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# Teachers' experiences of English-medium instruction in higher education: a cross case investigation of China, Japan and the **Netherlands**

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#### **ABSTRACT**

In recent decades, English taught programmes have rapidly increased in number throughout Europe and East Asia as universities aim to internationalise their curriculum, which has given rise to an increase in English-medium instruction (EMI). This study aims to compare the teaching experiences at three EMI programmes in The Netherlands, China, and Japan in response to calls for more comparative research on the pedagogical issues associated with teaching through English in non-Anglophone contexts. Interviews were conducted with 19 teachers in managerial and classroom-facing roles, working within comparable undergraduate English-taught business degree programmes across the three contexts. Data were thematically analysed for convergent and divergent experiences. Findings indicated similarity between the Chinese and Japanese contexts compared to the Netherlands, highlighting greater concerns surrounding student proficiency, teacher competence, and the overall impact of EMI on educational quality. Unique solutions were uncovered to inform better content and language integration in EMI practices.

#### ARTICLE HISTORY

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#### **KEYWORDS**

Higher education; China; Japan; the Netherlands; English medium instruction; English language

#### Introduction

Higher Education (HE) 'belongs to a globalised market' (Coleman 2006, 3), which is increasingly becoming an 'Englishised' market. An increase in English as a medium of instruction (EMI) at non-Anglophone universities is a result of internationalisation strategies pursued by many universities to attract international students and faculty and to develop the linguistic skills of local students (Galloway and Ruegg 2020). In Europe, EMI largely developed to meet demands of student and faculty mobility initiatives such as the Erasmus programme, where the institutionalisation of English as an academic lingua franca gave birth to an explosion of English taught programmes. According to Bothwell (2017), there were 50 times more English-taught bachelor programmes in continental European universities in 2017, compared to 2009. In various comprehensive surveys of EMI in Europe (Maiworm and Wächter 2002; Wächter and Maiworm 2008; Brenn-White and Faethe 2013), the Netherlands has been identified as a mature (i.e. well-established) EMI context, with English taught programmes widely taught at most of its universities. Many Asian countries have introduced EMI

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initiatives more recently via internationalisation policies at the national level (Walkinshaw, Fenton-Smith, and Humphreys 2017, 1), among which Japan and China have become emerging countries of significant growth. Both nations are emerging as rapidly developing regions of EMI provision.

Despite a current boom in research exploring the phenomenon of EMI, Macaro et al. (2018) point out a paucity of comparative case studies that explore EMI pedagogical challenges across regions. To fill this need, a study of three broadly comparable EMI programmes in three countries, (the Netherlands, China and Japan) was carried out to better understand how teaching challenges and experiences compare and contrast in mature and developing EMI contexts. This comparison aims to inform language and content specialists of EMI issues and challenges in different national contexts to elucidate shared endeavours and improve pedagogical practices.

#### Literature review

EMI refers to the teaching of academic subjects (other than English itself) in contexts in which the majority of the population's first language is not English (Macaro et al. 2018, 37). There is no prototypical EMI context (Coleman et al. 2018), as EMI provision is influenced by country, region, university, academic discipline, linguistic proficiency, and educational level.

EMI, by modern definitions, has existed in Dutch universities since the 1980s. Wilkinson and Walsh (2015) provide a case study of a pioneering programme of EMI within a Dutch university in the mid-1980s, which marked the beginning of active expansion of EMI policy and practice in higher education in the Netherlands in response to a more mobile Europe and the adoption of the Bologna Declaration. Since this time, the number of English taught programmes in the Netherlands has skyrocketed (Wächter and Maiworm 2008), and EMI has become commonplace in many Dutch universities.

In China, the Ministry of Education in China (MOE 2001) started to promote EMI as one of the twelve principal means of offering high-quality undergraduate education. Financial support and preferential policy investment have been provided to universities to internationalise, especially the institutions listed in Project 985 (39 universities), Project 211 (211 universities) and Double First-Class University Plan (42 universities and 465 disciplines from 140 universities) (Peters and Besley 2018). Institutions listed as high-level key universities by provincial governments have also been given prioritised support. Additionally, in recent decades China has seen the emergence of the 'offshore branch campuses of English-speaking countries' (Fang 2018, 33) that have replicated and relocated their institutional management, curricula and pedagogical practice in their Chinese campuses.

In Japan, the Global 30 Project was initiated by the Japanese Ministry of Education in 2009 and aimed to enhance the internationalisation of selected universities via the establishment of EMI as one of its four main pillars. In 2014, this scheme was concluded and, in the same year the *Top Global University Project* began to take shape. This project offered financial support to 37 universities at the national, public and private levels to 'enhance the international compatibility and competitiveness of higher education in Japan' (MEXT 2014). Specifically, these universities are expected to set an example of internationalising Japanese HE and society (Rose and McKinley 2018).

