

Academic Development of Chinese Students in the UK EMI Environment

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Abstract: The framework of this paper attempts to methodically examine how EMI which is English as Medium of Instruction, affects the academic growth of Chinese expatriate students in the UK context and the factors that influence academic development in an EMI environment. The introduction will be followed by an in-depth analysis of the relevant literature on the impact of EMI environment on academic development and the relationship between English language proficiency and academic performance in EMI, which will further lead us to the current gaps in this line of research and the purpose of this study. The research methodology section will include textual parts on the research methodology, data collection strategy and data analysis procedures of this study. By analysing the theoretical and empirical data, the pros and cons of EMI on the academic growth of Chinese overseas students will be explored. Finally, this study will also consider its own research flaws as well as the future development of this research.

Keywords: EMI, Chinese international students, Semi-structure interview, Bilingualism, academic development

1. Introduction

1.1. Background

English as Medium of instruction (EMI) has become one of the biggest phenomena in global education in the twenty-first century [1]. Learning in such an environment has both advantages and disadvantages that cannot be ignored. In universities, Chinese international students are constantly combining two mother tongues as well as two languages, English, on a daily basis to solve new academic problems, factors like bias in second language understanding, labor- and time-intensive language switching between the two languages, and divergent interpretations of the same academic subject in two different linguistic contexts are just a few examples. However, bilingual learners have advantages over monolingual learners in terms of cognitive flexibility, language executive functioning, creativity, and facing multitasking [2].

Therefore, this study will focus on the academic development of Chinese international students in an EMI environment and observe whether they have advantages or potential disadvantages compared to monolingual students.

1.2. Literature review

The influence of EMI environment on academic performance

Although English as a medium of instruction (EMI) is becoming more and more popular worldwide, research is still being done to determine the academic benefits of learning in English for non-native English speakers.

Some studies have shown that EMI may have a negative impact on students' academic development to a certain extent. [3] conducted a comparative study of students enrolled in English-medium and Swedish-language courses in a randomised controlled experimental design, and statistically found that the dropout rate of English-medium students was higher than that of non-native English-speaking students. English as a medium had a higher dropout rate, thus concluding that in some cases EMI may have some negative impact on student performance. In addition to this, [4] in his conclusion on the effect of EMI on the academic performance of engineering students which has been studied in the case of A'Sharqiyah University in Oman, shows that EMI, although it can improve students' English language proficiency to a certain extent, but it also hinders them to a certain extent in their acquisition of relevant knowledge, proficiency and skills.

However, not all studies have been able to demonstrate that the impact of EMI on students' academic development is necessarily negative. In an experiment examining the relationship between academic performance and EMI in Spanish university students, the results of a longitudinal study of four subjects over two academic years showed no significant difference in performance between EMI and non-EMI students, and therefore insufficient evidence of a positive or negative impact of EMI on student performance [5].

The relationship between English proficiency and academic performance in EMI

Familiarity with the mediating language is also an aspect of students' academic development performance in the EMI environment.

In 2020, the University of Oxford released a study that included assessments and questionnaire interviews with students enrolled in an EMI business program in Japan. The purpose of the interviews was to find out how the students perceived the connection between using English as a learning medium and being queer in the language. According to the study's findings, students who took part in the research felt that using EMI as a learning medium presented fewer difficulties the more proficient they were in the English language. This implies that there is some direct link between English language threshold and the impact of EMI [1]. Meanwhile, in a study conducted in a university setting in Turkey on the predictive ability of academic success of English Medium Instruction (EMI) students studying engineering and social sciences programmes, where language and non-language were used as variables, the results showed that only language proficiency was able to influence the students' academic performance in social subjects [6].

Therefore, I believe that this is also related to the advantages of adult bilinguals and to a certain extent, the better the level of bilingualism in the language, the more pronounced the advantage. According to a summary of the study's findings in [7], bilingual children are better at simple tasks because they frequently use two languages on a daily basis and must deal with complex processes that call for inhibitory control. As a result, the bilingual mode also effectively contributes to the development of the children's cognitive flexibility. As a result, the bilingual mode is also beneficial for their cognitive flexibility development. Meanwhile, bilingual kids are more creative and have a deeper comprehension of language structure and function than monolingual kids, according a meta-analysis by [8], which compiled data from 63 studies. This shows that bilingual children are more conscious than monolingual children, have better insight into some abstract elements of linguistic notions, and have more control over their abilities to support their own learning process when they manage and apply two languages at the same time. Later, an English-French bilingual study

conducted in Montreal [2] discovered that bilingual kids had higher working memory capacity when they used visual attention management to finish tasks. These cognitive benefits might also be present in bilingual college students, since bilingual children are the progenitors of bilingual college students. The linguistic advantages of bilinguals may also be evident, since bilingual youngsters are the precursors to bilingual adults.

