



10. MODERN DIDACTIC METHODS USING IN EDUCATIONAL PROCESSES OF THE TRAINING OF LOGISTIC SPECIALIZATION

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Abstract: The logistics industry is one of the areas that has been developing very intensively in recent years. The expansion of logistic companies in the market determines the increase in the demand for specialized and highly qualified employees. This contributes to the increase of interest and increased emphasis on the quality and effectiveness of didactic processes dedicated to students of logistics majors. The authors in the article point to the need to teach not only program content but also key soft skills that should be stimulated and developed during educational processes. However, in order for these processes to be effective, it is necessary to create new educational models using modern didactic techniques. The aim of the article is to present examples of educational models which, through the selection of appropriate teaching methods, should increase the increase of key competences among graduates of logistics faculties.

Keywords: *didactic methods, transversal competences, logistics*

1. INTRODUCTION

Logistics outside the ICT industry is one of the most dynamically developing branches of the economy. Logistics companies must be characterized by high flexibility as well as the use of adaptive mechanisms. This is possible only when the organization has human resources whose attributes allow flexible organizational behavior. Therefore, soft, abstract and non-standard skills become increasingly important, which provide greater organizational flexibility. The progressing evolution of the economy has contributed to the increase in the demand for non-material resources of organizations, among which human resources are becoming more and more important. Consequently - the demand for highly qualified employees increases significantly, characterized not only by thorough theoretical preparation but also having the expected skills in the field of such competences as communication skills, creativity, entrepreneurship and team work. The abovementioned skills are treated as key cross-cutting competences, which are particularly important in the management of knowledge organizations. In the case of logistics companies, these competences acquire even greater significance, because the work of logistics often requires making uncertain, unstructured conditions quick, risky but also unambiguous decisions. In order to make these decisions appropriate, knowledge of legal conditions is also necessary - as the authors write in this article.

Among the most sought-after skills of modern employees of logistics departments, competencies such as entrepreneurship, creativity, communicativeness and teamwork skills occupy a special place. Therefore, at all stages of education and, above all, at universities, more and more emphasis is placed on improving teaching processes through the use of modern teaching methods that would stimulate and develop among students soft skills that fall into the group of key competences. The aim of the article is to present a fragment of research carried out as part of the project entitled "The acceleration method of development of transversal competences in the students' practical training process, implemented as part of financing with the Erasmus + program

The cited studies are conducted in several stages. The first stage concerned the identification and characterization of modern teaching techniques that are possible to implement as part of didactic processes at universities. In the next stage, didactic procedures were designed using the most adequate teaching techniques. Thus designed models of didactic procedures were implemented in the form of pilot studies in didactic processes, which were subject to monitoring and evaluation carried out by researchers. The above research procedures were carried out in 2015-2017 at selected universities in Slovakia, Slovenia and Poland. In total, over 2,000 students were subjected to the study.

The authors want to present selected models of didactic tools that have been created and implemented in didactic processes. The research procedure of this fragment of research was carried out at the University of Economics in Wrocław.

2. KEY MANAGERIAL COMPETENCIES

A contemporary manager should be characterized not only by education and experience in a specific field. Competences in the field of soft skills such as entrepreneurship, creativity, communicativeness and group work are very important. These competences are currently treated as key skills expected from candidates employed in the logistics area.

Entrepreneurship in literature has many definitions. The most frequently cited is the classic definition of Schumpeter, where entrepreneurship is an activity that involves the introduction of new combinations of production factors, new products and methods, on acquiring new markets and new sources of supply and on creating new, more effective organizational forms of business (Noga 2009). It is a team of knowledge and skills that allow you to adapt to changes, see new development opportunities and critically evaluate them, anticipate, plan, organize and create new, creative solutions, the ability to rationally take risks, implement ideas and consistently implement them (Postuła, Glinka, Pasieczny 2014). From a process perspective, entrepreneurship is treated as an organized process of deliberate and deliberately undertaken actions, the result of which is the creation and development of business entities (Dyduch 2008).

