

English-Medium Instruction at the Faculty of Engineering in Rijeka: Conditions, Commitment and Commitment and Competencies

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UNIVERSITY OF RIJEKA
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**ENGLISH-MEDIUM INSTRUCTION AT THE FACULTY OF
ENGINEERING IN RIJEKA: CONDITIONS, COMMITMENT AND
COMPETENCIES**

Submitted in partial fulfillment of the requirements for the M.A. in English Language and
Literature and German Language and Literature at the University of Rijeka

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Abstract

In the last decades we have witnessed the widespread use of English in all domains of human achievement, among which in academia. There has been a noticeable increase in English-medium instruction (EMI) in the European Higher Education Area (EHEA) and beyond. The present study is concerned with EMI implementation at one of the constituent institutions of Rijeka University, i.e. the Faculty of Engineering (TFRI). A comprehensive analysis of the existing conditions, commitment and competencies of the teaching staff was carried out via a questionnaire and interviews with the management. The findings indicate a generally positive attitude towards EMI implementation on the part of both the teachers and the management. In fact, the management has expressed their intention to take concrete steps aimed at the internationalisation of higher education by, for example, ensuring financial support through applying for a project which will be initiated by the Ministry of Science, Education and Sports within this academic year. The great majority of the teachers (76.4%) believe that EMI, i.e. an entire programme in English, could be implemented at TFRI in the foreseeable future, primarily at the graduate and postgraduate level, which also shows their commitment to the initiative. They feel confident regarding their linguistic, didactic and intercultural competencies needed for EMI implementation. As regards the potential problems, the only two identified seem to be the finances and the teaching load, which will require an in-depth restructuring and rethinking of study programmes. The general opinion seems to be that the assurance of timely and transparent information flow between teachers and the management is essential for successful EMI implementation.

Key words: English-medium instruction (EMI), Faculty of Engineering in Rijeka (TFRI), attitudes, conditions, commitment, competencies

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1. Introduction

Multilingualism and multiculturalism enable us to better understand and respect each other, so it is not surprising that in 2001, the European Year of Languages, the European Union and the Council of Europe advocated multilingualism. Their aim was to encourage European citizens to be at least bilingual in order to efficiently communicate in their immediate international surrounding, within the European Union and beyond. Indeed, when learning a second language, we do not just learn grammar and vocabulary, we get acquainted with another culture, which raises our awareness of the different, of the other, giving us the opportunity for comparison, tolerance and deeper appreciation of what we are and what we have.

What we have been witnessing for the last decades is the widespread use of English all around the globe. We cannot but recognize the value of a common language that helps us to mutually understand each other, and promote international cooperation. The technologically globalised world has definitely encouraged the spread of a global language. As David Crystal claims, “the first principle [multiculturalism] fosters historical identity and promotes a climate of mutual respect. The second principle [global language] fosters cultural opportunity and promotes a climate of international intelligibility.” (Crystal 2003: XIV). We should follow his advice “not to turn these principles against each other, seeing them contradictory rather than complementary [...]”.

Moreover, what is really important in acquisition of any knowledge or skill, and consequently of a new language, is motivation,

which has been defined in terms of two factors: on the one hand, learners` communicative needs, and on the other, their attitudes towards the second language community. If learners need to speak the second language in a wide range of social situations or to fulfil professional ambitions, they will perceive the

communicative value of the second language and are therefore likely to be motivated to acquire proficiency in it. Similarly, if learners have favourable attitudes towards speakers of the language, they will desire more contact with them (Lightbown & Spada 2013: 87).

Thus, we distinguish between instrumental and integrative motivation (Gardner & Lambert 1972), the former being practical, such as the necessity to learn and master a language in order to successfully function in it, e.g. in order to get a job, be able to write scientific papers, etc., and the latter, integrative motivation for second language learning, which is based on a wish to know more about the language/culture/community of the target language group, seen as personal growth.

The present study attempts to shed light on the motivation and readiness of teachers and management of the Faculty of Engineering in Rijeka (TFRI) to embark on English-medium instruction (EMI). Throughout the globe, higher education aims at internationalisation of teaching and research activities, which is linked to the greater use of English among non-native speakers. “Internationalisation has become highly topical and all HEIs aspire to being international” (Doiz et al. 2011: 346). “English-medium teaching is permitting rapid internationalization of higher education” (Graddol 1997: 41), and, as a result, teaching in universities has been increasingly delivered through the medium of the English language.

The present thesis analyses the implementation of EMI in the European context of higher education with special regard to the following aspects: conditions for EMI implementation, commitment of the teaching staff and their competencies. The theoretical framework will be first presented, grounded on Mellion`s study (2008) on EMI at the Nijmegen School of Management in the Netherlands. In the central part of the thesis, the context in which the study was conducted will be briefly described, and results will be

presented and discussed. The data were collected by means of a questionnaire administered to the teaching staff, and several interviews with members of TFRI management aimed at investigating their attitude towards implementing EMI at TFRI. More specifically, the participants in the study were invited to reflect on the existent conditions as well as on those that need to be met prior to the successful implementation of an entire programme in English. Moreover, the study sought to examine whether the teachers were willing to undertake changes in instruction, i.e. tackle EMI, and felt competent to teach courses in English, with a particular focus on their English language proficiency, their didactic and intercultural competencies.

2. Theoretical framework

This study used the conceptual model designed by Mellion, consisting of three components, the three Cs: conditions, commitment and competencies.

This model has been based on recent insights in educational innovation (Johnson, 1990; Vinke, 1995; Markee, 1997; Klaassen, 2001, Wilkinson, 2004; Fullan, 2007). These studies emphasize that the success of educational innovation largely depends on certain factors such as the strategies employed by the faculty management, the commitment shown by the teaching staff and the competencies they possess (Mellion 2008: 213).

As in Mellion`s study, in the present thesis face-to-face interviews with the management were used, but unlike hers, a questionnaire was administered to teachers, and not to students. Mellion analysed the Business Studies Bachelor Programme in English offered in 2000-2005, but already in 2003 started to reveal flaws. Her findings show that what primarily determines success or failure of an EMI programme are the commitment and competencies of both the staff and faculty management.

As to the first C, conditions, four aspects have been considered in the present study: the socio-political support for the internationalisation of education, support of the University Strategy for the internationalisation of education, the Faculty`s financial support for implementing an EMI programme (translation/purchase of teaching materials, hiring new staff, recruitment of foreign lecturers, provision of language support) and the organisational aspect (Faculty`s logistic support for EMI students, Faculty`s logistic support for EMI teachers).

The second C, commitment, is understood as the teachers' readiness to invest extra time and effort when needed. "[C]ommitment is seen as an affective and emotional attachment when the individual strongly identifies with the organization, is involved in it and enjoys membership in the organization" (Allen & Meyer 1990, cited in Mellion 2008: 215). Mellion offers advice as to how to foster strong motivation and willingness to teach in English: the management should ensure support to its teachers, create an environment that motivates them to teach in another language and communicate with the teaching staff and inform them about changes that EMI brings about. Teachers expect to be timely informed, which means that information and popularisation of EMI should be top-down. However, success in implementation of any educational change or innovation depends on top-down and bottom-up processing of data, which means that a dialogue needs to be established between teaching staff and the management. If there is no approval, understanding and commitment on the teachers' part, any step is likely to be destined to failure. What is needed is a strategy for "implementing a faculty training program", i.e. "a program leading to formal certification, a program of courses and workshops offering teachers opportunities to improve themselves [and] continued education of teachers as life long learners" (Colet 2002, cited in Mellion 2008: 215).

The third C, competencies, encompasses three categories: linguistic, didactic and intercultural competencies. Mellion suggests both teachers' and students' competencies should be taken into account when implementing EMI programmes. The present study, however, does not enquire into students' attitudes and competences at TFRI, and further research is needed to explore this aspect.