While recent studies have shown how well students learn in EMI settings, they also highlight their abilities as bilinguals and how well they do academically in EMI settings. Still, there is a dearth of information about multilingual Chinese students in the UK, their particular EMI performance, and the particular difficulties they encounter. More empirical research is specifically required to ascertain whether EMI has a favorable or unfavorable effect on the academic growth of Chinese international students studying in the UK, as well as the specific variables influencing Chinese international students' academic development in the context of EMI in the UK.

In order to identify the benefits and possible drawbacks of EMI on Chinese overseas students' academic performance, this study intends to investigate the academic growth of these students within the framework of EMI. This study will specifically examine how challenging it is for Chinese international students to use English in the four domains of listening, speaking, reading, and writing in an EMI environment. It will also look for evidence of whether EMI will make learning more difficult for these students. And then assess its potential negative impact on their academic performance; at the same time, this study will also explore how Chinese international students can use EMI to improve their language processing efficiency, promote their cognitive flexibility and cross-cultural understanding, which provide Chinese international students with unique advantages in their academic growth.

1.3. Research questions

RQ1: Does EMI affect the academic development of Chinese students in the UK? What are the advantages? What are the disadvantages?

Prediction: Yes. EMI affects the academic development of Chinese students.

RQ2: What are the specific challenges or strengths that bilingual Chinese students encounter in the EMI classroom?

Predictions: Language proficiency is a challenge.

RQ3: What's the relationship between English proficiency and Chinese international students academic performance in EMI.

Predictions: It's related, but it is not the only factor that affects it.

2. Method

2.1. Participants

In this study, 100 19-year-old Chinese students (the ratio of men to women is 1:1) with an IELTS score of 6 or above or a TOEFL score of 85 or above will be selected from the first-year education students of this university to participate in the study. The participants were also divided into two groups: those who had participated in language classes and those who had not. This research will utilize large-scale data collection and a small amount of in-depth knowledge of the detailed views of key respondents, thus ninety of them will participate in the questionnaire survey and ten of them will participate in semi-structured interviews. At the same time, all the participants involved in the study had no unhealthy physical conditions, no brain injuries, no cognitive disorders, and possessed the ability to discern right from wrong on their own with complete independence.

2.2. Material

A mixed-methods strategy will be used to perform this study, combining quantitative and qualitative techniques. By combining information from several sources and viewpoints, this strategy offers a thorough grasp of the study subject [9]. In qualitative research, semi-structured interviews are conducted; in quantitative research, questionnaires are used. Quantitative research involves collecting and analyzing data in an objective manner while employing methods such as description and prediction to control variables and further explore the mechanisms and causal relationships between variables [10]. In contrast to qualitative research methodologies, quantitative research uses questionnaires with closed-ended questions and answers to draw quantitative conclusions. This can reduce the subjectivity of the researcher and produce more reliable and objective research data for the study [11]. Through the use of closed-ended questions and responses in surveys, quantitative research generates quantitative assumptions that can lessen the subjectivity of the researcher and produce more unbiased and trustworthy research data for the study [11]. A university, or the setting in which the college student participants are situated, should also be used for the study's data collection. In this approach, semi-structured interviews can be utilized to obtain first-hand information from study participants in a more focused and detailed fashion. Moreover, EMI's effect on Chinese college students' academic growth is being studied as part of a sociological study that looks at college students as a group from a language standpoint.

Apparatus

The data collection and analysis in this study will be operated by computer, and the data collection in the interview part will use a recording pen.

Questionnaire

This study will use a questionnaire for data collection. A questionnaire consists of a series of questions and is a means of obtaining a large amount of information from participants or respondents [10]. The questionnaire in this study will be borrowed and adapted from [12] 45-item questionnaire, which involves the investigation of students' level of difficulty in the four areas of academic writing, academic speaking, academic reading, and academic listening. In order to better study the academic development of Chinese students in the UK and in the EMI context, I modified the four directions of the questionnaire to include Chinese students' perceptions of the difficulty of listening in the classroom (10), communicating with peers (10), reading literature (10), and writing essays (15). The Chinese students will respond on a Likert scale ranging from 1 (very easy) to 7 (very difficult). For example: First question: What do you believe makes it difficult for students to raise questions in English classes? A component of open-ended questions will be incorporated into the questionnaire to gather information on the GPA, major course grades, standardised test scores, language learning experiences, and language use of the Chinese students.

Interviews

The qualitative data for this study will be collected using semi-structured interviews. In order to further investigate the academic developmental strengths and weaknesses of Chinese college students in the EMI environment, the researcher will use semi-structured interviews to help carefully select a sample of participants based on the relevance of Chinese college students to the research questions, as well as the diversity of the participants' genders, experiences, and EMI educational environments. The goal of the interviews is to learn more about their language proficiency, including their capacity to participate in discussions, confidently voice their opinions, and ask questions in English. To prevent information inaccuracies caused by language barriers, the participants answered questions in their mother tongue during the interviews.

