

## Development of Key Competences of Students Preparing in the Field of Study to Reception Technicians

Roman Hrmo<sup>1</sup>, Daniel Kučerka<sup>2</sup>, Henryk Noga<sup>3</sup>, František Dzíbela<sup>4</sup>, Agnieszka Gajewska<sup>5</sup>, Tomasz Piotrowski<sup>6</sup>

**DOI:** https://doi.org/10.53349/resource.2023.is1.a1193

#### **Abstract**

The presented article deals with the development of key competencies of students preparing in the study field of reception technician. It describes key competences, the possibilities of developing key competencies and the development of key competences of primary and secondary school students. The article draws attention to the development of key competencies through a professional didactic text focused on the management of the work of a reception technician in a car service and selected options for evaluating professional texts. Expert evaluation methods, according to Turek (2010), were chosen for the evaluation of the professional text. In this part, we focused on the evaluation of features such as content correctness, compliance with the curriculum, clarity of expression and transparency, connection of theory with practice, simplicity, appropriateness and interest, the content side of the curriculum, arrangement of the curriculum into a system, inter-subject relationships, and clarity.

The results showed that all experts evaluated the features of the professional text on the rating scale 0, +1 and +2. They did not use the ratings -1 and -2. The experts were in the Czech Republic and Slovakia.

Keywords: Key Competencies, Reception Technician, Professional Didactic Text

<sup>&</sup>lt;sup>1</sup> DTI University, Ul. Sládkovičova 533/20, 018 41 Dubnica nad Váhom.

<sup>&</sup>lt;sup>2</sup> Faculty of Education of Palacký University Olomouc, Žižkovo nám. 5, 779 00 Olomouc. *E-mail: dkucerka1@qmail.com* 

<sup>&</sup>lt;sup>3</sup> Uniwersytet Pedagogiczny im. Komisji Edukacji Narodowej w Krakowie, 30-084 Kraków.

<sup>&</sup>lt;sup>4</sup> DTI University, Ul. Sládkovičova 533/20, 018 41 Dubnica nad Váhom.

<sup>&</sup>lt;sup>5</sup> Uniwersytet Pedagogiczny im. Komisji Edukacji Narodowej w Krakowie, 30-084 Kraków.

<sup>&</sup>lt;sup>6</sup> Uniwersytet Pedagogiczny im. Komisji Edukacji Narodowej w Krakowie, 30-084 Kraków.



## 1 Introduction

Acquiring, developing, and mastering the key competences of pupils preparing for the job of reception technician is closely linked to improving teaching and increasing its quality. In the current era and the company's conditions, we must constantly adapt to new changes and requirements. Therefore, to not lose a certain continuity with education development, we must look for new ways to find more attractive, more effective teaching of students for personal and professional application.

In its 1997 report to UNESCO, the International Commission on Education in the 21st Century, led by Jacques Delors, identified four main principles of education for Europe: "Learning to learn, learning to work, learning to live together, learning to be". However, they emphasised that traditionally applying these principles in teaching is no longer acceptable.

The education process should focus on competencies and their development in children and pupils. To develop key competencies, which can be achieved through specific contents, subjects and areas of education.

Therefore, educational outcomes and requirements cannot be tied to the specifics of certain teaching subjects but are also tied to universal knowledge, abilities, and skills that we usually apply in our lives, work areas and life situations.

## 2 Analysis of Key Competencies

In connection with employment issues, Mertenz began to analyse and solve key competences from the 1970s. D. (1974). Subsequently, the strategic goal of developing key competences in a knowledge-based society was determined by the Lisbon Process (2000). In 2001, the working group started working on creating basic concepts in educational processes to improve the quality and efficiency of education systems. The most important task was the creation of a definition of the concept of competence and, accordingly, its characteristics. In the late 1990s, it began to be used in education as a bridge between the graduate profile and the requirements from employers. To use one of the styles, copy the templates to the directory where you want to save your manuscript. Double-click the template to create a new document. Save the document under a new name.

The concept of competence began to be used in pedagogy in connection with the analysis and change of the content of school education in European school systems. The change in didactic terminology is in line with European developments, where education tries to express social habits for the entire population, at a new level and in the quality of education. Therefore, the importance of the quality of education for the entire population continues to grow (at the primary and secondary levels, this knowledge base is based on the development of key competences).



