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Developing 21st Century Skills in a Foreign Language Classroom: EFL Student Teachers' Beliefs and Self-Awareness

Abstract

This study reports on EFL student teachers' opinions, beliefs and their self-awareness of developing 21st century skills, particularly the 4Cs: critical thinking, creativity, communication, collaboration, in the Polish educational context. A questionnaire designed for the purpose of this study was administered to 53 participants who were all student teachers of English enrolled in bachelor's and master's degree programmes. The survey results indicate that although the majority of the participants showed a low level of understanding of what 21st century skills are, they were fairly positive about integrating them into foreign language classroom instruction. At the same time, the teacher trainees tended to overrate their own abilities to develop the 4Cs in their future students. These findings suggest a greater need to raise FL teachers' awareness as to the implementation of particular 21st century skills in the classroom. It is also postulated that enhancing such skills among student teachers in the course of teacher training is a prerequisite for 21st century skills-oriented pedagogy.

Keywords: 21st century skills, 4Cs, student teachers, teacher beliefs, EFL teaching

1. Introduction

Foreign language (FL) education in the 21st century ought to respond to the changing and growing needs of students so that they are fully prepared for effective functioning in the modern world. The way we learn and teach languages, as well as communicate, have changed radically due to globalization and digitization (Fandiño 2013; Faulkner & Latham 2016). Consequently, 'the focus in language education in the twenty-first century is no longer on grammar, memorization and learning from rote, but rather using language and cultural knowledge as a means to communicate and connect to others around the globe'

(Eaton 2010: 5). It has been suggested that FL classrooms should become places where, apart from basic language skills, learners develop wide-ranging skills that help them succeed in different spheres of life. Saavedra and Opfer (2012) indicate that a variety of terms have been applied to describe such skills, but the most widely recognized and internationally adopted term is *21st century skills*, which is also used in the present study.

The analysis of the relevant documents reveals that 21st century skills are a very broad concept and may be related to thinking processes, such as creativity, problem solving, decision making, self-knowledge, critical thinking, accessing and analysing information. They may also embrace learning and employability skills, for example ICT literacy, agility and adaptability, cooperation, communication, motivation, or time management. Finally, social skills, i.e. citizenship, responsibility, cultural awareness, are also categorised as 21st century skills (Voogt & Roblin 2010).

In this paper, the focus is on 21st century skills and their role in foreign language (L2) teacher education. More specifically, this topic is analysed from the perspective of trainee teachers of English as a foreign language (EFL). Johnson (2006: 239) postulates that in L2 teacher education the emphasis should be on 'teachers as users and creators of legitimate forms of knowledge who make decisions about how best to teach their L2 students within complex socially, culturally, and historically situated contexts'. Hence, L2 teacher education is shaped by the sociocultural setting, and as such, should respond to the ever changing needs of a society.

Owing to an increasing interest in the implementation and the integration of 21st century skills into the curriculum, it has been postulated that they should be treated as cross-curricular skills underpinning the core subjects and leading to the development of wider key competences (Voogt & Roblin 2010). This approach requires substantial changes in teaching methods and assessment, as well as initial training and continuing professional development of teachers (European Commission 2019). Such programmes should be directed at, first of all, advancing teachers' understanding of the role of such skills and their links with the subject areas, and then equipping them with necessary knowledge and skills concerning 21st century competences. Thus, it seems interesting to investigate if future teachers of 21st century learners are willing and ready to embrace their new roles. Accordingly, this study aims to examine the level of awareness, competence and self-assessed abilities of students—future teachers of English—concerning the importance and classroom implementation of selected 21st century skills. For the purpose of the present study all the students attending teacher training courses at the Institute of English Studies, University of Wroclaw, Poland were surveyed. It was assumed that the results of the questionnaire would enable the researchers to evaluate and, if necessary, introduce some changes to the teacher training programme so that it would offer an adequate preparation in terms of developing 21st century skills.

2. 21st century skills

The concept of 21st century skills was introduced at the turn of the century to respond to important changes in the modern society, education, and employment. Nevertheless, it seems difficult to find one universally-accepted definition or framework of 21st century skills. The notion can be generally understood as a set of knowledge, skills or traits necessary to function effectively in today's world. What

is more, there are a number of related terms that are commonly used to denote similar concepts. As Silva (2008: 3) notices, depending on the adopted perspective, 21st century skills have been called *soft* or *interpersonal* skills, *applied* or *workforce* skills, *life* and *career* skills, or *non-cognitive* skills. In addition, because these skills can be developed and used in diverse academic areas and at all stages of education, they are also referred to as *cross-curricular*, *cross-disciplinary*, or *interdisciplinary skills* (Great Schools Partnership 2016). Another term that is used in this context is *generic skills*, also known as *subject-independent* or *transversal competencies* (Eurydice 2002). These terms emphasise that the skills are highly flexible and thus transferable across different fields.