2.3. Procedure

Questionnaire

In order to obtain data on the students' perceived ease of fluency in English in the context of EMI, as well as their specific academic performance, participants will be asked to complete two questionnaires. The first questionnaire will reflect proficiency in English and their use of the language in the context of the English language environment through four areas: listening in class, interacting with classmates and teachers, reading literature, and writing papers and completing assignments. The second questionnaire will focus on the student's academic development, such as their GPA, standardised test scores, and final exam results.

The questionnaires will be completed online through the platform, which greatly facilitates participants and is expected to take 5-10 minutes per questionnaire to complete. The questionnaires will be anonymous, as a researcher I am obliged to protect the privacy of each participant and inform participants of the purpose of the questionnaire and how it will be used in the future prior to the start of the survey, participants can complete the questionnaire at any time that is convenient for them.

Interview

Ten students will be invited for in-depth follow-up interviews after the questionnaire. I will use semi-structured interviews, which will unfold face-to-face or by video, and each interview will last 30-40 minutes, with the exact format chosen according to the convenience of the participants.

The interviews will further centre on the participants' level of confidence in using English in the EMI environment and their perceptions of how English fluency affects their academic development in the EMI environment.

2.4. Data analysis

Using the quantitative data that questionnaire obtained, I will do analysis using descriptive statistical methods to summarize the traits and response distribution of the study sample. In addition, I will use inferential statistics such as t-tests and correlation analysis to test my hypotheses and look into the relationships between variables. For example, I used the t-test to look at the participants' mean GPA and standardized tests to compare the difference between the two averages. To increase the rigor of the results, the data was analyzed using the Statistical Package for the Social Sciences (SPSS), which is widely used to support academics in applying statistical analyses in the social sciences. In the interim, I will use theme analysis to examine qualitative data. The thematic analysis methodology, according to [13], is a social science research method that involves a number of iterative steps, such as familiarizing oneself with the data, developing draft codes, recognizing themes, assessing themes, and defining and labeling themes. The writing is then complete.

3. Conclusion

The purpose of this study was to examine the academic development of Chinese international students in the EMI environment in the UK and whether and how EMI has an impact on the academic performance of Chinese international students. In addition, data were further collected and analysed through questionnaires and interviews to test whether English fluency is a factor affecting academic development in an EMI environment.

The impact of EMI on their academic development and the effect of English fluency on learning in an EMI environment were predicted by examining the ease of feedback from Chinese international students in four areas of listening, speaking, reading, and writing, as well as their overall grades, such as GPA, and uniform standardised test scores. Prediction 1: Although all Chinese students passed the standardised language test before entering the university, their fluency in the four areas of listening,

speaking, reading, and writing did not develop equally, and therefore English fluency is an important factor affecting learning in the EMI environment. At the same time, since the comprehensive assessment of the education programme is essay-based, there is also a direct link between Chinese international students' fluency in writing and their final academic development grades such as GPA.

This study has certain research significance. Teaching through the medium of English is widely used globally, and more and more Chinese students are choosing to study and further their education abroad. In order to help Chinese students better integrate bilingualism into their studies, this study examines the effects of the EMI environment in the UK on their academic development. It also looks at the benefits and drawbacks of the environment and offers fresh ideas and lessons for the problems that Chinese students face.

Although the results of the data analysis may be consistent with the predicted results, there are still some research challenges and drawbacks in this study. The use of questionnaires for data collection may result in sample bias. Questionnaire responses are more dependent on the participants' personal wishes, and there may be the phenomenon of participants choosing their answers randomly, which may lead to a decrease in the quality of the data or failure to obtain useful information. The use of interviews for data collection requires the researcher to record the whole dialogue, which requires better patience and time from the researcher and makes the data collection process more troublesome.

The mixed research approach, which combines qualitative and quantitative methods, is challenged in this study. On the one hand, quantitative research demands a lot of data to be collected, which can be done through questionnaires and other time- and money-consuming extensive surveys and data collection. On the other hand, semi-structured interviews in the qualitative research method necessitate that the researcher be patient enough to take notes and that confidentiality measures be put in place.

At the same time, although it is predicted that fluency in English may be a factor influencing the academic performance of Chinese students in the UK EMI environment, language fluency is not the only influencing factor. Students' autonomy and the use of social media while studying may all be influential factors in academic development among Chinese students studying in the UK EMI environment.

In future research, it may be possible to further explore other factors that can influence the academic development of Chinese students in the context of EMI in the UK.

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