Entrepreneurship indicators:

- Ability to invoke and accept changes
- Ability to perceive and critically evaluate entrepreneurial opportunities
- Ability to plan creative solutions
- Ability to create new, creative solutions,
- The ability to rational risk taking
- Ability to translate ideas into specific activities

The second skill expected from graduates of logistics is creativity. Most often it is defined as a set of attributes of an employee concerning not only the intellect, but also the traits resulting from the personality as well as the internal strength of motivation (Nęcka 2000). According to another definition, the creative concept is characterized by a "human" capable of generating new / original and at the same time valuable in terms of cognitive, aesthetic, pragmatic or ethical solutions (nęcka 2003). Creativity is manifested in readiness and the ability to apply knowledge to solve new problems, create new ideas and find original solutions (Szczepańska-Woszczyzna 2014). Creativity is a team of knowledge and the ability to use creative

thinking techniques, create original and useful solutions to problems, develop new concepts or new relationships with existing ideas and concepts

Indicators of creativity:

- Ability to use creative thinking techniques,
- Ability to create original and useful solutions to problems,
- Ability to develop new concepts or new connections with existing ideas and concepts

Collaboration in a group is a team of knowledge and skills of mutual cooperation of group members based on activity and commitment to tasks and pursuit of a common goal, providing solutions to improve work and accepting responsibility for the group's task, allowing effective exchange of knowledge, experience, receiving feedback, joint problem solving and mutual support of employees during the implementation of tasks (Bielińska, Jakubczyńska 2016). The correct setting of operating principles guarantees high efficiency of the team in the work phase (Heerkens 2002). Much of the literature devoted to the use of bands deals with the effects they should bring, and not the way to organize, develop and maintain them. Meanwhile, inappropriate initiation is a frequent reason for companies failing to implement teamwork (Connor 1997).

Indicators of cooperation in the group

- Ability to be active and involved in tasks
- Ability to build a pleasant atmosphere and positive relationships
- Ability to solve conflicts in a group
- The ability to motivate others to act
- The ability to encourage others to achieve a common goal
- Ability to respect the group's norms and principles as well as opinions and ideas of others
- The ability to effectively communicate information

Communication is a team of knowledge and skills of reliable communication and reception of information and establishing and maintaining proper interpersonal relationships that are the basis of effective professional activities, clear and understandable expression and interpretation of concepts, thoughts, feelings, facts and opinions in speech and writing, reading non-verbal messages, listening and respecting the opinions of others, negotiating, public appearances and self-presentation (Taredajna 2014).

Communication indicators:

- Ability to reliably transmit and receive information
- Ability to establish and maintain proper interpersonal relationships
- Ability to clearly and intelligibly express and interpret concepts, thoughts, opinions, in speech and writing
- Ability to read non-verbal messages
- Ability to listen and respect others' opinions
- Negotiation capacity
- Ability to express and defend your own sentence

Ability to perform in public, self-presentation skills

The key competences identified above should be stimulated during the didactic processes, whose main task is to educate program content specific to graduates of logistics majors. In addition, a further important educational element should be thorough preparation in the area of legal regulations

3. MAIN LAW REGULATIONS IN LOGISTICS AREA - SELECTED ASPECTS.

Every branch of running a business must be legitimate. Logistic nowadays is the most expanding branch of marketplace. Obeying the law for the both parties within the limits of the legal relationship shall be the principal rule. Legal relationship concerns not only employees and employers as a part of the employment contract, but every agreement to be signed by the parties.

Nowadays the most popular legal relationship concerning employees is the employment contract or self-employment. Labour code regulations must provide the best protection of workers (employees). Employment conditions and workers' rights are essential. The regulation of the minimum wage as an implementing act is intended to protect the worker from exploitation. The minimum hourly rate for contract work has also been regulated.

All contractual relations concluded within the framework of logistics in the broad sense of the term shall be governed by the fundamental principles of contract law. When concluding a contract, the parties should be guided by the principle of freedom to shape the content of contracts - *Pacta sunt servanda*. Particular attention should be paid to the issue of possible encumbrance of the declarations of intent submitted by the parties with legal defects. The terms of the agreement are not only to define the mutual rights and obligations of the parties, but also to regulate possible disputes that may arise between the contracting parties.

