Integrating Transferable Skills into the Curriculum in the Framework of the Management of Study Programmes in Higher Education Institutions of Latvia

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Abstract: In the agenda of globalization and the related integration of markets in the world economy, the main concern for modern universities is to provide their graduates with a wide range of skills necessary for launching and managing their professional career. This is directly associated with the overall academic quality of the study programme. In this context, higher education institutions of Latvia should develop a clear policy for integrating transferable skills in their academic programmes. As programme directors manage all pedagogical and administrative issues affecting the programme, and introduce modifications in accordance with the changing requirements of students, they need some information about their students’ opinion on promoting transferable skills in the university. Later, this information will be used in the course of the management of a study programme for updating it and making it more competitive in the international education market. In the paper, it is argued that integration of transferable skills into the curriculum can be regarded as an essential aspect of the management of study programmes in a university, which is vital in the context of providing more career opportunities to graduates.

The aim of the research presented in the paper was to identify what transferable skills (those that can be used across different fields and jobs) would appeal to potential employers and contribute to a successful career from the point of view of university students. The paper is based on 1) the analysis of theoretical literature and official EU documents on higher education; 2) a survey conducted in two higher education institutions of Latvia – Riga Technical University (RTU) and Transport and Telecommunication Institute (TSI). The results of the study performed in the paper suggest that the formation of students’ transferable skills should be integrated in a corresponding study programme and promoted over the whole period of studies. Education managers should favour the development of a wide assortment of skills, which are vital for their graduates’ professional growth and career development.

Keywords: higher education, transferable skills, study programme management.

Introduction

Today, European universities face serious challenges (The role of..., 2003; European Higher..., 2013) which is particularly topical in the context of the implementation of the European strategy for Smart, Sustainable and Inclusive Growth (Europe 2020...., 2010).

As both skills and human capital are now the pillars of economic prosperity and social well-being, it requires nations to maintain their competitiveness by developing and sustaining a skilled workforce (Tremblay, Lalancette, 2012). Thus, higher education, being a crucial factor in innovation and human capital development, plays an essential role in the success and sustainability of the knowledge economy (Dill, Van Vught, 2010).

In view of the above, the main concern for modern universities is to provide their graduates with a wide range of skills necessary for launching and managing their professional career in the knowledge-based economy. This is directly associated with the overall academic quality of study programmes. In this context, higher education institutions of Latvia should develop a clear policy for integrating transferable skills in their academic programmes. As programme directors manage all pedagogical and administrative issues affecting the programme, and introduce modifications in accordance with the changing requirements of students, they need some information about their students’ opinion on promoting transferable skills in the university. Later, this information will be used in the course of the management of a study programme for updating it and making it more competitive in the international education market. In the paper, it is argued that integration of transferable skills into the curriculum can be regarded as an essential aspect of the management of study programmes in a university, which is vital in the context of providing more career opportunities to graduates.

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career from the point of view of university students. The paper is based on the analysis of theoretical literature and official EU documents on higher education, and a survey conducted in two higher education institutions of Latvia.

**Methodology**

The paper is based on 1) the analysis of theoretical literature and official EU documents on higher education; 2) a survey conducted in two higher education institutions of Latvia – Riga Technical University (RTU) and Transport and Telecommunication Institute (TSI). The research population included the students studying the following programmes: Computer Science, Telecommunications, Transport and Logistics, Management and Economics.

An original questionnaire was developed by the authors. A list of transferable skills was developed on the basis of ESF’s list of 17 transferable skills identified for researchers (Research Careers in Europe, 2009, 48); it was adapted to the higher education context. A discussion “What are the 21st century skills students need?” was also organized by the authors prior to conducting the survey. 202 students from the above study programmes participated in the discussion and expressed their point of view on the topic. The information obtained in the discussion was used to create the questionnaire.

