

# Aspects of managing intercultural differences and language barriers in work teams in industrial companies

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#### Introduction

Globalisation and the openness of labour markets have brought not only diversity to industrial enterprises, but also the need to adapt to the new conditions that this diversity creates. Companies are increasingly faced with challenges such as language barriers, cultural differences and different working practices. These factors affect the effectiveness of teamwork, the quality of communication and the overall productivity of work teams. Especially for young employees with different cultural and linguistic backgrounds, adaptation to the corporate environment can be a major challenge.

The topic of intercultural differences is therefore crucial not only for ensuring the smooth running of company processes, but also for promoting inclusion and diversity, which are increasingly perceived as strategic goals of modern businesses. The project "Young people in the company - concept maps in intercultural work teams" brought an innovative approach to managing these challenges. The tools developed, such as concept maps and e-learning courses, have supported the integration of young foreigners, improved orientation in the work environment and contributed to the development of a multicultural working environment.

With the trend towards significant changes in the composition of work teams, which are increasingly becoming multicultural, come not only opportunities but also challenges related to overcoming language barriers and cultural differences. This article explores effective strategies, tools and practices to help managing the aspects of overcoming language barriers and cultural differences.



The aim of this article is to analyse the different aspects of managing intercultural differences and language barriers, to evaluate the contribution of the tools developed within the project and to provide recommendations for further practice. We focus on key areas such as the importance of diversity, dealing with language barriers, strategies for bridging cultural differences and the implementation of innovative educational tools.

# 1 The importance of a multicultural environment in industrial enterprises

## 1.1 The benefits of diversity

Multicultural teams bring different perspectives, creativity and a broader spectrum of problem solving. However, diversity requires effective management and adaptation of organizational strategies. Diversity in the workplace is increasingly perceived as a key advantage that gives companies a competitive edge. Diverse teams offer a wider range of perspectives, innovation and creative solutions. Employees from different cultural backgrounds bring new ways of thinking that can significantly enrich company processes. Diversity also promotes the adaptability of teams to rapidly changing market demands, which is particularly crucial in industries where innovation often determines competitiveness.

An example from the project is the area of quality management, where diversified work teams were able to bring new approaches to assessing standards and identifying problems. Employees with different cultural backgrounds approach quality analysis from different perspectives, leading to better quality management results and reduced error rates. Diversity is not limited to the professional level, however - it also contributes to an improved company culture, where a multicultural environment promotes openness, respect and interpersonal collaboration.

## 1.2 Diversity challenges

Despite the benefits of diversity, businesses face a number of challenges. The main challenges include language barriers, different working practices and cultural expectations. Without adequate support, these factors can lead to misunderstandings and reduced productivity.

Language barriers, cultural misunderstandings and different working practices can cause conflict or inefficiency. For example, in logistics, where fast and accurate communication is required, language barriers can lead to delivery errors or misunderstanding of instructions.



Another significant challenge is the adaptation of foreigners to the company culture and work environment. Young people with a different mother tongue often face feelings of isolation or insecurity, which can affect their work performance and motivation.

The project "Youth Work - Cconcept Maps in Intercultural Work Teams" identified these challenges and offered practical solutions through concept maps and e-learning courses to bridge language and cultural differences in an effective and accessible way.

## 2 Language barriers and their impact on the working environment

#### 2.1 Characteristics of language barriers

In industrial companies, language barriers limit effective communication, which can lead to increased error rates and loss of employee motivation.

Language barriers are one of the biggest obstacles to the integration of young foreigners into work teams in industrial enterprises. These barriers not only slow down the adaptation of new employees, but can also affect the effectiveness of teamwork, cause communication errors and lead to a loss of trust between employees and management.

Employees with limited knowledge of the language used to communicate in a company often find it difficult to understand work instructions, quality standards or safety rules. Moreover, in industrial processes such as production management or logistics, accuracy and speed of communication are crucial. For example, language barriers can lead to misinterpretation of instructions, which has a direct impact on productivity and safety.

The project "Youth Work - Cconcept Maps in Intercultural Work Teams" brought a solution in the form of concept maps that help to identify key terms and processes. Translated into 4 languages, these maps have become a tool that enables new employees of 4 different nationalities to quickly grasp basic work concepts regardless of their language skills.

#### 2.2 Addressing language barriers in practice

Currently, digital tools such as translation apps and chat platforms with integrated translations are mainly used to remove language barriers in practice. These technologies are used to instantly remove language barriers, contributing to faster employee adaptation and improved teamwork. A new trend for the future is the use of artificial intelligence in the form of text and voice generators and virtual assistants.



The project designed an innovative tool for removing language barriers, the Industrial Process Concept Maps, which contained the 50 most important technical terms for each of the key industrial sectors such as quality management, production management, HR, logistics, plastics, mechanical engineering, electrical engineering and information technology. The maps were not only translated into 4 languages, but also graphically designed to be intuitive and easy to use even for employees with minimal language skills.