The logistics branch to which the agreement will apply will determine the contractual provisions. The two most popular contracts used in logistics are the contract of carriage and the contract of forwarding. Their content is regulated in the Civil Code for forwarding contracts in art. 794 et seq. respectively, for transport contracts in art. 774 et seq.

Under the contract of carriage, the carrier must undertake, within the scope of his business, to carry passengers or goods for consideration. It is a service contract, the purpose of which is to bring people, goods or animals to their final destination, not the transport itself. It therefore creates a commitment of a results. When concluding the contract, the parties must specify the subject of transport, the route and the remuneration to be paid to the carrier. It is therefore a paid,

reciprocal, bilaterally binding agreement, at least unilaterally commercial (the carrier must be a businessman). It comes into effect when a consensual declaration of intent is made, so it is a consensual agreement. It can be concluded in any form.

The Civil Code contains different regulations depending on the object of carriage. A distinction is made between the transport of passengers and the transport of goods. Article 776 of the Civil Code provides that in the case of passenger transport, the carrier is obliged to provide travellers with safety and hygiene conditions and such comfort as are deemed necessary by the mode of transport. The Code also regulates the liability of the carrier for the luggage he carries with him. In such a case, the trader who has concluded the contract of carriage shall be liable for damage arising only if it is caused by his wilful misconduct or gross negligence. Otherwise, the liability for baggage entrusted to the carrier is regulated. In that case he shall be liable in accordance with the rules laid down for the carriage of goods for which reference shall be made in a separate Article. The legislator has laid down in Article 778 a limitation period for claims arising from a contract for the carriage of passengers. They may be enforced within one year from the date of performance of the carriage, and if the carriage has not been performed, the statutes of limitations shall expire one year from the date on which it was to be performed.

The Freight Forwarding Contract is a named contract, regulated in art. 794- 804 of the Civil Code, where the provisions of the Civil Code are of an auxiliary nature. Article 795 of the Civil Code - they apply only if this contract is not governed by separate provisions. Unless the provisions of the Civil Codes concerning forwarding or other special provisions provide otherwise, the provisions concerning the contract of order shall apply to the contract.

This agreement is linked to the development of trade and, in particular, to the transport of goods. In general, forwarding services are related to the transport of parcels, acting as an auxiliary service to it, with the aim of accelerating and facilitating the entire transport process.

The party interested in the carriage may use other services, taking into account the best method of cargo transfer, conclusion of a contract with the carrier, provision of appropriate packaging, transport to the final destination in accordance with the catalogue of transport services. Freight forwarding services are not considered to be an activity which is interdependent with the activity of transport itself.

It is sometimes the case that operators do not know whether the operations they carry out fall within the scope of transport operations or whether they fall within the scope of forwarding operations. The lack of such knowledge does not allow to determine the extent to which a given entity is responsible for the activities performed. There is quite a difference between a road haulier and a forwarder. A road transport operator may be considered to be an undertaking authorised to carry out economic activities in the field of road transport. The Freight Forwarder

is an entrepreneur whose purpose is to organize the transport of goods. In practice, the carrier carries cargo and the freight forwarder arranges the transport.

It is sometimes the case that operators do not know whether the operations they carry out fall within the scope of transport operations or whether they fall within the scope of forwarding operations.

4. MODERN METHODS OF EDUCATION

Currently, the processes and methods of education offered at universities have to meet the requirements of modern entrepreneurs. The modern labor market is looking for employees who are not only knowledgeable in a specific field but have very developed soft skills. Therefore, modern, interactive teaching methods that activate social skills are increasingly used.

In teaching processes, a number of teaching techniques may be used, which should be applied adequately to the expected learning outcomes. In the literature, one can meet the division of teaching techniques into groups depending on the intended didactic effects we want to achieve. Belong to them:

Problem-based methods - which are designed to develop critical thinking skills and rely on presenting the problem situation to the listeners and organizing their cognitive process using a variety of information sources, eg didactic films, numerical data, periodicals. The cognitive processes taking place at that time consist of analyzing, explaining, evaluating, comparing and inferring.

