# Effects of English as Medium of Instruction (EMI) on Students' Content Knowledge Acquisition in Japanese Higher Education

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## Introduction and aims

This study, focusing on undergraduate students in Japan as primary stakeholders in EMI, aims to:

1. investigate whether the learning of academic subjects in English can contribute to the acquisition of Japanese students' content knowledge in comparison to when their learning takes place in their L1.
2. examine language and content learning related challenges faced by Japanese medium instruction (JMI) and EMI students
3. explore the relationship between students' English language proficiency and the mastery of their content knowledge acquisition
4. investigate other factors (excluding English language proficiency) that influence EMI student learning.

## Driving forces behind EMI

In the latest British Council report on EMI, Galloway, Kriukow and Numajiri (2017) summarised several benefits of EMI (p. 4).

- **English proficiency** in addition to content knowledge
- intercultural understanding and **global awareness/citizenship**
- **Career opportunities**
- **Staff employment**
- Access to cutting-edge knowledge and increasing **global competitiveness** to raise **the international profile**
- income (and compensating for shortages at the domestic level)
- **Student and lecturer mobility**
- Employability of graduates/ **international competencies**
- Using **English as a neutral language**

## EMI in Japan

The 'Top Global University Project' (TGUP) A 10-year, multimillion dollar investment initiative (31 universities)

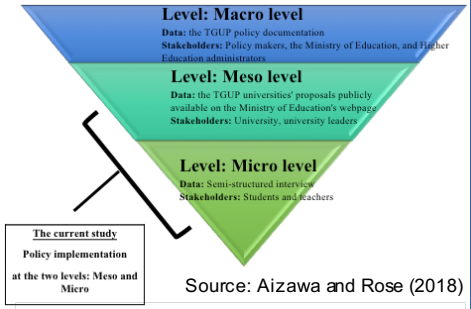
Over one third of Japan's 781 universities offer EMI, an almost 38% increase from 2008 (MEXT, 2015).

*Table: Japanese universities offering subject classes taught in English by year*

| Year | Number of universities |
|---|---|
| 2008 | 190 |
| 2009 | 194 |
| 2011 | 222 |
| 2012 | 241 |
| 2013 | 262 |

19 universities now offer sufficient classes in English to allow students to graduate without taking additional classes in Japanese (MEXT 2015).

## Reservation about EMI – gap between policy and practice




Source: Aizawa and Rose (2018)

Benefits of EMI are not guaranteed, and this EMI movement can present serious issues to all stakeholders (Olsen & Huckin, 1990).

## Method

### Setting

- TGUP participant university in 2014 in Tokyo
- Courses offered in both English and Japanese

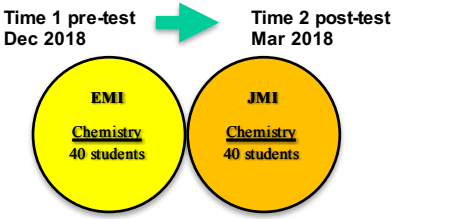
*Table; The number of classes taught in foreign languages or in English*

| | 2013 | 2016 | 2019 | 2023 |
|---|---|---|---|---|
| Number of classes taught foreign language (A) | 248 | 353 | 449 | 568 |
| Number of classes taught in English (B) | 240 | 345 | 441 | 560 |
| Number of classes taught at the university (C) | 1,451 | 1,400 | 1,400 | 1,400 |
| Proportion (B/C) | 16.5 | 24.6 | 31.5 | 40.0 |

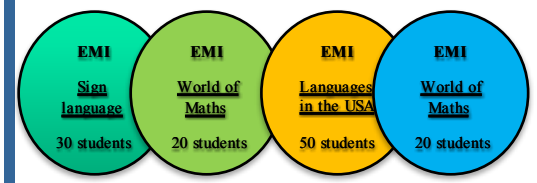
### Design and participants

*Research Question 1 and 2 (Chemistry course)*

The pretest–posttest non-equivalent control group design (Bryman, 2008)




*Research Question 2, 3 and 4 (four EMI courses)*




### Data collection and procedure

| Time | Data |
|---|---|
| TIME 1 | Pre-content test<br>Background questionnaire |
| BETWEEN TIME1&2 | Classroom Observations |
| TIME 2 | Post-content test<br>Background questionnaire (only to gain information about attendance, self-study hours)<br>Questionnaires (language and content learning relate challenges)<br>Final grades (obtained from content teachers)<br>Student interviews<br>Teacher interviews |

## References

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