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<tr>
<td><strong>Title</strong></td>
<td>English-medium instruction in Chinese higher education: a cross-disciplinary study of classroom discourse</td>
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<td><strong>Year</strong></td>
<td>2018</td>
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<td>Hu, Guangwei, 1962-</td>
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Summary

In recent years, various top-down and bottom-up efforts have been made to promote the internationalization and marketization of higher education in various countries and regions. Among those efforts, the adoption of English-medium instruction (EMI) to realize the dual goal of improving both subject knowledge learning and English language proficiency has attracted growing policy and research attention. In China, there is a similar form of language provision known as “Chinese-English bilingual education” or “bilingual instruction”. It involves the use of not only English but also Chinese in subject content teaching. Previous research on bilingual instruction in China has investigated stakeholders’ perceptions of bilingual instruction and its effectiveness in achieving the dual objective of improving content and English learning. This line of research has largely drawn on surveys, interviews, and policy documents. However, there is a paucity of empirical research that investigates what transpires in the EMI classroom.

This study examines classroom discourse — specifically classroom questions and student responses — to explore the relationship between medium of instruction and language learning in 20 EMI lectures from a number of hard and soft disciplines at one Chinese university. It is guided by the following research questions:

1. What types of question and response can be found in Chinese EMI classrooms?

2. Does medium of instruction have any effect on the incidence,
cognitive and linguistic complexity of classroom questions and responses?

3. Does the variable of discipline have any effect on the incidence, cognitive and linguistic complexity of classroom questions and responses?

4. Do medium of instruction and discipline interact to shape the incidence, cognitive and linguistic complexity of classroom questions and responses?

5. How does the cognitive and linguistic complexity of classroom questions relate to the cognitive and linguistic complexity of student responses?

Twenty teachers and their undergraduate students from several hard and soft disciplines at a Chinese university participated in this study. A 45-minute EMI lecture taught by each teacher was observed and audio-recorded. Semi-structured interviews were conducted subsequently with the 20 teachers and 20 students (i.e., one selected from each of the observed classes). Both the recorded lectures and semi-structured interviews were transcribed for further analysis.

Four methods were used to analyze the data. A Classroom Observation Scheme (COS) adapted from Spada and Fröhlich’s (1995) Communicative Orientation of Language Teaching Observation Scheme was utilized to record the classroom questions, responses and other contextual information to facilitate the subsequent data coding and analysis. A Cognitive Complexity Scheme (CCS) adapted from Bloom’s Revised Taxonomy (Anderson & Krathwohl, 2001) was adopted to code the cognitive complexity of the classroom questions and responses. A Syntactic Complexity Coding Scheme (SCCS) integrating English and Chinese T-unit analysis
(Hunt, 1965; W. Jiang, 2013) and Analysis of Speech Unit (AS-unit) (Foster, Tonkyn, & Wigglesworth, 2000) was employed to analyze the syntactic complexity of the classroom questions and responses. Semi-structured interviews were analyzed using thematic analysis (Braun & Clarke, 2006, 2012) in relation to the research questions. The qualitative data elicited from the interviews were intended to triangulate the quantitative patterns yielded by the cognitive and syntactic complexity analyses of the classroom questions and responses.

The quantitative and qualitative analyses performed to answer Research Question 1 showed that the bulk of teacher questions across the disciplines were at low cognitive levels, with few teacher questions targeting higher-order thinking. There was a paucity of student questions in the recorded classroom discourse, and the few student questions found in the data were primarily of low cognitive complexity. Similarly, most student responses in all the 20 lectures involved only lower-order cognitive processes.

As regards Research Question 2, the quantitative analyses revealed that medium of instruction had no statistically significant effect on the incidence, cognitive and syntactic complexity of teacher questions and student responses.

With respect to Research Question 3, discipline was found to have no significant effect on the incidence and cognitive complexity of teacher questions and student responses or the syntactic complexity of student responses measured by clauses per T-unit, but a statistically significant effect of discipline was found on the syntactic complexity of student responses measured by mean T-unit length. Student
responses in soft-discipline lectures were longer than those found in the hard-discipline ones.

The analyses conducted to address Research Question 4 found that instructional medium and discipline had no significant interaction effect on the incidence or cognitive and syntactic complexity of teacher questions and student responses.

Finally, the analyses conducted to address Research Question 5 revealed that in EM classroom discourse of the hard-discipline lectures, significant associations were found between the syntactic complexity of student responses measured by mean T-unit length and the syntactic complexity of teacher questions measured by clauses per T-unit, but no correlation was observed in the CM classroom discourse of the hard-discipline lectures or in the EM and CM of the soft-discipline lectures.

The results indicated that the use of English as a medium of instruction did not positively influence the classroom interaction, and that the optimistically envisioned dual goal of subject learning and development of English language proficiency was not achieved in the observed lessons. By way of conclusion, this dissertation proposes pedagogical implications for the stakeholders of EMI courses/programs, discusses the limitations of the present study, and make the suggestions for future research.