Eventually, the following variables (transferable skills) were chosen for empirical analysis: S1 - Communication skills, S2 - Analytical skills, S3 – IT skills, S4 - Flexibility/adaptability, S5 - Interpersonal skills, S6 - Language skills, S7 - Teamwork skills, S8 - Organizational and planning skills, S9 - Self-management skills, S10 - Problem-solving skills, S11 - Critical thinking skills, S12 - Presentation skills, S13 – Leadership skills, S14 - Intercultural skills.

Students were asked to rate the above items on a five-point Likert scale, as follows: 1 = not important, 2 = somewhat important, 3 = sufficiently important, 4 = rather important, 5 = highly important.

The obtained data were processed using SPSS software package.

**Results and discussion**

1. **Analysis of literature and official EU documents on education**

Modern European universities face new challenges associated with creating the European Higher Education Area and providing quality higher education (Bologna Declaration, 1999; Standards and Guidelines for…, 2009; Bergen Communiqué, 2005; London Communiqué, 2007; The European Higher Education…, 2012) in the context of the implementation of the European strategy for Smart, Sustainable and Inclusive Growth (2010).

It is vital that European students have access to the best possible higher education learning environment (Modernisation of Higher Education…, 2014), the European Union’s higher education institutions being crucial for generating new knowledge, educating critical thinkers and problem-solvers”, and Europe’s graduates being the “most effective channels for transferring knowledge” from higher education institutions to the society because of “enriching the individual, the family, the community, the workplace, the nation, the EU and the wider world” (High Level Group on…, 2013). The European strategy for Smart, Sustainable and Inclusive Growth (Europe 2020…, 2010) is based on the following mutually supporting priorities: developing an economy based on knowledge and innovation, promoting a more resource efficient, greener and more competitive economy delivering social and territorial cohesion.

The goals posed to European education and training include both professional development of Europeans and their personal development for a better life and active citizenship in democratic societies respecting cultural and linguistic diversity (Detailed work…, 2002). The Lisbon agenda for economic growth emphasizes the importance of giving EU citizens the opportunity to develop their skills for managing their careers (Career development…, 2008).

In this context, to better anticipate the labour market’s needs the Commission has adopted a new and comprehensive “Skills Agenda for Europe” aimed at 1) assuring that EU citizens develop a wide assortment of transversal skills necessary to improve their chances in life; 2) making the most of Europe’s human capital, which will finally increase employability, competitiveness and growth in
Europe (Ten Actions…, 2016). These new basic skills should be provided through lifelong learning, and they are associated with the key competences defined in the Recommendation of the European Parliament and of the Council on key competences for lifelong learning (2006):

- communication in the mother tongue (developing skills related to the ability to communicate orally and in writing in different communicative situations);
- communication in foreign languages (developing skills related to mediation and intercultural understanding);
- mathematical competence and basic competences in science and technology (skills related to the ability to handle technological tools and scientific data);
- digital competence (skills related to the ability to gather and process information, and use it in an organized way);
- learning to learn (literacy, numeracy and ICT skills needed for further learning);
- social and civic competences (skills related to the ability to communicate productively in different environments, to demonstrate tolerance and understanding of different viewpoints);
- sense of initiative and entrepreneurship (skills related to the ability to plan, organise, manage, lead and delegate, analyse and assess, as well as the ability to work in teams);
- cultural awareness and expression (skills associated with the ability to connect one’s own creative and communicative opinions with the opinions of others, and understand social and economic opportunities in cultural activity).

There can be a diversity of approaches to the integration of skills into the curriculum. Most higher education institutions choose to develop their own list of desirable skills (Fallows, Steven, 2000) depending on institutional priorities and practices. For example, students learning a laboratory-based science subject have to develop additional skills necessary for operating professionally in their specialist environment (Ibid.). Such skills are characterized as transferable skills – the skills “learned in a particular context that can be useful in another context”, as they can be applied in a variety of work situations and areas (Transferable Skills …, 2012).