Another important notion that needs to be introduced at this point is the concept of *key competences*. It has been widely discussed in the context of education and has recently become a buzzword in this field. The word *competence* can be understood in a number of ways. One of the definitions was presented at the Council of Europe's symposium on key competences as 'the general capability based on knowledge, experience, values, dispositions which a person has developed through engagement with educational practices' (Coolahan 1996: 26). The issue of understanding what a *key competence* means is addressed in the following way.

> […] for a competence to deserve attributes such as 'key', 'core', 'essential' or 'basic', it must be necessary and beneficial to any individual and to society as a whole. It must enable an individual to successfully integrate into a number of social networks while remaining independent and personally effective in familiar as well as new and unpredictable settings. Finally, since all settings are subject to change, a key competence must enable people to constantly update their knowledge and skills in order to keep abreast of fresh developments. (Eurydice 2002: 13)

As stated in many European documents (see Gordon et al. 2009), developing key competences is a precondition for high-quality and inclusive education, training, and lifelong learning. The European Parliament and the Council of the European Union adopted a Recommendation on Key Competences for Lifelong Learning. The revised version of the Recommendation was issued in 2018 and it identifies eight key competences: literacy, multilingualism, numerical, scientific, and engineering skills, digital competence, personal, social, and learning to learn competence, active citizenship, entrepreneurship, cultural awareness and expression. All these competences, which are seen as equally important, should be promoted throughout one's life in a variety of contexts and forms. Moreover, the key competences are interdependent, and such transversal skills as communication, problem solving, cooperation, negotiation, critical thinking, or creativity stimulate the development of all the key competences.

The diversity of terminology used to describe these important competences and skills is visible in several frameworks that have been created worldwide by various educational institutions in cooperation with the governments and the business sector. Voogt and Roblin (2010), in their review of the literature and documents concerning 21st century skills, indicate that such skills as collaboration, communication, ICT literacy, social and/or cultural skills, citizenship are included in all reviewed frameworks, as well as recommendations from the European Union and OECD. Most of these models and documents also make reference to critical thinking, creativity, and problem solving. There are also skills such as learning to learn, self-direction, planning, flexibility and adaptability which can be found in only some of the frameworks.

One of the initiatives aiming at the comprehensive description of 21st century skills was an international project called *Assessment and Teaching of 21st Century Skills (ATC21S)*, which was conducted

between 2009 and 2012 with the financial support of Cisco Systems, Intel Corporation, and Microsoft Corporation. The result of this initiative was a model including ten 21st century skills divided into four broad categories (Binkley et al. 2012):

(1) Ways of working: creativity and innovation; critical thinking, problem solving, decision-making; learning to learn / metacognition
(2) Ways of thinking: communication; collaboration (teamwork)
(3) Tools for working: information literacy; ICT literacy
(4) Ways of living in the world: citizenship (local and global); life and career; personal and social responsibility—including cultural awareness and competence

Another example of the 21st century skills framework was created in the U.S. by Partnership for 21st Century Learning (P21 [2007] 2019a). The framework includes three groups of skills: (1) life and career skills, (2) learning and innovation skills, (3) information, media, and technology skills, all of which constitute the integral part of 21st century learning. Teaching key school subjects, such as mathematics, world languages, science, history, or arts, as well as introducing interdisciplinary themes, such as global awareness, civic or health literacy, are seen as effective channels for developing these skills, thus preparing students for successful functioning in the modern society. Life and career skills, for example, allow young people to adjust to the changing life and work environments, so they include the following components: flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility. Information, media and technology skills, in turn, enable people to effectively use ICT to find, process, and evaluate information, to understand how the media shape our behaviour and attitudes, and to readily respond to the inevitable technological changes. Finally, the concept of learning and innovation embraces the so-called *4Cs*: creativity and innovation, critical thinking and problem solving, communication, and collaboration. As the main focus of the survey used in the present study was on these four skills, the following section examines them in more detail.

3. The four Cs

Creativity is described as a complex skill that 'manifests itself in many different ways, and this is one of the reasons it has proved so difficult to define' (Maley 2015: 7). Most people, however, intuitively understand what creativity is and are able to recognize creative achievements. In order to be called creative, such acts or products need to be not only new and original but also useful; additionally, they result from divergent thinking processes, including flexibility, fluency, originality, and elaboration (Lai & Viering 2012). As Bialik and Fadel indicate (2015), creativity is not limited to producing works of art or music but it is considered vital for various spheres of life, for example scientific thinking, entrepreneurship, design thinking, or mathematics. Foreign language learning will undoubtedly be more successful when creativity is integrated into the process and students are encouraged to think outside of the box (Maley & Peachy 2015; Hurst et al. 2018). Lai and Viering (2015) list the qualities that creative individuals often display, such as higher levels of intrinsic motivation, willingness to take intellectual risks, openness to new ideas, tolerance of ambiguity, high self-efficacy. All these features can also be found in the descriptions of successful language learners (Griffiths 2008), so developing creativity in the language classroom seems

to be highly desirable. Nevertheless, stimulating creativity in language learners depends to a large extent on teachers' creativity, their being open to new methodologies, or adopting an innovative approach to teaching materials (Tomlison 2015; Wright 2015). Researchers indicate that teachers who receive training on creativity show more favourable attitudes towards promoting it among students (Cachia et al. 2010).

