

DEVELOPMENT OF KEY COMPETENCES FOR LIFELONG LEARNING IN STUDENTS DURING MOBILITY

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Abstract

Given the global change, key competencies form the leitmotif in educational processes development at all levels of school systems and their participants. At the same time, students' education is characterized by a greater degree of independence and freedom in choosing the way of learning. Their participation in mobility programs represents a certain contribution. This paper deals with examination of students' opinion on the development of key competences for lifelong learning during their stay abroad within the *Erasmus+* mobility program.

The aim of this research is to determine the extent to which each of the eight key competencies has developed in students during their stay abroad and to examine how they recognize that they have developed and/or improved certain competencies for lifelong learning. Participants of semistructured interview are students of the University of Zadar (Croatia) who spent one semester studying at universities abroad. Main results showed that the majority of the students have mostly developed a multilingual, partly mathematical competence, digital, personal, social and learning competences. A lot of key competences have been developed also in the informal context. All of them, inter alia, emphasise that multilingual competence is the most developed competence during the mobility for which there is no possibility to improve and develop rapid at the home university as it is possible abroad. In conclusion, the students recommend to other students that it is worth to spend a period studying abroad since it has much more benefits than disadvantages.

Keywords: lifelong learning, key competences, mobility programmes, semi-structured interview, student.

1 INTRODUCTION

We are living in the learning civilisation of the 21st century. Learning is a naturally innate need of humans, but it is also recognized as a competence. There are numerous definitions of competences, but none of them encompass this phenomenon in its entirety. Competence comes from the Latin word *competens* and it means *responsible for, proper*. The shortest way to define it would be as a person's ability to master demands of a certain field, and therefore it can be referred to as social competence, personal competence and professional competence [1]. Competence as a concept and a subject of research in the field of education was first used by American psychologist David McLelland in the *American Psychologist* journal in 1973 [2]. In the *Lexicon of Basic Pedagogical Concepts*, under the concept of competence Mijatović [3: 158] implies "personal ability to do, perform, manage and act at the level of a particular knowledge, skill and ability, which a person can prove in a formal or non-formal manner." According to Razdevšek-Pučko [4: 75], competence implies "the ability of effective action in a number of situations, which is based on acquired knowledge, although it is not limited by that knowledge." One of the definitions determines competence as "the ability to successfully deal with more complex demands in special situations by mobilizing psychological predispositions" [Rychen, Salganic, 2003: 13 according to 5: 111]. In another definition, Suzić [5: 111] quotes Chisholm (2005) and states that "competence means the ability to apply knowledge, know-how and skills in a stable/recurring or changing situation." According to the Recommendation [6: 174] competences encompass knowledge, skills and attitudes and thus form a combination of aforementioned elements. "Key competences are those that are needed by all individuals for personal validation and development, active civic life, social integration and employment".

There are many competences, but each of them encompasses this phenomenon only partially and cannot be identified with ability. It is derived from the optimal definition of competence that a competence is ability in action [5], while Jurčić [7] believes that it is an emerging concept since there is no definition that is generally accepted and agreed upon by the scientists.

Global social changes lead to the change of the teaching paradigm, learning and education in general. Since realization of the concept of lifelong learning is strived toward, it is necessary to clearly define

key competences, both in teachers and students. At the centre of learning are students and learning outcomes, i.e. competences necessary to acquire during school education as a foundation for further education, employment and professional development [8]. Therefore, this paper will present eight key competences for lifelong learning as defined and adopted by the Council of the European Union in the document *Council Recommendation of 22 May 2018 on key competences for lifelong learning* (hereinafter *Recommendation*). This Recommendation was preceded by the *Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences on lifelong learning* (2006/962/EC) which was the first to define eight key competences, i.e. European Reference Framework. Namely, teaching methods have, in the meantime, developed quickly; development of competences was under increasingly strong influence of information and communications technology and it is necessary to better utilise the (formal and informal) environment for education, training and learning. These are some of the reasons the *Recommendation* from 2006 was replaced by the *Recommendation* from 2018 whose goal, among others, is to “support the right to quality and inclusive education, training and lifelong learning and ensure opportunities for all to develop key competences by making full use of the ‘Key Competences for Lifelong Learning — A European Reference Framework’” [9: 4].