Proficiency in English is fundamental for effective EMI programmes, as well as the positive attitude to the language of instruction. In addition to BICS (Basic Interpersonal

Communicative Skills), CALP (Cognitive Academic Language Proficiency) should be sufficiently developed (Doiz et al. 2013). However, for successful transfer/acquisition of knowledge in EMI, it is important to bear in mind that a good command of English is sometimes not sufficient. (Barrios et al. 2016; Doiz et al. 2013). The teaching staff may be linguistically competent, but can still have problems in successfully communicating their knowledge in a programme taught in English. Didactic competency comes to the fore here. When switching from one language to another, pedagogical changes are necessary, which is often underestimated by local policy makers and administrators when launching EMI programmes (Dearden & Maracaro 2016; Leong 2016). Ball and Lindsay (2013: 49) emphasise, “pedagogic skills have not, in the past, been a prerequisite to a successful university career and advancement”. However, delivering content through the medium of the English language implies more than translating teaching material and power point presentations from one language into another (Ball & Lindsay 2013; Cots 2013; O` Dowd 2015). It requires a change and/or adaptation of the teaching method, which can be facilitated through collaboration of a content and a language teacher, i.e. “tandem teaching” (Cots 2013: 117-118) or “team teaching” (Doiz et al. 2013: 219) or through attendance of EMI pedagogy courses (Ball & Lindsay 2013; Klaasen 2008). “A shift in language immediately influences the lecturing behaviour of lecturers and student learning as a result of language and lecturing behaviour.” (Vinke 1995, cited in Mellion 2008: 216) It challenges the teaching practices and the established teacher–student role (Studer 2016). The “assumptive teaching” (Cleg 2011, cited in Ball & Lindsay 2013: 53) does not suffice as “the teacher can no longer assume (for purely linguistic reasons) that students understand the content of a course”. What is needed is raising of “a new awareness of the need to focus more carefully on the intimate relationship between teaching and learning.” A didactic approach that enables successful EMI classes should stimulate classroom interaction, questioning techniques, and student participation in

constructing meaning by the teacher. “A monologic approach sits uneasily alongside the belief that EMI is a tool for opening doors to a global world, a multilingual and multicultural tool for developing intercultural communication.” (Dearden & Macaro 2016: 479)

Intercultural competencies imply that teachers can deal with the presence of students from different linguistic and cultural backgrounds in the classroom. It means that they are willing and able to adapt their teaching methodology to international classrooms, modify their input and create an atmosphere where different learning styles and strategies are taken into consideration (Mellion 2008). He and Chiang (2016: 66) claim that EMI in China is generally affected by lower level of English proficiency and is culturally conditioned. “Asian students favour the information-driven learning style whereas Americans prefer using the participant learning style”.

3. The study

3.1. Aims

The aim of this study was to explore the attitudes of teachers and the management towards the implementation of an entire study programme in the English language. Another aim was to examine their perception of the feasibility of its implementation on the basis of the existing conditions and to reflect on the conditions that still need to be met prior to successful EMI implementation. Additionally, the study aimed to enquire into the participants` willingness and their competence to embark on EMI in terms of their English language proficiency, their didactic and intercultural competencies.

3.2. Participants

The sample comprised 72 members of the teaching staff at the Faculty of Engineering of Rijeka University. Most teachers (69.5%) were between 30-49 years old, 18% were 50 or above and 12.5% were 29 or below. The participants had an average of 14 years of teaching experience in higher education. Around a fifth (22.2%) of them had taught in English, at TFRI (56%) or abroad, and 13.9% of the respondents had been instructed in English.

3.3. Setting

TFRI consists of 11 departments, which include 38 sections and 50 laboratories, as well as the computing centre (Annual Report of the Faculty of Engineering 2015/2016). It offers undergraduate and graduate study programmes in mechanical engineering, naval architecture, electrical engineering and computer engineering, as well as undergraduate vocational study programmes in mechanical engineering, naval architecture and electrical engineering. It also offers a three-year doctoral study in the area of engineering sciences, and in the fields of mechanical engineering, naval architecture, electrical engineering, fundamental engineering sciences and interdisciplinary engineering sciences. Classes at TFRI are conducted in Croatian, apart from foreign language courses (English Language I and English Language II or German Language I and German Language II) that are mandatory in the second year of all studies except for Computer Engineering, where courses English Language I and II are mandatory in the first year of study. However, TFRI offers a list of individual courses that can be held in English. According to the information obtained from the management members, the courses in English have been intended for exchange students who want to accomplish part of their studies in Croatia, specifically at TFRI. However, given that some exchange students are fluent in Croatian, they attend courses with Croatian students.

Consequently, a few non-Croatian speaking exchange students are instructed in English in the form of individual tutorials with the course coordinator. English is also used in the post-graduate doctoral study programme, in communication with foreign students who do not speak Croatian. Additionally, students can write their doctoral dissertation in English, in agreement with their supervisor(s).

TFRI promotes and realises the mobility of students and teachers within the framework of the Erasmus and the CEEPUS programmes. TFRI currently has 22 bilateral agreements with international partners, i.e. international universities from Austria, Cyprus, the Czech Republic, Finland, France, Italy, Latvia, Hungary, Poland, Portugal, Romania, Slovenia, Serbia and Sweden. With regard to Erasmus student mobility, as of the academic year 2012/2013 to date, there have been about five incoming and three to four outgoing student mobilities per year, and about four or five incoming and one or two outgoing teacher mobilities per year.

3.4. Research methods

The data in this study were obtained by means of a questionnaire and individual, semi-structured interviews, which required both quantitative and qualitative analysis. The gathered data were analysed using Microsoft Office Excel 2013. The quantitative data were statistically analysed so as to obtain frequency rates and percentages. Answers to open-ended questions were coded for the purpose of statistical analysis and discussion.

3.4.1. Questionnaire

The questionnaire was originally written in Croatian, and was administered in paper-and-pencil format to a sample of 100 teachers from TFRI (see Appendix 1). Seventy-two questionnaires were completed and returned to the researcher. The questionnaire comprised closed- and open-ended questions, and space for additional comments was provided at the end of the questionnaire.

The first part of the questionnaire enquired into the participants' background information, i.e. age, years of teaching experience at the tertiary level, and prior experience of EMI. It also examined the teachers' attitudes towards EMI implementation, more specifically, whether they were informed about the possibility of holding courses in English at TFRI, and how they felt about it. They were invited to list (potential) problems and barriers to teaching through the medium of English at TFRI. The respondents were finally asked to identify the level at which, in their opinion, a complete programme in the English language could be launched, i.e. at the undergraduate, graduate, post-graduate level or none of them, and to corroborate their answers.

The second part investigated the participants' perception of the existing conditions for EMI implementation at TFRI. They were asked whether the internationalisation of education, and more specifically EMI, was supported by socio-political structures, the University and/or Faculty strategy. Moreover, the participants had to list (other) conditions for introduction of a programme in English that in their opinion the Faculty already meets or does not meet yet.

The third part elicited information regarding the participants' commitment to the educational innovation. Specifically, it explored the participants' willingness to hold their course(s) in English within an EMI programme, and whether financial remuneration for additional work that EMI implies, or might imply, would be a prerequisite for them to embark

on it. In addition, the participants were asked if they were informed about the possibilities of EMI implementation and whether the international reputation and visibility enhanced with EMI were of any significance for them. Furthermore, they were asked whether they would be willing to hold courses in English regardless of the character of the student body. The participants' attitude towards the need for language and pedagogical support was also examined.

The fourth part of the questionnaire enquired into the respondents' competencies. It first addressed their English language competency, i.e. they were asked to self-assess their proficiency in terms of the four skills (speaking, listening, reading and writing), on the scale ranging from 1 (insufficient) – 5 (excellent). The questions aimed to establish if they had attended a specific English language course organised by Rijeka University and/or had an English language proficiency certificate, as well as whether they had participated in various workshops/courses organised by the University aimed at improving their teaching skills and competencies. Further questions investigated whether they thought that by using the English language, the quality of classes, i.e. the depth and quantity of the conveyed information, would suffer, and whether the interaction between teachers and students would be negatively affected. Finally, their intercultural competency was addressed to gain insight into their awareness of the difficulties that could arise when teaching students of different cultural backgrounds.

3.4.2. Interviews

Five individual, semi-structured interviews were conducted in Croatian with the management of TFRI. Their duration varied between 30 and 60 minutes. The interviews focused on the data gathered via the questionnaire, which offered them the opportunity to

clarify and/or interpret them, and express their view regarding EMI implementation. The members of TFRI management that were interviewed were: the former Dean (the interview was carried out at the end of his mandate, September 2016), the present Dean, the Vice-Dean for academic affairs, and the Vice-Dean for business affairs. The former Erasmus coordinator was also interviewed.