Activating methods whose task is to activate the participants of the teaching process to act and independently attempt to define and solve problems. It is a group of teaching methods that primarily increases the active participation of students in teaching activities, at the same time limiting the role of the lecturer to the moderator in achieving educational goals and evaluating progress.

Exposing methods (Bereźnicki 2001) that are supposed to increase the value of expression by enabling participants to experience more deeply certain values, crisis situations, empathize participants of the process.

Practical methods (Petty 2001) allow to develop skills of effective action, implementation of theory into practice and gaining new experiences in action

Table 10.1. Typology of didactic techniques

Group of methods	The name of didactic technique
Problem-based methods	<ul style="list-style-type: none"> - brainstorming, - observation, - panel discussion, - problem-base lecture - case study (Ziętkiewicz 2000).
Activating methods	<ul style="list-style-type: none"> - case study, - organizational drama,

	<ul style="list-style-type: none"> - coaching, - managerial training, - business stories, - six thinking by Edward de'Bono, itd (Rau 2000).
Exposing methods	<ul style="list-style-type: none"> - demonstration, - psychodrama, - simulation didactic games, itp.
Metody praktyczne	<ul style="list-style-type: none"> - subject classes - laboratory classes - production classes - project method - seminar - simulation

Source: own elaboration by: Chomiak-Orsa I.: Process tools to improve the quality of education in the creation of transversal competence [In:] The acceleration of development of transversal competences; ed. Więcek-Janka E., Sychała M., Szafranski M., Goliński M; Centria University of Applied Sciences 2017, p.102-121 The report concerning applied teaching methods of transversal skills and methods of practical trainings; Elaborated by Poznan University of Technology; Poznań 2016; Matrix – evaluation of some methods

The teaching techniques mentioned above can be combined into any teaching models, depending on what teaching effects we expect. In the case of stimulating and developing skills such as creativity and abstract thinking, process models should be created whose task should be to activate these skills in the listeners

5. PROPOSALS OF EDUCATIONAL MODELS

The effectiveness of using modern teaching methods can be increased by designing and implementing appropriate educational models. The task of such a model should be not only to stimulate key competences such as: creativity, entrepreneurship, communicativeness and teamwork, but also to strengthen and consolidate these skills. The article presents one of such models, which was tested among students at the University of Economics in Wrocław.

In order to increase the learning outcomes, in the area of teaching theoretical foundations as well as activating and stimulating key skills, hybrid models seem to be the best, which include both problem techniques and techniques from the group of activating or exposing methods. Four exemplary models of didactic processes that can be used to activate soft skills are presented below.

In the area of entrepreneurship, the model presented in Figure 1 has been proposed