Competence, one of the key terms of the document, is defined in the *Recommendation* as a “combination of the knowledge, skills and attitudes, where d) knowledge is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject; e) skills are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results; f) attitudes describe the disposition and mind-sets to act or react to ideas, persons or situations” [9: 7]. Key competences are necessary for everyone for the purposes of personal development and fulfilment, employment, social inclusion and active citizenship. They develop within the domain of lifelong learning, i.e. from childhood to old age, in different environments through formal, non-formal and informal learning. In the Reference Framework, all eight key competences are considered equally significant since each of them contributes to successful life. They overlap and intertwine so the development of competences in one area can stimulate development in another area. Therefore, application in different contexts and combinations, overlapping and intertwining make some of the features of key competences for lifelong learning. Key competences include skills such as: critical thinking, problem solving, teamwork, communicative skills, analytical skills, creativity and intercultural skills [9].

Key competences revised in the 2018 *Recommendation* are: Literacy competence; Multilingual competence; Mathematical competence and competence in science, technology and engineering; Digital competence; Personal, social and learning to learn competence; Citizenship competence; Entrepreneurship competence; and Cultural awareness and expression competence. More detailed description of each of the competences will be provided in the research results analysis and interpretation chapter.

Alongside the notion of competence, learning in formal, non-formal and informal environment is also highlighted, and the *Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning* states: formal learning is realized in organised and structured environment intended for organisation and implementation of learning, and by obtaining qualification, one also obtains a certain certificate, diploma and similar; non-formal learning is a form of planned activities where learning support is provided in the form of courses organised by the civic society for its members or general public, programmes whose purpose is obtaining work skills, adult literacy and similar; informal learning is defined as learning through everyday activities related to family, work and leisure without organisation and structure in the sense of objectives or learning support. Various skills acquired through work and life experience are highlighted as learning outcomes of informal learning [10].

As one way of supporting development of key competences, especially linguistic ones, the Council of the European Union recognises mobility of both faculty and students. Mobility at the higher education level is mainly realized in the form of the *Erasmus+* mobility programme, or more precisely *Erasmus+: higher education* sub-programme (hereinafter *Erasmus+*). The aims of the programme are strengthening of knowledge, skills, competences and employability of European citizens, advancement of education and work in the youth and sport field, while the aim of the sub-programme is modernisation and improvement of higher education throughout Europe and in the rest of the world [11]; [12]. *Erasmus+* also represents a contribution to the *Europe 2020* strategy, *A European strategy for smart, sustainable and inclusive growth* (2010). The cycle of formation of higher education policy at the European Union level was initiated in late 60s of the 20th century and ended with European Council adopting this programme on June 15th 1987 while its realisation began on July 1st of the same

year. With this model of transformation of an idea into a common policy, university autonomy and national sovereignty were, at the same time, respected and preserved (Šćukanec 2010).

2 METHODOLOGY

This chapter contains review of methodology of the conducted qualitative research with accompanying description of the subject of research, research aim, from which are derived research objectives, participants, research methods and instruments, details about the time and place the research was conducted, as well as the process of research and data processing.

2.1 Research subject

Student opinions on development and/or improvement of key competences for lifelong learning during studying abroad under the *Erasmus+* mobility programme.

2.2 Research aim

The aim of this research is to determine how students recognise within themselves development and/or improvement of each of the eight key competences during studying abroad and examine their assessment of the ways they developed and/or improved certain lifelong learning competences.

2.3 Research objectives

Research objectives derived from the research aim are as follows:

- 1 Determine students' assessment of their own development and/or improvement of competences for lifelong learning during studying abroad.
- 2 Determine students' opinion on the manner of development and/or improvement of competences for lifelong learning during studying abroad.
- 3 Examine students' opinions on advantages and disadvantages of studying abroad.
- 4 Examine students' opinions on competences developed and/or improved during studying abroad, for which they had not had the opportunity to develop and/or improve during study at their home university.

