

STUDENT EVALUATION OF TRANSFERABLE COMPETENCES AND REQUIREMENTS FOR THEIR STUDIES

Lucie Smékalová¹, & Karel Němejc²

¹*Department of Lifelong Learning and Study Support, Institute of Education and Communication,
Czech University of Life Sciences Prague (Czech Republic)*

²*Department of Pedagogy, Institute of Education and Communication, Czech University of Life Sciences
Prague (Czech Republic)*

Abstract

At present, the quality of education is getting more and more important at the level of educational processes, educational institutions, and overall the education system. This trend is also related to so-called accountability, when educational institutions are responsible for both consequences and quantity and quality of their services. In this way, various evaluations are carried out at universities trying to identify, evaluate, measure and compare quality. However, attention is often paid to tools for measuring learning outcomes through didactic tests, or to different ways of engaging learners' opinions through questionnaires focused mainly on the evaluation of learning environment and performance of the academics. Nevertheless, apart from above mentioned, student evaluation is also necessary to focus on aspects related to students themselves, it means on their complex skills. In this context, the paper deals with transferable competences and methods of finishing university courses. A questionnaire exploratory survey maps the degree of saturation of transferable competences and preferred methods of completion of courses by means of subjective evaluation of the target group, i.e. students of bachelor and master study programmes of a selected Czech university. The results can be used for the administrative decision-making apparatus to help to improve the planning and implementation of the educational processes of the university, both at the curricular level and to ensure optimal conditions for the completion of courses.

Keywords: *Evaluation, transferable competences, saturation, university exams, employment during studies.*

1. Introduction

At present, the quality of education is getting more and more important at the level of educational processes, educational institutions, and overall the education system. As for university graduates, in pace of rapidly changing environments, internationalization and globalization, employers expect them to be fully equipped with various professional skills and knowledge in order to deal with complex situations effectively and solve problems quickly (Murakami et al., 2009). This trend is also related to so-called accountability. As reported by Foley (1999) or Chanock et al. (2004), in recent years, universities have been under increasing pressure to make themselves accountable, among other things in terms of preparation of their students for the rapidly changing world of employment.

Transferable competences (also referred to as transversal, cross sector skills or capabilities, or competences for employability) are considered to be most valued in industrial, commercial and professional life as well as in public and social administration. As they are important to society and to the individual, they should figure prominently in the curriculum (Assiter, 2017).

The fact that the issue of transferable competences is of growing interest not only in Europe is evidenced by many researches, such as for instance Atlay & Harris (2000), Farrington et al. (2012), Stevens & Miretzky (2014), Savitz-Romer et al. (2015). The significance of transferable competences acquired during studies in relation to professional development and support of employability of an individual in the labour market is further referred to also e.g. by Rocha (2015), Miština et al. (2016). Further, transferable competences are set of competences related to attitudes and values (knowing how to be) and procedures (know how). They can be transferred from one specific professional field to another.

The following researchers describe various types of transferable competences (e.g. Andrews & Higson, 2008; Gisbert & Bullen, 2015; Carvalho, 2016; Smékalová et al., 2016).

Based on the above-mentioned, various evaluations are carried out at universities trying to identify, evaluate, measure and compare the quality of education. However, attention is often paid to traditional tools for measuring learning outcomes through didactic tests, or to different ways of engaging learners' opinions through questionnaires focused mainly on the evaluation of learning environments, content of courses and performance of the academics. Nevertheless, student evaluation is necessary to focus on aspects related to students themselves, too, it means on their complex skills, needs and preferences based on current trends and requirements of practice. *In this context, the paper deals with transferable competences, and methods of finishing university courses as perceived by the students.*

The issue of the quality of education, evaluation of the educational process, and transferable competences is the focus of the authors on a long-term basis on both secondary and tertiary level and thus they build on their previous experience and research. In transferable competences, they focus mainly on the benefits of studies to develop these competences, on the saturation (acquisition) of transferable competences, or on the significance of transferable competences for the labour market as seen by students of various fields of study (e.g. Smékalová et al., 2016; Smékalová & Němejc, 2016).

2. Methodology

The aim of the exploratory survey was: *to map the degree of saturation of transferable competences of university students enabling to increase their employability, to find out whether university students have a contract of employment during their studies, and to determine current and preferred methods of completion of university courses*, all by means of evaluation of the target group, i.e. students of bachelor and master study programmes of a selected Czech university.

Qualitative data for the analysis of the issue concerned was obtained by means of a questionnaire survey. The questionnaire investigated the subjective view of students on the development and application of competences in connection with their university studies, and on the evaluation of requirements for completion of courses finished by credits and exams during their university studies.