#### Impact of EMI on teaching in higher education

Previous research has been undertaken pertaining to students' and teachers' perceptions of EMI, and the interrelationship between students' and teachers' English proficiency and their performance in content learning and teaching (Ali 2013; Earls 2016; Jensen et al. 2019; Hamid, Jahan, and Islam 2013; Lehtonen et al. 2003; Hu, Li, and Lei 2014; Tange 2010). A recent international survey (Macaro, Akincioglu, and Han 2020) showed a strong consensus among teachers that teaching had to change in an EMI context. In the context of Western Europe, while much EMI research examines how stakeholders perceive EMI in relation to top down policy and bottom up pedagogical movements (Dimova, Hultgren, and Jensen 2015), the European teachers in Earls' (2016) study saw

EMI as a tool to explore cultures and 'mental flexibility' (126). In the region of Japan and China, empirical research has investigated stakeholders' personal accounts, their experience with EMI as well as insights into pros and cons of EMI (Galloway, Kriukow, and Numajiri 2017; Thompson 2019; Hu, Li, and Lei 2014). While early challenges of EMI in the Netherlands centred around whether high-school graduates were linguistically-prepared for EMI (Wilkinson and Walsh 2015), more recent challenges centre on the tension between English and Dutch in higher education, and their power fight in political, economic and cultural life (Breetvelt 2018). In response to a re-structuring of EMI, the plurilingual approach and the inclusion of lecturers' plurilingual resources have been a major focus of research investigation and policy change (Duarte and van de Ploeg 2019). Thus, in the Netherlands, major EMI concerns have shifted from students' lack of English to the perceived problems of using too much English at Dutch universities.

# Pedagogical challenges

Research in diverse global contexts has highlight that some EMI teachers have concerns over their own and their students' English language proficiency. In Turkey, for example, teachers in more than one study (Başıbek et al. 2014; Macaro, Akincioglu, and Dearden 2016; Kirkgöz 2009) reported a lack of students' general English proficiency and discipline-specific vocabulary. A similar view was also held by students in Bozdoğan and Karlıdağ's study (2013), in that inadequate English proficiency was an obstacle to content learning. In two Korean studies, the teachers perceived students' English proficiency as being the greatest obstacle to effective content learning (Choi 2013), indicating that one-third of the students were linguistically underprepared to undertake EMI (Kim and Shin 2014).

Other studies have revealed that teachers have different understandings and standards of a requisite level of English language proficiency to undertake teaching in EMI (Dearden and Macaro 2016). Dearden's (2015) survey of institutions in 55 countries showed that 83% of the respondents indicated that the number of linguistically qualified teachers was not enough to meet demand. A study of students' and teachers' perceptions of teachers' English proficiency in Sweden by Bolton and Kuteeva (2012) revealed that, contrary to teachers' self-assessments, a considerable percentage of students cast doubt on their teachers' English proficiency. In the Italian HE context, teachers expressed anxiety that their English presented students with difficulties to comprehend the content and even mislead them (Pulcini and Campagna 2015; Campagna 2016). In another study carried out in Italy (Guarda and Helm 2016), 19% of the teacher participants perceived their language capabilities as being one of the significant challenges in teaching EMI programmes.

EMI has also resulted in challenges for teachers in their delivery of content. Studies have shown that teachers need to adjust their curriculum, teaching approach, teaching materials and students' assessment (formative, such as assignments, and summative, such as exams) to switch from L1 instruction to EMI, which demands more time and energy (Başıbek et al. 2014; Hellekjær 2017). Other studies have found that English imposes a distance between the teacher and his/her L1 language, as well as the local cultural context, and it is difficult to introduce humour and build rapport with students (Airey 2011). Further to this, observations of teacher and student interaction in high school EMI classes in China, have shown EMI to lead to monologic, and less interactive, teaching styles, regardless of the teachers' English abilities (An, Macaro, and Childs 2021). It will be of interest to see how the three contexts in the current study compare and contrast with widely reported pedagogical challenges to highlight areas of shared concerns.

With increasing debate surrounding the problematic E in EMI and its impact on EMI effectiveness, pedagogic translanguaging (García and Li 2014; Li 2018) has been advocated as a possible solution to enhance EMI teaching. Essentially, via pedagogic translanguaging, teachers and students can embrace their plurilingual resources and integrate them into the construction of content knowledge. Through translanguaging, students optimise their knowledge intake drawing on their full linguistic repertoire (Basturkmen and Shackleford 2015) and content knowledge in multilingual forms (Barwell 2016). Translanguaging practice can empower students with multiple forms of knowledge, rather than relying on resources in English only.

