

## DEVELOPMENT OF PROFESSIONAL COMPETENCES THROUGH APPLIED EDUCATION

Miriam MARTINKOVIČOVÁ

University of Matej Bel, Banská Bystrica; miriam.martinkovicova@umb.sk

**Abstract:** The current labor market requires dynamic and broadly competent university graduates. An international trend is to promote the teaching of transversal competences. These are not only related to a particular study program or future profession, but are universally applicable in different professions, thus promoting job mobility and flexibility of persons. This is a system of competence-based learning. Universities are currently undergoing paradigmatic changes in the university education system. The paper monitors international and home experiences and recommendations for the development of the competences that prepare graduates for life in society. It specially examines the position of the students' social and ethical competences. These findings are compared with the results of own research focused on the development of students' ethical competences through the Professional Ethics course at EF UMB.

**Keywords:** Applied competence-based learning, transversal competences, ethical sense, applied ethics.

### 1. Introduction

The labor market of the 21st century requires dynamic and broadly competent university graduates. Quality tertiary education nowadays meets difficult criteria for the graduates' applicability (Palenčíková, 2017). To offer students the latest scientific knowledge and information is not enough today. Recently, increased attention has been paid to the parallel development of their skills and capabilities to enable them to adequately make use of the knowledge on the labor market. These competences constitute an "umbrella" covering everything that can directly or indirectly affect individual's work performance (Woodruffe, 1992). An international trend is to promote the teaching of cross-sectional (key/generic/cross-sectional/core/transferable/basic/essential) competencies. These are not only related to a particular study program or future profession, but are universally applicable in different professions, thus promoting job mobility and flexibility of employees. This is a system of

competence-based learning. Universities are currently undergoing paradigmatic changes in the university education system.

The paper monitors international and home experience and recommendations for the development of the competencies that prepare graduates for life in society. It specially examines the position of competences and what attention is paid to the development of social competences including ethical ones. The structure of the paper is as follows:

- The first part is based on the Tuning Educational Structures in Europe project (TUNING), which focuses on the formation of the competencies of university students in European countries. Based on this, it offers an analysis of education model of the University of Deusto (UD) in Spain promoting the development of transferable competencies and can serve as an example of good practice.
- The second part deals with the official descriptors of the European Qualifications Framework for formal education. These apply to the conditions of the SR and make available the conclusions of the national survey on cross-sectional competencies at Slovak universities (Horný, Ďurina, 2014; CVTI, 2016).
- In the third part, the acquired knowledge compares with the results of the own research, which focused on the development of students' ethical competences through the course of Professional ethics (EF UMB, 2017-2018).

## 2. International experiences and recommendations

The Tuning Process of higher education programmes results from and is clearly related to the Bologna Process. While the Bologna Process focuses on the harmonisation of systems, the Tuning Process aims to make educational programmes compatible and comparable. The axiom of the Tuning approach is to respect and promote diversity of degree programmes. To make this possible, Tuning has given much attention to the development of a common language, which is understood by all stakeholders involved in the process. Key to this language is the development of competences and the achievement of learning outcomes. The aim of a degree programme or a period of studies is to make the learner more competent (Introduction to Tuning, 2006).

International educational experiences of prestigious universities are based on important principles that support development of generic competences. An example is University of Deusto in Spain. Basic university's principles are follows (Sánchez, 2008, pp. 16-18):

- **A university that focuses on the student as a person.**  
Education is aimed at the student as a whole, at all his or her facets and dimensions, from the intellectual and professional, to the psychological, moral and spiritual. UD considers each person to be a unique, unrepeatable human being and seeks to develop

to the utmost each student's capacities. Students develop in all their dimensions, so that the prime indicator of the university's achievement is what they become as persons.