Today, educational managers face the challenge of embedding various skills provision within a curriculum so that it will make its contribution to their students’ overall development. As economic and social transformations are constantly occurring in the global environment, they have to review their study programmes in order to bring it in line with these transformations, integrating the 21st century skills provision within a curriculum being an important aspect of the programmes’ management, development and improvement. This can be done in the framework of the management of study programmes; programmes can be tuned to discipline requirements due to considerable autonomy being given to a particular department for meeting the needs of different disciplines areas. In this context, the role of a programme director increases. Study programme directors supervise a study programme, representing an “interface” between students, academic staff and the university administration. So, they manage pedagogical, operational, and administrative issues that affect the programme implementing program necessary modifications. Education markets are complex as they comprise many different stakeholders, university students being among them. The stakeholders perceive educational quality differently depending on their requirements and expectations. The increased competition in higher education makes universities employ more customer-oriented approach in delivering their services (Kara, DeShields, 2004); and a faculty that supports this customer-oriented attitude would be responsive to its students’ interests and opinions (Hemsley-Brown, Oplatka, 2010). If educators have sufficient understanding of their students’ needs and expectations, they could manage them, the information they collect assisting education managers to create novel managerial and pedagogical tools (Voss, 2009). Education managers can successfully use student evaluations in several contexts – student evaluations of a study course, of a study programme (Stukalina, 2012).

In view of the above, students’ perceptions (evaluation) of their skills development should be obtained by the programme director in the agenda of the management of study programmes. Education managers can successfully use this information in different contexts:

- for initiating activities in the department to address some urgent issues in undergraduate education;
- for monitoring and implementing the study programme;
- for modifying the programme and adding (or deleting) some courses;
• for providing students with essential information on their programme and their progress through it;
• for advising students how to solve problems that may arise in the course of studies;
• for providing assistance to the academic staff involved in the programme’s implementation;
• for establishing efficient communication channels among the participants of the educational process (faculty, students, academic and attending staff).

2. Analysis of the empirical study

The study findings are presented in Table 1 and Figures 1, 2, 3 and 4. The results of the study show that the importance of various transferable skills is evaluated differently by different students – some skills students consider to be of the highest importance, whereas some skills are regarded to be less significant, though of a high importance too. So the skills can be categorized according to how they are perceived by students from their career development perspective.

Table 11

<table>
<thead>
<tr>
<th>Variables</th>
<th>Students of Computer Science</th>
<th>Students of Telecommunications</th>
<th>Students of Transport and Logistics</th>
<th>Students of Management and Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Mdn</td>
<td>M</td>
</tr>
<tr>
<td>Communication and people skills</td>
<td>3.9</td>
<td>0.9</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Analytical skills</td>
<td>4.3</td>
<td>0.9</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>IT skills</td>
<td>4.7</td>
<td>0.8</td>
<td>5</td>
<td>4.3</td>
</tr>
<tr>
<td>Flexibility/ adaptability</td>
<td>4.0</td>
<td>0.9</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>3.5</td>
<td>0.9</td>
<td>3</td>
<td>3.6</td>
</tr>
<tr>
<td>Language Skills</td>
<td>4.1</td>
<td>1.1</td>
<td>4</td>
<td>4.1</td>
</tr>
<tr>
<td>Teamwork skills</td>
<td>4.3</td>
<td>0.9</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>Organizational and planning skills</td>
<td>4.1</td>
<td>0.9</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Self-management skills</td>
<td>3.8</td>
<td>1.0</td>
<td>4</td>
<td>4.1</td>
</tr>
<tr>
<td>Problem-solving skills</td>
<td>4.4</td>
<td>0.9</td>
<td>5</td>
<td>4.3</td>
</tr>
<tr>
<td>Critical thinking skills</td>
<td>4.2</td>
<td>0.9</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Presentation skills</td>
<td>3.2</td>
<td>1.2</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Leadership</td>
<td>3.4</td>
<td>1.2</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>Intercultural skills</td>
<td>3.1</td>
<td>1.2</td>
<td>3</td>
<td>3.2</td>
</tr>
</tbody>
</table>

As seen in Table 1, more than half of the students of Computer Science think that analytical skills/IT skills, teamwork skills and problem-solving skills are of the highest importance. However, communication skills, flexibility/adaptability, language skills, organizational and planning skills, self-management skills, critical thinking skills are also regarded by students as very important for their professional growth.