3.5. Research questions

The study sought to answer the following questions:

- 1) Do the respondents know that some courses at TFRI can be held in English and what is their attitude in this respect?
- 2) What are, in their opinion, the (potential) problems and barriers related to teaching in English at TFRI?
- 3) Do the respondents believe that EMI (i.e. an entire programme in English) could be implemented at TFRI, and if so, at which level?
- 4) Do the respondents think that conditions for EMI already exist at TFRI?
- 5) According to the respondents, which conditions need to be met to ensure a successful implementation of EMI at TFRI?
- 6) Are the respondents willing to undertake EMI and invest extra time and effort in it?
- 7) Do the respondents find themselves competent enough to teach in English?

4. Results and discussion

4.1. Teachers` attitude to EMI at TFRI

Around half of the respondents (52.8%) do not know that some courses at TFRI could be held in English. Some of their answers were:

#7 I'm not familiar with the fact that there are courses which are held in a foreign language.

#39 I know that this is envisaged, but I'm not familiar with their actual implementation.

#46 Excellent, although I am not familiar with it and do not know for whom they are held.

However, the great majority of the respondents have a positive attitude towards it, considering it useful for the Faculty`s reputation. Offering a larger number of courses in English and, in particular, launching an entire EMI programme could attract a greater number of foreign students and encourage the international student exchange. It would give students an opportunity to improve their knowledge of English, thus becoming more competitive on the labour market. The following is a selection of respondents` answers to the question regarding their attitude to holding some courses at TFRI in English:

#3 The Faculty will become more attractive to foreign students. This initiative will contribute to the reputation of the Faculty and enable an easier scientific communication with other universities and faculties.

#5 I assume that this is necessary for foreign students, and I think that our students could only benefit from it.

#16 It's inevitable as foreign students are expected to come.

#19 It should be normal.

#21 As we are members of the European Union, the support for the exchange of students needs to be encouraged, and we should aim at an entire study programme in English. I consider this to be the beginning of internationalisation.

#62 I think there should be an entire programme in English, not just individual courses.

As for the concrete performance of courses through the medium of English at TFRI, a respondent observes that courses offered in English are in fact not held in the language (i.e. no lectures are held in English), but rather consist of individual teacher–student tuition.

#23 It's good if we want to join the network of European higher education institutions, but these courses are in reality not carried out in English (no lectures in English), rather individual teacher–student tuition is held for exchange students.

#60 I think it is a good idea. I've been offering a course in a foreign language, but no one has registered for it yet.

Although they do welcome this educational innovation, some question the need for it, i.e. whether there is a sufficient number of foreign students.

#2 It's fine if the courses are attended by foreign students, otherwise, should we abolish the Croatian language in secondary schools?

#25 Positive if there is a real need for it.

#52 If this has to be done to support exchange programmes such as ERASMUS, I think it is acceptable. Otherwise, I think it is unreasonable.

#53 Positively, but the demand for that is feeble since students who come and are not fluent in Croatian are rare.

#66 It makes sense if there is enough interest, i.e. enough foreign students.

Also, they hold that Croatian students should not be deprived of their right to attend courses and take exams in their mother tongue, i.e. Croatian.

#33 Very positive. In the future, we should have even more courses in English, but not at the expense of classes in the Croatian language.

#54 A complex topic. Croatian students must have the right/possibility to attend courses in Croatian.

When asked to mention some (potential) problems related to the teaching in English at TFRI, the respondents' answers reflected their lack of experience in the field. The (potential) problems reported included:

#2 Probably, the content coverage would be reduced, and thus the students' acquisition as well.

#4 Problems in communication between teachers and students. Extra time needed to translate teaching materials into English.

#5 Insufficient level of students' and teachers' English proficiency.

#24 There would be an increase in teacher workload; poor knowledge of English among teachers.

38 Potentially impaired student–teacher interaction.

#50 The teaching staff has no experience in it.

#54 In essence, classes in English mean double classes! More people. Furthermore, teaching materials are not in English.

#58 Little interest on students' part.

#64 The necessary preparation will take time; organisation of teaching in an already busy schedule and lack of space for teaching that should be carried out separately.

#70 The purpose, concept, (numerous) preconditions met for the start of classes.

As for barriers to holding a larger number of courses in English at TFRI, the respondents list similar factors. Some of the respondents' answers are the following:

#1 Lack of teachers.

#2 Preparation of classes in English; flexibility towards foreign students; financial support

#10 In addition to teachers' language competency for teaching in English, extra time must be invested in the preparation of teaching materials.

#11 Insufficient number of foreign students.

#17 I think that there are no obstacles, but it is a question of interest among foreign students.

#37 I think that there are no big (unbridgeable) obstacles, under the assumption that all teachers are willing to teach in English and competent in the language.

The respondents describe the lack of foreign students as a problem, which reveals a misconception that EMI is implemented exclusively for foreign students (Doiz, Lasagabaster and Sierra 2011). According to Drljača Margić and Vodopija-Krstanović (2015: 58), “on the one hand, enhanced international mobility is seen as an important prerequisite for introducing EMI. Foreign students are considered to be an important precondition for the implementation of EMI, while their absence is perceived as the major barrier to its introduction. On the other hand, unless EMI is introduced, it is unlikely that Croatian universities will be internationally visible.”

About a quarter (23.6%) of the respondents believe that EMI (i.e. an entire programme in English) could not be implemented at TFRI in the foreseeable future. The reasons given by the respondents include inadequate interest in it, insufficient teachers` proficiency in English and teachers` overall workload:

#24 Explanation: there is no need for this at present.

#45 Potential students do not seem particularly interested in it.

#47 Too much effort is needed.

#50 Lack of lecturers as the existing teaching staff are overloaded and they teach too many students.

#51 Students have inadequate mastery of English.

#68 Teachers` knowledge of English is not tested and cannot be assessed. If lectures and exercises are held in English, then the exams have to be in English too. This is a more complex thing. The need for that is also questionable.

Others find that courses must be held in Croatian for Croatian students to protect the Croatian language and identity:

#52 This is an institution in the Republic of Croatia and the official language of instruction should be the official language of the country. It would be justified only in case we had foreign students.

#55 This would not be correct unless the same subjects were held in Croatian as well, so as not to neglect the Croatian engineering terminology.

#68 Croatian technical jargon should be developed.

The rest (76.4%) of the respondents, however, think that an entire programme in English could be implemented at TFRI in the foreseeable future. More specifically, 33.4% think that EMI could be implemented at the postgraduate level, 18% at all three levels (undergraduate, graduate and postgraduate level), 16.7% at the graduate and postgraduate level, 6.9% at the graduate level and 1.4% at the undergraduate level. The respondents consider the postgraduate level to be the most appropriate level for launching an entire programme in English in the near future. They advance several reasons for that:

#2 PhD students need to be fluent in English since most of the professional literature is in English.

#10 Due to a smaller number of students and literature that is basically in English, a programme in English could be launched at this level.

#21 The implementation of a programme in English at the undergraduate and graduate level would overburden the teaching staff. At the PhD level, due to a smaller number of students and courses, and with additional teacher`s effort, the mentioned change could perhaps be launched.

#22 The postgraduate level can attract foreign students. Moreover, our PhD students are very proficient in English.

#23 At the postgraduate level we should not have problems because courses are carried out in the form of individual teacher–student tutorials, and dissertations can be written either in Croatian or in English.

#38 At the lower levels, this would demand parallel studies, for which we do not have human resources.