# **Comparative EMI studies**

Despite calls for comparative studies of EMI (Macaro et al. 2018), there have been few empirical studies on teachers' experiences of EMI across national contexts. In a recent empirical study in Japan and China, Galloway, Kriukow, and Numajiri (2017) investigated 579 students' (from five Japanese universities and seven Chinese universities) and 28 teachers' (from seven Japanese universities and four Chinese universities) perceptions of EMI, including the perceived challenges and obstacles. Students in Japan reported more exposure to English in their lectures, course materials, classes and exams than their Chinese counterparts. Furthermore, Chinese students perceived EMI as being less effective for improving their English proficiency. Additionally, in relation to teachers' English proficiency and overall pedagogical approach, the Japanese students tended to emphasise a need for teachers to have 'native-like' accents and possess overseas experience, compared to the Chinese students surveyed. The study emphasised the importance of addressing the languagerelated challenges in EMI that both the students and teachers were strongly concerned about. This study is significant in that it compares educational experiences across two national contexts. Some limitations include a lack of control over the university types and disciplines, which previous researchers have pointed out to exert influence over student need. For example, Physics lecturers in Turkey suggested that the English needed in a Physics class was relatively minimal (Macaro, Akincioglu, and Dearden 2016), compared to language-reliant disciplines in the social sciences.

In one of the few studies that has compared EMI contexts in Asia and Europe, Bradford (2013) carried out a qualitative examination of publicly available documents in Japan and Europe, as well as a synthesised literature review of studies in both contexts, and discussed what the implementation of EMI in HE in Japan could draw from the more established European perspective. According to the study, while EMI implementation in Europe was more developed than in Japan, the linguistic, cultural and structural (school management and administration) challenges observed in Europe could also be seen in Japan. Bradford proposes that classes to improve language and academic skills should be encouraged to help students with their linguistic obstacles, whilst faculties could benefit from training in intercultural teaching pedogogies. Bradford's (2013) inclusion of a mature EMI context is helpful to discern whether the challenges observed in emerging EMI contexts like Japan are teething problems or a pervasive part of EMI implementation in general. Our study aims to build from such previous comparative research in a bid to inform local solutions for shared issues and concerns across contexts.

# Methodology

The study adopts a multiple-case study approach, in which a case is positioned as 'a programme, an institution, an organisation, or a community' (Dornyei 2007, 151). In this study, the case was set at the EMI programme level, although each of these programmes was embedded within a separate university and in separate national context, which adds contextual layers to each case. The actors in the case study were positioned as EMI teachers (content teachers/language teachers/programme managers), as these people occupy agentic positions of molding the teaching practices at each case site.

Field research was conducted at three universities offering EMI programmes in the same discipline: one in each of Japan (J-U), China (C-U) and the Netherlands (NL-U). Data collection consisted of semi-structured interviews with EMI teachers in each context. The guiding research questions for the study were intentionally broad in order to capture a range of issues at the interface of teaching content in an EMI context. These questions were: 'What language related issues and pedagogical challenges arise from delivering content in a second language in three comparable EMI contexts?'; and 'How do these issues and challenges diverge and converge across these



contexts?'. While previous research has previously investigated challenges within singular EMI contexts, these have not provided a suitable basis for cross-country comparisons. A key tenet of comparative research is the Principle of Equivalence, that requires contexts to be functionally equivalent to be meaningfully compared (Esser and Vliegenthart 2017) - a tenet the current study aims to adhere to.

# Research population and sampling

The study adopted a purposive sampling technique of three universities. In purposive sampling a researcher 'first needs to decide the attributes that are crucial to the study, and then find the context or participants that appear to meet those criteria' (Miyahara 2020, 55). To enhance the functional equivalency of the EMI contexts being compared, we selected a single discipline in broadly comparable universities within which to conduct research. The following criteria were used to establish equivalence in the selection of the research sites:

- EMI schools that offered undergraduate degrees related to management and business. According to EMI reports, the areas of business and engineering are areas of the greatest growth in EMI provision (Wächter and Maiworm 2014), but business was thought to be more language-dependent as a social science, and thus more challenging from a language perspective.
- Within a tertiary higher institution that advocates internationalisation of HE and promotes EMI education at the undergraduate level. As EMI research has shown strong connections between internationalisation and EMI, we needed to explore EMI as an institutionally-supported, rather than grassroots, phenomenon.
- Within an institution that is firmly established in its own national HE context, with an established academic reputation for EMI. Because EMI is linked to newly established forms of private universities and transnational partnerships, we wanted to compare more stable forms of EMI at well-established universities.

The three field research trips involved the collection of data from:

- Six teacher interviews, two management interviews, and five supplemental classroom observations (not reported in this paper) from C-U.
- · Six teacher interviews, one management interview, and three supplemental classroom observations (not reported in this paper) from J-U.
- · Six teacher interviews, two school management interviews and two supplemental classroom observations (not reported in this paper) from NL-U.