- **A university that bases learning on values.**

In its Deusto University Project (DUP), the UD has listed a set of personality values, including: to develop persons who are free and responsible, professional and supportive, competent and creative, capable of critical thinking and teamwork, ethical and devout. In order to train people in these values, the university as an institution must itself live by them. Understood as guidelines for pedagogical innovation, these values fall under three main headings:

1. Personal and social development.
2. Knowledge orientation.
3. Ethical and social commitment.

- **A university that fosters healthy personal and social attitudes.**

Integral, wholesome growth and development at university is based not only on intellectual capacities; students' attitudes are also crucial for successful personal achievement. Attitudes, motivations and habits constitute the true basis of drive as a synthesis of choice and personal commitment to study.

- **A university that stimulates thinking.**

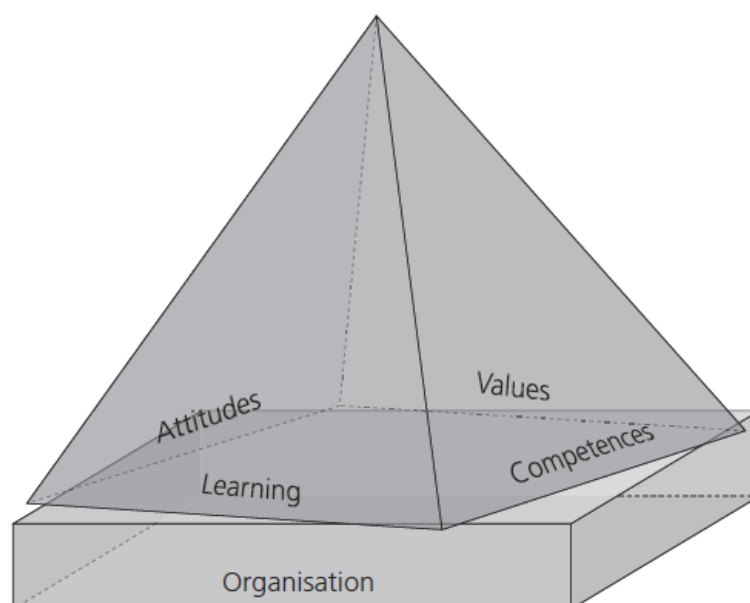
The main characteristic of university students is clear thinking. Clear thinking distinguishes the educated individual from one who is not. Therefore one of the university's key tasks is to foster and promote a type of thinking that will enable students to become persons with well-structured, orderly heads on their shoulders, rather than heads that are merely "full". To develop clear thinking means to foster different types of thought as instruments at the service of reason. Some of the types of thinking considered necessary for good intellectual development are: reflective thinking, logical thinking, analogical thinking, analytical thinking, systemic thinking, critical thinking, creative thinking, practical thinking, deliberative thinking and team thinking. Course content is considered a necessary vehicle for such intellectual development, but must never become the ultimate objective.

- **A university that promotes the attainment of academic and professional competences.**

In order to function and integrate successfully into society and workplace, people need to acquire certain instrumental, interpersonal and systemic skills and abilities. These competences are therefore crucial to university degree programmes which, in addition to requiring mastery of an academic specialty, also incorporate a broad range of competences designed to enrich the student's personal life and career.

The University's Training Framework spells out the educational and learning model in terms of a four-sided pyramid on a base plate, with each side representing one of the

organisation's four key principles. These constitute the habitat and atmosphere that ensure that the model will function well and strongly affect the results that can be achieved (see Figure 1).



**Figure 1.** University of Deusto Training Framework. Source: Sánchez, 2008, p. 21.

These four features affect the functioning and development of values that students experience and live. The four sides of the pyramid represent the four core features of the model Values, Attitudes, Competences and Learning Model that will further autonomy and the meaningfulness of learning. Innovation at the university means emphasising the organisation of knowledge, and to this end it is necessary to develop different types of thinking. This learning model calls for different modes of learning and the application of different types of intellectual thinking. Attitudes help to establish and systematise good habits and behaviour depending on the personal options that are assumed as values. Learning based on the interplay of different types of skills and abilities can lead, when fully mastered, to the formation of true competences. All these elements combined promote integral learning and help students to grow and develop as individuals.