Critical thinking refers to a wide array of mental processes, such as analysing information, deductive and inductive reasoning, judging or evaluating, problem solving (Lai & Viering 2012). What is more, some researchers point out that there is an interdependence of critical thinking skills and metacognitive skills (Bialik & Fadel 2015) as well as one's background knowledge (Case 2005). More than ever, critical thinking appears to be an indispensable component of effective education in the 21st century; hence, teachers and policy makers tend to agree that it needs to be incorporated into the curricula, also in the context of foreign language teaching (Ketabi, Zabihi & Ghadiri 2012). In fact, research findings indicate that critical thinking is a predictor of academic success and employment prospects (Masduqi 2011). Certainly there is some place for critical thinking in L2 classrooms because such skills can be improved by means of, for example, content-based instruction, project work, debates, or task-based learning (Hurst et al. 2018; Rezaei, Derakhshan & Bagherkazemi 2011).

Communication is understood as a two-way process of deciphering information and conveying thoughts and ideas by means of oral, written, and nonverbal channels as well as making use of multiple media and technologies (P21 2019b). Effective communication has always been highly valued in professional and public life, but nowadays modern media and communication technologies necessitate an even stronger emphasis on overcoming deficiencies in communication. That is why students should be equipped with appropriate skills that enable them to communicate successfully for various purposes and in different situations and environments, including multilingual contexts. Communication is the skill of particular relevance for language learners, yet in FL classrooms too little focus is placed on true communication (Hurst et al. 2018). Bialik and Fadel (2015) suggest that students can be trained in authentic communication through, e.g., peer tutoring or collaborative tasks.

The ability to collaborate is highly desirable in the modern world as it allows people, who may be able to offer different skills and perspectives, to jointly solve problems more efficiently. Collaborative forms of work have been used in general, as well as foreign language education, for some time now, but it was only recently that collaboration became 'an important outcome in its own right rather than merely a means to teach and assess traditional academic content' (Lai & Viering 2012: 18). Cooperative learning has been found to be a very versatile and effective pedagogical tool that not only results in better achievement outcomes and productivity than individualistic or competitive learning (Johnson, Johnson & Stanne 2000) but it also fosters harmonious relationship between students and contributes to their psychological well-being (Laal & Ghodsi 2012). Despite these benefits that collaboration among students may bring, there are still some teachers who feel reluctant to engage students in this mode of instruction. As Hurst et al. (2018) notice, in a FL context this is mainly due to classroom management and assessment issues, which should be addressed in the course of teacher training.

Taking into consideration the fact that a FL class should not only develop the TL skills of students but also a wide range of 21st century skills, a study was conducted to examine the opinions, beliefs and self-assessed abilities of future teachers of English related to the above-mentioned issue. Its methodology and results are discussed in the next subsection.

4. Methodology

This section presents the research design, opening with the research questions, presentation of the participants, description of the instruments and data gathering and analysis procedures. What follows is the report and discussion of the results and pedagogical implications deriving from the achieved outcomes.

4.1. Research questions

The research questions (RQs) that the study attempted to find answers to were as follows:

1. Are student teachers aware of and have adequate knowledge on the matter of 21st century skills and their role in FL teaching?
2. What are student teachers' opinions about developing 21st century skills at different stages of education?
3. What is the student teachers' self-assessed level of abilities to develop 21st century skills in the FL classroom?

4.2 Participants

The study involved all the students (N = 53) of the Institute of English Studies, University of Wroclaw, Poland, who were enrolled in the teaching specialization. All of the participants of the study were Poles. While 49% of them were second and third year BA students, 51% were first year MA students. In the case of the latter group, the majority (74%) were participants of the day studies; the remaining were extramural students. While none of the BA students had any experience in teaching English at a public school, four of the MA students taught either at a kindergarten, primary school or secondary school. It is also more MA than BA students that declared experience in teaching English at private language schools (41% and 8% respectively). However, the majority of both BA (65%) and MA students (76%) acknowledged giving private tuition. When their plans concerning future teaching are concerned, over 81% of the BA students declared a willingness of various strength (from *'very willing'* to *'rather willing'*) to work as an English teacher. The tendency was yet smaller in the case of MA students, from among whom 55% showed interest in this profession. Most of the motives of those who acknowledged the intention to become an English teacher was evidently intrinsic, related to experiencing satisfaction and pleasure from teaching and the feeling of vocation for this job (e.g. *'I have wanted to teach ever since I can remember'*, *'I love preparing the materials', 'I simply enjoy teaching.'*). On the other hand, the arguments for not being particularly (or at all) willing to teach were mostly extrinsic of pragmatic nature, such as low status of teachers in Poland, lack of social respect, low salaries incompatible with the qualification, expectations and effort, and stress related to being constantly assessed by parents and authorities.