Another innovative tool was e-learning courses that combined interactive practice of concepts and practical examples. These courses were developed in cooperation with Slovak partners and are available online on the web and in the e-learning course, which allows their use not only directly at the workplaces of companies, but also in schools during career counselling, or at employment offices and other institutions working with young foreigners, such as Centres for Integration of Foreigners.

The result of using concept maps in company practice and the corresponding e-learning courses is a significant improvement in the ability of employees to communicate and perform their tasks effectively. Employees who had language support through concept maps and e-learning courses showed higher levels of self-confidence and job satisfaction. This not only leads to better job performance but also increases their loyalty towards their employer.

The project "Youth Work - Cconcept Maps in Intercultural Work Teams" has shown that concept maps created in six languages (Czech, Slovak, English, German, French, Ukrainian) facilitate the adaptation of employees and improve understanding of work processes. These tools ensure that even workers with different mother tongues quickly grasp key concepts in the field.

## 3 Intercultural differences and their management

#### 3.1 Cultural differences in work teams

Cultural differences affect the way teams communicate, approach to problem solving, hierarchy and leadership style. In industrial enterprises, for example, employees from low individualistic cultures rely more on teamwork and management authority, while employees from individualistic cultures prefer autonomy and decision-making based on personal initiative. These differences can affect team dynamics, process efficiency and interpersonal relationships.



Cultural differences are often reflected in the approach to time and meeting deadlines. For example, employees from cultures that view time as a linear concept (e.g., Central and Western Europe) may expect strict adherence to schedules. Conversely, employees from cultures where the perception of time is more flexible (e.g. some Eastern cultures) may place more importance on interpersonal relationships than on strict deadline compliance. Without knowledge of these differences, misunderstandings and frustration can occur.

Thus, intercultural differences in work environments can be a source of innovation on the one hand, but also of conflict due to differences in values, communication and access to authority. Developing intercultural sensitivity and the ability to work in diverse environments is key to resolving them. The project "Youth Work - Cconcept Maps in Intercultural Work Teams" focused on overcoming these differences through educational tools that not only take into account language barriers but also cultural specificities. The concept maps were designed to help employees understand not only professional concepts but also the core values and expectations within the company culture.

#### 3.2 Tools to bridge cultural differences

One of the key tools used to bridge cultural gaps is interactive training on intercultural communication. These trainings combine theoretical information on cultural norms and values with practical exercises such as model situations and simulations of work problems. This enables employees to better understand how their colleagues perceive communication, leadership and work expectations.

On the basis of sharing good practices from industrial enterprises, mentoring is successfully used to overcome intercultural differences, especially among young employees, where more experienced employees act as guides for young foreigners in adapting to the new working environment. This approach not only enables new employees to integrate more quickly, but also strengthens team cohesion and develops empathy within the team.

Another tool used today to bridge intercultural differences is digital platforms that facilitate direct communication between employees from different cultures. These platforms include integrated translators, Al-powered text and voice generators and virtual assistants, allowing for instantaneous information exchange and helping to reduce tensions caused by cultural differences.



In our project "Youth Work - Cconcept Maps in Intercultural Work Teams" we focused on an innovative tool for creating concept maps of industrial processes in combination with digital support for e-learning courses. The combination of e-learning courses and printed conceptual maps contributes to better adaptation of young foreigners, especially Ukrainians, in industrial companies, which we tested in pilot courses. Concept maps support not only linguistic but also cultural orientation.

One specific example was the use of concept maps in electrical engineering. The maps included not only specific technical terms, but also concepts from the field of occupational safety. This approach helped eliminate misunderstandings in production management in the electrical industry and increased the effectiveness of teamwork and safety in the workplace. Based on feedback from participants in the online conference and pilot course, it was found that ideally, concept maps should already be used when training new employees. This will not only improve employees' orientation in the professional field, but also their sense of integration into the company culture.

## 4. Impact of the project on practice

#### 4.1 Implementation of concept maps

Concept maps created within our project "Young people in the company - concept maps in intercultural work teams" can find wide application as a tool for improving the adaptation of young foreigners not only in industrial companies, but also in other institutions working with young people with different mother tongues, for example in Centres for the Integration of Foreigners,

in schools in the teaching of citizenship education or career counselling, or in employment agencies and labour offices. Concept maps help to simplify the learning of basic terminology in industrial processes by visualising key concepts and narrowing down the selection of terms. In each selected area, the maps provide an overview of 50 concepts of the relevant technical terminology, enabling employees to acquire specialist language skills more quickly and thus prevent mistakes.

The maps were tailored to the specific needs of the companies and were created in six languages (Czech, Slovak, English, German, French and Ukrainian). The project thus enables industrial enterprises to use the concept maps as part of their training processes, which will facilitate the adaptation of young foreigners to multicultural working environments.



## 4.2 E-learning as a support for education

One of the key outputs of the project was interactive e-learning courses that combined concept maps with practical exercises. These courses were designed to encourage independent learning and allow staff to practice technical concepts at their own pace. The content of the courses covered the key industries for which the concept maps were developed and was tailored to the language needs of the users. The online courses developed within the project thus allowed for interactive practice of professional terminology.

