English as a medium of instruction at a Japanese university Preferences and opinions of domestic and international students

REMIJN, Gerard B. Faculty of Design, Kyushu University

FUYUNO, Miharu Faculty of Design, Kyushu University

BLANCO CORTES, Laura M. Graduate School of Design, Kyushu University

ONO, Asuka Graduate School of Design, Kyushu University

https://doi.org/10.15017/2228570

出版情報:基幹教育紀要. 5, pp.75-85, 2019-03-05. Faculty of Arts and Science, Kyushu University バージョン: 権利関係:

English as a medium of instruction at a Japanese university Preferences and opinions of domestic and international students

Gerard B. REMIJN^{1*}, Miharu FUYUNO¹, Laura M. BLANCO CORTES², Asuka ONO²

¹Faculty of Design/ Research Center for Applied Perceptual Research, Kyushu University, 4-9-1, Shiobaru, Minami-ku, Fukuoka 815-8540, Japan

²Graduate School of Design, Kyushu University, 4-9-1, Shiobaru, Minami-ku, Fukuoka 815-8540, Japan

*E-mail: remijn@design.kyushu-u.ac.jp

Received Sep. 11, 2018; Revised Dec. 13, 2018; Accepted Dec. 19, 2018

To get insight into how non-native students prefer to receive classes with English as the medium of instruction (EMI), we conducted a short questionnaire study at two departments of Kyushu University, Japan. The respondents were 94 first-year students (predominantly domestic) and 41 postgraduate students (domestic and international). The questionnaire showed that a significant majority of respondents preferred EMI mixed with some instruction in Japanese. Many respondents thought the instructors' English would improve if they used clearer and simple verbal English, as well as clearly legible visual English. Furthermore, the respondents thought that the most important ingredients of an EMI class were summaries/repetition of subject matter and hand-outs /downloadable materials. Given that many respondents were domestic students, these preferences may reflect the students' concern about picking up subject matter in English in general. Since non-native respondents will have little, if any, experience with (academic) EMI when starting their studies, academic institutes in non-native countries should thus consider additional instruction in the native language and appropriate ways to evaluate and support their EMI environment.

1. Introduction

In 2014, the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) launched the "Top Global University Project"¹. The project aims to support academic institutes that lead the internationalization of Japan's higher education, and follows similar internationalization projects in other Asian-Pacific and European countries^{2, 3, 4}. Internationalization concerns the policies and practices undertaken by academic systems and institutes to cope with the global academic environment⁵. Through internationalization, academic institutes strive to improve their educational reach and research output. It is often initiated by expansion of the curriculum with international content to stimulate enrollment of international students, as well as attempts to increase cross-border academic exchange and collaboration. In the long run, these initiatives are thought to enhance an institute's (inter)national profile and its role in society.

In Japan, out of 777 universities⁶, the Top Global University Project supports 13 universities as "Top Type" academic institutes. These are considered to provide world-level education and have the potential to be ranked among the world's top 100 universities. Another 24 universities are supported as "Global Traction Type" universities. Similar to the Top Type universities, they are supposed to strongly promote international activities by developing international curricula and research collaborations. With English as the de facto

working language in academia, all these universities now have initiated curricula with course work taught in English as a prime requirement of the project. From here on, we will refer to teaching course work in English as 'English-medium instruction' (EMI). As a result of internationalization activities, the supported universities in Japan are seeing sharp increases in the number of international students. For example, at Kyushu University, one of the Top Type universities, the number of international students rose from 1972 to 2313 during 2014-2018, while the total number of students throughout these years actually decreased a little, from 18772 students in 2014 to 18668 students in 2018⁷.

When entering a university, in Japan and elsewhere, students need to cope not only with new course work but also with a new language environment. Literacy skills are very important – especially academic literacy skills. Few students freshly entering a university start out with proficient academic literacy. This is the case for domestic students who will study subject matter in their mother tongue, and even more so for students who will study in a second language. As a first step towards English academic literacy in non-native students, universities that provide EMI typically require students to study for an English language proficiency test. Research has shown, however, that English as a second language (ESL) tests, such as TOEFL, TOEIC, or IELTS, do not sufficiently prepare students to deal with English academic course material⁸. Students thus have to develop academic literacy independently over the years. To support this, many will need guidance and practice in reading, writing, and understanding subject matter taught with EMI⁹.