From the point of view of shaping and developing social and ethical competences, values have great importance. Universities, as the prime agents of higher knowledge, are being asked to play a new role in the defence and development of values starting within the institution and radiating outward to all aspects of the social and political milieu. This task is perhaps more important than ever at the start of the third millennium. This model understands values as the internal ideals motivating a person to act according to his or her priorities in life. A university education cannot be reduced simply to good academic training. Universities must also endeavour to nourish values that will, above all, help students grow primarily as persons, meaning that they will defend and postulate values that dignify all human beings as persons, regardless of any other variables that distinguish them.

In a document entitled “Development of the Deusto University Project” (1992), UD spelled out the values that it seeks to promote within its sphere. Based on an analysis of this document, they have established three major guidelines along which sets of values are grouped, in consonance with the University’s mission, its view of development of the person, and its desired learning model. These three guidelines are:

- Personal and social development.
- Knowledge orientation.
- Social and ethical responsibility.

Guidelines „Social and ethical responsibility“ involves taking responsibility for economic resources and for human capital and structure; balancing the quality of service offered and creating a stimulating work environment; contributing to the community in the broadest sense; and all with the ultimate objective of educating students. The University of Deusto seeks to develop in its students an ethical and social sense that will guide their personal and professional behaviour. This means forming a conscience and acting in consonance with it, assuming responsibly for decisions and conduct made or performed in any area of life. In short, it requires that people think about the consequences and effects of their decisions on others, particularly those that contribute to social justice.

Education based on such principles helps to create desirable competences. By competence, we understand good performance in diverse, authentic contexts based on the integration and activation of knowledge, rules and standards, techniques, procedures, abilities and skills, attitudes and values. The Learning Framework of the University of Deusto distinguishes three types of generic or transversal competences:

- **Instrumental competences:** or competences that function as a means to an end. They require a combination of manual skills and cognitive capacities needed for professional competence. These include skill in handling ideas and the environment in which persons, craft skills, physical skill, cognitive comprehension, language ability and academic achievement all come into play.
- **Interpersonal competences:** require personal and relational abilities. These competences refer to capacity, ability or skill in expressing one’s feelings and emotions in the most appropriate way and accepting the feelings of others, making it possible to work together toward common objectives. Interpersonal competences are related to the ability to act with generosity and understanding toward others, for which it is first necessary to know oneself. These skills imply the ability to objectify, identify and inform feelings and emotions, whether one’s own or others’, to foster social interaction and co-operation.
- **Systemic competences:** involve skills and abilities related to an entire system. They require a combination of imagination, sensibility and ability, enabling one to see how the parts of a whole are conjoined and related. Such competences include the ability to

plan changes that will introduce improvements in overall systems, and the ability to design new systems. These competences are built on previously acquired instrumental and interpersonal competences.

Interpersonal generic competences include competence, which interests us: ethical sense. It means being positively inclined toward the moral good of oneself or of others (that is, toward everything that is good or tends toward the wholesomeness or realisation of the individual) and perseverance in that moral goodness. Mastery of this competence is closely related to: analytical thinking, systemic thinking, critical thinking, problem-solving, decision-making, oral and written communication skills, interpersonal communication, diversity and interculturality, adaptability, responsibility, autonomy, justice, co-operation, etc.

As for description of competence ethical sense, according Cobo (Sánchez, 2008, p. 223) it means „when people must take action or decisions with ethical implications, their capacity to adapt, to get involved and let themselves be guided by their moral existence is what we call their ethical sense“. This ethical sense takes shape in people's lives through processes of building moral character, and concerns their positive inclination toward the moral good of oneself or of others – that is, toward everything that is good or tends toward the wholesomeness or realisation of the individual – and perseverance in pursuing that moral goodness. Therefore, we can say that the ethical sense is the ability to think and act according to universal principles based on the value of human beings and oriented toward their full development.