While all efforts were made to recruit a similar number and profile of participants across the three contexts, we acknowledge a limitation that slight differences in numbers of content and language teachers may have influenced emphasis placed on certain experiences reported in the data. An overall EMI context of each case is described in Table 1. A summary of interview participants is outlined in Table 2, followed by an overview of more detailed information about participants (interviewees) in Table 3. Particularly, all participating teachers in three universities had a minimum of 5 years of EMI teaching experience. Most teachers had 10 + years of teaching, had research experience in international collaboration and output in English, and previous degree study or visiting scholar experience in English-speaking contexts. Some teachers had prior industrial or private sector working experience in an English-speaking context. Their sufficient EMI teaching experience and diverse academic/professional backgrounds in EMI contexts ensured a strong linguistic platform for reflection and in-depth discussion. While every effort was made to collect data from broadly similar populations at each research site, practical issues such as availability and accessibility meant slightly different proportions of teachers and administrators. It

Table 1. EMI contexts of three universities.

	C-U	J-U	NL-U
Year EMI established	2003	2006	1970s and 80s
English language support in curriculum	EGP + EAP + ESP Overseas Exchange (optional)	EGP + EAP + ESP Overseas Study (optional)	English Writing Centre (optional)
Role of English	Academic	Academic Communicative	Academic Communicative Lingua franca
Student demographic	100% home	Majority Japanese (< 10% International, mostly Asian)	Majority German, Dutch and European (< 10% other international)
Student native/first language	Chinese mandarin or Regional dialects	Japanese or Asian languages	German, Dutch and European languages
Entry English requirement	Based on overall China College Entrance Exam scores in which English is included	TOIEC <sup>1</sup> scores submitted periodically for upgrade/ degrade in ESP classes	Not applicable for European admission; Required for international admission
Institution band/ rank	Top 10% HE institution in China	Selected member of Top Global Project By MEXT	Triple awarded business school among 1% of business schools worldwide

should be noted that multiple case studies aim to explore and compare the cases, but not to generalise from the data or make claims to be representative of the broader context within which the cases are situated, thus we believe these small differences have not distorted the findings from each context.

#### Data collection and data analysis

A semi-structured interview was the main method of data collection, which allowed flexibility within a set question structure for the different circumstances in which the interviewees from different case countries were situated. Part of the semi-structured interview themes were adapted from the open questions and interviews by Rogier (2012) and Dearden (2015). There were five general interview themes:

- Students' English language proficiency and its relationship to content performance and their English development.
- Perceived pedagogical challenges and teaching approaches related to language difficulties.
- Institutional language support.
- Pedagogical strategies used to address language or educational challenges.
- Perceived benefits, advantages and drawbacks of implementing EMI.

All interviews were conducted face to face during the field research except one with the ESP curriculum designer/teacher at J-U, for which a Zoom interview was organised due to scheduling conflict during fieldwork. Interview length varied from 10 to 30 minutes but the same key questions were covered in all interviews. A limitation of semi-structured interviews on having participants

**Table 2.** Number of participants involved in each case study.

	C-U	J-U	NL-U
Language Teachers	2*	4*	1
Content Teachers	4*	2	5
School Management	2*	1*	2
Classroom observation-	5	3	2

<sup>\*</sup>Case C-U includes two teachers with a dual language and content role, and another teacher with a dual content and school management role.

<sup>\*</sup>Case J-U includes one participant who had a dual language and curriculum designer role, with the latter treated as school management/administrative function.



		<b>Participants</b>	Native Language	Teaching Area / Role
C-U	Language	P1	Chinese	Business translation
	3 3	P2	Chinese	EAP
	Content	P3	Chinese	International Trade
		P4	Chinese	International Business
		P1	Chinese	International Management
		P2	Chinese	Business Negotiation
	School Management	P5	Chinese	Vice Dean
	_	P4	Chinese	Vice Dean
Co	Language	P6	English	English for Specific Purpose (ESP) / EAP
		P7	English	ESP / EAP
		P8	English	ESP /EAP
		P9	English	ESP /EAP
	Content	P10	Japanese	Finance
		P11	English	Global Business and Management
	School Management	P9	English	Curriculum Designer
NL-U	Language	P12	English	Academic Writing
	Content	P13	Dutch	Governance
		P14	Dutch	Tutorial Tutor
		P15	Dutch	Accounting
		P16	Dutch	Marketing
		P17	Dutch	Organisation Behaviours
	School Management	P18	Dutch	Exam Office
	5	P19	Dutch	Admin and Teaching Training

respond in real-time without space for critical reflection is acknowledged. Supplemental classroom observations were also conducted, which focused on EMI pedagogical approaches, existent English proficiencies and linguistic challenges during the class, however, this data was not drawn upon in this paper due to limitations of space.

NVivo was used for the thematic analysis of interview transcripts. The node repertoire was established in two directions. From a top-down direction, 'thematic coding' (Kvale and Brinkmann 2009) was driven by five categories above. From the bottom-up direction, 'eclectic coding' (Saldaña 2013, 188) was applied to conduct open-ended explorations of the data. Therefore, the five interview themes were listed as 'top-down' parent codes with a second layer of 'data-driven' children nodes based on sub-themes emerging from these larger pre-determined themes. For transparency, these themes are linked to the semi-structured interview questions which are included as supplementary materials. The study received ethical approval from the lead researchers' university ethical review board before data collection.