4.2. Management`s attitude to EMI at TFRI

The management is not surprised by the high percentage (52.8%) of teachers who do not know that some courses can be held in a foreign language. They are well aware that TFRI has not particularly encouraged teachers to embrace EMI, although TFRI did and does aim at carrying out courses in English, in particular, at the postgraduate level. Also, as already mentioned, a list of courses that can be held in English does exist, although it is primarily offered to foreign students. Members of the management have a positive attitude to the implementation of EMI at TFRI as it is necessary and recommendable in today`s world. The

present Dean states: “This is our intention and wish in the near future”, adding that in the very near future TFRI intends to apply for a project aiming at the internationalisation of higher education, which will be initiated by the Ministry of Science, Education and Sports of the Republic of Croatia. According to her this is both necessary and feasible and a team has been put together to work on that application. EMI should eventually be implemented in both graduate and postgraduate levels, but it is believed that it should first be adopted at the postgraduate level in the form of an accredited interdisciplinary module, intended for both foreign and Croatian students. However, certain preconditions need to be met prior to the implementation of such an educational innovation. What is essential is to reduce the teaching workload, e.g. abolish some courses or an entire study programme, and/or cut down the enrolment quotas, which are perhaps too high at present. Tuition fees are likely to be introduced, with the aim of providing teacher training, recruiting foreign lecturers, etc. The Vice-Dean for academic affairs confirmed the present Dean`s intentions and steps. “Our new Dean is committed to it.” The Dean says: “We expect to obtain funding from a project which will enable us to launch a postgraduate specialist interdisciplinary module completely performed in English, and created in accordance with our human and material resources.”

The fact that 76.4% of the teaching staff involved in the questionnaire-based survey support EMI implementation at some level is satisfactory for half of the management interviewed. The other half thinks the number should be larger.

According to the management, the main problem and barrier to a successful and effective EMI implementation is the teaching workload. The present dean states: “When implementing a programme in English, we must rely primarily on TFRI teachers, we cannot count on the engagement of foreign lecturers or recruitment of new staff, at least in the

beginning”. Another problem is the current high enrolment quotas, which are not realistic given the teaching capacity.

The language barrier is not perceived as a problem, because only those teachers who are willing and competent to tackle EMI would join the programme. The present Dean says: “For engineers it is almost easier to teach in English; we deal with equations, figures and graphs, professional vocabulary, and we use basic tenses (Past Simple, Present Simple, etc.)”. Accessing literature in English is not seen as a problem, but rather as an advantage as it is nowadays easily available and we should make use of it. As the former Dean notes: “The scientific community uses the English language, presents papers at international conferences, reads and draws on literature in the English language.”

Spatial capacities could be insufficient. One way to overcome it is to reduce the teachers` workload. Another problem could be finances. The management generally agree that TFRI should remunerate EMI teachers, as well as cover the cost of proofreading their teaching material in English and the teachers` additional training in the English language. Additional finances are also necessary for engaging foreign lecturers. A viable solution could be to cover at least part of these costs from the EMI students` fees.

In conclusion, the management strongly believes that prerequisites for the implementation of a programme in English at TFRI do exist and that all the above mentioned potential barriers should not refrain them from embarking on EMI.

4.3. Conditions

Around one third (36.1%) of the respondents think that there is no socio-political support for the internationalisation of education, while 36.1% think that there is, and the

remaining 27.8% of them are not sure. As regards the University Strategy, 9.7% of the respondents believe that it does not support programmes in English, 50% of them think it does, while 40.3% are not sure. As for the financial support of the Faculty for translation/purchase of teaching materials, 26.4% of the respondents think that it exists, 40.3% do not know, and 33.3% think that it does not exist; while for hiring new staff, 68.1% think there is no support, 26.4% are not sure, and only 5.6% think that financial support exists. As to the Faculty's financial support for recruitment of foreign lecturers, only 8.3% think it exists, 54.2% think there is no support, while 37.5% are not sure. Financial support of the Faculty for provision of language support exists according to 20.8% of the respondents, it does not exist in the opinion of 34.7%, and 44.4% of the teachers do not know. Faculty's logistic support for (foreign) students exists according to 34.7%, 25% think it does not exist, and 40.3% are not sure. Finally, Faculty's logistic support for the teachers exists according to 25% of the respondents, it does not exist in the opinion of 29.2%, and 45.8% are not sure.

The data obtained reflect the teachers' uncertainty and lack of information about EMI implementation. In this respect, we could highlight the respondents' answers to two questions, namely the possibility to finance the recruitment of foreign lecturers and/or hiring new staff. Indeed, more than 50% of the respondents believe that TFRI does not have the funds for that. They seem to be much more concerned about this precondition than any other mentioned in that part of the questionnaire.

The 2007-2013 Strategy of Rijeka University aimed to implement ten programmes in a foreign language by 2013; however, only one programme has been launched to date, at the Faculty of Economics in 2011 and it is still active. The 2014-2020 Strategy increased the number of programmes in a foreign language to 20, and the Faculty of Medicine in Rijeka is planning to implement EMI as of the academic year 2017-2018. According to the TFRI

management, “the University encourages the internationalisation and introduction of EMI at its constituent institutions. This has become an increasingly important topic. However, the University would not support EMI implementation financially.” Hence, the management strives to secure funding from other sources, such as projects and tuition fees.

As to the Faculty’s financial support for purchase of teaching materials, every department receives an amount of money for that purpose each year. Translation of the material for holding courses is something that all interviewed management members see as part of the teacher’s job, which does not necessarily have to be financially supported. According to the former Dean, “effort needs to be invested in the initial preparation, as is the case of every single course in Croatian.” The Vice-Dean for Academic Affairs states: “The course coordinator would translate teaching materials into English better than any language expert, who could proofread the materials if necessary.”

As for the organisational aspect, the present Erasmus coordinator will not suffice in case a programme in English is implemented. According to the present Dean, “we will need an Office for Foreign Students, located at TFRI. Initially, there would be one person in the Student Affairs Office, who would be linguistically competent and would look after student arrival, accommodation, visa requirements, etc.” The former Dean agreed that Erasmus coordinator will not be enough: “We will need an EMI office, but it would be too expensive to have one at each Faculty. An EMI office at the University level would be more appropriate.”

With regard to the conditions for introduction of a programme in English that TFRI already meets, the respondents listed the following:

#15 A sufficient number of young teachers who are proficient in English.

#17 The equipment is satisfactory and the teachers` knowledge of English.

#18 There is a large number of courses that are already prepared for being taught in English.

#28 The teaching staff that has been instructed in the English speaking countries. The literature in the library is largely in English.

#32 Everyday usage of English in scientific research; a number of scientific papers in English.

#37 I am not familiar with any formal conditions that should be met except for teachers who need to be proficient in English. I do not know whether that “knowledge” has to be certificated.

#45 Existing technical preconditions and equipment, and access to literature in English

#48 A sufficient number of teachers who speak English as a foreign language. Their willingness to hold classes in English.

#60 Technical support (classrooms, laptops, teleconferencing rooms); courses in the field of engineering are relatively easy to hold in English.

#72 The great interest of young, highly motivated teachers; interest of Erasmus and other students who could study at our faculty through mobility programmes.

The conditions for the introduction of a programme in English that TFRI does not meet yet are:

#2 Large number of teaching hours per teacher; employment of new teaching staff.

#6 Lack of teachers

#7 Insufficient motivation of most of the teachers, lack of incoming students.

#13 If the programme in English is carried out in parallel with the programme in Croatian, then the teacher workload will increase. Assistants should be recruited where needed.

#15 The number of interested foreign students.

#18 Teacher training, online system for students is in Croatian (MudRi, etc.).

#22 Too many students per class.

#25 The minimal number of students (foreign) who would enrol in a study programme in English; lack of space for holding any additional classes, poor exchange of students and teachers, teaching staff overloaded.

#50 Lack of teaching staff; lack of interest. Financial support missing.

#51 Teaching materials (sufficient number of textbooks), time needed for preparation of classes.

4.4. Commitment

A large percentage (57%) of the respondents are willing to hold classes in English as part of the programme in English, while 29.2% are not sure, and only 13.8 are against. The management is generally satisfied with the percentage of the respondents who are willing and ready to tackle EMI. As the Vice-Dean for academic affairs said: “It is a nice percentage. Certainly, it is necessary to popularise EMI, talk with teachers and inform them about what would be expected of them. This type of popularisation has been neglected so far. ” The results of the questionnaire show that only 7% of the respondents think that TFRI informs them about the possibility of implementation of programmes in the English language, and only 7% hold that TFRI motivates them to carry out courses in English. Accordingly, if motivated and informed, the number of respondents willing to undertake EMI would increase.