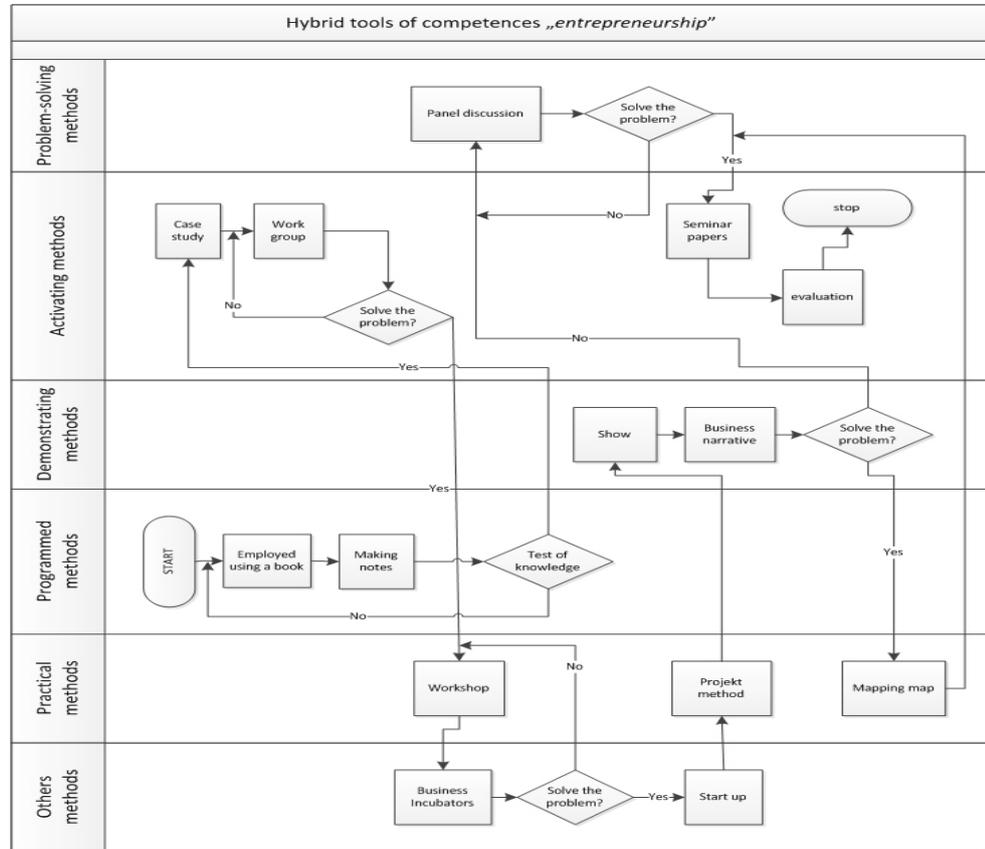


Fig 10.1. Hybrid model of competence “entrepreneurship” creation.

Source: Chomiak-Orsa I.: Process tools to improve the quality of education in the creation of transversal competence [In:] The acceleration of development of transversal competences; ed. Więcek-Janka E., Spychała M., Szafranski M., Goliński M; Centria University of Applied Sciences 2017, p.102-121 The report concerning applied teaching methods of transversal skills and methods of practical trainings; Elaborated by Poznan University of Technology; Poznań 2016; Matrix – evaluation of some methods

In the area of communication creation, the model presented in Figure 2 has been

proposed

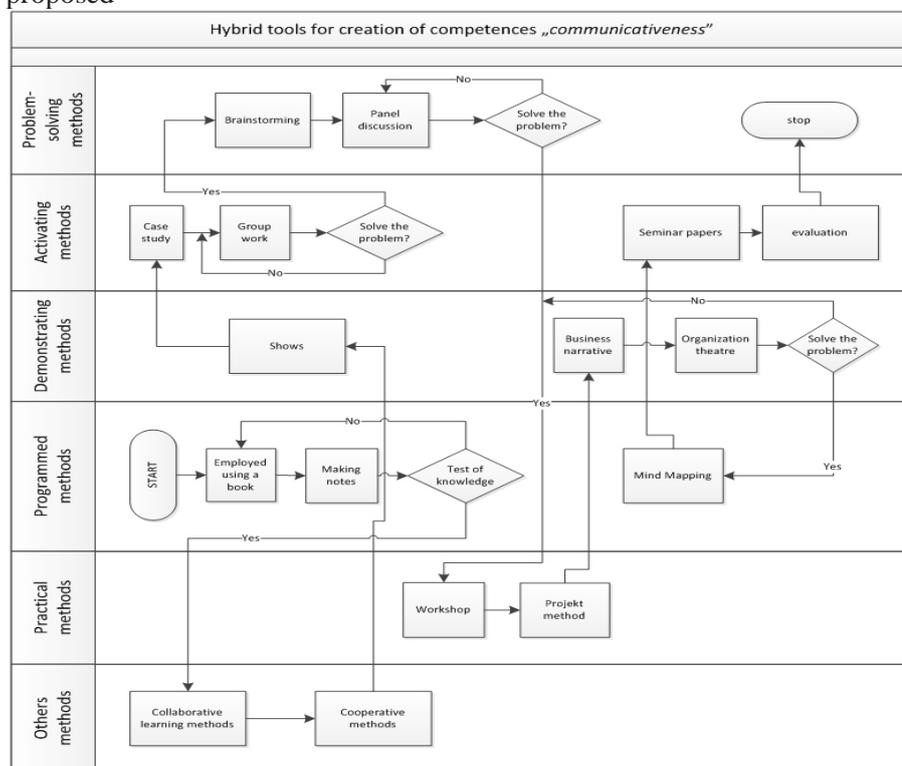


Fig 10.2. Hybrid model of competence “communicativeness” creation.