# **Findings**

The main themes that emerged from the coding process and were in alignments with the focus of this paper were issues surrounding: students' language proficiency; compromises in depth of content taught; academic language-related challenges; lacks in language support and content integration; and EMI teaching competence. Each of these themes are outlined in turn, accompanied by illustrative data across the three case sites.

#### **English proficiencies**

All of the teachers from C-U and J-U indicated that many students struggled in their EMI programmes due to limited English language proficiency, in contrast to the teachers at NL-U, who gave positive assessments of their students' English language ability.

At C-U, two teachers believed a certain number of students were unable to follow the class. Another teacher pointed to the fact that their programme adopted a bilingual approach, so students



were encouraged to access content in their first language to support their understanding. This teacher's perspective was echoed in another content teacher's comments:

Of course, the class or textbooks are difficult for some students. However, I don't see the inadequacy in English would affect students' content comprehension tremendously because they could eventually get it by studying it in Chinese. Normally, I would suggest students to find the Chinese version of the English textbooks. (Content teacher C-U)

At J-U, one language support teacher gave a range of TOIEC scores from 450 (A2-elementary proficiency) to 990 (C1-international professional proficiency) to show the widespread reality of students' English proficiency, indicating that the lower 25% of the class struggled with EMI. The other language support teacher made a direct comparison between European programmes and the bilingual programmes in J-U, stating that only the top half at J-U had adequate English to study abroad.

In contrast to J-U and C-U, all of the content teachers at NL-U indicated confidence in the students' English proficiency. Six out of the eight teachers interviewed mentioned a noticeable difference between the NL-U regular students and the international exchange students from Asia and southern Europe in terms of abilities to engage in discussions. The language support teacher at NL-U pointed out that academic writing was still an area that all students needed to put effort into, even if their general English skills were adequate, as illustrated by the comment below:

Because they [the regular students] are so good at communicative English, they believe that they do not need to have academic writing, training. Because they think well we're really good at English already. And they do not understand that even native speakers need training on how to write an academic paper. (Language support teacher NL-U)

Thus, while students at NL-U were reported to have some lacks in academic proficiency surrounding academic writing, the students at J-U and C-U were perceived to have greater linguistic challenges, that were thought to prevent them from understanding content taught in English.

#### Perceptions of language improvement through EMI

All of the teachers gave positive evaluations of the ability to improve students' English language proficiency throughout their EMI studies. At C-U, a content teacher stated that intensive English for Academic Purposes (EAP) classes were embedded in the programme, particularly in the first and second years, which significantly helped students to undertake content classes in their third and senior years. He drew on a statistic that 40% to 50% of the business programme students were able to pass the Test for English Majors-band 4 by the end of the second year. Similarly, at J-U, students had a foundation in English skills through EAP and ESP language modules in their first two years, and the teachers drew on department statistics that indicated an average 50-point increase in each students' TOEIC tests, which were generally given 6 months apart. Another instructor mentioned that speaking and listening were the two areas with the most noticeable improvement.

At NL-U, the teachers recognised some language improvement throughout their studies, except for one teacher who claimed that the students' English proficiency was at a ceiling level from the outset. Comments about improvement were specific, and included phrases such as that students were learning 'more professional words', 'more complex structures', sounding 'more like natural English', and had developed 'English skills such as writing and specific professional vocabulary'. Additionally, four teachers attributed English improvement to the Problem Based Learning approach used in their classes. For example, a lecturer described the process the students went through as the years progressed:

... in year one it is rather painful for the students because they also have to learn the skills that are attached to the language, so they have to present, write the papers. By year two, they understood what we want from them,

but still, I feel that they are not really cooperating, so they will cut short on many important expressions. They will be very short in the sentences and they will not elaborate. By year three, I feel that, people have picked up on the fun aspects of our teaching style and I believe then it becomes the most interesting. (Content teacher NL-U)

Thus, the NL-U teachers held a holistic judgment of English improvement, which went beyond proficiency, and involved use of English skills, which were appropriate to the programme as a whole. For the J-U and C-U teachers, improvement was very much viewed in terms of performance on proficiency measures.

#### Compromised content learning due to language lacks

The interviewees at J-U and C-U expressed concern about compromised content learning within their programmes, especially for the students with relatively low English proficiencies. A language support teacher at J-U elaborated on his critical view of the balance between English improvement and understanding the content:

You're making a claim that you're able to do both, to improve the language ability enough and that you can teach the content material at that same high level as they were for others. I think that you're always deceiving yourself at least a little bit if you believe that's be true ... ... I think that you'd be better off, admitting that and saying we have a program that strikes a nice balance, between improving language skills and improving the content knowledge of business. (Language support teacher J-U)

The teacher in a management role at J-U mentioned a similar concern from the perspective of cognitive processing. He believed that not all students were able to attend to two demanding cognitive challenges, namely English and content learning, at the same time. Some students might be busy processing one task, which was trying to understand what was going on, and, thus, deeper learning of the content could not be achieved.