Learning to build an ethical sense takes place primarily within the sphere of people's daily lives, where they must find reasons for their moral convictions. Education of this sphere of daily living should be geared toward offering students essential frameworks of reference both for building their own personal lives and for their lives as citizens who must get along with others. The ethical sense competence is designed to fulfil certain functions, including:

1. promoting a reflective, critical attitude, getting students used to not accepting any ideas, acts or values that have not been carefully analysed and thought about,
2. strengthening their capacity to think logically, using reason as an instrument of dialogue,
3. learning to think independently, adopting their own stand on issues,
4. integrating into their vision of the whole a diversity of knowledge, beliefs and values,
5. evaluating the normative capacity of ethics as an instrument for transformation and change (Sánchez, 2008, pp. 223-226).

### **3. Social competences in strategic documents**

Such a range of ethical competences corresponds with the requirements that are part of a number of European strategy documents. These include the following:

- Official descriptors of the European Qualifications Framework for the 6th level of formal education (see Table 2).
- European Parliament recommendations about key competences for lifelong learning where competences are defined as knowledge, skills and attitudes appropriate to the context. Key competencies are then those that individuals need for personal satisfaction and development, active citizenship, social inclusion and employment (Recommendation, 2006).
- **European Reference Framework** created by European Commission. This document mentions Social and civic competences. Social competence is understood as the following competences: personal (assertiveness, attitude of collaboration, integrity), interpersonal (the ability to communicate and establish contacts, the ability to solve conflicts) and intercultural (respect for otherness, tolerance, compromise) indispensable to function and be active in social and professional spheres in various and changing reality. The common basis of these competences requires the high level of moral maturity of the individual. Therefore Kuzior (2014, p. 76) proposes to define directly Ethical competences – fairness and responsibility in all aspects of human activity, consideration of good rules and ability to find common denominator between individual and community good, orientation to subsidiarity, solidarity, respect for own and others dignity, respect of basic human rights, tolerance and respect for people and natural environment.

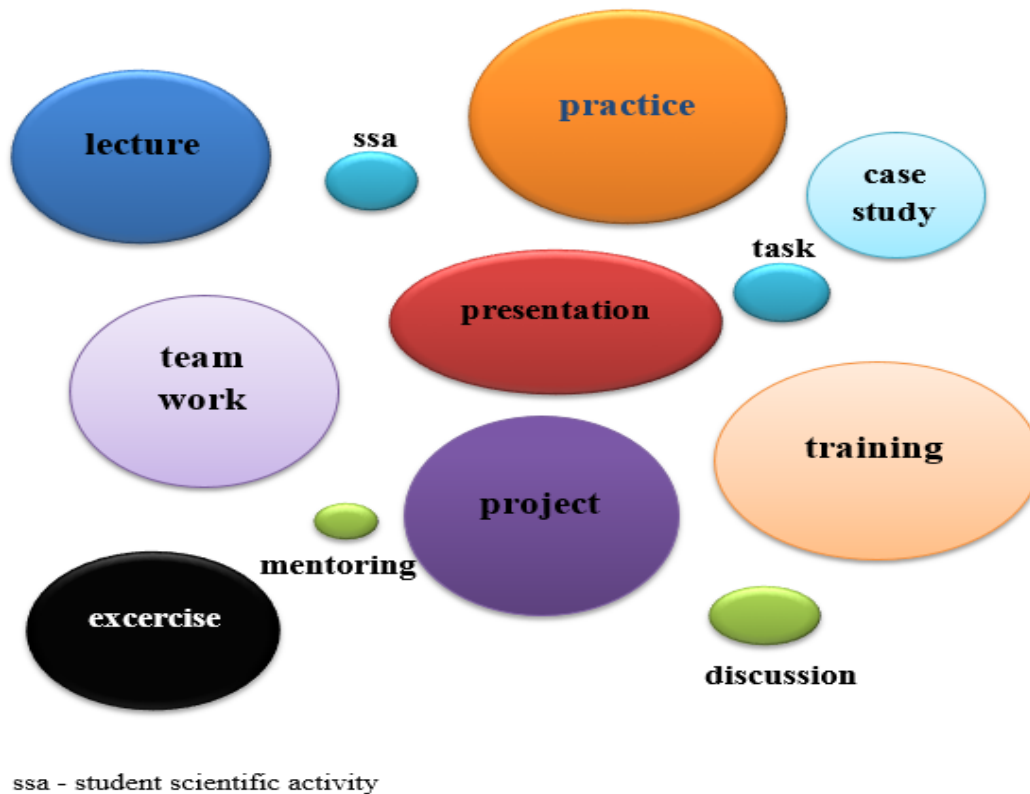
**Table 1.**  
*The European Qualifications Framework*

