

UNIVERSITY STUDENTS' PERCEPTIONS AND ATTITUDES TOWARD CLIL-BASED INSTRUCTION IN IRAQI EFL CONTEXTS

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Abstract

This research explores how university students respond to learning their academic subjects through English under the Content and Language Integrated Learning (CLIL) framework. Conducted at the Islamic University's College of Law and the Mathematics Department of the University of Kufa, the study examines students' motivation and attitude toward receiving subject content in a foreign language. After introducing CLIL and outlining its educational principles, the paper contrasts students instructed via CLIL with those taught through traditional methods, accounting for gender differences as well. A total of 60 students — from both first and second academic years — completed a questionnaire assessing their perceptions of English-medium instruction. The analysis reveals that most participants expressed positive attitudes toward learning through CLIL, highlighting increased motivation not only to learn English but also to engage more deeply with the subject content. Overall, the findings suggest that CLIL can foster higher motivation and positive attitudes toward bilingual instruction in university-level education.

Keywords: CLIL, motivation, English-medium instruction, student attitudes, higher education.

Introduction

Learners' attitudes and motivation are widely acknowledged as two essential factors influencing success in foreign language acquisition. These affective variables significantly shape both the learning experience and the outcomes of instruction. In recent years, the

integration of language and content instruction has gained traction in educational contexts where English is taught as a foreign language (EFL). Among these innovative pedagogical models, Content and Language Integrated Learning (CLIL) has emerged as a dual-focused approach that aims to teach both subject content and a foreign language simultaneously.

CLIL, an acronym for Content and Language Integrated Learning, is often described as a pedagogical strategy with “dual-focused aims,” where language and content share equal instructional priority (Marsh, 2002). Marsh further characterizes CLIL as any educational scenario in which a foreign language is used as the medium of instruction for non-language subjects, with both elements functioning interdependently. Similarly, Coyle, Hood, and Marsh (2010) describe it as fostering “authenticity of purpose,” suggesting that language learning becomes more meaningful when embedded in content-rich instruction. Mearns (2012) emphasizes the role of the foreign language as the primary vehicle for content delivery, while Pinner (2013) likens CLIL to a strategy that achieves dual goals with a single instructional approach — “killing two birds with one stone.”

From these perspectives, CLIL can be understood as an educational response to the perceived limitations of conventional EFL methods. It represents an attempt to promote more purposeful and engaging language learning by embedding it within academic content. This study seeks to investigate how CLIL influences student motivation at the university level, particularly in disciplines such as law and mathematics, where English is not traditionally the language of instruction. By examining students’ attitudes toward this approach, the research aims to determine whether CLIL fosters greater engagement with both the language and the subject matter.

2. Literature Review

This section reviews relevant studies on the effects of the CLIL approach on university students’ attitudes toward learning both content subjects and the English language. The research was conducted at two institutions in Iraq: the Islamic University’s Department of Law and the Mathematics Department at the University of Kufa, targeting first- and second-year students in both disciplines.

2.1 CLIL Learners versus Non-CLIL Learners

Several comparative studies have examined differences between students taught through CLIL and those taught via conventional methods. Researchers have explored how these groups differ in terms of affective factors, interactional behavior, and overall engagement with content delivered in English. For instance, Seikkula-Leino (2007), Fontecha (2014), and Navarro Pablo (2018) found that students who received instruction through CLIL demonstrated significantly higher levels of motivation and content-language integration than those in non-CLIL settings. These findings underscore the potential of CLIL to enhance learner engagement and foster more meaningful educational outcomes.

2.2 Gender-Based Differences in CLIL Motivation

Other studies have investigated the role of gender in shaping student responses to CLIL instruction. Fontecha and Canga Alonso (2014), for example, examined two mixed-gender

groups—one taught through CLIL and the other via traditional instruction. Their findings suggested that, in some cases, students taught through traditional methods showed greater motivation than their CLIL counterparts. However, further research by Fontecha (2014) revealed a nuanced relationship between gender and vocabulary acquisition in CLIL environments. Specifically, boys with higher intrinsic motivation levels demonstrated stronger vocabulary growth, suggesting that motivation may interact with gender in complex ways within CLIL frameworks.