At NL-U, no such views were present in the interview data. In fact, two of the teachers were more concerned about the reverse impact of English's impact on knowledge of disciplinary content in their first language. For instance, one tutor mentioned she could not speak with confidence about her research in her native language, which caused her to decide to conduct a recent research grant application interview in English:

I switched to English and I really notice that I was more confident and I could remember better and I could explain it better in English. You read the research in English and you always work on it in English so I just did it in English and that was much better. (Content teacher NL-U)

Thus, for the teachers at C-U and J-U there was raised concern that content was not being delivered to the same standard in English as it would be in the students' first language, due to lacks of English language knowledge. Contrary to this, for the NL-U teachers, they expressed domain loss in the native language as a concern in that content knowledge in English was superior to that in their first language.

# Language-related challenges

The teachers from each university discussed different aspects of language-related challenges. At C-U, one content teacher highlighted listening comprehension as an issue. She had to mix English with Chinese, slow down or repeat the content whenever she realised some students could not follow. Notably, she believed that specific course vocabulary presented a large obstacle in students' comprehension. Another content teacher expressed concern for students' overall English proficiency, stating he would strategically use Chinese, depending on his judgment of the students' responses:



In reality, I fill half of my class with English and the other half with Chinese. However, the use of Chinese is not random but rather with obvious purpose. Once I noticed my students were slow in responding or the class atmosphere became passive, I would immediately switch to Chinese and explain what I had said one more time. (Content & language support teacher C-U)

At J-U, one language support teacher stated students' vocabulary directly impacted on the students' reading of course materials. To address this issue, simplified texts were used to scaffold students. Three other language support teachers also mentioned this strategy. Another language teacher believed that reading was a serious challenge for the majority of the students.

Reading a lot of college level texts is very challenging for them, and the number one problem there is vocabulary knowledge ..... they're having to stop regularly to look things up, and so [they] can't read fluently. (Language support teacher J-U)

At NL-U, the teacher from the academic writing centre believed the 'habitual' local forms of spoken English were too dominant and were reinforced by their content tutors:

When you are in a country like the Netherlands where the standard of communicative English is so high, what has happened is that there are these errors that have come into the language. So I, the English teacher, must be incorrect, even though I'm the expert. Because every other person in the class, and their tutors reinforces these errors because their content teachers are not native speakers either and quite often those errors come from the content tutors down into them, into the students and into their writing. And so I think that that tends to be, one of the biggest issues. (Language support teacher NL-U)

Thus, at C-U and J-U the teachers perceived the language-related challenges at the basic, passive level, such as the limited vocabulary hindering listening and reading, whereas at NL-U, students' English was so advanced it had developed its own local norms, and thus challenges seemed to be at the ideological and usage level about whether these norms were deemed acceptable by the English support teacher.

# Teaching support-related challenges

Regarding teaching support-related challenges, teachers in all contexts stated that the curriculum was able to foster connections between language and content. At C-U, both language and content were explicitly embedded in the curriculum. However, although the policy at C-U encouraged collaboration between the two arms of the programme, it encountered practical restraints. For instance, according to one interviewee (the Vice Dean), the teachers were overwhelmed with their teaching allocation, leaving limited time for possible collaboration:

One way we promoted collaboration between two sides was encouraging a showcase of classes so teachers would see exactly what was going in the class to facilitate mutual learning and understanding through collaborative teaching and research. However, in reality, teachers were allocated with lots of teaching and thus the time did not allow it. (Content teacher and school management C-U)

Another issue was that students' course allocations for English modules were perceived as being insufficient to prepare them for their content classes. Practical issues in curriculum planning arose, which limited decisions to provide more English language credits within the programme, as one senior manager at C-U explains: 'students are, after all, not English major students but business majors, so, technically, the curriculum cannot allocate more than the required English class hours and credits to those business major students'. An interview with the language teacher at C-U further alluded that the language teaching component of the course had its own separate curriculum. The teacher explicitly said there was no, or very little, communication with the content teachers; at least there was no such intention proposed from either side. Teachers at C-U expressed confusion about how English support would develop as the English language teacher role and business teacher role were seen as very separate parts of the programme so in the curricula the subjects were not linked, eroding possibilities of collaboration.



At J-U, all of the language support teachers described a synchronised curriculum to support the content courses within the programme. As one teacher summarised:

We have our own class, which is ESP, which uses the same textbook [as the content class], and we teach the same material but more having the students practice the material, whereas the business professors are, lecturing about the material and hopefully giving more information. As teachers we are not experts in business, so we have the students practice explaining the material to each other, or doing some extra research and then presenting using the business models such as strategies and ways of analyzing that they learned in the [content] class and so that kind of class has some coordination. (Language support teacher J-U)

The three other language support teachers mentioned meeting on a regular basis with content teachers to update student progress and adjust their teaching according.