Especially in countries where English is not the native language, not only the students need support with EMI classes: instructors need support too. Evaluations have shown that non-native instructors not always have sufficient academic English abilities and are sometimes not even quite motivated to use EMI¹⁰. Furthermore, they tend to cover less material¹¹, and engage in less student-instructor interaction¹² in EMI classes. Unfortunately, adequate assistance for both students and instructors to remedy these issues is not always present^{13, 14}. Although most studies underline the benefits of EMI, attempts must therefore be made to improve the EMI environment at academic institutes in non-native English countries.

Surprisingly few studies dealing with ways to improve EMI have actually looked at and listened to the opinions of the recipients of EMI: the students. What kind of EMI environment do they prefer and what are their ideas to improve EMI at their institute? One study that obtained students' opinions was performed by Byun and colleagues³ at Korea University. Their interviews with students raised both positive and negative outcomes of EMI. Among the positive outcomes were an improvement of students' general English abilities, an increased influx of international students and faculty, and a fairly high satisfaction level with EMI overall. Among the negative outcomes were dissatisfaction with the instructors' or classmates' English abilities, which could hamper discussion about subject matter, and problems with finding support and materials to increase the level of academic English. Many students therefore suggested having at least some materials explained in their native tongue, next to English, in order to improve their understanding of subject matter.

In this study we further focused on the specific problems of international and domestic students dealing with EMI in a non-English-speaking country. The study was done at Kyushu University in Japan, assigned as Top Type university by MEXT as mentioned. Kyushu University is a typical research university with (under)graduate school disciplines ranging from literature to engineering. It ranks within the top 150 universities in the world (place 128 in 2018, QS World University Rankings¹⁵). As Top Type university it hosts EMI-only postgraduate programs and some EMI programs for undergraduates as well. The authors of this study have either instructed or followed some of these EMI courses and are non-native English speakers. Our goal was to gain insight into how domestic and international students prefer to receive EMI at two departments of Kyushu University. Students were asked to voice their opinions and give preference ratings by filling in a questionnaire. The results were shared and discussed at a faculty development meeting on how to improve the EMI environment. So far, to our best knowledge, EMI had not been evaluated at Kyushu University by any other means, apart from annual evaluations of individual course content without focus on EMI in particular.

Of special interest were the students' opinions with regard to dual-language teaching. As one of the outcomes of Byun et al.³, students at Korea University tended to prefer classes both with English and Korean instruction to improve their understanding of subject matter. We assessed whether domestic and international students of the engineering department and the design department of Kyushu University also tended to prefer dual-language teaching. In Japan often at least half of the international student population consists of Chinese nationals, who are able to understand both English and Japanese, which is partly composed of Chinese "Kanji" characters.

2. Method

2.1. Respondents

In total, 135 students filled in the questionnaire forms. Most of them were first-year students from the engineering department (n=54) and the design department (n=40) of Kyushu University. The questionnaire results showed that 90 of the 94 first-year students were Japanese nationals (domestic students), 3 were international students who could read Kanji in their field of study, and 1 was an international student who claimed he/she could not. Forty-seven of the first-year students from the engineering department and 31 first-year students of the design department reported a TOEFL ITP score. On a maximum of 677 points, the engineering freshmen scored 474 ± 55 on average and the design freshmen scored 457 ± 36 on average. This difference was not significant (Welch t=1.498, df=75, p=0.14). The first-year students filled in the questionnaire as a part of course material, yet on a voluntary basis.

Forty-one respondents were postgraduate (master's course or doctoral course) students from the design department. They also filled in the questionnaire on a voluntary basis. Their answers showed that this group consisted of both domestic (n=26) and international students (n=15). Although a total of 15 international students is relatively small, we statistically analyzed their data where possible, or else expressed their responses in percentages so as to give an impression of the trends in their data. Eight of the 15 international students could read Kanji characters in their field of study, while 7 could not. Only 9 of the 26 domestic postgraduate respondents reported a TOEFL ITP score, with an average of 459 points. Eight of the 15

international postgraduate students reported to have passed a Japanese Language Proficiency Test (JLPT) with a level of N3 or higher. The JLPT has 5 levels, with N1 being the highest. Two international postgraduate students reported to have passed N1.

Before filling in the questionnaire, the students were informed about the purpose of the questionnaire and told that results would be summarized and presented publicly. They were further informed that they would remain anonymous, and they were encouraged to be as frank as possible in their answers. Students could decline participation without any consequences whatsoever as regards their academic evaluation. The research procedure had been approved by the Ethical Committee of the Faculty of Design, Kyushu University. Answer sheets were gathered by members of each respondent group, respectively, including authors LBC and AO, and delivered in envelopes to authors GBR and MF, who analyzed the data.