Education is a process in which, through teaching, an individual acquires a system of knowledge and activities, which he transforms into knowledge, experience, and habits through internal processing – learning. The education process takes place between two agents: the educator (teacher, lecturer) and the educated (pupil, student). From the educator's point of view, it is about teaching; from the point of view of the educated, it is about learning.

Formation of the so-called terminology key competence started in an Anglophobic environment. It went through a specific development from the concept of "competence as the basic skill" when it was also referred to as "competences" up to the final terminology of "key competences". The term "basic skill" only defined habits that related to reading (literacy and numeracy), or "life" or "survival skills". Thanks to its narrow scope, the term "competence" was also used, which, even in a Francophobic environment, became famous as "competence" (Veteška, Tureckiová, 2008).

In addition to the concept of key competences, individual states also use the following distinctions in their curriculum:

- Threshold and final competencies (e.g., Walloon community in Belgium),
- Basic competences (Spain, Luxembourg, Portugal),
- Key competencies (Great Britain).

By competence, we understand the ability that activates and applies an internalised system of knowledge, abilities, professional, personal, and social skills, values, attitudes, as well as other personal qualities, which has a specific arrangement (rate, intensity, ratio of individual components, method of grouping, hierarchy). Various activities can activate this system in real life.

Competence can also be understood as behaviour that maximises and improves performance in certain areas of activity. Within a set of competencies, core competencies are the most important. With their help, a whole range of unforeseen problems can be solved, and thanks to them, an individual can successfully cope with various changes at work and in their personal and social life (Hrmo, Turek, 2003 in Kučerka 2011).

## **2.1** Key Competences and their Characteristics

According to Kučerka (2011) in the Report for UNESCO in 1997, the International Commission for Education in the XXI. century, led by Jacques Delorson, determined four basic principles for Europe: "Learning to learn, learning to work, learning to live together, learning to be". However, he realised that it could not be learntraditionallyway. When learning, one should focus on developing the student's competence, especially developing key competencies, which are the most important. This is possible through appropriate content within different subjects or areas of education. Competences are learned, developed and applied through activities.



Competences and skills will make it possible to create value orientations, which are procedural quantities and "above all lived".

The hierarchical model of the competence structure is based on mental and intellectual abilities and is supported by attitudes, interests and needs that create motivation. The skills, knowledge and experience created on these foundations shape the individual's behaviour. The resulting behaviour, i.e., negotiation competence, then serves to adapt to new situations and to solve problems.

From this point of view, Mertens (Mertens, 1974 in Dzíbela, 2019) identified a set of knowledge, abilities and skills which, although not tied to a particular activity, are used as critical qualifications within certain professions. He divided these key qualifications into four categories:

- Skills usable in different situations and contexts (basic qualifications)
- Skills for effective work with information (horizontal qualifications)
- Skills for work performance (expanding qualifications)
- Skills related to an individual's social behaviour and adaptation (time factors).

Key qualifications are used in professional education, mainly concerning retraining and further professional education. The sets of key competencies thus make it possible to define more general qualifications that are the content of key competencies. This approach subsequently influenced forming and developing key competences and defining curricular contents in European documents.

However, if we were to discuss competencies from the point of view of analysing individual characteristics, then Lombardo offers frozen items (Lombardo in Veteška, 2009) – "Quick learning of new knowledge":

- Creativity and ingenuity
- Determination
- Flexibility and balance
- Self-awareness
- Handling complex tasks
- Troubleshooting
- Team orientation
- Management of colleagues
- Recruiting new talented workers
- Creating and improving interpersonal relationships
- Compassion, tact, sensitivity
- Balance between private life and work.

The basic competence model proposed by Greenspan and Greensfield (Beneš, 2004) is:

 Instrumental competence – includes the intellectual component, i.e. information processing, analytical and conceptual thinking and the motor component



 Social competence – covers intellectual aspects (practical and social intelligence) and aspects of independent intellectual areas (character, temperament).