At NL-U, the content teachers were aware of the existence of a language centre for students, but this language support did not form part of the structure of the degree. On the side of language support, the language coordinator from the academic writing centre had a clear understanding of her role in offering language support. She mentioned the centre worked very closely with programmes to help students with their writing for assignments in their content classes. She stated that the centre mostly helped students to enhance three aspects of their writing: academic language, structure, and referencing (citations).

We teach the language aspects and how to write a paper, how to structure, and the type of vocabulary that could be used. And referencing, citations things like that. Then at the same time there is a content course running ... and so they tie in together, so that the paper they must write is on that subject. (Language support teacher NL-U)

Thus, in N-U the language support seemed predominantly in the form of an optional writing centre for students to seek advice on their academic writing skills to improve the papers they were writing for their content course. This marked it as very different to the C-U and J-U cases, which had embedded academic skills as part of the degree programme, in both a highly integrated (J-U) and separated (C-U) structure to the content courses.

#### Lack of suitable teachers

At J-U, one lecturer expressed his desire to have more content teachers who are capable, willing and, more importantly, comfortable teaching in English. He believed the shortage of such teachers presented a challenge, stating 'It's really sad we just don't have enough instructors who can teach in English, effectively'. This teacher saw the skills needed to teach in an EMI context as uniquely different to teaching in students' first language:

It is not always about teaching, in English, that's one issue. But when you teach in English, you also bring in a particular kind of teaching culture. (Content teacher J-U)

This sentiment was also echoed at C-U, by the Vice Dean, who stated that hiring qualified staff presented a significant challenge for EMI development within his department. Based on his experience and observations, EMI content teachers needed to engage with English on three levels, which he referred to as 'the medium of terminology, the medium of syntax and the medium of logic', which incorporated knowledge of discipline specific terminology, English grammatical (syntactic) competence, and the pedagogical skills and know-how to convey concepts to students in an effective manner. He stated that while it was easy to find teachers with disciplinary knowledge and English skills, it was more challenging to find teachers who were pedagogically competent to teach in an EMI context. At N-U none of interviewees raised teaching capabilities as a challenge.

#### **Discussion and implications**

The main themes emerging from the teacher interviews across the three contexts raise a number of issues at the interface of language and content learning in mature and developing EMI contexts.

These include issues surrounding student proficiency, language learning expectations, and the role of collaboration in support of lower proficiency students. Each of these are discussed in turn.

The teachers generally indicated concerns about the students' English proficiency in China and Japan, in stark contrast with the Netherlands. Differences may stem from the greater dominance of English in society in the Netherlands, as well as the greater focus of languages in the primary and secondary school language education sectors (Dimova, Hultgren, and Jensen 2015). Though it is equally common that English teaching starts from primary school in China and Japan, the testoriented nature of the education system focuses less on communication which might impact the English proficiency needed for real-world academic performance. The educational cultures typical of East Asia are often perceived as a pedagogical challenge and obstacle in Western-style EMI implementation (Bradford and Brown 2017). Among the three universities, the C-U teachers expressed greatest concerns about the students' English, and at J-U the teachers stated that about half of the students were not ready for a European-style of EMI. Data further suggested that proficiency concerns are not easily solved via an addition of more language courses into EMI programmes, as one might see in a Content and Language Integrated Learning approach (see Wilkinson and Walsh 2015). Degree structure constraints, such as those reported in China, dictate a focus on content over English - put simply, the main goal of the degree is to produce business, rather than language, majors, preventing the integration of too many language-support classes. Thus, EMI degree programmes in contexts where general proficiency is highlighted as a concern, might need to consider other types of elective or extra-curricular language support models. In many EMI programmes in Turkey, for example, students of lower proficiency must undertake a preparation programme in English before entering an EMI programme (Macaro 2018). Although several issues have been raised about whether students actually achieve the required benchmarks within a yearlong curriculum, a preparatory system might be one way for EMI programmes to ensure students have the requisite language abilities before starting the EMI portion of the degree, without taking credits from the programme itself. The teachers at C-U and J-U believed that either English use or content delivery had to be compromised in their implementation of EMI - a sentiment not voiced in the NL-U context. This finding raises a concern about whether EMI is negatively affecting the quality of education. Indeed, research has shown that the linguistic demands of learning through a second language can impede processing abilities needed by students to succeed in their academic studies. In one study of 63 Chinese and 64 British students at a UK university, the researchers found that a majority of the variance in Chinese students' grades could be explained by language and literacy indicators alone, pointing to a systematic disadvantage of studying in a second language (Trenkic and Warmington 2019). The authors conclude that:

As any systematic disadvantage, it needs addressing. For example, students with the vocabulary size several standard deviations below the norm may find access to a dictionary helpful in exams; the disadvantage in the speed of processing could be offset by extra exam time. (Trenkic and Warmington 2019, 363)

This suggestion should extend to EMI contexts, where slow language processing by some students creates a systematic disadvantage to accessing the requisite content knowledge expected to be acquired in a degree programme. To address this issue, pedagogic translanguaging could be considered as a comprehensive approach to empower students' and teachers' full linguistic knowledge and alleviate such disadvantages. In this study, such translanguaging practices were elaborated on by only some teachers at C-U. According to interviewees at this university, the use of students' shared languages of Chinese and English was adopted as a pedagogical practice because teachers believed it enhanced the flow of teaching and made the learning process more sustainable. Such practice may be particularly important for students in disadvantaged linguistic situations, whereby they are severely limited in their learning by an English-only approach to EMI.