2.2. Questionnaire

The questionnaire consisted of 11 questions, compiled in an English version and a Japanese version, translated from the English by author MF. The first two questions were posed in order to group respondents according to their language ability. First, the respondent was asked whether he/she was a native Japanese or not, and had the ability to read Kanji characters in their field of study. Kanji characters are Chinese characters adopted in the Japanese writing system. Following this, the respondent was asked for a TOEFL (ITP) score and a Japanese-language test score (JLPT), if available. The results of the questions regarding the respondents' language ability are described in the Respondents section above.

The respondent was then asked whether he/she had received 5 or more courses in English or not, excluding those for English language education. With this question we assessed how much experience the respondent had with EMI. Since EMI is not a part of the first-year curricula at the engineering department and the design department at Kyushu University, freshmen students first received a short model EMI lecture by author MF. Included in this lecture were examples of English-only slides and slides with subject matter both in English and Japanese to help students form their opinions.

The next 8 questions after this all pertained to EMI. The question contents are discussed below along with the results. Where appropriate the differences in the proportions of the response categories were statistically compared by using Cochran's Q test. In the case of a significant outcome, pairwise comparisons were performed using McNemar tests with Bonferroni-correction on the p-value to account for the number of pairwise comparisons.

3. Results

The answers to question 3 confirmed that the first-year respondents did not have experience with EMI. Surprisingly, none of the 26 domestic postgraduate students and just 2 of the 15 international postgraduate students had experienced 5 or more courses with EMI. Since EMI is used for mandatory courses in the postgraduate program for design students, all domestic and international postgraduate students had at least experienced 1 course with EMI at the time they filled in the questionnaire. Overall, though, the respondents

were not at all familiar or not very familiar with EMI.

Figure 1 shows the response percentages to questions 4 (1a) and 5 (1b). Question 4 assessed what type of EMI classes the respondent would prefer: all-English classes, English but also with some instruction in Japanese, or English mixed with a lot of instruction in Japanese. The vast majority of the first-year respondents, 61.70%, preferred EMI classes with some instruction in Japanese. Cochran's Q indeed showed that a significant difference existed between the response categories (T=46.00, df=3, p<0.001). Classes with some Japanese were significantly more preferred than all-English classes (p<0.001) and classes with a lot of Japanese instruction (p<0.001). The postgraduate students (53.66%) had the same opinion, though the differences with the other response categories were smaller (T=7.66, df=2, p=0.022). Post hoc tests showed that the classes with some Japanese were more preferred than the all-English ones (p=0.020) and the classes mixed with more Japanese (p=0.034). With Bonferroni correction on the alpha level, however, the latter difference strictly would not be significant. Domestic and international postgraduates (57.69%) and about half of the international postgraduates (46.67%) preferred EMI classes with some instruction in Japanese.

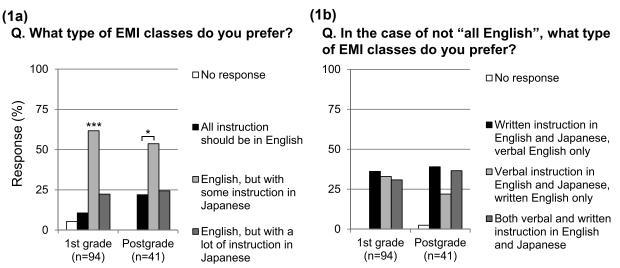


Figure 1 Response percentages for question 4 (1a) and question 5 (1b) obtained from first-year respondents (n=94) and postgraduate respondents (n=41). *** p<0.001; * p<0.05.

Question 5 assessed, in the case EMI classes were not fully in English, whether the respondent preferred written instruction (e.g. text material and/or slides) in English and Japanese, verbal instruction in English and Japanese, or both written and verbal instruction in English and Japanese. The results revealed no clear favorite way of instruction. There was a slight preference for written instruction in English and Japanese with English-only verbal instruction, both in the first-year group (36.17%) and in the postgraduate group (39.02%). Not only the international (46.67%) but also the domestic postgraduate respondents (34.62%) seemed to have this opinion to some extent. However, many other respondents (over 30% in both the first-year group and the postgraduate group) favored classes in which both verbal and written instruction

were in English mixed with Japanese. The percentages of domestic (38.46%) and international postgraduates (33.33%) were similar in this regard. No significant difference was found indeed between the three alternatives in the first-year group (T=0.40, df=2, p=0.82) and in the postgraduate group (T=2.39, df=2, p=0.30).