2.4 Research participants

Population or the basic data set are students who participated in the *Erasmus+* mobility programme, and the sample, i.e. participants of this research are University of Zadar students who had realized mobility within the *Erasmus+* mobility programme. All research participants are students of different double-major combinations (English language and literature, Italian language and literature, Spanish language and literature, Russian language and literature and Pedagogy). The research included eight students of different double-major combinations at the graduate level, where six students make a group of students studying two different foreign languages, while two participants are students of a foreign language and pedagogy. At the time the research was conducted, six of the eight participants were in their absolvent year, i.e. students at the final year of graduate study, while two of them already obtained their master's degree (age varies from 24 to 26 years). Research participants were chosen through non-random sampling which includes "choosing closest individuals as respondents and continuation of that process until desired size of sample is reached" [14: 102].

2.5 Research method and instrument

Qualitative research was conducted using the method of semi-structured problem-centred interview which provided a more thorough entry into the issue and an adequate insight into participants' way of thinking about the research subject. Research method used is the interview research method, and the instrument used for data collection was semi-structured individual interview. It is, according to Patton [15: 343], "a guided interview where topics and problems are pre-specified in the form of a set framework, and the researcher decides the sequence of topics and the manner of asking questions during the conversation." This enables flexibility in data collection because, with pre-determined structure of fundamental questions, it also allowed asking sub-questions which were asked depending on the answers given by the participants. Duration of each individual interview was around 25 minutes.

At the very beginning, each research participant was individually explained the aim and purpose of the research. All of the participants have given their consent to participate, with previously offered possibility of withdrawal at any moment and with guaranteed anonymity and data confidentiality.

The first part of the semi-structured interview included general questions and data about the participant (age, study majors, year and university level at the time of studying abroad, duration of the study abroad and the country and city of study abroad). The second part of the interview consisted of eight questions categorised according to the eight key lifelong learning competences and of questions about the advantages and disadvantages of studying abroad. The last question referred to whether or not research participants would recommend an abroad study to future generations of students.

2.6 Time and place of the research

The research was conducted during June, August, September and October of 2019 in the following Croatian cities: Opatija, Zadar, Šibenik and Split.

2.7 Research process and data analysis

With the help of scientific literature [16]; [17]; [14], presented research methodology was determined. According to Mužić [16] in case of a qualitative research, a structured individual interview is used, which enables predetermination of categories that could be expanded if needed. In accordance with that, each student was asked the same sequence of main questions, and sub-questions were asked for each separate question, depending on provided answers.

Qualitative data collection approach provided answers that were then transcribed into written form, with a record of every pause, participant's speech intonation, dilemmas, facial expressions, i.e. non-verbal communication. With data reduction to a level necessary for research and text transmission into shortened, categorised sentences, research results which will be presented in the following chapter, were provided. In order to guarantee participants' anonymity, each participant was marked with a lowercase letter *s* with an accompanying numbering (s1, s2, s3, s4, s5, s6, s7, s8).

Qualitative data analysis provided research results which were partially compared with results of previous research on the same subject and their interpretation will be provided below.

3 RESULTS

Results of the introductory part of the conversation indicate that all participants have used their study abroad within mobility programmes at the graduate level. In general, all eight students spent their stay abroad, whose duration was from three to six months, in a country whose linguistic area corresponds to the language the participant is majoring in at the University of Zadar. Therefore, it can be concluded that motivation for study abroad, among others, is acquisition and improvement of knowledge of a particular foreign language. Countries and cities the participants studied abroad during mobility programmes are Italy (Padua, Pavia and Rome) and Spain (Valencia).

The results of the second part are categorised according to questions which refer to the development of each of the key competences for lifelong learning. The analysis of the final part of the interview is connected with aforementioned topics: Advantages and disadvantages of studying abroad and competences acquired at a foreign university, which were not possible to develop and/or improve at their home university.

3.1 Student assessment of development and/or improvement of key lifelong learning competences

The analysis and interpretation of research results is focused on each particular competence, it begins with a brief description of each of them and will be completed with a review of the manner of development of each individual competence, i.e. development of competences through formal, non-formal and/or informal learning. Some research results will be complemented with results of some other research on this subject.