Level 6	Knowledge	Skills	Competence
The learning outcomes relevant to Level 6 are	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups

Source: [https://ec.europa.eu/ploteus/sites/eac-efq/files/leaflet\\_en.pdf](https://ec.europa.eu/ploteus/sites/eac-efq/files/leaflet_en.pdf).

From these document comparisons results that ethical competences are a natural part of most cross-sectional competences. The way to develop them therefore requires a new, modern teaching methodology as well as a variety of teaching forms. It is a suitable combination of reproductive and production forms of teaching, activating methods that support student autonomy and creativity, developing contextual thinking, problem teaching, simulating real assignments, stimulating critical thinking, projecting programs, linking theory to practice.

In this connection, the Center of Scientific and Technological Information of the Slovak Republic processed the results of the Analysis of Cross-sectional Competencies at Slovak Universities (CVTI, 2016). Analysis is based on evidence provided by 18 universities. As for the innovative forms of cross-curricular teaching, the most commonly used one is capturing the following figure (see Figure 2).



**Figure 2.** The size of the circle shows the frequency of occurrence. Source: CVTI, 2008.

#### 4. Results of the ethics competence development survey

With intend to contribute to the development of cross-sectional competences during the university education of future economists, a survey of students' opinions was carried out at EF UMB in Banská Bystrica within the subject of Professional Ethics. The survey was aimed at identifying their perception of the importance of ethics for the development of their professional competences and the evaluation of the forms of teaching used in this subject.

In this section of the paper we offer the following survey results:

1. The perception of the importance of ethics knowledge in the life of a person through the eyes of students.
2. Significance of Professional Ethics for development of interpersonal competences.
3. Evaluation of used activating forms of teaching.



The survey was conducted over two years 2017-2018 and took part in 134 students, of which 80,6% were women and 19,4% were male, especially 1st and 2nd year of bachelor study. The results show the following charts (see following figures 3 to 5).