The response percentages to questions 6 (2a) and 7 (2b) are shown in Figure 2. Question 6 probed what aspect(s) of the instructors' verbal English during EMI classes needed improvement: clarity of speech (e.g., pronunciation and speed), grammatical construction, others, or nothing in particular. Respondents could indicate more than one aspect or indicate that they had no opinion due to a lack of experience with EMI. Excluding the first-year respondents who had no opinion (33.33%), Cochran's Q revealed significant differences between response categories (T=47.11, df=3, p<0.001). The number of first-year respondents who had no problem with the instructors' verbal English (36.28%) or wanted to see an improvement in the clarity of verbal English (21.57%) was significantly larger than the number of first-year students who wished for better grammar (3.92%) or something else (4.90%). The postgraduate group also chose differently between response categories (T=20.10, df=3, p<0.001). The majority of the postgraduate group also wanted clearer spoken English (49.02%), significantly more than any of the other three alternatives. The domestic postgraduates (63.33%) were firmer about this than the international postgraduates (28.57%).

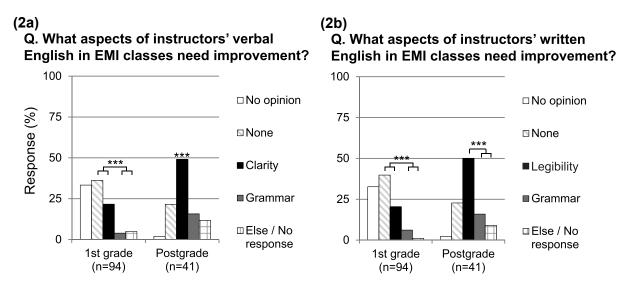


Figure 2 Response percentages for question 6 (2a) and question 7 (2b) obtained from first-year respondents (n=94) and postgraduate respondents (n=41). *** p<0.001.

Question 7 probed what aspect(s) of the instructors' written English during EMI classes needed improvement: legibility, grammar, others, or nothing in particular. Again, respondents could indicate more than one aspect, or answer that they had no opinion due to a lack of EMI experience. The responses showed a similar pattern as to question 6. Excluding the first-year respondents who had no opinion (32.65%), Cochran's Q revealed significant differences between response categories (T=54.88, df=3, p<0.001). The number of first-year respondents who had no problem with the instructors' written English (39.80%) was larger than the number of first-year students who wanted to see an improvement in the legibility of written

English (20.41%). With Bonferroni-correction on the p-value, this difference bordered on significance (p=0.013). The percentages of first-year students who had no issues or wished better legibility of visual English were significantly larger than the percentages of first-year students who wanted better grammar (6.12%) or something else (1.02%). The majority of the postgraduate answers indicated a need for better legibility of visual English (50.00%). This was driven mostly by the opinions of the domestic students (65.39%) compared to the number of international students who wanted better legibility (27.78%). Cochran's Q was significant (T=18.22, df=3, p<0.001). The difference between the group with no issues and those who wanted better legibility was not significant with a corrected p-value (p=0.034), but the difference between the group who wanted better legibility and the groups who wished for better grammar (15.91%) or something else (9.09%) was significant. Interestingly, though, the postgraduate respondents who wanted better grammar mainly consisted of international postgraduates. One-third of them thought that grammar needed to be worked on by instructors of EMI classes, while only 1 out of 26 domestic postgraduate students shared this opinion.

In the following questions, respondents could indicate what they thought about the amount (question 8) and the level of difficulty (question 9) of English in EMI classes. Figure 3 only shows the response percentages of the postgraduate group to questions 8 (3a) and 9 (3b), since the majority of the first-year

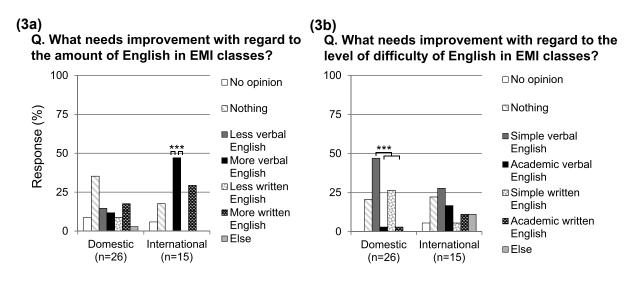


Figure 3 Response percentages for question 8 (3a) and question 9 (3b) obtained from domestic (n=26) and international postgraduate respondents (n=15). *** p<0.001.