For 30% of the respondents, financial remuneration for preparing teaching material/carrying out a course in English is not a prerequisite to teach in English, while for 43.1% of them there should be some extra remuneration, while the rest (26.4%) are not sure. According to the Dean for business affairs, financial remuneration would be necessary only if teachers held EMI courses above their teaching load. The vast majority of the survey respondents (65.3%) say that the reputation of the Faculty, which would grow due to EMI, is important for them. 20.8% are not sure, and 13.9% do not care about that. Most of the TFRI teachers identify with their institution, which means that they are ready to invest extra time and effort for the benefit of their Faculty. However, as teachers often mentioned in the questionnaire, more intensive student and teacher exchanges are necessary for a successful EMI implementation. If there are no foreign students, there is no need for switching to English. Foreign students are envisaged as the key reason for EMI implementation. The results of the questionnaire corroborate that 64% of the respondents would teach in English only if courses were attended by foreign students, and only 30.5% of them would hold a course in English if it were attended only by Croatian students. The Dean and the rest of the management are not surprised by this result and say that it would be strange to teach in English only for Croatian students. The present Dean said: "If foreign students are present, then certainly we must switch to English. We have many foreign students coming from the neighbouring countries (Bosnia and Herzegovina, etc.) who understand our language. Thus, we need to accommodate to the situation and the students." The Vice-Dean for academic affairs states: "With the introduction of a module in English, both foreign students and home students who see in EMI the opportunity to improve their English and thus become more competitive on the labour market will be able to enrol. The launching of a one-year postgraduate specialist study, and in English to that, would be a novelty at TFRI. It would give engineers holding a master`s degree in mechanical or any other field of engineering an

opportunity to acquire additional professional competencies and skills in a specific engineering field, and it would attract foreign students.”

Commitment of teachers has also been observed through the teachers` readiness to improve their linguistic and teaching skills, as it shows their willingness to invest time, effort, and/or money for the benefit of their students, courses, department and institution, but also for their personal growth and professional advancement. A large number of respondents (58.3%) would attend additional language training (an English language course) organised by the Faculty. Moreover, 76.3% of the respondents would accept to be tested after completion of that course. As for the willingness to attend additional pedagogical training for teaching in English, which would be also offered by the Faculty, opinions are divided: 51.4% of the respondents would attend it, 20.8% are not sure, and 27.8% of them would not.

Over 50% of the respondents are not afraid of changes causing extra work. A large number of respondents (57%) consider that the Faculty should provide language support for teaching in English. About 14% of the respondents are willing to invest their own money in language training, and 11% of them are ready to invest their own money in the pedagogical training, which indicates that the teachers expect certain preconditions to be met by their institution. In other words, commitment should be reciprocal.

4.5 Competencies

The respondents self-assessed their knowledge of English and they highly rated all four skill. The receptive skills (reading: average grade 4.39 on a scale 1–5, and listening: average grade 4.22) were slightly higher rated than the productive skills (writing: average grade 3.93, and speaking: average grade 3.85). Specifically, about 80% of the respondents assessed their listening competency as excellent or very good (1.4% poor), and about 88% of

them assessed their reading competency as excellent or very good (no one considered themselves incompetent). In rating the productive skills, about 72% of the respondents assessed their writing competency as excellent or very good (2.8% poor), and around 67% of them assessed their speaking competency as excellent or very good (4.2% poor).

Moreover, 93.1% of the participants claimed to be fluent in English and use professional literature in English. Despite their highly developed competencies, the respondents expressed need for additional instruction. Courses/workshops organised by the University of Rijeka with the aim of improving the knowledge of the English language were attended by only 4 out of 72 respondents, i.e. 5.5%. A certificate of knowledge of the English language at the at least C1 level has been reportedly obtained by about 19% of the respondents.

As to didactic competency, most respondents (66.7%) think that they have the appropriate command of English for holding courses in it, while 23.6% of them are not sure and only 9.7% do not feel capable of teaching in English. Thus, the great majority claim to have not only linguistic but also didactic competency, i.e. do not perceive teaching in English as an obstacle for successful transmission of content. However, switching from one language to another is a complex phenomenon, which does not simply mean translating teaching material and delivering it to the audience. Teachers should adopt a style of teaching which would aid the transfer and acquisition of content in a foreign language (Mellion 2008). Airey (2015) offers a number of strategies for efficient EMI. According to the author, teachers should: raise students` awareness of the difference of an EMI lecture and discuss it with them; be at disposal for further questions at the end of the class since many students do not feel comfortable asking questions in class; avoid the practice of students` note-taking, and rather use a textbook and provide students with handouts or lecture notes; make students read the

material, i.e. a chapter, prior to lecture; and finally, avoid using lectures as form of tuition since they minimise student–teacher interaction.

Workshops/courses organised by the University with the aim of improving teaching skills and competencies were attended by 44.4% of the participants. When asked to assess whether the Faculty had a sufficient number of linguistically competent teachers to teach in a programme in English, 41.7% of respondents believe that it does. However, only 20% of them think that there is a sufficient number of teachers who are motivated for teaching in English. As for switching from Croatian to English, 54.2% of the respondents claim that this could be problematic for many colleagues, and 70.9% of the respondents find that this could be problematic for many students.

The majority (59.7%) of the respondents hold that carrying out courses in English would not reduce the quality of teaching, i.e. the content coverage. Only 15.3% of them think that it would have a negative impact, and 25% do not know. The same percentage (59.7%) of the respondents do not believe that teaching in English would have a negative impact on the interaction between teachers and students, while 16.7% of the respondents think it would, and 23.6% of them do not know. The overwhelming majority (91.7%) of the respondents think that communication with students in class is essential for quality transmission/acquisition of knowledge, with only 1.4% who do not think so, and 6.9% who are not sure.

As to intercultural competency, 75% of the respondents feel that they can deal with the presence of students from different linguistic and cultural backgrounds in the classroom, while 19.4% of them are not sure, and only 5.6% of them think they cannot cope with it. Only about a third (30.5%) of the respondents hold that the presence of foreign students requires a different approach to learning and teaching and different teaching methods, while 33.4% do not think so, and 36.1% are not sure. This result may be due to the fact that the respondents

have little or no experience of teaching intercultural students. Most of the foreign students who have attended courses at TFRI to date come from the former Yugoslav republics, i.e. the same or similar cultural backgrounds as Croatian students.

The management was invited to comment on the support that the University provides in the form of workshops/courses with the aim of improving the English language. They hold that it is insufficient as this lifelong learning programme started in the academic year 2015/2016, and it is held once yearly. It accepts up to 20 participants from 15 University constituent institutions, so every constituent institution can send one participant, with some larger constituents (such as TFRI) sending two of them. The present Dean states: “The number of the workshop participants should be increased to at least 20 per constituent institution. However, we could organise English language courses at TFRI for the teachers willing to tackle EMI. These courses would be held by our own English for specific purposes teachers or by external English teachers.” The management undertakes to wholeheartedly support the provision of language support for teachers embarking on EMI, particularly given the results of the questionnaire-based study. The opinion of a member of the management is worth mentioning in relation to the language training support offered by the University: “The interest of our teachers is larger than the supply. Perhaps, the STEM area (Science, Technology, Engineering, Mathematics) should be first considered, which means that in organising the workshops/courses with the aim of improving the English language, precedence should be given to teachers coming from these constituent institutions. The Croatian Strategy for Education, Science and Technology emphasises the need for supporting the priority areas, i.e. engineering and natural sciences.”

5. Conclusion

In view of the fact that the number of EMI programmes in the European Higher Education Area has been constantly increasing, the University of Rijeka also took some steps in this direction, though EMI is still in its infancy here. A number of studies have been carried out to assess the situation, i.e. conditions and commitment (cf. Drljača Margić & Vodopija-Krstanović 2015; Drljača Margić & Žeželić 2015). Along the same lines, this thesis aims at conducting a comprehensive analysis of conditions and needs which should be satisfied for an effective implementation of EMI at one of the Rijeka University`s constituent institutions - TFRI. The aim of this study was to analyse the situation at TFRI, the attitude of both teachers and the management towards holding courses in English and the feasibility of the implementation of an entire programme in English.

This study used the theoretical framework offered by Mellion (2008), from the Business School of Management in the Netherlands, who analysed why the English version of the Bachelor programme in Business Administration had been brought to a halt. According to her findings, the causes of this failure were: first, the programme had not been approved by the University Board, i.e. it was run for five years without having an official status; second, it was implemented at the bachelor degree level, which the author found not to be the best level for EMI implementation; third, it was “an English version of an already existing Dutch-taught curriculum in Business Studies for Bachelor students” (Mellion 2008: 213), which should be avoided when implementing EMI courses. The new programme in English should be “freed from the harnesses of the old, a step forward which involves all cultures, one worthy of international merit.” (Mellion 2008: 213, 222). She also noted the problem of the insufficient number of international students, organisational problems, etc.