The questionnaire was administered in a paper form. Clear instructions were given to respondents to fill it out. The response rate of the questionnaires was 100% due to the presence of researchers in the lecture rooms. Because of the focus of the paper, results of the following exploratory questions are presented.

The exploratory question no. 1: The acquisition and development of transferable competences

Indicate to what extent (in %) you believe that university studies have enabled you to acquire and develop transferable competences, that is, those that enable people to increase their employability. These include mainly, in particular, the following skills: communication in a foreign language - ICT skills - learning to learn competence - problem solving skills - teamwork skills - a sense of responsibility, etc. The degree of saturation of transferable competences was indicated on a scale from 10 to 100 %, with a range of 10 %.

Given that transferable competences are closely related to the employability of the graduate in the labour market, the questionnaire contained a follow-up question dealing with the phenomenon to be employed during studies. **The exploratory question no. 2:** Having a job while studying

Answer whether you have a job during your university studies, meaning being employed on the base of an employment contract (not based on the employment agreement). The answers were yes - no.

As the education system is influenced by new trends and changing students' requirements, a question has been included on the ways of completing subjects with exams (current status versus preferred methods of finishing university courses) as perceived by the students.

The exploratory question no. 3: Examination requirements

Choose the ways you most often take the exam when finishing your courses; secondly, choose the methods that you would consider optimal, i.e. those you would prefer. There were six of the most common ways to complete the course by the exam.

The research sample of a questionnaire survey conducted at a selected university in the Czech Republic in the academic year 2017-2018 comprised a total of 213 respondents. Specifically, there were 166 undergraduates of bachelor studies (71 - the 1st grade, 61 - the second grade, and 34 - the third grade). The follow-up master's study programmes are implemented as two-year studies in the Czech Republic, i.e. there were 47 respondents included in total; of whom 21 were 1st grade students and 26 were the second grade students.

3. Results and discussion

3.1. The acquisition and development of transferable competences (degree of saturation)

The degree of saturation of transferable competences was indicated on the scale from 10 % to 100 %, with a range of 10 %. The students expressed themselves based on their overall subjective view. It means they evaluated all the offered transferable competences during their studies as a whole, based on the degree of saturation. The favourable result is clear from Table 1 that that most students (up to 22.1 %) agree that through their university studies, they can perceive the development and saturation of competences up to 70 % out of 100 %. Even higher degree of saturation, i.e. up to 80 % out of 100 %, is reported by almost one fifth of the students (i.e. 17.4 %).

If we divide the response scale (the degree of saturation of transferable competences) into 3 intervals, then the following results can be found: (a) in the range of the degree of saturation of competences of 10 - 30 %, there is an average of 4 % of respondents' answers; (b) in the range of the degree of saturation of competences of 40 - 60 %, there is an average of 14 % of respondents' answers; (c) in case of the interval of 70 - 90 %, there are on average 14 % of respondents' answers. Only two respondents indicated the ideal state of the degree of saturation of transferable competences, i.e. of 100 %, which is an unexpected and surprising result.

Table 1. Saturation of transferable competences in bachelor and master students (frequency, percentage in totals).

The degree of saturation	Bachelor Studies				Master Studies			Total
	Grade 1	Grade 2	Grade 3	Total	Grade 1	Grade 2	Total	
10 %	2	2	1	5 (3.0)	0	0	0 (0.0)	5 (2.3)
20 %	2	3	0	5 (3.0)	0	0	0 (0.0)	5 (2.3)
30 %	7	6	1	14 (8.3)	1	1	2 (4.3)	16 (7.5)
40 %	15	9	4	28 (16.9)	4	1	5 (10.6)	33 (15.5)
50 %	12	12	4	28 (16.9)	2	0	2 (4.3)	30 (14.1)
60 %	9	9	4	22 (13.3)	4	2	6 (12.8)	28 (13.1)
70 %	10	15	10	35 (21.1)	6	6	12 (25.5)	47 (22.1)
80 %	10	4	8	22 (13.3)	3	12	15 (31.9)	37 (17.4)
90 %	3	1	1	5(3.0)	1	4	5 (10.6)	10 (4.8)
100 %	1	0	1	2 (1.2)	0	0	0 (0.0)	2 (0.9)
Total	71	61	34	166 (100.0)	21	26	47 (100.0)	213 (100.0)

It is apparent that, on average, one-seventh of the respondents' answers show the degree of saturation of transferable competences in the interval of 40 - 90 %. Every seventh respondent was able to acquire transferable competences in this range during their university studies. The most frequent interval appeared in the degree of saturation of 70 % and 80 %, respectively. It can be said that the curriculum of the university and the quality of educational mechanisms allow students a sufficient development of transferable competences. This corresponds to the fact that only 4 % of the respondents show 1/3 of the scale of answers in the degree of saturation of 10 - 30 %.

