the right competence potential. In order to achieve key organisational goals, companies need to manage competences, especially of managers, in a modern way. This raises expectations and increasingly high requirements for managers.

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