Source: Chomiak-Orsa I.: Process tools to improve the quality of education in the creation of transversal competence [In:] The acceleration of development of transversal competences; ed. Więcek-Janka E., Spychała M., Szafranski M., Goliński M; Centria University of Applied Sciences 2017, p.102-121 The report concerning applied teaching methods of transversal skills and methods of practical trainings; Elaborated by Poznan University of Technology; Poznań 2016; Matrix – evaluation of some methods.

In the area of stimulating and developing creativity, the model presented in Figure 3 was proposed

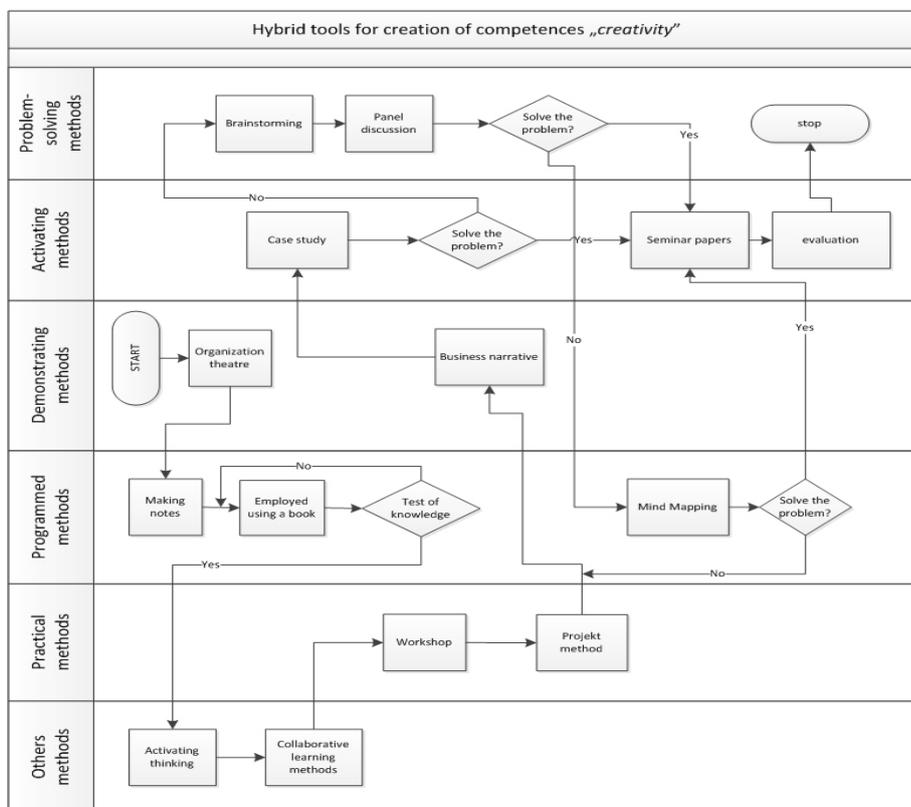


Fig. 10.3. Hybrid model of competence “creativity”.

Source: Chomiak-Orsa I.: Process tools to improve the quality of education in the creation of transversal competence [In:] The acceleration of development of transversal competences; ed. Więcek-Janka E., Spychała M., Szafranski M., Goliński M; Centria University of Applied Sciences 2017, p.102-121 The report concerning applied teaching methods of transversal skills and methods of practical trainings; Elaborated by Poznan University of Technology; Poznań 2016; Matrix – evaluation of some methods.