students either had no problems with these factors, or no opinion due to a lack of experience with EMI. The postgraduate responses were more informative. Statistics were performed over 5 response categories: "no issue", "less verbal English", "more verbal English", "less visual English", and "more visual English". The data of the domestic postgraduates (T=9.62, df=4, p=0.048) showed that the number of domestic postgraduate students who had no problem with the amount of English in EMI classes (35.29%) was larger than the numbers of respondents who wanted more verbal English (11.76%) and less visual English (8.82%). With Bonferroni correction (p-value becomes 0.005), these differences would strictly not be significant

(p=0.021 and p=0.006, respectively). Many international postgraduates voiced that EMI would improve with more verbal English. Cochran's Q was significant (T=15.60, df=5, p<0.0036). Post hoc comparisons showed that they significantly preferred more verbal English (47.06%) over less verbal English (none) or less visual English (none).

With regard to question 9, almost half of the domestic postgraduate respondents (47.06%) wanted simpler verbal English. Post hoc comparisons after a significant Cochran Q test (T=26.13, df=4, p<0.001) showed that simple verbal English was significantly more chosen than academic verbal English (2.94%) or academic visual (written) English (2.94%). Other differences between response categories were not significant with a corrected p-value. The opinions of the international postgraduate respondents were more diverse. Some preferred simpler English, some did not. The statistical test did not show any significant differences between response category preferences (T=3.57, df=4, p=0.47).

In question 10 respondents could indicate the most important elements of an EMI class. Respondents were allowed to choose 3 or less of the following: a clear indication of the purpose of the lecture, a clear indication of the lecture structure, repetition and summaries of course material, receiving hand-outs, and a clear explanation of tasks and homework. Under 'else' they were free to indicate other elements as well. The results are shown in Figure 4. Cochran Q for first-year respondents, excluding the 'else' category due to a lack of responses, was significant (T=33.69, df=4, p<0.001). Post hoc comparisons showed that the first-year respondents had two essential requirements: repetition and summaries of course material during the lecture, as well as hand-outs or downloadable material to review the contents again. Each of these was answered in 26.02% of responses. This was significantly higher than the preferences for clearer explanations of tasks and homework

postgraduate data was also significant (T=21.98, df=4. p<0.001). Hand-outs and/or downloadable materials after the EMI lecture (28.95%) were deemed significantly more important than explanations of the purpose (14.04%)and the structure of the lecture (17.54%), and explanation of tasks and homework (13.16%). Other differences did not reach significance with correction for multiple comparisons.

(15.24%). The test performed over

Q. When following an EMI class, the most important elements are:

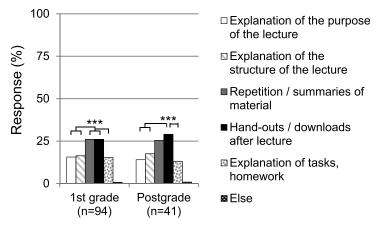


Figure 4 Response percentages for question 10 obtained from first-year respondents (n=94) and postgraduate respondents (n=41). *** p<0.001.

Finally, the respondents were

asked to ventilate their opinions, complaints, and/or advice with regard to EMI at Kyushu University in free-form style, either in English or Japanese. Eleven of the 94 first-year respondents voiced their opinion. Nine of them were concerned about their understanding of subject matter taught with EMI, either because they could not deal with the English or had problems with the way it was used by the instructor. Having native-English instructors or support for those struggling with EMI were among the suggestions. Two domestic postgraduate students also indicated that they had problems following subject matter in English, due to their self-reported lack of understanding of academic English in general. The 15 international postgraduate respondents were more outspoken, in particular with regard to the way EMI was taught. Two mentioned no particular problems with EMI at their department, but 6 respondents wanted to see improvement. They were mainly worried about the fact that in some EMI classes Japanese was still the default language with "a general resistance towards using English". Poor English by the instructor and the lack of discussion and proper content due to this were among the most pressing matters. Some also thought that the sheer amount of EMI classes was simply not enough. In short, the international students who took the opportunity to respond thought that EMI classes should indeed predominantly be in English and that more EMI classes are necessary.