The findings of the present study suggest a generally positive attitude towards EMI implementation on the part of both teachers and the management. The great majority (76.4%) of the teachers believe that EMI (i.e. an entire programme in English) could be implemented at TFRI in the foreseeable future, primarily at the graduate and postgraduate levels, i.e. after students gain an insight into the field of engineering in their mother tongue. The management has actually just started planning a programme in English at a postgraduate level, perhaps a combined study, or an accredited specialist postdoctoral study which would not be just an English translation of a Croatian programme. First, the management intends to apply for funding, and then teachers would be invited to establish a list of relevant courses in English. No prior testing of teachers' language competency would be conducted, and the first year would serve as a pilot project aiming to get feedback from the students. According to the management, "it's necessary to ensure the quality assurance, and teacher language competencies can be expected to develop and improve in time."

The first criterion for selecting EMI teachers would be their willingness to participate in EMI. The findings of this study show that 57% of the respondents are willing to hold classes in English as part of the programme in English. This would lead to the creation of an EMI programme which would be intended both for foreign and home students. Fees would probably be charged, as they could provide financial resources for teacher training, engaging foreign lecturers, teacher remuneration, etc. According to this study, a large number of respondents (57%) consider that the Faculty should provide language support for teaching in English. In addition, half of the teachers (51%) would attend additional pedagogical training for teaching in English.

A great majority (66.7%) of the respondents do not only feel linguistically competent but also they claim to have the required didactic competency, i.e. teaching in English would

not be an obstacle for them. The fact that engineers do not see major difficulties in switching from Croatian into English in classroom is certainly related to the fact that engineering sciences, in contrast to humanities and social sciences, are less rooted in a particular language and culture (Gnutzmann 2008). However, the fact that various authors focused on this phenomenon, i.e. the disciplinary differences in attitudes to EMI, indicates that this issue should not be ignored when planning and/or launching EMI programmes (Airey 2015; Gürtler & Kronewald 2015; Kuteeva & Airey 2014; Pulcini & Campagna 2015). Moreover, 60% of the teachers think that classes in English would not diminish the quality of teaching, which could also be related to the fact that engineers predominantly make use of non-verbal communication, e.g. formulae, illustrations, charts to mention just a few. As one of the members of the management observes: “For us [engineers] words are secondary.” It is not surprising that an equal percentage (60%) of the respondents also think that teaching in English would not negatively impact the interaction between teachers and students. As to intercultural competency, 75% of the respondents feel that they could deal with the presence of students from different linguistic and cultural backgrounds in the classroom.

With regard to the organisational aspect, the respondents generally agree that a Foreign Students Office/EMI office should be established either at the level of the University or at TFRI, but in any case at least one person fluent in English should be recruited at the Student Affairs Office.

Mellion’s findings show that what primarily determines success or failure of an EMI programme are the commitment and competencies of both the staff and faculty management. The findings of this study seem to suggest that competencies (linguistic, didactic and intercultural) of TFRI teachers are developed as well as their commitment to the initiative. The potential problems are the finances and the teaching load, which will require not just

cosmetic changes but an in-depth restructuring and rethinking of study programmes. What is essential is the assurance of timely and transparent information flow between teachers and the management.

References

- Airey, John. 2015. From stimulated recall to disciplinary literacy: Summarizing ten years of research into teaching and learning in English. In Slobodanka Dimova, Anna Kristina Hultgren & Christian Jensen (eds.), *English-medium instruction in European higher education. English in Europe*, Volume 3, 157–176. Berlin/Boston: De Gruyter Mouton.
- Ball, Phil & Diana Lindsay. 2013. Language demands and support for English-medium instruction in tertiary education: Learning from a specific context. In Aintzane Doiz, David Lasagabaster & Juan Manuel Sierra (eds.), *English-medium instruction at universities: Global challenges*, 44–61. Bristol/Buffalo/Toronto: Multilingual Matters.
- Barrios, Elvira, Aurora López-Gutiérrez & Clotilde Lechuga. 2016. Facing challenges in English Medium Instruction through engaging in an innovation project. *Procedia. Social and Behavioural Sciences* 228, 209-214.
- Cots, Josep Maria. 2013. Introducing English-medium instruction at the University of Lleida, Spain: Intervention, beliefs and practices. In Aintzane Doiz, David Lasagabaster & Juan Manuel Sierra (eds.), *English-medium instruction at universities: Global challenges*, 106–128. Bristol/Buffalo/Toronto: Multilingual Matters.
- Crystal, David. 2003. *English as a global language*. Cambridge: Cambridge University Press.
- Dearden, Julie & Ernesto Macaro. 2016. Higher-education teachers' attitudes towards English medium instruction: A three-country comparison. *Studies in second language learning and teaching* 6(3). 455-486.
- Doiz, Aintzane, David Lasagabaster & Juan Manuel Sierra. 2011. Internationalisation, multilingualism and English-medium instruction. *World Englishes* 30(3). 345–359.

- Doiz, Aintzane, David Lasagabaster & Juan Manuel Sierra. 2013. Future challenges for English-medium instruction at the tertiary level. In Aintzane Doiz, David Lasagabaster & Juan Manuel Sierra (eds.), *English-medium instruction at universities: Global challenges*, 213–221. Bristol/Buffalo/Toronto: Multilingual Matters.
- Drljača Margić, Branka & Irena Vodopija-Krstanović. 2015. Introducing EMI at a Croatian university: Can we bridge the gap between global emerging trends and local challenges? In Slobodanka Dimova, Anna Kristina Hultgren & Christian Jensen (eds.), *English-medium instruction in European higher education. English in Europe*, Volume 3, 43–63. Berlin/Boston: De Gruyter Mouton.
- Drljača Margić, Branka & Tea Žeželić. 2015. The implementation of English-medium instruction in Croatian higher education: Attitudes, expectations and concerns. In Ramón Plo Alastrué & Carmen Pérez-Llantada (eds.), *English as a scientific and research language. English in Europe*, Volume 2, 311–332. Berlin/Boston: De Gruyter Mouton.
- Gardner, Robert C. & Lambert Wallace E. 1972. *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Gnutzmann, Claus. 2008. Fighting or fostering the dominance of English in academic communication? In Claus Gnutzmann (ed.), *English in Academia: Catalyst or Barrier?* 73-91. Tübingen: Narr Francke Attempto Verlag GmbH + Co. KG.
- Godišnjak Tehničkog fakulteta Sveučilišta u Rijeci – Annual Report of the Faculty of Engineering University of Rijeka 2015/2016.
- Graddol, David. 1997. *The Future of English?* The British Council.
- Gürtler, Katherine & Elke Kronewald. 2015. Internationalization and English-medium instruction in German higher education. In Slobodanka Dimova, Anna Kristina Hultgren & Christian Jensen (eds.), *English-medium instruction in European higher education. English in Europe*, Volume 3, 89–114. Berlin/Boston: De Gruyter Mouton.

- He, Ji-Jun & Shiao-Yun Chiang. 2016. Challenges to English-medium instruction (EMI) for international students in China: A learners' perspective. *English today* 128, 32(4). 63-67.
- Klaasen, Renate G. 2008. Preparing lecturers for English-medium instruction. In Robert Wilkinson & Vera Zegers (eds.), *Realizing content and language integration in higher education*, 32-42. Maastricht: Maastricht University.
- Kuteeva, Maria & John Airey. 2014. Disciplinary differences in the use of English in higher education: reflections on recent language policy developments. In *Higher Education* 67. 533-549. DOI 10.1007/s10734-013-9660-6.
- Leong, Patrick NG Chin. 2016. English-medium instruction in Japanese universities: policy implementation and constraints. *Current Issues in Language Planning*. DOI: 10.1080/14664208.2016.1204053.
- Lightbown, Patsy M. & Nina Spada. 2013. *How languages are learned*. Oxford: Oxford University Press.
- Mellion, Michelle J. 2008. The challenge of changing tongues in business university education. In Robert Wilkinson & Vera Zegers (eds.), *Realizing content and language integration in higher education*, 212–227. Maastricht: Maastricht University.
- O'Dowd, Robert. 2015. The training and accreditation of teachers for English medium instruction: A survey of European universities. *SGroup News Bulletin* 132. http://sgroup.be/sites/default/files/EMI%20Survey_Report_ODowd.pdf (accessed 13 November 2016).
- Pulcini, Virginia & Sandra Campagna. 2015. Internationalisation and the EMI controversy in Italian higher education. In Slobodanka Dimova, Anna Kristina Hultgren & Christian Jensen (eds.), *English-medium instruction in European higher education. English in Europe*, Volume 3, 65–87. Berlin/Boston: De Gruyter Mouton.