As seen in Table 1, more than half of the students of Computer Science believe that analytical skills, IT skills, teamwork skills and problem-solving skills are of the highest importance. Moreover, students also consider communication skills, flexibility/adaptability, language skills, organizational and planning skills, self-management skills and critical thinking skills to be significant in the agenda of their career development. The obtained data also prove that more than half of the students of Telecommunications think that IT skills, language skills, problem-solving skills and critical thinking skills are of the highest importance. According to the students' opinion communication skills, analytical skills, interpersonal skills, organizational and planning skills, teamwork skills, leadership skills and presentation skills are also essential in the context of their career development (Table 1).
The data also show that more than half of the students of Transport and Logistics think that communication skills, language skills, organizational and planning skills, problem-solving skills are of the highest significance. The critical thinking skills and all other skills are also very important for the students (Table 1).

The results indicate that more than half of the students of Management and Economics believe that communication skills, flexibility/adaptability, language skills, teamwork skills, organizational and planning skills, self-management skills, critical thinking skills and problem-solving skills are of the highest importance. The students consider other skills also to be very important as well (Table 1).

According to the opinion of students one of the most important transferable skills for their professional career are communication skills. However, students of diverse study programs assess these skills in a different way: for example, for the students of Management and Economics and Transport and Logistics such skills are extremely important – 4.9 and 4.7 points respectively (Figure 3, 4). Whereas, for the students of Computer Science and Telecommunications these skills are not so significant – 3.9 and 4 points (Figure 1, 2).

Figure 1. Importance of transferable skills as perceived by students from their career development perspective (Means): Students of Computer Science.

Figure 2. Importance of transferable skills as perceived by students from their career development perspective (Means): Students of Telecommunications.
The difference in students’ opinions could be explained by the fact that the students of Management and Economics and Transport and Logistics are more tended to communicate and cooperate with people, and the communication and cooperation are of a vital importance for their professional career development in comparison with the students of Computer Science and Telecommunications. However, in the circumstances of globalization, the students of the Computer Science and Telecommunications also have to take into consideration that communication skills can be applied in a variety of working areas, this way assisting them to perform in a multicultural environment. That is why as a positive tendency is worth mentioning that the students of Computer Science, Telecommunications and Transport and Logistics evaluate the importance of intercultural skills quite highly – 4.4 and 3.9 points respectively (Fig 1, 2, 3) in comparison with the students of Management and Economics – 3.6 points (Fig 5). Nevertheless, when analyzing the students’ opinion about interpersonal skills, it should be mentioned that the students of Computer Science and Telecommunications (3.5 and 3.6 points respectively) consider them to be less important compared to the students of the Management and Economics (4.2 points) and Transport and Logistics (3.9 points) (Figure 1, 2, 3, 4). The intentions of students to enter the global labour market prove their attitude towards the importance of language skills. The highest evaluation of language skills is characteristic for the students of Transport and Logistics and Management and Economics – 4.7 and 4.6 points respectively (Figure 3, 4). The students of Computer Science and Telecommunications evaluate language skills a little lower – 4.1 points (Figure 1, 2). However, there is a tendency among students to put more emphasis on language learning as good language skills would provide sharp edge in the international labour market.

Communication skills are also closely related to teamwork skills. The data of the research provide some interesting findings – the students of Computer Science demonstrate quite high evaluation of team work.
skills – 4.3 points in spite of the fact they are not very active communicators (Table 1). The students of Management and Economics and Transport and Logistics also consider teamwork skills to be significant – 4.4 and 4.2 points (Figure 4, 5). Whereas the students of Telecommunications believe that having good teamwork skills is less important – 3.8 points (Figure 2).