4.3 Measurement

All the data needed to answer the research questions were gathered from the participants with the use of a questionnaire. Although the students were English majors, the instrument was written in their L1 to diminish the risk of any questions being misunderstood. The questionnaire consisted of five parts.

Part I entailed questions concerning background information concerning the respondents' year of study, their experience with teaching English, extent of willingness to teach in the future and reasons for (not) wanting to take up this profession. Part II were two open questions aiming at diagnosing the participants' level of awareness of the key competences and their role in EFL teaching (RQ1). They could be translated as follows: *'Which skills, according to you, should a FL teacher develop in primary school and which in high school? Are any of the skills more important than others? Why?'* and *'In your opinion, is teaching any of the FL skills neglected in primary and/or high school/s? If so, what may the reasons for this be?'* Part III and IV had the forms of statements with a six-point Likert scale (from *'strongly agree'* to *'strongly disagree'*). The former addressed RQ2 and opened with the following sentence beginning: *'The FL teacher should develop their students' ability to/competence in …'.* Below in a table there were 25 endings of the statement, with the fist 9 referring to different FL (sub)skills, e.g. *'… comprehend written texts', '… grammar'* or *'… pronunciation'*. These first items, however, were only distractors. What followed were 16 more endings of the statement, which this time referred to 21st century skills. Each chosen skill was represented by four items, which referred to typical abilities belonging to the 4Cs, such as:

(1) Critical thinking—the ability to: analyse and interpret written or audio texts; compare information coming from different sources when completing oral or written assignments; develop an argument and draw conclusions.

(2) Creativity—the ability to: approach learning creatively, e.g. by designing original products; generate and express one's original ideas; be ingenious.

(3) Collaboration—the ability to: produce work in collaboration with others; cooperate, be tolerant towards others and take group responsibility; provide constructive non-critical feedback to classmates.

(4) Communication—the ability to: design cohesive and coherent oral and written input; process and present information displayed in graphs and tables; convey ideas using different media, e.g. posters, blogs, video.

Exactly the same 25 items appeared in Part IV, which this time allowed to answer RQ3. The students self-assessed their FL teaching skills and their abilities to develop the 4Cs of their students by choosing a digit from 1 to 5, where 1 meant *'very low'* and 5—*'very high'*. It is important to add that in Part III and IV the respondents could also provide the answer *'I don't know'*, which they were asked to use sparingly, as the last resort. Moreover, in both of these parts of the questionnaire, the students marked the responses separately for primary school and high school. The internal reliability of Parts III and IV of the questionnaire referring to the 4Cs showed satisfactory levels, with Cronbach alpha equalling .87 and .89, respectively.

Finally, Part V referred directly to 21st century skills. It began with an open question: *'Have you heard of 21st century skills? If so, provide a definition and explain how they can be developed at a FL course'.* Those who answered positively were asked to fill out a short 5-item scale which was aimed at diagnosing the respondents' further opinions about the importance of developing 21st century skills at FL courses and thus about the need to train future teachers in this area. As in Part III, the participants expressed the extent to which they agreed with 5 statements, by choosing a digit from 1 to 6 or an option *'I don't know'*. This last part was to provide further information on RQ1 and RQ2. Its internal reliability represented by Cronbach alpha reached the level of .95.

It is worth adding that a few steps were taken to decrease subjects' expectancy and raise the reliability of the obtained data. First of all, the level of students' knowledge on and opinions about 21st century skills and their importance in FL teaching was addressed a few times in the questionnaire with the use of different types of questions. Moreover, the order of the questions was carefully planned, with the open ones preceding the Likert-scale and the questions specifically on the 4Cs being left to the very end of the instrument. Finally, a decision was made to introduce distractors in the form of questionnaire items referring to FL (sub)skills, which were not really the area of our interest.

4.4 Data gathering and analysis procedures

The data were gathered at the end of the academic year 2018/2019 (in May and June) during one of the classes devoted to EFL teaching. Completing the questionnaire took from 20 to 25 minutes. Participation in the study was voluntary and anonymous. The participants were informed that their involvement in the study was most valuable since their sincere responses would allow to introduce modifications in the contents and approaches used in EFL courses offered to students at the Institute of English Studies, University of Wroclaw, Poland, who wish to become teachers of English.