Strategija obrazovanja, znanosti i tehnologije [Strategy for education, science and technology]. 2014.

<http://www.vvg.hr/kvaliteta/wp-content/uploads/sites/2/2014/07/Nacrt-prijedloga-strategije-obrazovanja-znanosti-i-tehnologije.pdf> (accessed 15 October 2016).

Strategija Sveučilišta u Rijeci 2007-2013 [Strategy of the University of Rijeka 2007-2013].

<http://www.apuri.hr/propisi/kvaliteta/SVURI01-01Strategija.pdf> (accessed October 2016)

Strategija Sveučilišta u Rijeci 2014-2020 [Strategy of the University of Rijeka 2014-2020].

http://www.biotech.uniri.hr/files/Dokumenti/Strategija_UNIRI_2014_2020_HR.pdf (accessed October 2016)

Studer, Patrick. 2016. Lecturers' communicative strategies in English-medium instruction: the importance of classroom interaction. In Patrick Studer (ed.), *Communicative competence and didactic challenges. A case study of English-medium instruction in third-level education in Switzerland*, 7-20. Winterthur: ZHAW Zurich University of Applied Sciences. Working papers in Applied Linguistics 6.

Sveučilište u Rijeci [University of Rijeka]. <http://www.uniri.hr> (accessed October 2016)

Tehnički fakultet u Rijeci [Faculty of Engineering]. <http://www.riteh.uniri.hr/> (accessed November 2016)

Appendix 1: Upitnik za nastavnike Tehničkoga fakulteta u Rijeci

Molim Vas da odvojite petnaestak minuta Vašega vremena za ispunjavanje sljedećega upitnika. Upitnik je anonimn, a prikupljeni podaci koristit će se isključivo za pisanje diplomskoga rada.

I

Zaokružite ili odgovorite na sljedeća pitanja:

1. Dob:

- do 29 godina
- 30-49 godina
- 50 godina i više

2. Godine radnoga/nastavnoga iskustva na visokoškolskoj instituciji:

3. Jeste li već poučavali na engleskome jeziku?

DA

NE

Ako DA, molim navedite instituciju/e i koliko dugo:

4. Jeste li se školovali na engleskome jeziku?

DA

NE

Ako DA, molim navedite na kojoj razini i koliko dugo:

5. Znete li da se na Tehničkom fakultetu neki predmeti izvode na engleskome jeziku?

DA

NE

6. Kako gledate na to što se neki predmeti na Tehničkom fakultetu izvode na engleskome jeziku?

7. Možete li navesti (eventualne) probleme vezane uz nastavu na engleskome jeziku na Tehničkome fakultetu?

8. Koje su prema Vašemu mišljenju prepreke održavanju većega broja predmeta na engleskome jeziku na Tehničkome fakultetu?

9. Smatrate li da bi se na Tehničkome fakultetu mogao pokrenuti cjelokupni program na engleskome jeziku u skorijoj budućnosti (zaokružite sve s čime se slažete)?:

- na preddiplomskoj razini
- na diplomskoj razini
- na poslijediplomski razini
- niti na jednoj razini

Molim obrazložite svoj stav:

II

Zaokružite ili odgovorite na sljedeća pitanja:

1. Smatrate li da postoje sljedeći preduvjeti za uvođenje programa na engleskome jeziku:

A) društveno-politička podrška internacionalizaciji obrazovanja

DA NE NISAM SIGURAN/SIGURNA

B) Strategija Sveučilišta podržava programe na engleskome

DA NE NISAM SIGURAN/SIGURNA

C) financijska potpora Fakulteta za:

prevođenje/nabavku nastavnoga materijala DA NE NISAM
SIGURAN/SIGURNA

zapošljavanje novoga kadra DA NE NISAM
SIGURAN/SIGURNA

angažiranje stranih predavača DA NE NISAM
SIGURAN/SIGURNA

osiguravanje jezične podrške DA NE NISAM
SIGURAN/SIGURNA

D) logistička podrška Fakulteta (stranim) studentima

DA NE NISAM SIGURAN/SIGURNA

E) logistička podrška Fakulteta nastavnicima

DA NE NISAM SIGURAN/SIGURNA

2. Navedite (ostale) uvjete koje prema Vašem mišljenju Tehnički fakultet **ispunjava** da bi se uveo program na engleskome jeziku:

3. Navedite uvjete koje prema Vašem mišljenju Tehnički fakultet **ne ispunjava** da bi se uveo program na engleskome jeziku:

III

Na skali od 1 do 5 zaokružite u kojoj se mjeri sljedeće tvrdnje odnose na Vas:

1 (uopće se ne odnosi na mene) - 5 (odnosi se na mene u potpunosti)

1. Voljan/voljna sam držati nastavu na engleskome jeziku u okviru programa na engleskome.

1 2 3 4 5

2. Naknada za pripremu kolegija na engleskome jeziku nije mi preduvjet da bih predavao/predavala na engleskome jeziku.

1 2 3 4 5

3. Programi na engleskome bi doprinijeli većoj međunarodnoj reputaciji Fakulteta, što je za mene važno.

1 2 3 4 5

4. Kolegij bih izvodio/izvodila na engleskome jeziku jedino ako ga pohađaju strani studenti.

1 2 3 4 5

5. Kolegij bih izvodio/izvodila na engleskome jeziku i samo za naše studente.

1 2 3 4 5

6. Fakultet me informira o mogućnostima uvođenja programa na engleskome jeziku.

1 2 3 4 5

7. Fakultet me motivira da izvodim nastavu na engleskome jeziku.

1 2 3 4 5

8. Pohađao/pohađala bih dodatnu jezičnu edukaciju (npr. tečaj engleskoga jezika) koju bi mi omogućio Fakultet.

1 2 3 4 5

9. Prihvatio/prihvatila bih testiranje po završetku tečaja engleskoga jezika.

1 2 3 4 5

10. Pohađao/pohađala bih dodatnu pedagošku edukaciju za držanje nastave na engleskome jeziku koju bi mi omogućio Fakultet.

1 2 3 4 5

11. Bojim se svake promjene budući da znam da me čeka dodatni posao.

1 2 3 4 5

12. Smatram da bi mi za izvođenje nastave na engleskome jeziku Fakultet trebao osigurati jezičnu podršku.

1 2 3 4 5

13. Spreman/spremna sam uložiti vlastita sredstva u jezičnu poduku.

1 2 3 4 5

14. Spreman/spremna sam uložiti vlastita sredstva u pedagošku poduku.

1 2 3 4 5

IV

1. Molim procijenite razinu svoje engleske jezične kompetencije.

1 (nedovoljno) - 5 (izvrsno)

Govorenje:	1	2	3	4	5
Slušanje:	1	2	3	4	5
Čitanje:	1	2	3	4	5
Pisanje:	1	2	3	4	5

Molim zaokružite odgovor na sljedeća pitanja:

2. Jeste li već sudjelovali na radionicama/tečajevima organiziranim od strane Sveučilišta s ciljem usavršavanja znanja engleskoga jezika?

DA

NE

3. Posjedujete li potvrdu o znanju engleskoga jezika na barem C1 razini?

DA

NE

Na skali od 1 do 5 zaokružite učestalost koja se odnosi na Vas:

1 (nikad) - 5 (vrlo često)

4. Služim se engleskim jezikom i koristim stručnu literaturu na engleskome jeziku.

1 2 3 4 5

Na skali od 1 do 5 zaokružite u kojoj se mjeri sljedeće tvrdnje odnose na Vas:

1 (uopće se ne odnosi na mene) - 5 (odnosi se na mene u potpunosti)

5. Smatram da dovoljno vladam engleskim jezikom za izvođenje nastave na engleskome jeziku.

1 2 3 4 5

6. Smatram da na Fakultetu postoji dovoljan broj jezično kompetentnih nastavnika da bi se pokrenuo program na engleskome jeziku.