All the mentioned definitions have one common feature, and that is that competence is defined as a personal quality that is connected with performance, e.g.:

- The ability to behave in a way that corresponds to the requirements of work in various parameters of the organisation's environment and to achieve the desired results (Boyatzis, 1982);
- Ability and willingness to apply new skills and knowledge in new situations (Burgoyne, 1988);
- Basic skills and abilities that are necessary to perform a good job (Furnham, 1990);
- Essential human characteristics that lead to efficiency or excellent and quality performance (Mansfield, 1999) and others.

Competencies can be identified through empirical and theoretical procedures. Empirical procedures have only an information character for a particular area; they are difficult to compare and apply. Theoretical procedures have a basis in scientific theories and use scientific methods of investigation. The result is a taxonomy of competencies, from which the ones mentioned above are often used. Veteška (2009) states, e.g., research by Belz and Siegrist, who analysed the requirements for an applicant for a managerial position listed in advertisements.

The issue of competencies, i.e., their formation and needs for an individual in today's modern society, is closely related to the definition of competence and key competence. However, this process has not yet been completed, so it is a question of when it will be completed and firmly established in the current conditions and future society, whose main characteristic is rapid development.

As mentioned above, the main prerequisite for successfully forming competence is lifelong education and the support of society. Lifelong learning is a continuous learning process from birth and lasts until death.

Initial education includes all formal education, which is structured into three levels (CZSO, 2008):

- Basic education primary and lower secondary (ISCED 1,2);
- Secondary education upper secondary, which is completed by a school-leaving exam or a teaching certificate (ISCED 3, 4);
- Tertiary education post-baccalaureate and is carried out at universities or higher vocational schools (ISCED 5, 6).

Formal education can be obtained in educational institutions where educational goals, contents, organisational forms, and assessments are determined by legislation. Even if it does not serve to obtain a proper degree of education, informal education can be obtained through various courses (retraining, foreign languages, driving motor vehicles), seminars, lectures,



training, etc. Informal education is learning based on everyday activities and experiences acquired in the family and personal environment, including self-education. However, it is unorganised and unsystematic.

Further education is a way of learning that begins when an individual completes a certain level of education and enters the workforce. The focus of work can be professional, interest or civic education, i.e., rights and obligations of citizens within society and family.

At the end of the last century, lifelong learning became the main topic for several international organisations due to the rapid development of national economies, e.g., OECD and UNESCO. In recent years, due to the creation of the European Union, its bodies, such as The Council of Europe, the European Commission, and the European Parliament, and the educational programmes they supported. Since the mentioned institutions have different focuses, they agree, for example:

- The OECD supports the concept of periodic education as the main principle (recurrent education), with the help of which lifelong learning is achieved (OECD, 2009);
- The Council of Europe, more precisely the Council for Cultural Co-operation of the Council of Europe, covers permanent education (Council of Europe, 1973).

By the term key competencies, we mean those skills and abilities that will help an individual to properly integrate into society and into social and working life, where he can perform work in various positions and functions, solve problems of unpredictable nature and cope with rapid changes at work and in his personal life. These competencies are of great importance for the individual and also for society. Therefore, these competencies are already developed in primary and secondary schools. (Turek, 2003).

Based on several sources and several international comparative studies (PISA, PIRLS), the following list of key competences is formed:

- Literacy in mathematics
- Literacy in natural sciences
- Literacy in reading
- Cognitive competence
- Communicative competence
- Information and communication technology
- Learning to learn
- Social competence
- Civic competence
- Personnel competence.

#### 2.2 Evaluation of the Textbook and Didactic Text

The textbook is one of the main factors that determine and decide the quality of the teaching process. Since the textbook plays a significant role for the student and is an important aid, a theory in pedagogy for determining the quality of the didactic text should also be developed.



According to the results, more extensive research should be done on textbooks and didactic texts. Methods aimed at evaluating the quality of textbooks can be divided into three groups (Turek, 2010 and Dzíbela, 2019):

#### a) Experimental methods

With the help of a pedagogical experiment, we can most objectively determine the quality of the textbook. The independent variable that is manipulated is the textbook and the teaching text. In the experimental group, the pupils have a new textbook, and the control group has the original textbook. For both groups, the intervening variables are the same (teaching goal, teacher, students, classroom, teaching procedure, etc.) After the end of this experiment, knowledge, attitudes, and skills are compared for both studied groups.