The quantitative data, i.e., answers to the Likert-scale questionnaires in Part III and IV, which were in the form of digits representing the participants' levels of agreement with different statements, were fed into Excel so as to be able to trace the frequencies of occurrence of particular answers. Then the frequencies of responses to items representing each of the four skills were added up and transformed into percentages. When answers to open questions are concerned, they were coded, classified as representing 21st century skills and summed up so as to be able to observe common trends.

5. Presentation of results

5.1 Student teachers' knowledge and attitudes towards 21st century skills

The answers to the open questions provided both in Part I and Part V of the instruments suggested that the participants' level of knowledge on 21st century skills and their importance in EFL teaching was very limited. The most frequent answers to the question inquiring about the skills a FL teacher should develop referred to typical FL (sub)skills, with speaking being the most popular (mentioned by from 82% of the BA students and 68% of the MA respondents, irrespective of the educational stage), and pronunciation— the second most important skill (suggested by 32% of the BA students and 27% of the MA students, irrespective of the educational level). The other FL skills (listening, reading) and subskills (grammar, vocabulary) were mentioned by the participants with a similar frequency (from approximately 20% to 30% of the respondents).

The answers referring to 21st century skills were occasional. In reference to primary school the following abilities belonging to 21st century skills were suggested (the number of particular responses related to 21st century skills provided from among all the 53 participants are given in brackets): the ability to work in groups (3), intercultural competence, tolerance and acceptance of otherness (2), the ability to listen to others, communicate their ideas effectively (2), individual learning abilities (2), systematic

work (1), and conscientiousness and responsibility (1). The distribution of answers in reference to high school was as follows: the ability to express one's opinions, build coherent input in writing and speech (6), autonomy (5), the ability to search for information (3), group work (2), effective note taking (1), effective argument provision (1), critical thinking (1), self-assessment skills (1), self-studying skills (1), effective planning of one's learning (1), and successful use of English in work (1). Finally, some participants did not differentiate between the abilities a FL teacher should develop at primary and high school level. This time the answers were as follows: creativity (3), individual thinking (2), first language competence (1), interactive and communicative skills (1), interest in other cultures and languages (1), tolerance and understanding (1), and interpersonal skills (1), and patience (1). Although the range of responses was quite extensive, it is evidently alarming that in this open question they were provided by so few participants.

The answers to the second open question seem to lend further support to the poor orientation of the participants in 21st century skills. As before, when asked about the aspects neglected at English classes in primary and high schools, they focused primarily on typical FL skills. Analogously, the (sub) skills the respondents considered most neglected were speaking (marked by 61% of the BA students and 59% of the MA students) and pronunciation (marked by 50% of the BA students and 51% of the MA students). The other areas perceived as neglected were writing, listening and vocabulary, chosen by up to 3% of the respondents. When ignoring the development of 21st century skills is concerned, the following abilities were mentioned, with some participants specifying the educational stage at which the skill was particularly neglected: autonomy (3), communication skills, often practised not earlier than in high school (3; primary school), creative thinking (4), note taking and effective information search (2), the ability to express one's opinions, build coherent input in writing and speech (1; high school), intercultural competence (1), cooperation and co-responsibility, and constructing logical argumentations (1).

When asked directly about 21st century skills in Part V of the instrument, only 34% of the BA students and 18% of the MA participants acknowledged to knowing what 21st century skills are. Those BA students who claimed they knew what the term referred to provided the following examples: creativity (5), critical thinking (3), the ability to work in a group (3), IT and new technology competences (2), flexibility (1), involvement (1) and entrepreneurship (1). Among the answers was one more elaborate definition: *'These are all the skills that help people to adapt and adjust to the rapid changes in the world, such as intercultural competences, IT skill, abilities to raise the effectiveness of your work with minimalized effort, adaptive skills, entrepreneurship, involvement and cooperation skills.'* The fewer definitions provided by the MA students referred to such examples of 21st century skills as IT skills (1), abilities to find relevant information and design projects (1), communication abilities and cooperation (1), intercultural competence and tolerance (1), creative and critical thinking (1).

What is more, the last section in the instrument also aimed at examining student teachers' attitudes towards 21st century skills in FL education. Altogether it was completed by 14 (27%) respondents. The data displayed in Table 1 suggest that those who know what 21st century skills are believe that future FL teachers should be provided with adequate theoretical and practical training in this area. Most of the respondents had no doubt that the skills should be developed at foreign language classes, though some disagreed (27%) or were not fully convinced (27%) that developing 21st century skills during a FL course is as important as working on typical language (sub)skills.

	1	2	3	4	5
Don't know	7%	7%	7%	13%	7%
Strongly disagree	0%	0%	0%	7%	0%
Disagree	0%	0%	7%	0%	0%
Rather disagree	13%	0%	27%	13%	7%
Rather agree	7%	13%	27%	40%	60%
Agree	47%	47%	33%	33%	13%
Strongly agree	33%	40%	7%	0%	20%

Note: Statements 1–5

1. Developing 21st century skills should constitute an integral part of a FL teacher's job.
2. Future FL teachers should be provided with theory and practical training in developing 21st century skills of their future students.
3. Developing 21st century skills during a FL class is as important as developing FL skills and subskills.
4. Teaching FLs should aim at developing 21st century skills of the students.
5. Programmes for future FL teachers at all educational levels should contain theory and training in the area of 21st century skills.