The number of respondents for bachelor studies was 166 (78 %) and 47 (22 %) for master's studies. The differences are because there are three grades in bachelor studies, while in master studies they are two. For this reason, the results are comparable.

The specific form of the development and saturation of transferable competences for individual grades and levels of studies looks like this. Individual grades of bachelor's and master's degree programmes do not show big differences between them within the degree of saturation of competences in the interval 10 - 100 %. According to the criterion of 1/3 of the highest values in the total of respondents' answers for bachelor and master studies, it is evident that master students have acquired competences to a greater degree (60 - 80%) than the respondents of bachelor's degree (40, 50, 70 %). This means that a longer study period allows a higher degree of competence saturation. Similar can be observed for individual grades, when the values in the first year of bachelor students are higher for the degree of saturation of 40 - 50 % (where the frequency is 15 and 12) and lower for the degree of saturation of 70 - 80 % (with the frequency of 10 and 10). In the second and third grades, the degree of saturation then changes in favour of higher frequencies for higher saturation degrees.

3.2. Having a job (employment contract) during university studies

In the detailed view of the results of the second questionnaire item it is obvious that 38 respondents (17.8 %) out of 213 work based on the employment contract, including 34 (20.5 %) of bachelors out of 166. It is worth noting that up to 1/4 of the second grade bachelor students (24.6 %) work contractually. Four (8.5 %) working respondents were among 47 master students (see Table 2).

Table 2. Working university students based on an employment contract (frequency and percentage).

Bachelor Studies				Master Studies			Total
Grade 1	Grade 2	Grade 3	Total	Grade 1	Grade 2	Total	
14 (19.7)	15 (24.6)	5 (14.7)	34 (20.5)	3 (14.3)	1 (3.8)	4 (8.5)	38 (17.8)

Let us underline here that the results can be influenced by a higher-level of working bachelor students compared to master studies. The effect may be that bachelor students acquire competences in higher grades, and, more would be evident from the results of the exams compared to the employment workload of the students. On the other hand, master students can be assumed to focus more on learning and therefore they do not work in such quantity. However, this phenomenon, which the authors have been dealing with for a longer period (e.g. Němejc & Smékalová, 2018).

Comparing the degree of saturation of transferable competences and contract employment of the research sample of the respondents, the vast majority (i.e. $\frac{3}{4}$ or 76.3 %) of those who expressed they worked (n = 38) they had acquired and developed transferable competences in the degree from 40 % to 70 %.

3.3. Examination requirements

In case of the last observed aspect, it can be concluded that there are 627 of responses in total to the current ways of completing subjects (472 in bachelors, 155 in masters). Regarding the preferred ways of completion of subjects by exams, the results are based on a total of 421 responses (of which 322 are in bachelor students, 99 in master students).

Table 3. Completion of courses by exams (current requirements versus respondents' preferences).

Most common ways of finishing a course				Course completion	Preferred ways of finishing a course			
Count	Bachelors %	Masters %	Total %		Count	Bachelors %	Masters %	Total %
86	14.2	12.3	13.7	A multiple-choice test	150	39.1	24.2	35.6
176	29.9	22.6	28.1	A written exam with given open-ended questions	63	13.4	20.2	15.0
108	16.5	19.4	17.2	An oral exam with time to prepare	108	24.5	29.3	25.7
80	12.1	14.7	12.8	An oral exam without time to prepare	20	4.7	5.1	4.8
108	16.9	18.1	17.2	An oral exam with a random selection of questions by the student	57	13.6	13.1	13.5
69	10.4	12.9	11.0	An oral exam with questions given by the teacher	23	4.7	8.1	5.4
627	100.0	100.0	100.0		421	100.0	100.0	100.0

Table 3 demonstrates that today, the students are most likely to complete the course by a written exam with given open-ended questions. This is similar in bachelor, as well as in master studies. In the latter mentioned, an oral exam with time to prepare answers, or an oral exam with a random selection of questions by the student are also common to a similar extent.

As for the preferred ways of completion of the courses, the bachelor students would prefer the written test with the choice of the answer options (so called multiple-choice test). Master students would prefer an oral exam with time to prepare answers, the preference of a multiple-choice test was chosen as second in the order of preference.