#### b) Expert methods

Expert methods evaluate the adequacy, methodical processing, interest, difficulty and other properties of textbooks and didactic tests based on the statements of specific groups of observers – experts, students, teachers, lecturers, etc. Depending on the textbook's focus or didactic text, we can modify the evaluated properties and change individual elements – expand or shorten them, change their meaning, separately evaluate individual chapters, etc.

#### c) Statistical methods

Statistical methods examine various subject matter properties that are achieved through measurement. We include here:

- Average length of the text the number of words per lesson.
- Degree of difficulty of the text the so-called Nestler's method modified by Prúch (1984) & Pluskal (1996). This difficulty determines the language and scope complexity of the potential reader.
- Readability of the text the Cloze test, fog index, haze index, etc., are used for determination.

#### Cloze test

The cloze test is based on a random text selected from a didactic text or textbook to meet the length of approximately 250 words. Then the first 35 words remain intact, but after that, the 36 and every 10 words have been removed or hidden. Twenty words are thus removed. Then this test is given to a specific group of students for whom the textbook is intended. If students do not complete at least 13 words, the gist is the difficulty **index.** 

A text of 100 words is selected from a textbook or didactic text. More similar samples are recommended for more effective results. We add all long words (three or more syllables) in the given samples. After the words are counted, the average sentence length in the samples is calculated by the total number of words in the samples by the number of sentences. The formula is used for calculation:

(Average length of sentences +number of long words) x2/5+5



The ideal result is 12. The classroom has a good rating if the result is 11 or less.

#### Haze index

A sample of approximately 100 words is selected from the textbook. Also, similar to the fog index, the more samples, the better and more effective. In the selected samples, the average number of words and the percentage of long words (three and more syllables) are calculated. Subsequently, according to the relationship, the following is calculated:

IZ=(PSV +%DS)x 0.4

PSV – the average number of words in an essay

%DS – the percentage of long words

The result tells us how long the student takes to read and understand the text. If, for example, IZ=17, the student must be 17 years old for the given teaching text (applies to English texts). The smaller the IZ value, the more accessible it is to students. In the index, be mitigated by shortening and simplifying sentences.

# 2.3 Didactic Text for the Subject Work Management of the Reception Technician

The aim of the teaching subject Management of the work of a reception technician is to provide the basic knowledge, skills, and techniques that a qualified receptionist must master. This subject includes knowledge and skills from the field of psychology and sociology – the field of customer segmentation, customer typology, etc.

The subject requires knowledge and inter-subject relations with the subjects of economics in the part of the repair price calculation, as well as knowledge and inter-subject relations with subjects of the basics of the law of contracting and contract changes. This subject is widely multi-subject and, therefore requires attention and knowledge of already completed subjects. In the teaching subject Management of the work of a reception technician, we use educational and educational strategies for the formation and development of the following key competencies, which enable pupils to:

The ability to interactively use knowledge, information, and communication technology to communicate in the state, native and foreign languages:

- verify and interpret the obtained data.
- work with essential information and communication technologies.

Ability to act independently in social and work life:

make clear agreements.

Based on the decision of the subject commissions, we will develop the following competence within this school education programme:

Ability to act independently in social and work life:



- to justify their arguments, solutions, needs, rights and actions.

The elaborated didactic text about Management of the work of a reception technician contains chapters:

- 1. From recipient to repair to service advisor
  - Service cycle
  - Meaning of service advisor
  - Description of the service advisor function
- 2. Opening the order and taking the vehicle to the service centre
  - Motor vehicle repair procedures
  - Order opening
  - Warranty and warranty conditions
  - The warranty repair liquidation process
  - The process of liquidation of insurance claims
  - Identification of the type of failure
  - Car diagnostic
  - Determining the scope of the repair
  - Determination of the type and number of spare parts
  - Own products
  - Products of subcontractors
  - Presentation of the repair solution
  - Negotiation
  - Taking over the vehicle according to company standards
  - Entering the order into the system
  - Delivery of the vehicle to the workshop
  - Possibilities of renting a spare vehicle
  - Changes to the scope of the repair
  - Communication with the customer approval of the change
- 3. Realization of motor vehicle repair
  - Performing diagnostics
  - Informing the customer about the progress of the repair
  - Checking the progress of the repair
  - Provision of substitute goals
  - Order, Expense, Receipt,
  - Order, Invoices
- 4. Handing over the vehicle to the customer