Table 1. Distribution of answers showing the level of agreement with statement 1–5.

5.2 Student teachers' beliefs about the 4Cs

As explained above, the opinions of the participants on developing 21st century skills among students in primary and high school were gathered with the use of a questionnaire based on a six-point Likert scale. Although it inquired also about the respondents' ideas on the necessity to develop learners' FL skills, the items addressing this matter functioned only as distractors and, therefore, these results are not reported herein.

Table 2 shows the participants' opinions on whether creative thinking of primary and high school students should be developed during English classes, by reporting the percentage of participants who agreed with this claim to a various extent.

	BA		MA	
	PS	HS	PS	HS
Don't know	0%	0%	1%	1%
Strongly disagree	0%	2%	0%	1%
Disagree	0%	1%	0%	1%
Rather disagree	9%	11%	5%	11%
Rather agree	21%	21%	20%	12%
Agree	29%	27%	38%	37%
Strongly agree	41%	38%	36%	37%

Note: BA—BA students; MA—MA students; PS—primary school; HS—high school

Table 2. Frequencies of answers representing the participants' opinions on the need to develop creative thinking of primary and high school students during English classes.

As Table 2 displays, most of the respondents, irrespective of the programmes they were enrolled in (both BA and MA students), agreed or strongly agreed that English teachers should help their learners think creatively and become more innovative. Moreover, the participants seemed to believe that the ability should be developed in the case of both primary and high school students.

A similar distribution of answers was found in the case of collaboration (see Table 3), i.e. most of the respondents agreed that among the roles of a FL teacher is to develop the students' ability to cooperate with others. The more frequent choice of '*Agree*' in comparison to '*Rather agree*' in the case of teaching high school students seems to suggest that the respondents think the more appropriate time for raising learners' cooperation skills is in high school rather than primary school.

	BA		MA	
	PS	**HS**	**PS**	**HS**
Don't know	0%	0%	0%	1%
Strongly disagree	1%	1%	1%	2%
Disagree	2%	1%	2%	0%
Rather disagree	10%	5%	11%	9%
Rather agree	25%	15%	22%	18%
Agree	33%	40%	32%	38%
Strongly agree	30%	38%	32%	32%

Note: BA—BA students; MA—MA students; PS—primary school; HS—high school

Table 3. Frequencies of answers representing the participants' opinions on the need to develop collaboration abilities of primary and high school students during English classes.

The outcomes are different in the case of the two remaining 4Cs, i.e. critical thinking and communication abilities. As Tables 4 and 5 show, in both cases a different pattern emerges. It implies that the future teachers were more convinced about the necessity to raise these particular skills during English classes at high school than primary school. Not only did some of the respondents partly disagree about the FL teachers' role being working on their primary school learners' critical thinking and communication skills (20%–22%), but some even disagreed (12%–13%).

	BA		MA	
	PS	**HS**	**PS**	**HS**
Don't know	1%	1%	1%	0%
Strongly disagree	7%	2%	6%	0%
Disagree	13%	3%	13%	0%
Rather disagree	22%	2%	30%	6%
Rather agree	31%	20%	37%	27%
Agree	15%	44%	11%	35%
Strongly agree	11%	28%	3%	31%

Note: BA—BA students; MA—MA students; PS—primary school; HS—high school

Table 4. Frequencies of answers representing the participants' opinions on the need to develop critical thinking abilities of primary and high school students during English classes.

	BA		MA	
	PS	**HS**	**PS**	**HS**
Don't know	0%	2%	1%	0%
Strongly disagree	8%	1%	8%	0%
Disagree	13%	3%	12%	0%
Rather disagree	30%	9%	20%	11%
Rather agree	29%	17%	21%	17%
Agree	10%	43%	22%	38%
Strongly agree	12%	25%	15%	34%

Note: BA—BA students; MA—MA students; PS—primary school; HS—high school

Table 5. Frequencies of answers representing the participants' opinions on the need to develop communication abilities of primary and high school students during English classes.