In relation to the **literacy competence**, research participants were asked a question which referred to efficient communication, leading a constructive dialogue and connecting with other individuals in an appropriate manner. All participants have agreed that efficient communication is crucial for connecting with others and additionally brought to consciousness the importance of language and transparent

communication, whether in formal, non-formal or informal sense. Participant s4 states that, before his departure for study abroad, he took language and communication for granted because he was in a familiar environment. However, during his study stay abroad, he realised that efficient communication and literacy are, in general, extremely relevant in establishing appropriate relationships with others. Also, all participants stated that studying abroad affected their awareness of the need to understand and use language in a positive and socially responsible way.

Participants s5, s6, s7 and s8 have stated that they have, even though to a lesser extent, improved their knowledge of their mother tongue. Participant s5 pointed out that while socialising with a colleague from Germany, who is of Croatian descent, in his free time, i.e. in an informal environment, he insisted on communication in Croatian by assisting him in his language resulted in him improving his own knowledge in the sense of speech, because he had to think about correct sentence construction and use wide array of words, synonyms and similar. Participants s6, s7 and s8 are all in translation studies and they stated that they had an opportunity to improve their mother tongue (in the form of language constructions, vocabulary, general literacy, literary expression and use of more eloquent expressions in mother tongue) in a formal manner, i.e. through translation of texts from a foreign language into Croatian within certain courses.

Starting from the fact that all research participants in this paper are students of at least one foreign language, it can be assumed that they have developed and/or improved their **multilingual competence** during their study abroad. In accordance with this, all participants answered to the first part of the question that they had the opportunity to meet and communicate with individuals from other cultures and languages and thereby were increasingly curious about other people's mother tongue and culture, and respected them. In relation to that, a research conducted in 2017 by The Agency for Mobility and EU Programmes, which included 2272 students who participated in the *Erasmus+* mobility programme within KA1 activity (learning mobility for individuals) whether for education of training, is interesting. The results of the analysis of the reports [18] of *Erasmus+* (KA1) mobility programme participants show that 73,7% of participants consider they have, during their study abroad, managed to recognize the value of other languages and cultures and respect them. This result generally does not differ greatly from research results of this paper. Majority of participants have stated that communication in free time, outside institutions (informal) had the greatest impact on their more efficient improvement of the multilingual competence.

With regard to the **mathematical competence and competence in science, technology and engineering**, participants were asked a question related to improvement and development of logical and spatial thinking. All eight participants provided an affirmative answer to this question, with explanation that unknown space and environment, large city and travel opportunities resulted in the competence of better orientation in space and more active logical thinking.

In questions related to **digital competence**, which implies safe and responsible use of digital technologies and their use for learning and social participation, i.e. with computer and data literacy and ability of creating digital content, the answers were diverse. Participants s1, s3, s5, s6 and s7 claim they have improved their digital competence exclusively in a formal manner, i.e. by attending various courses. They stated that they have gained knowledge in creating blogs (s1), web pages, subtitling and digitally creating (programming) educational video games, in using other forms of PowerPoint presentations and video creating and editing (s5). Participants s6 and s7 have used digital technology within courses in their translation studies, in the form of translation tools and through constant use they have developed their digital competence more than they had the opportunity to do so at their home university. Participants s2 and s4 stated that they have not developed nor improved their digital competence, while participants s3 and s8 claim that they were forced to learn on their own how to print and scan books and documents in both analog and digital form, which is something they had no opportunity nor need to do previously. Research results of this paper are similar to the research results of The Agency for Mobility and EU Programmes [18], where more than three quarters (76,9%) of participants stated that they have improved their knowledge and skills in use of information and communications technology for education, work or personal activities.

According to the results of the aforementioned research [18], in the part concerning higher education mobility, for development of **personal, social and learning to learn competence** in students, it is stated that the vast majority of mobility participants agree that they have learned to collaborate better in teamwork (92%), independently plan their own learning (84%), organise tasks and activities (77%). These results are not completely in accordance with the results of the research within this paper. Participants s5, s6 and s8 stated that they have completely improved their competence of efficient management of time and learning because they believe they have approached their mobility in a