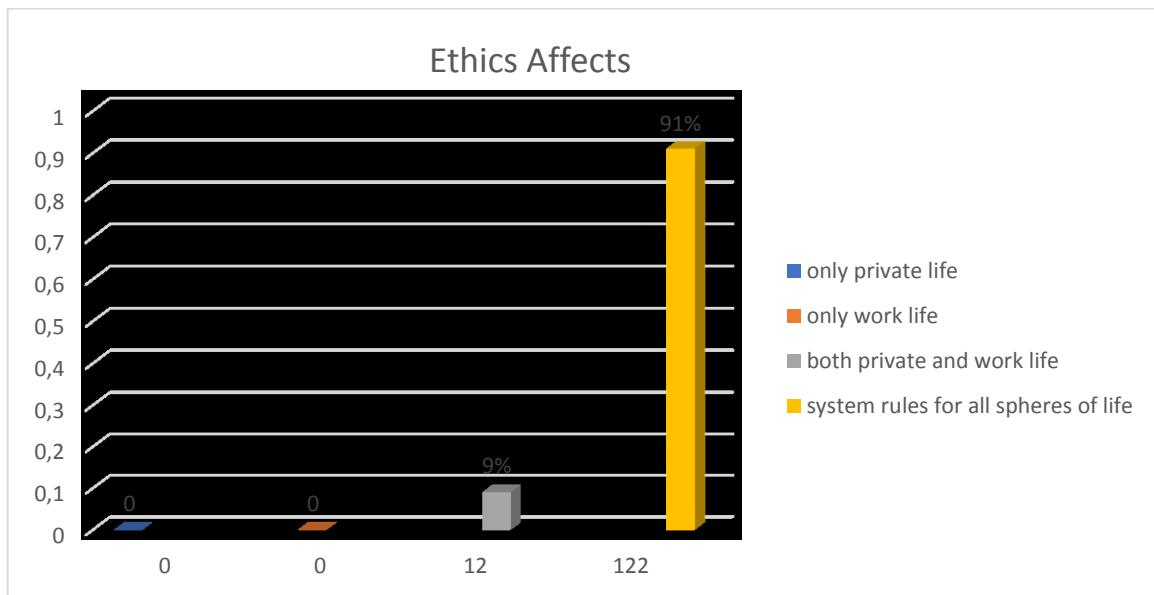


Figure 3. Ethics Affects. Source: own research.

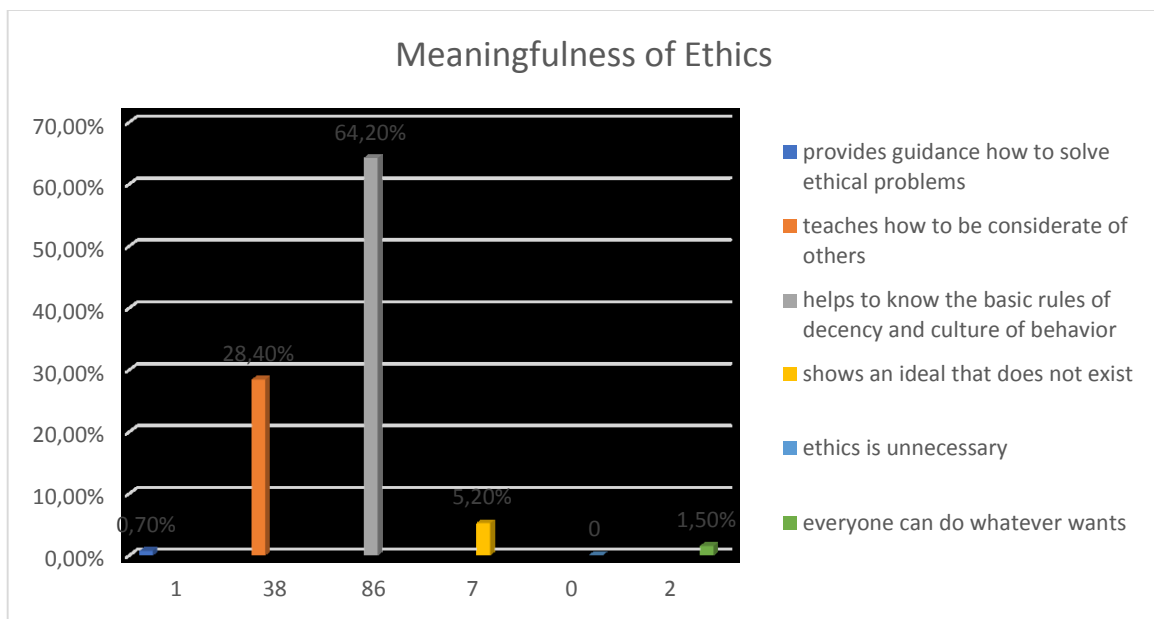


Figure 4. Meaningfulness of Ethics. Source: own research.



responses	number	%
a) ethics does not exist in the real practice of professions, everyone works only for money and nobody cares any ethics	5	3,7
b) it imposes workers rules that would otherwise not respected	12	9,0
c) it formalizes the behavior of members of professions toward the internal and external environment	107	79,9
d) characterizes the required quality of optimal working relationships in organizations	54	40,3
e) it contributes to the image of the profession in the public eye	46	34,3
f) is a sign of attractiveness and prestige of a particular professional group	32	23,9
g) is a business card of credibility, utility and respect for the profession	79	59,0

**Figure 5.** Significance of Professional Ethics. Source: own research.

Students were given the opportunity to express their opinion on the used teaching methods at the end of the course. Professional Ethics is an part of applied ethics, it is natural that the practical and activating forms of making knowledge have been used (Hrehová, 2011). Among the most frequently used and also positively evaluated by students belong these:

- case study,
- simulated practical situations,
- role playing,
- discussion,
- teamwork,
- self-knowledge.