5.3 Student teachers' self-assessed level of teaching the 4Cs

Part IV of the instrument was aimed at diagnosing the participants' self-assessed level of teaching the 4Cs. As before, this part of the instrument referred also to the respondents' abilities to teach English skills (listening, speaking, reading, and writing) and aspects (grammar, vocabulary and pronunciation). Since, however, they functioned only as distractors, the outcomes of this part are not reported and analysed in this paper. Figure 1 shows how the BA students assessed their abilities to develop in their learners the 4Cs.
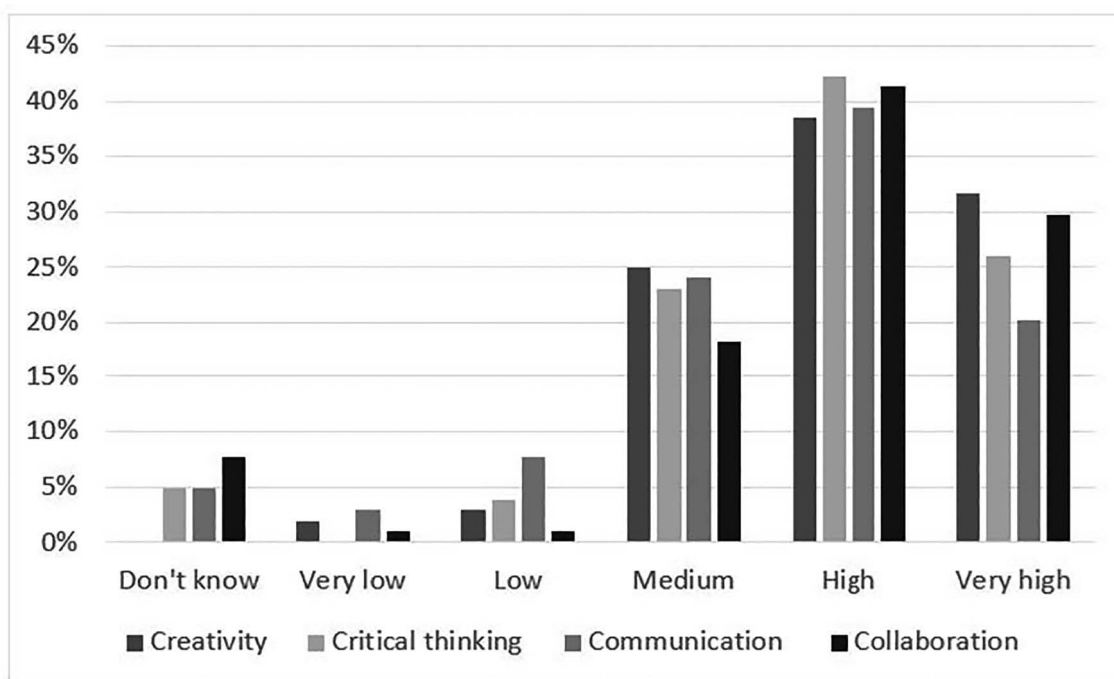
Figure 1. Self-assessment of BA participants' abilities to develop the 4Cs of their potential students.

As the figure shows, although the BA respondents did not reveal too high knowledge on 21st century skills, they considered their abilities to develop them in their future students to be at a medium, high or even very high level, with most of them believing their skills to be high. A similar pattern can be observed in the case of MA students (Figure 2), most of whom again perceived their skills in this area as high, very high or medium.
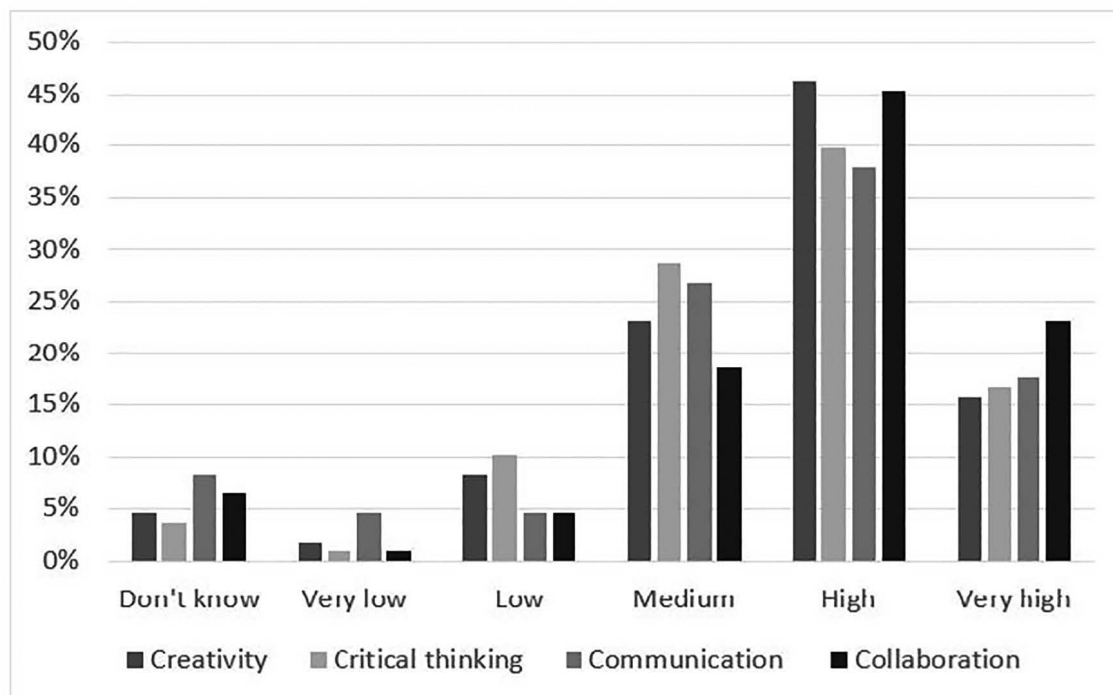

Figure 2. Self-assessment of MA participants' abilities to develop the 4Cs of their potential students.