- Implementation of exit control



- Elimination of deficiencies
- Development of service documentation
- Explain the course of the repair to the customer
- Explain the price of the repair to the customer
- Explain the options and conditions for a repair claim
- Hand over the keys and documents to the customer, and see the customer off
- Determining satisfaction with the repair

Kowalski, M. and Sztangret also deal with the mentioned issue. M. (2012) and Bryła, K., Kowalski, M. (2011).

## 3 Survey

The main goal of the research is the processing and evaluation of the didactic text about the subject of Management of the work of the admissions technician in the field of study 2493 L vehicle sales and service.

In addition to the main goal of the survey, we also investigated other goals:

- Statistical evaluation of properties for the processed didactic text;
- Comparison of the assessment level of individual experts.

The subject of the research is the creation of a didactic text, the assessment of the degree of difficulty of the didactic text and the determination of the readability of the didactic text. I conducted the research at the following selected schools: Secondary Vocational School of Automobile Trnava, Secondary Vocational School of Electrical Engineering Trnava, Secondary Vocational School of Mechanical and Electrical Engineering Levice, Secondary Vocational School of Mechanical and Electrical Engineering Velešín, Secondary Vocational School of Mechanical and Electrical Engineering České Budejovice and Secondary Vocational School of Mechanical and Electrical Engineering Tábor.

## 3.1 Research Hypotheses

The main starting hypothesis:

The didactic teaching text for the subject Management of the work of a reception technician will be manageable in the 2nd year of the study field 2493 L vehicle sales and service. In order to verify and confirm the mentioned hypothesis, it is also necessary to verify the

following working hypotheses:

H1: Traits will be rated from 0 to +2 more than 50% of the time

H2: Individual experts will have an evaluation level of more than 60%



Methods will be used in the investigation of hypotheses.

The experiment had two parts:

- Preparatory part;
- Experimental part.

In the preparatory part, we dealt with:

- Preparation of materials and processing of didactic teaching text;
- Preparation of questionnaires for teachers of technical subjects.

In the preparatory phase of the experiment, the questionnaire for teachers was processed based on a standardised questionnaire (Turek, 2010). Using this questionnaire, we evaluated the methodological processing of the didactic text, its quality, appropriateness, interest, etc. The evaluations were carried out by teachers of technical subjects (table 1) focusing on engineering and electrical engineering schools.

School	Number of teachers	Focus of school
SPŠSaS Tábor	2	engineering
SOŠSaEV Velešín	1	engineering
VOŠ, SPŠ and SOŠŘaS Strakonice	1	engineering
SPŠ Levice	1	engineering
SOŠE Trnava	1	electrotechnical
SOŠA Trnava	2	engineering

Table 1: Number of teachers, the focus of schools

The evaluation scale -2, -1, 0, +1, +2 was used, which was intended to evaluate the didactic teaching text by teachers (experts).

## 3.2 Evaluation of the Experiment

As part of hypothesis 1, we investigated the opinion of 8 teachers of professional subjects on 21 features of the didactic text. The results are shown in tab. 2.

Evaluative characteristic	1 exp. SPŠSaS Tábor	2exp. SPŠSaS Tábor	3 exp. SOŠSaEV Velešín	4 exp. VOŠ, SPŠ a SOŠŘaS Strakonice	5 exp. SPŠ Levice	6 exp. SOŠE Trnava	7 exp. SOŠA Trnava	8 exp. SOŠA Trnava	PŠH
а	1	2	0	1	2	2	1	2	1.38
b	0	1	2	1	2	1	1	1	1.13
С	2	1	2	2	2	2	2	2	1.88
d	1	1	2	2	1	2	2	1	1.50
e	0	1	1	1	1	1	2	0	0.88