responsible way and have taken seriously their study obligations. They also stated that they have, with learning and attending courses, had enough time for leisure (socialising, travel etc.). They believe they were more irresponsible before their departure abroad because they felt safer "in their territory", but they claim they have become more mature, independent, self-aware, more responsible and capable of managing their time and learning with self-control during their study abroad. When it comes to personal development, similar results were obtained by the 2017 research [18] in which 92,7% of participants stated that, after a study abroad, they have adjusted and acted better in new situations and know themselves better, their own strengths and weaknesses. Participants s1, s2 and s7, on the other hand, consider that their ability of efficient time management was actually downgraded due to a multitude of possibilities (sightseeing of the large city they were in, constant travel, nights out, socialising) which resulted in them often neglecting their academic obligations, missing classes and losing track of time. However, they claim that their competence of managing their own learning has remained the same as before, and has not been improved in any way, which was also stated by participant s4. Furthermore, participants s3 and s4 claim that they were not prepared to cooperate with others and work in a team, but they would participate in such activities if it was mandatory for courses. They consider themselves to be introverts who are primarily reluctant to cooperate with others and complete most of the tasks independently. Participant s2 stated that he was also introverted and refused teamwork before his departure to a foreign university, but during his study abroad he constantly needed to cooperate and work in teams, which over time affected him and he believes he has completely improved his personal and social competence. Also, he pointed out that his self-confidence increased, he has a more relaxed approach to obligations, feels more empathy, overcomes prejudice easier and is more willing to compromise. Participants s3 and s8 consider they were more tolerant and empathetic toward migrants before departing for student mobility, which was downgraded during their study abroad because of bad personal experiences, significant fear and bitterness of the local population with regards to migrants that resided in their city, whose fear and disrespect transferred to them.

Regarding the **citizenship competence**, all but one participant (s4) believe that when meeting students from other foreign countries in an informal manner, they were, in a smaller measure, interested in their homelands and political scene. Participant s6 emphasised that he is not familiar with social, economic and political concepts and structures due to his personal lack of interest. Participants s2 and s3 pointed out that they read local newspapers and websites daily and that way became more curious and familiar with happenings of their host country, as well as global changes. Based on their answers, it is evident that they agree that they were most interested in the migrant situation, political attitude of other countries toward current situation and their integration into the society. Participants s2, s5 and s8 stated that they often had constructive conversations with local population on the topic of migrants with whom they had close contacts during their study abroad, which is something they were not particularly interested in beforehand, therefore they have become more informed and aware of the current situation during their study abroad.

The attention of the seventh group of questions was focused on the **entrepreneurship competence**. Majority of participants (s1, s2, s5, s6, s7 and s8) have revealed that they are, after achieved mobility, more prone to critical thinking and constructive discussions which they had a chance to participate in within various classes (in a formal sense) where critical understanding and thinking was intensively encouraged. These same participants emphasized that they were, at the beginning of their study stay, more insecure, lacked self-confidence and were not open to cooperation with others. Later, they stated, they were under the impression that they are handling certain insecurities better (such as public speech, teamwork in which they are active participants, openness toward colleagues), approach a problem more openly and face challenges easier. However, despite that, majority believe (except participant s1) they are still struggling to take initiative and turn an idea into practice. One participant believes that for turning an idea into reality it is necessary to have a secured financial situation, and therefore has "no will to deal with that". Participant s6 indicated that he must develop entrepreneurship competence on his own, i.e. try harder and take interest in entrepreneurship because he believes that study abroad had little to no effect on that aspect. One research participant (s3) stated her unwillingness to "relax" and talk and has therefore avoided expressing her opinion in classes that demanded that because she was not compelled to do so ("That's hard for me, I have been a withdrawn and closed off person and I think these few months abroad are not enough to change that. Maybe if I was forced to participate in discussions, debates, seminar presentations, I don't know, maybe I would relax, but this way I stayed in my safe zone and withdrew"). She believes that her study abroad had no positive impact on creativity, critical thinking and cooperation competence because, she believes someone else needed to encourage and force her to "break

loose”, but that was not done. She provided an example from her everyday life where she is inert in finding professional practice or employment and considers making formal phone calls to be a great challenge. She blames her “closedness” for this, which has not changed at all during study abroad. Comparing these results with those of the 2017 research [18], there are some differences with regard to developing an idea and turning it into reality where participants of the past research [18] consider they are capable of developing an idea and turning it into reality (73,7%) after their study abroad, which is one of key features of entrepreneurship competence. Furthermore, some participants consider themselves to be more capable of taking greater responsibility in performing tasks and they have a clearer vision of professional aspirations and goals (76,1%). With regards to the research of this paper, the results are not identical to previously mentioned ones.