6. Discussion

Despite the fact that both the BA and MA students were provided with a theoretical background on the 21st century skills and the 4Cs specifically, as well as offered guidance on how to develop these skills of their students in practice, the outcomes obtained in this study are evidently disappointing. The data gathered with Part II and V of the measure support one another, showing that the participants' awareness and knowledge on the matter of the 4Cs and their role in FL teaching was scarce. Although the repertoire of responses to the open questions was quite rich, it is alarming that so few students thought about the 4Cs when not having received any hints referring to them. These outcomes go hand in hand with the poor number of positive answers to the direct question on the knowledge of the 4Cs in Part V of the instrument (34% in the case of the BA studies and 18% in the case of the MA studies), followed by a request to provide a definition and examples of the skills. Luckily, most of those who remembered what

21st century skills are, had no doubt that they should be developed at foreign language classes, though some disagreed (27%) or were not fully convinced (27%) that developing 21st century skills during a FL course is as important as working on typical language (sub)skills. The results of further analysis of the data provided by those who acknowledged having knowledge on 21st century skills are comforting—most of them believed that future FL teachers should be provided with adequate theoretical and practical training in this area.

The results obtained in the third part of the measure, in which the students were to express their opinions about the roles of FL teachers at different educational stages, indicate that the participants consider a FL classroom to be a suitable place for developing at least some of the 4Cs. As shown in Tables 2 and 3, most of the respondents agreed, though with different strength, that FL classes should allow both younger and older students to work on their collaboration skills and creative thinking. However, a yet different pattern was observed in the responses referring to critical thinking abilities and communication skills (Table 4 and 5). This time, as many as 20%-30% of the study participants seemed to be unsure about the need of FL teachers to practise these skills with primary school students. Taking into account the fact that critical thinking is a determinant of general success in learning and later on in employment (Masduqi 2011), it is worrying that some respondents believed they should wait with working on this skill until the students are at high school. The hesitation seems particularly unexcused when taking into account the wide repertoire of tasks, e.g. project work, elements of task-based learning, discussions (Hurst et al. 2018; Rezaei, Derakhshan & Bagherkazemi 2011) that could be easily employed already in FL classes with younger teenagers. The similar hesitation concerning teaching communication skills to primary school students may result from the subjective theories of the respondents. Although they complained about speaking being one of the most neglected abilities in schools, primary schools in particular, they revealed difficulties with accepting the fact that communications skills should be worked on earlier than with high school students. Since communication skills are so relevant for FL learners and so many means of developing them in the FL classroom are available, there is a particular need to draw more attention to training future teachers on how to develop these skills with their students of different age and level.

Despite the fact that the knowledge on 21st century skills—the 4Cs specifically—of the BA and MA students involved in this study did not seem to be satisfactory, most of them appeared to be very positive about their level of abilities to develop these skills of the future students. As shown in Figures 1 and 2, the respondents considered their skills in this area to be high, moderate or even very high. Although it is possible that they felt sufficiently equipped with appropriate practical skills or trusted their intuition or experience gained already in teaching, the outcomes in this case ought to be interpreted with caution. It is more probable that for various reasons the participants overestimated their skills, with the attempt to please the test designers being one of them. It is only an objective observation that could verify the participants' self-evaluation.

7. Conclusion and implications

The present study reported on the student teachers' beliefs, knowledge, and self-assessed level of abilities concerning teaching 21st century skills in FL classrooms. The study results indicate that there is a greater need to raise student teachers' awareness as to the role of these global skills in FL teaching by treating the

topic in a more explicit manner, both at the theoretical and practical levels, throughout the whole teacher preparation programme. Since only few study participants were fully familiar with the concept of 21st century skills and the 4Cs, we may assume that developing these skills among their future students will be of low priority to them, regardless of how well they assess their abilities in this respect. Consequently, such teachers are less likely to respond adequately to the changing needs of students and the requirements of the modern world. Apart from addressing the issue of EFL teaching materials and techniques that can be utilised to promote 21st century skills, teacher training courses should be also directed at enhancing those crucial skills among student teachers. The role of FL teacher training is thus to prepare teachers who not only acknowledge the importance of critical thinking, creativity, collaboration or communication, but most importantly display these skills themselves.

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