		1						•	
f	0	1	1	0	2	1	1	0	0.75
g	0	1	1	0	1	1	1	0	0.63
h	0	1	1	0	1	2	2	0	0.88
i	1	2	2	1	1	1	2	0	1.25
j	2	2	1	2	1	0	2	2	1.50
k	2	2	2	1	1	0	1	2	1.38
1	1	2	0	1	2	0	2	1	1.13
m	2	2	0	1	2	1	1	1	1.25
n	1	1	0	1	2	1	2	2	1.25
0	1	1	0	1	1	1	1	2	1.00
р	1	0	1	1	2	1	2	2	1.25
q	1	0	2	1	2	1	2	1	1.25
r	1	0	1	1	1	1	1	1	0.88
S	1	0	1	2	1	1	0	2	1.00
t	1	2	2	0	1	1	0	2	1.13
u	2	1	2	0	1	2	0	1	1.13
v	0	1	2	1	2	1	0	1	1.00
w	0	1	1	1	1	2	0	0	0.75
х	0	2	1	2	2	1	0	0	1.00
у	2	2	0	2	1	1	0	0	1.00
Z	2	1	0	1	2	1	0	0	0.88
aa	1	1	1	2	1	2	1	2	1.38
bb	2	1	0	1	2	2	1	1	1.25
Average	1.00	1.18	1.04	1.07	1.46	1.18	1.07	1.04	

Table 2: Evaluation of experiment by teachers

The investigated questionnaire questions were properties such as content correctness, compliance with the curriculum, clarity of expression and clarity, connection of theory with practice, simplicity, appropriateness and interest, the content side of the curriculum, arrangement of the curriculum into a system, inter-subject relationships and clarity and concreteness of the curriculum, etc.

## 3.3 Verification of Hypotheses

H1: Traits will be rated from 0 to +2 more than 50% of the time.

To verify this hypothesis, we used questionnaires filled in by teachers (experts) of technical subjects. With these questionnaires, teachers (experts) expressed their opinion about the

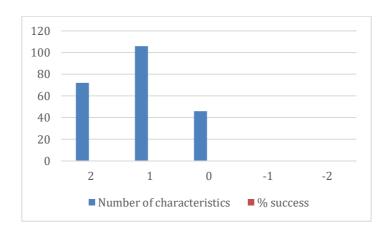


Management of the work of admissions technicians. The overall evaluation of the teacher's (experts) questionnaires is in tab 3.

	Number of	
Н	characteristics	% success
2	72	32%
1	106	47%
0	46	21%
-1	0	0%
-2	0	0%

Table 3: Evaluation of each specific characteristic

A total of 224 characteristics were evaluated by teachers (experts), which is a 100% scale from -2 to +2. Ratings -1 and -2 were not used by teachers (experts), so this rating represents 0% of the overall rating. Graph 1 presents the assessment by teachers. As can be seen from the graph, the highest rating was 1 in 106 properties, so 47%. This was followed by a rating of 2, awarded to 72 properties, representing 32%. 46 properties were rated zero, so 21%. The scale from 0 to 2 was used at 100%.



Graph 1: Evaluation of characteristics by teachers

It follows from the above that hypothesis H1 is valid. More than 50% of the properties were rated on a scale from 0 to 2. Teachers (experts) rated 100% of the properties on the given scale from 0 to 2.

H2: Individual experts will have more than 60% evaluation.

Hypothesis No. 2 was verified by a questionnaire for teachers (experts). With the help of a questionnaire, we learned their attitudes towards the didactic text about Management of the work of an admissions technician. The evaluation of the questionnaire can be found in tab. 2. The evaluation results by experts are shown in the tab. 4.



Evaluative				4 exp. VOŠ, SPŠ,SOŠŘaS				
characteristic	Tábor	Tábor	Velešín	Strakonice	Levice	Trnava	Trnava	Trnava
Average	50.00	58.93	51.79	53.57	73.21	58.93	53.57	51.79

Table 4: Experts' evaluation

It follows from the above that hypothesis H2 does not apply. Individual experts had an evaluation level below 60%.

Only one expert achieved the expected level of assessment. The remaining experts had an evaluation level lower than 60%.

### 3.4 Summary of Results and Recommendations

This study aimed to develop and evaluate a didactic teaching text for the subject Management of the work of a reception technician in the field of study 2493 L vehicle sales and service. In order to fulfil the set goal, we established two sub-hypotheses. These sub-hypotheses assumed the fulfilment of the main hypothesis – to process and evaluate the didactic teaching text for the subject Management of the work of the reception technician in the field of study of 2493 L vehicle sales and service.