Cultural awareness and expression competence – participants were asked a question closely related to the expression of interest in different cultures and ways of expression (in the form of theatre, dance, art and design, architecture) and respecting them. Of the eight research participants, two (s1 and s2) stated that, during their study abroad, they visited museums, exhibitions, observed opera performances in their free time, i.e. informally, which has provided them with new findings in the abovementioned field. They demonstrated their interest exclusively toward the culture of the country in which they studied. They claim they have respected other cultures as well, but without expressing any curiosity. Participant s3 provided an interesting answer in which she stated that, with the interest and respect of the culture and manner of expressing of the host country, for the first time in her life she had the opportunity to spend some time with people of African descent and she inquired in detail and showed interest in their culture, customs and civilisation (s3: “I respect all cultures, art, customs and similar, but I loved, for example, that my roommate’s boyfriend was Senegalese and we all hung out together. That was my first contact with an African and that is why it intrigued me. I found out a lot about their culture and customs through conversation.”). This participant believes she had unjustified prejudice before, but after the study abroad her opinion changed and respect increased significantly. Participant s5 states that he was not willing to develop his cultural awareness and expression competence, i.e. he demonstrated disinterest toward other cultures and ways of expression. Participant s8 stated that he had not visited exhibitions, museums and theatres, but he was interested mostly in architecture (churches, old buildings). Participants s4, s6 and s7 claim that with each new acquaintance, appeared a dose of curiosity for other cultures, customs, language as well as respect for them. In general, by analysing answers to the question about cultural awareness and expression competence, all participants agree that they have utmost respect for different cultures and ways of expression, some with more, others with less expressed curiosity.

3.2 Students’ opinion toward advantages and disadvantages of a study abroad

Lastly, when asked about the advantages and disadvantages of study abroad, all participants fondly remember their study abroad and without thinking stated a wide range of advantages, such as: independence, becoming self-dependant, more advanced logical thinking and spatial orientation, improving skills, knowledge and abilities in general, tolerance, empathy, meeting new people, cultures, ways of expression, learning foreign languages, travel, new friendships, unforgettable experiences. Disadvantages they indicated are present to a lesser extent, and majority of them refer to the formal part of the study abroad: finding adequate courses, changes and obstacles related to documentation, finding accommodation, too many students at smaller universities. Among other things, several participants (s3, s4, s5 and s8) claimed that it is difficult to integrate into a society without friendliness from locals which results in presence of a sense that they are only foreigners. Finally, all eight participants gladly recommend study abroad to future generations of students, with a note to be, at the very beginning, more open, willing to cooperate, self-confident, curious, active in different spheres of life, socially responsible and to overcome any form of fear and insecurity so that they could acquire and improve as many competences as possible, and primary build and perfect themselves as a person ready to live and work in the knowledge society.

3.3 Students’ opinion on opportunities to develop and/or improve key competences for lifelong learning during study abroad, for which they had not had an opportunity at their home university

According to the answers provided by the participants of this research, multilingual competence could be developed and/or improved at their home university only to a certain degree, since they needed a certain period of stay in the speaking area of the language they wish to learn or improve for a more significant improvement. They stated that the reason they improved their multilingual competence

during their study abroad is daily contact with everyday speech (colloquial expressions, dialect, specific conversation and terminology; e.g. in a restaurant, at the bus station, train station, hotels), while informal contact with other languages and cultures is absent from their home university. Majority of them also added that the study abroad provided them a greater possibility to develop personal and social competence, that is, they believe that the new and unknown environment, mutual interaction with persons from different cultures and languages made them more tolerant, more empathetic and increased their self-confidence and willingness to cooperate with others, logical and spatial orientation, they are more open toward others and their self-doubt and doubt in their potential has decreased. Participants s6 and s7 stated that they continuously used digital translation technology at the foreign university which they have not had an opportunity to do at their home university and department, therefore they believe that this has significantly improved their digital competence. With regard to other key competences, participants believe that it is mostly equally possible to develop and/or improve them at their home university.