Overall, the least favourite ways of completion of courses include an oral exam without the time to prepare the answers (direct answering), and an oral exam with questions given by the teacher. We believe that a multiple-choice test is easier in the eyes of students as they see the answer and do not have to think about it for a long time, as opposed to an oral exam. They also do not have to demonstrate their communicative skills and the ability to apply the issue in practice.

4. Conclusions

The paper confirms the fact that the attention and significance of transferable competences is growing at a university level, which also corresponds to the findings of this exploratory survey. Similar conclusions can be stated for the developing trend of employment of university students during their studies (as evidenced e.g. by Murakami et al., 2009; Němejc & Smékalová, 2018). Finally, yet importantly, our results underline the importance of the adaptation of the completion of courses by exams. Here, it is desirable to keep up with current trends such as e-learning platforms. The university should also adapt to various tests, i.e. to have a combination of tests and exams based on the particular type of study.

It can be concluded that the results can be used for the administrative decision-making apparatus to help to improve the planning and implementation of the educational processes of the university, both at the curricular level and to ensure optimal conditions for the completion of university courses.

References

- Atlay, M., & Harris, R. (2000). An Institutional Approach to Developing Students Transferable Skills. *Innovations in Education and Training International*, 37(1), 76-84.
- Andrews, J., & Higson, H. (2008). Graduate Employability, Soft Skills versus Hard Business Knowledge: A European Study. *Higher Education in Europe*, 33(4), 411-422.
- Assiter, A. (2017). *Transferable Skills in Higher Education*. New York: Routledge.
- Carvalho, A. (2016). The Impact of PBL on Transferable Skills Development in Management Education. *Innovations in Education and Teaching International*, 53(1), 35-47.
- Chanock, K., & Clerehan, R., Moore, T., Prince, A. (2004). Shaping University Teaching towards Measurement for Accountability: Problems of the Graduate Skills Assessment Test. *Australian Universities' Review*, 47(1), 22-29.
- Farrington, C.A., & Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W., Beechum, N.O. (2012). *Teaching Adolescents to Become Learners. The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review*. Chicago: University of Chicago Consortium on Chicago School Research.
- Foley, P. (1999). Transferable Skills Teaching: Contextual Pressures and Personal Dilemmas. *Teaching in Higher Education*, 4(1), 5-25.
- Gisbert, M., & Bullen, M. (2015). *Teaching and Learning in Digital Worlds: Strategies and Issues in Higher Education*. Tarragona: Universitat Rovira i Virgili.
- Miština, J., & Hrmo, R., Krištofiaková, L. (2016). Teaching Professional Communication Competences for Labour Market Needs in Technical and Vocational Schools in Slovakia. In J. Miština & R. Hrmo (Eds.), *Key Competences and the Labour Market* (8-27). Warsaw: Warsaw Management University Publishing House Prof. Leszka Krzyżanowskiego.
- Murakami, K., & Murray, L., Sims, D., Chedzey, K. (2009). Learning on Work Placement: The Narrative Development of Social Competence. *Journal of Adult Development*, 16(1), 13-24.
- Němejc, K., & Smékalová, L. (2018). Reasons for Frequent Absence of Students from Lectures: Subjective Statements. *The International Journal of Assessment and Evaluation*, 25(1), 11-24.
- Rocha, M. (2015). Predictors of the Acquisition and Portability of Transferable Skills: A Longitudinal Portuguese Case Study on Education. *Higher Education: The International Journal of Higher Education and Educational Planning*, 69(4), 607-624.
- Savitz-Romer, M., & Rowan-Kenyon, H.T., Fancsali, C. (2015). Social, Emotional, and Affective Skills for College and Career Success. *The Magazine of Higher Learning*, 47(5), 18-27.
- Smékalová, L., & Němejc, K., Slavík, M. (2016). Plasticity of Evaluation of Transferable Competences of Students of Technical and Natural Science Fields of Study: A Transversal Research. In J. Miština & R. Hrmo (Eds.), *Key Competences and the Labour Market* (29-45). Warsaw: Warsaw Management University Publishing House Prof. Leszka Krzyżanowskiego.
- Smékalová, L., & Němejc, K. (2016). Transferable Competencies of Graduates of Vocational Education: A Retrospective Survey 2007-2014. In *Proceedings of the 9th International Scientific Conference: Rural Environment - Education - Personality (REEP)* (106-113). Jelgava: The Latvia University of Agriculture, Institute of Education and Home Economics.
- Stevens, S., & Miretzky, D. (2014). The Foundations of Teaching for Diversity: What Teachers Tell Us about Transferable Skills. *Multicultural Education*, 22(1), 31-40.