The research sample was based on eight teachers of professional subjects.

Table 5 below contains a summary of the verified hypotheses.

Hypothese	Method	Verification of hypothese	Investiga	ited effec	t	
H1	Questionnaire	Apply	Teaching text properties			
			Rating level of			evaluated
H2	Questionnaire	Not apply	characteristics			

Table 5: Summary of verified hypotheses.

We assume that the didactic textbook will help students who plan to study the subject Management of the work of a reception technician in the field of 2493 L vehicle sales and service. This didactic teaching text can also be used for self-study to extend or consolidate knowledge from school teaching. It is ideal for this text if it is presented to students in electronic form.

According to the processed experiment, we recommend:

- expand the scope of the text, thereby achieving a better development of key competencies;
- make the text available to students on the school website.



## 4 Conclusion

Key competencies are essential for every educated person. The basis of success in life is the effective development and improvement of skills, habits, experiences, and attitudes. The development of key competences can take place with the help of material teaching aids, which include textbooks and didactic teaching texts. However, material didactic resources should be used reasonably and not put pressure on the student. If necessary, he will give feedback to the teacher if he considers the given resource uninteresting. In that case, the teaching tactics must be changed so that the teaching process engages the student again.

According to professional practice, the school provides education, various professional courses, and material didactic tools, which are one factor in fulfilling the learning goal, increasing the clarity of the subject matter, and better establishing the topic covered.

With the help of the didactic teaching text, the student develops his key competences, such as information literacy, which also includes reading literacy and reading comprehension. As part of the PISA assessment, we have a low reading literacy level in Slovakia. Slovakia has been participating in PISA testing since 2000; unfortunately, the results are unfavourable.

The mentioned didactic teaching text in the field of study 2493 L sales and service of vehicles is one of the possibilities to develop your key competencies and reading comprehension, which our students often lack.

The test sample consisted of 8 teachers (experts) who are from Slovakia and the Czech Republic. Research has shown that the mentioned didactic teaching text is manageable for the target pupils. Didactic textbooks can help students improve their advanced competencies, which they can apply in professional practice and with a future employer.

#### References

- Bryła, K., & Kowalski, M. (2011). Symulacje przepływu płynów z wykorzystaniem aplikacji inżynierskich Źródło: Annales Universitatis Paedagogicae Cracoviensis. Studia Technica, *4*, s. 3-9.
- Dzíbela, F.: Rozvoj kľúčových kompetencií žiakov v manažmente práce prijímacieho technika. [Rigorózna práca] Vysoká škola DTI v Dubnici nad Váhom.
- MINISETRSTVO ŠKOLSTVA SR: Zákon č.245/2008 Z.z. z 22. mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov [online] 2008. [cit. 11.1.2019]. <a href="https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2008/245/20190102">https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2008/245/20190102</a>
- Hrmo, R., Škrabánková, J., Kučerka, D., & Kmec, J. (2016). *Kľúčové kompetencie v technických a prírodovedných predmetoch*. Varšava: Vydavateľstvo Wyzsza Szkola Menedzerska w Warszawie, Poľsko, ISBN 978-83-7520-204-5.
- Kolektív autorov, (2010). Školský vzdelávací program pre predmet Manažment práce servisného poradcu, interné materiály SOŠA Trnava.



- Kowalski, M., Sztangret. M. (2012). *Komputerowa analiza wpływu zmian geometrii nadwozia pojazdu na współczynnik oporu aerodynamicznego* Źródło: Annales Universitatis Paedagogicae Cracoviensis. Studia Technica, *5.* s. 97-104.
- Šimonová, I. a kol. (2011). *Klíčové kompetencie a jejich reflexe v terciárním e-vzdělávaní.* ISBN 978-80-86771-46-5.
- Veteška, J. (2010). *Kompetence ve vzdělávání dospělých. Pedagogické, andragogické a sociální aspekty.*Vydavateľstvo Univerzita Jana Amosa Komenského Praha, ISBN 978-80-86723-98-3.