The results of our study indicated various approaches to the collaboration of language support within the degree programme across the three contexts. In NL-U, an optional language centre focused on the provision of language support which was linked to students' specific academic papers. In China, compulsory language classes were part of the programme, but little collaboration occurred between language and content teachers. In J-U, there was a lot of collaboration between the two types of teachers, including language and content classes working from the same textbook, and regular meetings between teachers to update on student progress and needs. As EMI is expanding exponentially across the world, there is a growing push for the active integration of language support into the academic literacies (Dafouz and Smit 2014). Galloway, Kriukow, and Numajiri (2017) have previously recommended that collaboration and transparent communication are necessary and urgently needed for consistent and focused EMI programmes in Japan and China. While the academic writing centre at NL-U may be a sufficient mechanism of integration in 'established' EMI programmes, where students generally have sufficient English to complete other academic skills, the system at J-U provides a good example for emerging EMI context within which development of multiple academic literacies in students is seen as necessary. The frequent communication and meetings at J-U informed the language teachers of the academic needs and issues, and the language modules were designed and implemented accordingly. Universities that operate EMI programmes like C-U, where language teachers belong to a separate arm of the university or department, might reflect on ways in which to foster greater and more systematised collaboration. Team-teaching (involving both language and content specialists in the same classroom) has also been highlighted as a potential way to foster greater collaboration (Lasagabaster, Doiz, and Pavón 2018). Although such initiatives are resource-heavy, it is clear that policies and concrete efforts to foster collaboration are needed to target the right academic needs of EMI students especially in emerging contexts.

A final issue raised in this study is a need for teachers in EMI programmes who not only have the requisite content knowledge and English language skills, but also the pedagogical 'know-how' to effectively communicate content to students. This raises implications for professional development in EMI contexts - especially in emerging contexts where teaching through English may be new for many teachers. Unfortunately, research has highlighted that professional development is rare in EMI contexts, and pre-service training is even rarer (Macaro, Akincioglu, and Han 2020). Professional development can help to improve overall pedagogical practice, but to also heighten content teachers' awareness of the seriousness of language issues in EMI (Macaro, Akincioglu, and Dearden 2016). This is especially important given that EMI research has shown a general resistance from EMI teachers to address students' language problems (Airey 2012).

#### **Conclusion**

Some common lessons and experiences can be drawn upon from the aforementioned pedogogical issues in three educational contexts. In most of the themes, NL-U was positioned as a 'benchmarking' case, in terms of what an established EMI programme might look like: the issues raised in this context were fundamentally different from those in J-U and C-U. As Bradford (2013) concluded in her own comparative study, there is utility for EMI contexts such as Japan to learn about EMI implementation from a European perspective. Thus, the two Asian universities, as the emerging EMI universities, could draw cautiously on NL-U's experiences, while bearing in mind the unique contextual differences - remembering that what works in one EMI context may not be appropriate for another. In many ways, benchmarking EMI in emerging contexts like Japan and China with established contexts like The Netherlands, might run the danger of creating false comparisons between contexts that are not equivalent in their use of English. Thus, differences in our data could be attributed to NL-U's longer history of EMI implementation, its highly structured curriculum with a more proactive learning culture and approach, and its more internationally-diverse student body who have a more proficient base of English, as well as greater exposure to English in Dutch society.

Perhaps greater lessons can be learned from comparisons between closer (i.e. more functionally equivalent) EMI contexts, such as Japan and China in the current study. Although sharing



numerous similarities with C-U in this contrastive study, the J-U case had markedly different models of collaboration and integration, and thus there might also be opportunities for C-U to learn from the J-U case in terms of the strategies they are implementing to deal with languagerelated and academic literacy-related challenges within their programme structures. What is needed to resolve issues at the interface of language and content in emerging EMI contexts is clearly more opportunities for learning across contexts. Faculty mobility schemes would allow teachers to experience alternative forms of EMI in other national contexts, allowing them to bring home global solutions to local problems. Professional development programmes could also expose EMI teachers to a range of strategies that have been tried and tested in other contexts, equipping them with new tools to apply to their own pedagogical needs. Finally, more comparative research – like that reported in this paper - can help to tease apart core issues surrounding EMI that are being felt locally, but are shared globally.

#### Note

1. TOIEC: Test of English for International Communication, a recognised English skill test worldwide organised by Educational Testing Service (ETS). Official website: https://www.ets.org/toeic

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