1 2 3 4 5

7. Vjerujem da je dovoljan broj nastavnika motiviran za održavanje nastave na engleskome jeziku da bi se pokrenuo program na engleskome.

1 2 3 4 5

8. Smatram da se mogu nositi s prisutnošću studenata iz različitih jezično-kulturoloških miljea na nastavi.

1 2 3 4 5

Na skali od 1 do 5 zaokružite u kojoj se mjeri slažete sa sljedećim tvrdnjama:

1 (uopće se ne slažem) - 5 (slažem se u potpunosti)

9. Prijelaz s hrvatskoga na engleski jezik mogao bi biti problematičan za mnoge kolege/kolegice.

1 2 3 4 5

10. Prijelaz s hrvatskoga na engleski jezik u nastavi mogao bi biti problematičan za mnoge studente/studentice.

1 2 3 4 5

Molim zaokružite odgovor na sljedeće pitanje:

11. Jeste li već sudjelovali na radionicama/tečajevima organiziranim od strane Sveučilišta s ciljem usavršavanja nastavničkih vještina i kompetencija?

DA

NE

Na skali od 1 do 5 zaokružite u kojoj se mjeri slažete sa sljedećim tvrdnjama:

1 (uopće se ne slažem) - 5 (slažem se u potpunosti)

12. Održavanje nastave na engleskome jeziku umanjuje kvalitetu nastave tj. dubinu i opseg prenesenih informacija.

1 2 3 4 5

13. Nastava na engleskome jeziku imala bi negativan učinak na interakciju između nastavnika i studenata.

1 2 3 4 5

14. Komunikacija sa studentima tijekom izvođenja nastave nužna je za kvalitetno prenošenje/usvajanje znanja.

1 2 3 4 5

15. Prisutnost stranih studenta iziskuje drugačiji pristup učenju i poučavanju te drugačije nastavne metode.

1 2 3 4 5

Komentari (ako se Vaš komentar odnosi na određeno pitanje, molim Vas napisite broj pitanja):

Ukoliko imate bilo kakvih dvojbi ili pitanja vezanih uz upitnik ili istraživanje, slobodno mi se obratite (elisa@riteh.hr).

Veliko hvala na vremenu i trudu uložnim u ovaj upitnik!

Appendix 2: Questionnaire for teachers of the Faculty of Engineering in Rijeka

Please take 15 minutes of your time to complete the following questionnaire. The questionnaire is anonymous and the data collected will be used solely for writing an MA thesis.

I

Circle the answer or answer the following questions:

1. Age:

- 29 years or below
- between 30-49 years
- 50 years or above

2. Working/teaching experience in higher education instituion:

3. Have you already taught in English?

YES

NO

If yes, please state the institution/s and duration:

4. Have you been instructed in English?

YES

NO

If yes, specify at what level and for how long:

5. Do you know that some courses at the Faculty of Engineering are held in English?

YES

NO

6. What is your attitude towards some classes being held in English at our Faculty?

7. Can you mention some (potential) problems related to holding classes in English at our Faculty?

8. What are, in your opinion, the barriers to holding a larger number of courses in English at the Faculty?

9. Do you think that the Faculty of Engineering could run the entire programme in English in the near future? Circle all you agree with:

- at the undergraduate level
- at the graduate level

- at the postgraduate level
- at no level

Please explain your attitude:

II

Circle the answer or answer the following questions:

1. Do you think that the following preconditions for the introduction of a programme in English have already been met:

A) socio-political support for the internationalisation of education

YES NO NOT SURE

B) The Strategy of the University supports programmes in English

YES NO NOT SURE

C) financial support of the Faculty for:

translation/purchase of teaching materials	YES	NO	NOT SURE
hiring new staff	YES	NO	NOT SURE
recruitment of foreign lecturers	YES	NO	NOT SURE
provision of language support	YES	NO	NOT SURE

D) Faculty`s logistic support for (foreign) students

YES NO NOT SURE

E) Faculty`s logistic support for teachers

YES NO NOT SURE

2. List the (other) conditions for introduction of a programme in English that, in your opinion, the Faculty **already meets**:

3. List conditions for introduction of a programme in English that, in your opinion, the Faculty **does not meet**:

III

On a scale of 1 to 5, circle the extent to which the following statements apply to you:

1 (it does not apply to me at all) - 5 (it applies to me completely)

1. I am willing to hold courses in English within the programme in English.

1 2 3 4 5

2. Remuneration for preparation of courses in English is not a precondition for my holding courses in English.

1 2 3 4 5

3. Programmes in English would contribute to a greater international reputation of the Faculty, which is important for me.

1 2 3 4 5

4. I would hold a course in English only if it were attended by foreign students.

1 2 3 4 5

5. I would hold a course in English also if it were attended only by our students.

1 2 3 4 5

6. The Faculty informs me about the possibility of launching a programme in English.

1 2 3 4 5

7. The Faculty motivates me to teach in English.

1 2 3 4 5

8. I would attend additional language training (eg. English language course) offered by the Faculty.

1 2 3 4 5

9. I would accept to be tested after completion of the English language course.

1 2 3 4 5

10. I would attend additional pedagogical training for teaching in English organised by the Faculty.

1 2 3 4 5

11. I am afraid of any change since I know that this entails extra work.

1 2 3 4 5

12. I believe that the Faculty should provide language support for holding courses in English.

1 2 3 4 5

13. I am ready to invest my own funds in language instruction.

1 2 3 4 5

14. I am ready to invest my own funds in pedagogical training.

1 2 3 4 5

IV

1. Please evaluate your level of English language proficiency.

1 (unsatisfactory) - 5 (excellent)

Speaking: 1 2 3 4 5

Listening: 1 2 3 4 5

Reading: 1 2 3 4 5

Writing: 1 2 3 4 5

Please circle the answer to the following questions:

2. Have you already participated in workshops/courses organised by the University **with the aim of improving knowledge of the English language?**

YES

NO

3. Do you have a certificate of knowledge of the English language at least C1 level?

YES

NO

On a scale of 1 to 5, circle the frequency that applies to you:

1 (never) - 5 (very often)

4. I am fluent in English language and use professional literature in English.

1 2 3 4 5

On a scale of 1 to 5, circle the extent to which the following statements apply to you:

1 (it does not apply to me at all) - 5 (it applies to me completely)

5. I think that I have appropriate command of English for holding courses in it.

1 2 3 4 5

6. I believe that the Faculty has a sufficient number of linguistically competent teachers to run a programme in English.

1 2 3 4 5

7. I believe that a sufficient number of teachers is motivated for teaching in English to run a programme in English.

1 2 3 4 5

8. I feel that I can deal with the presence of students from different linguistic and cultural backgrounds.

1 2 3 4 5

On a scale of 1 to 5, circle the extent to which you agree with the following statements:

1 (completely disagree) - 5 (completely agree)

9. Switching from Croatian to English could be problematic for many colleagues.

1 2 3 4 5

10. Switching from Croatian to English in the classroom could be problematic for many students.

1 2 3 4 5

Please circle the answer to the following question:

11. Have you already participated in workshops/courses organised by the University **with the aim of improving teaching skills and competencies?**

YES

NO

On a scale of 1 to 5, circle the extent to which you agree with the following statements:

1 (completely disagree) - 5 (I completely agree)

12. Holding courses in English reduces the quality of teaching, i.e. the depth and range of information conveyed.

1 2 3 4 5

13. Teaching in English would have a negative impact on the interaction between teachers and students.

1 2 3 4 5

14. Communication with students during the teaching process is essential for a quality transmission/acquisition of knowledge.

1 2 3 4 5

15. The presence of foreign students requires a different approach to learning and teaching as well as different teaching methods.

1 2 3 4 5

Comments (if your comment relates to a specific question, please write down the question number):

In case you have any questions or further comments regarding the questionnaire or research, feel free to contact me (elisa@riteh.hr).

Thank you for the time and effort invested in filling out the questionnaire!