One of the benefits of e-learning is its flexibility. Courses can be used both as part of training, as part of ongoing corporate training to deepen qualifications, but also as support in everyday work. However, it is important that companies work with expert partners to tailor these courses to their specific needs. This tool also allows companies to reduce training costs by digitizing content.

## 4.3 International cooperation and experience sharing

The cooperation between the Czech and Slovak project partners proved to be crucial for the transfer of know-how and ensuring high quality outputs. The Czech beneficiary focused on the content of the concept maps and their implementation in practice, while the Slovak partner contributed its experience with e-learning and training methodology.

This approach has enabled effective testing and optimization of outputs in different cultural and linguistic environments. The project results were shared through international conferences, contributing to the dissemination of good practice and inspiring other organisations to implement similar tools.

The "Youth in Business" project has shown that cooperation between national and international partners brings significant benefits. We therefore recommend continuing similar projects that bring together expertise and experience from different countries to create a comprehensive framework for promoting diversity and inclusion in the workplace.

#### 5. Recommendations for practice

The project has not only brought immediate improvements in the conditions for young foreigners in industrial enterprises, but also created the basis for further development of training tools and methodologies. The companies involved in the project plan to continue using the concept maps and e-learning courses and tailor them to their own needs. At the regional and international level,



the project has contributed to promoting diversity and inclusion of young foreigners in the multicultural environment of Czech and Slovak companies, which is essential for maintaining competitiveness in a globalised environment.

#### 5.1 Promoting a multicultural environment

Based on the experience of the project "Young People in the Company - Concept Maps", we recommend that industrial companies integrate tools to promote a multicultural environment as a standard part of their adaptation and training processes. Among the most effective tools are concept maps that can be adapted to the specific needs of individual companies. These maps should include not only technical terms but also cultural aspects such as working practices, hierarchies and communication norms.

We recommend the introduction of regular training sessions on intercultural communication, where employees will gain practical skills for effective collaboration in a diverse environment. Project experience has shown that the combination of concept maps and interactive training significantly improves the adaptation of new employees and promotes team cohesion.

Companies should integrate learning tools such as concept maps into their adaptation processes. Emphasis should be placed on language support and cross-cultural communication training.

## **5.2 The role of technology**

Modern technology plays a key role in overcoming language and cultural barriers. We recommend that businesses invest in digital tools such as e-learning platforms, translation apps and online communication tools. These technologies enable effective information sharing, improve the accessibility of learning materials and support personalised learning. In addition, artificial intelligence tools, text and voice generators and virtual assistants can be used to facilitate training and improve collaboration in multicultural teams.

The training courses developed within the project, which combine concept maps with practical translation tasks in Google forms, can serve as a model for further development of digital learning tools.



#### Conclusion

The project "Youth Work - Cconcept Maps in Intercultural Work Teams" brought innovative approaches to managing language barriers and cultural differences in industrial companies. Concept maps and e-learning courses have proven to be effective tools for supporting employees with different mother tongues. The results of the project have a long-term potential to contribute to the development of an inclusive work environment and to promote diversity in industries.

The concept maps and e-learning courses developed have significantly improved the integration of young foreigners and contributed to the development of multicultural teams in industrial companies. The project has highlighted the importance of diversity, inclusion and modern educational tools to promote the employability of young people. The long-term benefit of the project is its applicability in company practice and its inspirational potential for further initiatives in the field of education, career guidance and integration at European level.

Managing intercultural differences and language barriers is essential in today's globalised work environment to maintain productivity and promote diversity. The project "Youth Work - Cconcept Maps in Intercultural Work Teams" has shown that a combination of concept maps, e-learning courses and digital tools is an effective way to overcome these barriers.

He also stressed the need for intercultural sensitivity and a strategic approach to the integration of young foreigners. The implementation of these tools not only allows bridging linguistic differences, but also builds an inclusive work environment that promotes innovation, collaboration and sustainability in industrial enterprises.

Effective management of intercultural differences and language barriers in industrial teams is essential to maintain productivity, improve collaboration and promote diversity. A multicultural work environment brings benefits such as creativity and a wider range of ideas, but also challenges such as communication and different cultural values.

The key to success is to systematically support employees with training tools such as concept maps, e-learning courses and cross-cultural communication training. These tools not only help to overcome barriers, but also to develop understanding and strengthen team cohesion. Strategic diversity management thus contributes to creating an inclusive work environment that fosters innovation and sustainability in a global context.



Further information and recommendations for the use of concept maps and their adaptation to specific company needs can be found in the methodological guide "METHODOLOGY FOR THE USE AND CREATION OF CUSTOMIZED CONCEPT MAPS", which was created by the project partners and reflects current trends in the integration of young foreigners into multicultural work teams of industrial enterprises in the current globalized world.

#### Source:

LOVASOVÁ, Vladimíra, PEROUTKOVÁ, Pavla, ŠTEFKOVÁ, Soňa and POLÁKOVÁ Nikola. *Methodology for the use and creation of customized concept maps.* Plzeň, 2023. Created within the Erasmus+ project "Youth Work - Cconcept Maps in Intercultural Work Teams", reg. no. 2022-3-CZ01-KA210-YOU-000102278.