Flexibility/adaptability could also be mentioned as transferable skills which being important in communication and cooperation process, can help students promote their professional career. The students of Management and Economics assess these skills highly – 4.3 points (Figure 4). The students of Computer Science, Transport and Logistics and Telecommunications also have expressed a positive attitude towards the acquisition of these skills – 4 and 3.9 points (Figure 1, 2, 3), which means that students have a positive attitude towards the communication. Moreover, there are other transferable skills which are also connected with communication and cooperation process. These are problem-solving skills and organizational and planning skills. The research results indicate that the students of Management and Economics consider problem-solving skills (4.5 points – Figure 4) and organizational and planning skills (4.7 points – Figure 3) to be vital for them to succeed in different working areas. It is worth mentioning that the students from other programs – Telecommunications, Transport and Logistics and Computer Science also evaluate problem-solving skills (4.3 and 4.4 points – Figure 1, 2, 3) and organizational and planning skills (4.2, 4.4 and 4.1 points – Figure 1,2, 3) to contribute much to their professional career development.

Besides, the results of the research show students’ attitude towards the other transferable skills related to the communication and cooperation process, namely self-management skills and leadership skills. However, it should be noted that the students evaluate the importance of these skills differently. The students of the Transport and Logistics (4.2 points), Management and Economics (4.3 points) and Telecommunications (4.1 points) considered self-management skills to be more significant in comparison with the students of Computer Science (3.8 points – Figure 1, 2, 3, 4). A similar tendency is seen in the evaluation of leadership skills – the students of Transport and Logistics (3.9 points), Management and Economics (3.8 points) and Telecommunications (3.6 points) assess the importance of leadership skills a little higher than the students of Computer Science (3.4 points – Figure 1, 2, 3, 4). Though, according to the students’ evaluation, these skills are of less importance for students’ professional career compared to other transferable skills.

The data of the research also prove that students have an opinion that skills connected with the development of their thinking process are of a high value for their professional career advancement. These are the following transferable skills – critical thinking skills and analytical skills. The students of all programmes evaluate these skills as very important (4 and 4.3 points – Figure 1, 2, 3, 4).

The transferable skills closely connected with students’ professional development are IT skills. It is obvious that the students of Computer Science assess these as the most important skills of all analysed – 4.7 points (Figure 2). The students of Telecommunications also highly evaluate IT skills – 4.3 points (Figure 2). Whereas the students of Transport and Logistics (3.8 points) and Management and Economics (3.6 points) are of an opinion that IT skills are not so essential for their professional career development (Figure 4, 5). When evaluating other transferable skills related to the students’ professional career – presentation skills, the results show that the students of Management and Economics (4 points) and Transport and Logistics (3.9 points) believe these skills to be quite important for their professional growth (Figure 3, 4). In turn, the students of Computer Science (3.2 points) and Telecommunications (3.4 points) think that these transferable skills are not to a large extent significant for their successful future career (Figure 1, 2).

In general, the results of the empirical study clearly indicate that a set of transferable skills have to be developed in the academic settings making an allowance for the students’ future career perspective, since building such skills can greatly expand the students’ career options and opportunities. This corresponds to the presupposition that the management of students’ professional career should start early (Roskosa, Stukalina, 2016).
Conclusions

- As the situation in the modern international labour market is dynamic and turbulent, students need transferable skills, which they can use in different areas and professional situations.
- The formation of students’ transferable skills should be integrated in a corresponding study programme and promoted over the whole period of studies. Education managers should favour the development of those skills, which are vital for their graduates’ professional growth and career development.
- Favoursing the development of transferable skills it is recommended that educators employ such learning and teaching methods and formats, which can improve students’ ability to work in a team, motivate students to take responsibility for their work and actions and promote their adaptability and flexibility in the constantly changing global environment.
- Since the importance of various transferable skills is evaluated differently by different study programme students, it is highly recommended that education managers operating in the area of career guidance and counselling perform regular analysis of the current situation in the local and international labour markets, at the same time staying tuned for their students’ expectations. For this purpose, student surveys and interviews can be used.
- Education managers responsible for career guidance and counselling in a university should work in close cooperation with the programme director (manager) who is responsible for the pedagogical and administrative issues affecting the programme.
- A limitation of this study is the small sample size (two higher education institutions), and further research is planned using a larger population.

Bibliography