Students in the feedback also appreciated the opportunity to participate in seminar's activities, the opportunity to express their views and linking theoretical knowledge with practical situations in practice.

## 5. Conclusion

A positive assessment of the subject and its contribution to the development of student ethical competences shows that this is a suitable way of adequately linking theory and practice. At the same time, the way by which is possible naturally, vividly and informally develop the cross-sectional competencies of the students (Martinkovičová, Benčíková, 2016). This form of learning increases student motivation to study, support personal engagement, willingness and interest to participate in solving practical examples. It reveals the real contours of the work world for future graduates, in which they will enter after successful completion of the study. At the same time, the bricks are more efficient in coping with difficult and unpredictable situations and increase the chances of their full employment in the labor market.

This is the way to cultivate all the aspects of the single-person professionalism that the job market expects. To obtain a high level of theoretical knowledge, understanding, so an adequate level of professional erudition, a wide range of practical skills and at the same time to develop personality abilities, attitudes and qualities of individuals. Thus, the intention of preparing graduates, not only theoretically proficient but also ready capable for life in society and the changing labor market, is fulfilled.

Contribution originated in resolving project VEGA 1/0187/16 "Post-fundacionalism perspective in (applied) ethics."

## Bibliography

1. Horný, P., Ďurina, J. (2014). *Prenositel'né kompetencie absolventov slovenských vysokých škôl*. Bratislava: Centrum vedecko-technických informácií SR. Available online <http://vysokoskolacidopraxe.cvtisr.sk/sk/aktuality/napisali-k-teme/prenositelne-kompetencie-absolventov-slovenskych-vysokych-skol.html>, 11.05.2018.
2. Hrehová, D. (2011). Vyučovanie podnikateľskej etiky (prehľadová štúdia). *Pedagogika.sk*, 2, 4, 275-294.
3. Kuzior, A. (2014). Development of competences key to sustainable development. *Zeszyty Naukowe Politechniki Slaskiej, s. Organizacja i Zarządzanie*, 75, 73.
4. Martinkovičová, M., Benčíková, D. (2016). The usable competences of graduates in practice. In: Ethics in the era of social, economic and technological changes. *Zeszyty Naukowe Politechniki Slaskiej, s. Organizacja i Zarządzanie*, 94, 137-149.
5. Sánchez, A.V., Ruiz, M.P. (2008). *Competence-based learning. A proposal for the assessment of generic competences*. Spain: University of Deusto, 334.

6. Introduction to tuning (2006). *Tuning methodology*. Available online [www.unideusto.org/tuningeu/tuning-methodology.html](http://www.unideusto.org/tuningeu/tuning-methodology.html), 21.05.2018.
7. *The european qualifications framework*. Available online <https://ec.europa.eu/ploteus/en/content/descriptors-page>, 21.05.2018.
8. Odporúčanie Európskeho Parlamentu a Rady z 18. Decembra 2006 o kľúčových kompetenciách pre celoživotné vzdelávanie. Úradný vestník Európskej únie, 962/ES. Available online [http://nuczv.sk/wp-content/uploads/2006\\_Klucove\\_kompetencie\\_pre\\_CZV.pdf](http://nuczv.sk/wp-content/uploads/2006_Klucove_kompetencie_pre_CZV.pdf), 21.05.2018.
9. Palenčíková, Z. (2017). Rozvíjanie profesijných kompetencií študentov cestovného ruchu. *Ekonomika a spoločnosť*, 18, 56-68.
10. Vančo, M. a kol. (2016). *Analýza získavania prierezových kompetencií na slovenských vysokých školách*. Bratislava: Centrum vedecko-technických informácií SR. Available online [www.minedu.sk/data/att/10091.pdf](http://www.minedu.sk/data/att/10091.pdf), 21.05.2018.
11. Woodruffe, C.H. (1992). What it mean competency? In R. Boam, R., Sparrow, P. (Eds), *Designing and achieving competency?* (pp. 16-30). London: McGraw-Hill.