4 CONCLUSIONS

Development of key lifelong learning competences presents one of the instruments for continuous monitoring of dynamic global changes such as fight against poverty, unemployment, for gaining personal fulfilment and health, active and responsible citizenship and for life in general appropriate for a knowledge society. By studying scientific and professional literature, it is evident that the emphasis is increasingly put on the importance and need of interweaving of competences, which is why, for example, knowledge of a foreign language is seen as one of the key entrepreneurship competences, (basis of a successful business in an international environment) [19]. It is equally necessary to strengthen personal, social and learning to learn competence from an earlier age because it presents an important foundation for the development of other competences. Digital competence can also be highlighted as one that can stimulate development of another key competence. It is important to understand that eight key competences for lifelong learning are not separated and partial, but they need to be understood as a whole and approached in a holistic way. Nowadays, majority of scientific and professional papers are on the topic of development of the entrepreneurship competence and foreign language knowledge since entrepreneurship is becoming an increasingly important topic among Croatian youth [20]; [21]; [19]; [22]. Multilingual competence, in addition to its influence on entrepreneurship, is also important for acquisition of intercultural competences, development of tolerance, becoming acquainted with and respecting diversity [23].

Search of professional and scientific literature related to the topic of this paper has shown that there are only a few research conducted in Croatia that are concerned with the topic of development of key competences for lifelong learning in students during study abroad within a mobility programme. At the European level, as an example are cited results of the report analysis of the participants of *Erasmus+* (KA1) mobility programme [18], mentioned in the previous chapter, whose results are related to development of key competences in students after achieved mobility are, to a degree, similar to results obtained by the research presented in this paper. It should be noted that due to the different methodological approaches of these two studies, the comparison between them should be taken with caution. Research results suggest that majority of students have mostly developed multilingual competence, i.e. competence of communication in a foreign language, personal, social and learning to learn competence. Some of the research participants have stated that they have also improved their digital, entrepreneurship, and cultural awareness and expression competences. In general, majority of the research participants agree in opinion that their foreign language knowledge has improved and they have become more tolerant toward diversity, more empathetic, open toward the world, more willing to think critically and to cooperate with others. When it comes to development of competences, from the report on 2017 [18] research results it is evident that a high percentage of participants (over 70%) have primarily developed and improved personal, social and learning to learn competence, digital competence, cultural awareness and expression competence, literacy and multilingual competence, and entrepreneurship competence as well, which leads to the conclusion that results of two above mentioned research are similar.

Ultimately, all research participants have emphasised that their study abroad was marked with more advantages than disadvantages and they believe that future generations should use the opportunity and spend a period of their university experience abroad. They stated that, for optimal progress, one needs willingness, curiosity and great will for development or improvement each of the eight key competences for lifelong learning.

With regards to the manner of development and/or improvement of competences, i.e. tripartite division to formal, non-formal and informal learning, it is evident that participants developed literacy competence, digital competence and partially personal, social and learning to learn competence in a formal environment. Some participants emphasised that they acquired multilingual competence in a non-formal manner, but mostly all agree that they developed and/or improved aforementioned competence in an informal environment. In their free time, everyday life and work, i.e. informally, participants also developed citizenship competence, cultural awareness and expression competence, entrepreneurship competence and only partially mathematical competence.

It is necessary to primarily strengthen awareness about the importance of constant and continuous development of key competences for lifelong learning from an early age, so that every individual would be able to recognise an opportunity to learn, whether in formal, non-formal and/or informal manner. Answers of a smaller part of participants indicate that they lack self-initiative and openness for acquiring new and improving existing competences. This underpins adequacy of the aforementioned definition of competence in *Recommendation* (2018) which does not equal it only with abilities, but includes attitudes with possession of knowledge and skills. Promoting development of key competences at higher education level is possible, among others, in the form of mobility programme participation, in this case a study abroad at foreign universities. Its numerous advantages were confirmed by this and other similar research. On the other hand, such possibilities demand higher education institutions to create an environment that is stimulating for learning, personal growth and development, necessary digital technology, learning tools, etc., all with the goal of enabling students continuous monitoring and adjustment to rapid changes and successful overcoming of obstacles and challenges posed by the future. Therefore, it is necessary to raise awareness of the importance of including every individual into knowledge society, society that brings and can bring numerous changes, reforms and change the world for the better.

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