4. Discussion

We presented the results of a questionnaire that asked the opinions of students with regard to English as a medium of instruction (EMI) at two departments of Kyushu University, Japan. The respondents were either first-year or postgraduate domestic students. It is important to note that the scores on an English language proficiency test (TOEFL ITP), as provided by these students, are below average in comparison to the averages obtained in other Asian countries. The averages of the first-year engineering (474) and design (457) students, as well the postgraduate design students (458), are close to the overall TOEFL ITP average in Japan of 460 – an average that ranks Japan among the bottom three Asian countries on this test¹⁶. In light of this, it is not surprising that our respondents have a strong preference for EMI classes with some instruction in Japanese.

The other results can also be linked to the respondents' general level of (academic) English. A relatively small group of postgraduate respondents mentioned a need for better English grammar, but this group mainly consisted of international respondents. International postgraduates also generally preferred more verbal English in EMI classes. Domestic postgraduates, however, either had no problem with the amount of English or preferred simple verbal English over academic verbal English or academic visual (written) English. The fact that summaries/repetition of subject matter and hand-outs/downloadable materials were regarded as the most important elements of an EMI class by first-year and postgraduate respondents may also reflect that many students at the engineering department and design department of Kyushu University are simply not very confident in their ability to easily absorb subject matter in English.

The opinions obtained here thus are in accordance with those of Byun et al.³, obtained in another non-English-speaking country (South-Korea) where the level of English is arguably similar to that in Japan.

Although EMI plays an important role in academic internationalization and attracting international students, in non-English-speaking countries the receivers of EMI are often domestic students. The present questionnaire is limited, e.g., as regards the range of questions and the fact that many respondents had little experience with the topic, but seeping out of the responses is a general concern of non-native students with understanding subject matter taught with EMI. Mixing EMI with some instruction in the students' native language, combined with repetition and clear overview materials is needed according to many of them. The result that many postgraduate students wished to see more clarity and better legibility in the instructor's English also suggests that EMI instructors should take considerable care when preparing their class materials. Practical information and training opportunities for EMI instructors need to be made available for both native and non-native speakers of English.

References

¹Ministry of Education, Culture, Sports, Science and Technology (MEXT) Japan (2014). *Top global university project*. Retrieved from: https://tgu.mext.go.jp/en/about/index.html.

²Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia-Pacific region. *TESOL Quarterly*, 37, 589-613.

³Byun, K., Chu, H., Kim, M., Park, I., Kim, S., & Jung, J. (2011). English-medium teaching in Korean higher education: policy debates and reality. *Higher Education*, 62, 431-449.

⁴Doiz, A., Lasagabaster, D., & Sierra, J.M. (2011). Internationalisation, multilingualism and English-medium instruction. *World Englishes*, 3, 345-359.

⁵Altbach, P.G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, 11 (3-4), 290-305.

⁶Ministry of Education, Culture, Sports, Science and Technology (MEXT) Japan (2017). *Abstract of Statistics*. Retrieved from: http://www.mext.go.jp/b menu/toukei/002/002b/1383990.htm.

⁷Kyushu University (2018). Yearly report for academic 2018. (May, 30, 2018).

⁸Von Randow, J. (2010). How much language do they need? The Dilemma English-medium universities face when enrolling English as an additional language students. In: *Collected essays on learning and teaching*, Vol. III, 172-176.

⁹Miller, J. (2006). Clash of language, clash of cultures. In: M. Stroinska & V. Cecchetto (Eds.), *International classroom dynamics: Challenging the notion of international students*. Berlin Peter Lang Verlag.

¹⁰European Commission (2008). *The impact of ERASMUS on European higher education: Quality, openness and internationalization*. Brussels: European Commission.

¹¹Vinke, A.A., Snippe, J., & Jochems, W. (1998). English-medium content courses in non-English Higher Education: A study of lecture experiences and teaching behaviours. *Teaching in Higher Education*, 3, 383-394.

¹²Airey, J. & Linder, C. (2006). Language and the experience of learning university physics in Sweden. *Institute of Physics Publishing*, 27, 553-560.

¹³Tsuneyoshi, R. (2005). Internationalization strategies in Japan. *Journal of Research in International Education*, 4, 65-86.

Article

¹⁴Erling, E.J., & Hilgendorf, S.K. (2006). Language policies in the context of German higher education. *Language Policy*, 5, 267-292.

¹⁵QS World University Rankings (2018). Retrieved from:

https://www.topuniversities.com/university-rankings/world-university-rankings/2018 (August 20).

¹⁶Educational Testing Services (2015). Test and Score Data for the TOEFL ITP test, Summary January – December

2014. Retrieved from: https://www.ets.org/s/toefl_itp/ pdf/toefl-itp-test-score-data-2014.pdf.