In the area of creating teamwork skills, the model presented in Figure 4 has been proposed

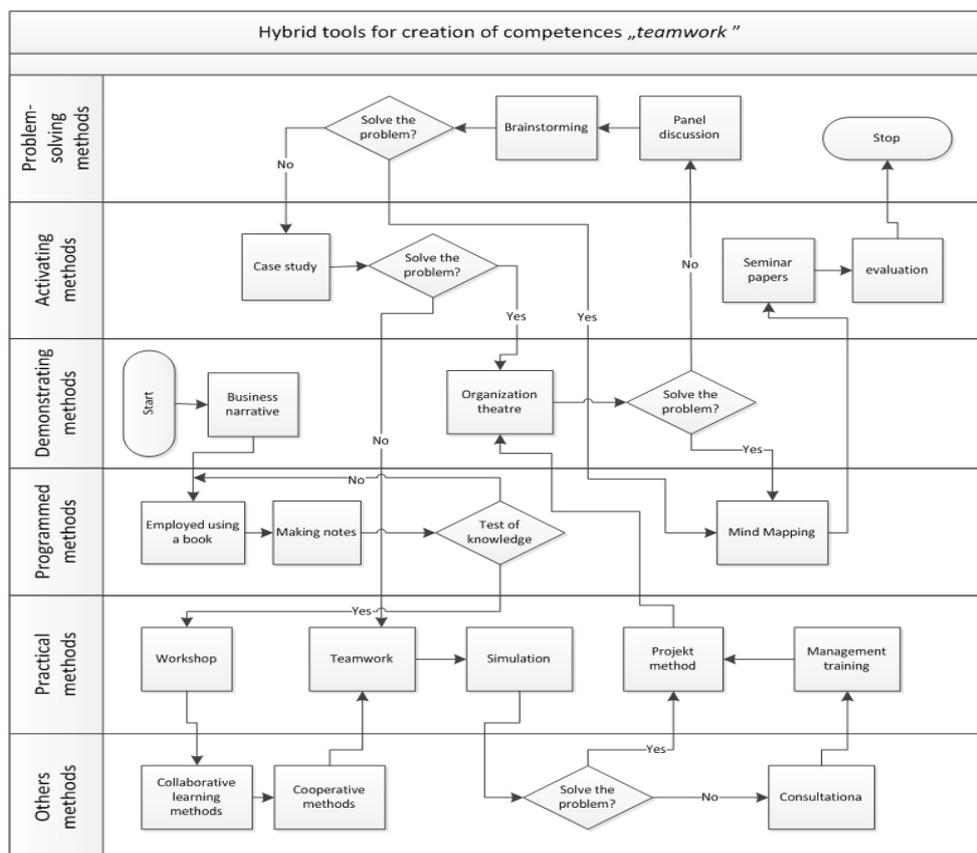


Fig. 10.4. Hybrid model of competence “teamwork” creation.

Source: Chomiak-Orsa I.: Process tools to improve the quality of education in the creation of transversal competence [In:] The acceleration of development of transversal competences; ed. Więcek-Janka E., Spychała M., Szafranski M., Goliński M; Centria University of Applied Sciences 2017, p.102-121 The report concerning applied teaching methods of transversal skills and methods of practical trainings; Elaborated by Poznan University of Technology; Poznań 2016; Matrix – evaluation of some methods

The models of didactic processes presented above are only a selected group of process tools that can be used in modern didactic processes for students of logistics.

6. CONCLUSION

Modern didactic processes should enable the use of flexible forms of teaching - so that university graduates, apart from domain knowledge, acquire additional skills expected by employers. According to the research, the most sought after skills are soft competences such as entrepreneurship, communication skills,

creativity and the ability to work in a group. In addition, legal regulations are of particular importance in domain knowledge, which increasingly determine the principles of cooperation between organizations and, consequently, strictly formalize logistics activities. In the article, the authors pointed out and presented the possibility of creating eleesthetic educational models using modern teaching techniques that should increase the growth of soft skills.

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BIOGRAPHICAL NOTES

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