2.3 Motivation and CLIL: Empirical Evidence

Numerous studies have addressed how CLIL influences students' comprehension and motivation. For example, Haagen-Schützenhöfer and Hopf (2010) argued that CLIL may improve student understanding of content in subjects like languages, though its effectiveness in areas like physics remains limited. Mearns (2012) conducted research in a UK secondary school where students experienced short-term CLIL instruction in PSHE (Personal, Social, and Health Education) through German. Although students showed some academic improvement, they also struggled with confidence and sustained motivation.

In contrast, research by Hussain and Hann (2016) emphasized the benefits of CLIL in Kurdish schools, where students' exposure to English and varied teaching strategies significantly enhanced their academic engagement. Lasagabaster (2011) compared students in CLIL and traditional EFL classrooms, finding that those in CLIL settings demonstrated stronger motivation and language proficiency. Similarly, Arribas (2006) reported improved attitudes and vocabulary retention among CLIL learners, with both teachers and students expressing satisfaction with the approach, despite similar academic scores across groups.

Additional evidence from Banegas (2012) highlights the importance of teacher feedback and context-sensitive pedagogies in sustaining motivation. His findings indicate that CLIL learners' engagement often hinges on the relevance of the content and the learning environment. Pinner (2013) further emphasized that CLIL fosters “authenticity of purpose,” arguing that content-rich instruction in sociocultural contexts enhances both motivation and critical thinking.

Taken together, these studies suggest that CLIL may have a particularly strong motivational effect when learners perceive the content as relevant and when instruction is responsive to learners' cultural and linguistic contexts. Although most of the existing literature focuses on school settings, these findings support the potential of CLIL to improve learner motivation at the university level as well.

3. Methodology

This study was conducted among university students enrolled in English-medium courses delivered through the Content and Language Integrated Learning (CLIL) approach. The primary aim was to explore students' attitudes toward receiving subject instruction in English, as well as their motivation to learn both the content and the language.

3.1 Participants

The research involved a total of 60 undergraduate students who had been exposed to CLIL-based instruction. Participants were drawn from two academic departments: the Mathematics Department at the University of Kufa and the Law Department at the Islamic University. Of the 60 students, 42 were female and 18 were male. The sample included 28 first-year and 32 second-year students, with 37 studying mathematics and 23 studying law. All participants attended classes delivered in English and voluntarily agreed to complete the questionnaire for the purpose of this study.

3.2 Data Collection

Data were gathered through a structured questionnaire administered in April 2025. The questionnaire consisted of two main sections. The first section included demographic questions to identify independent variables such as students' gender, university, department, and academic year. The second section comprised seven items designed to measure students' attitudes toward studying subject content in English.

Participants completed the questionnaire via an online Google Form. The process took approximately five minutes. The response options followed a five-point Likert scale format: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. These responses were then quantified and categorized for statistical analysis and visualization.

The following statements formed the basis of the attitudinal measurement:

1. I enjoy learning English.
2. I am satisfied with studying content subjects in English.
3. English-medium classes are more engaging than those conducted in Arabic.
4. Knowledge acquired in English is applicable beyond university settings.
5. There is greater teacher-student interaction in English-medium classes.
6. Studying content in English increases my interest in British and American cultures.
7. I take on more additional work during English-taught classes (e.g., projects, tasks).

The collected data were analyzed with respect to students' departmental affiliation (Mathematics vs. Law), using descriptive statistics and visual charts to compare trends across the groups.

4. Findings

This section presents the findings derived from the student responses to the attitudinal questionnaire. The data collected from the seven Likert-scale items were analyzed and visualized through comparative charts, highlighting variations between the two academic departments—Mathematics and Law.

4.1 Attitudes toward Learning English

Figures 1 and 2 display students' attitudes toward learning English across both departments. In the Mathematics Department, all participants reported a positive outlook, with no responses falling under the "Disagree" categories. This suggests a strong interest in learning English among these students.

In contrast, the Law Department's responses were more varied. While a majority expressed agreement or strong agreement, a small portion of students were uncertain or expressed negative views. This indicates a generally favorable but slightly more mixed attitude compared to Mathematics students.

I like learning English.

37 responses

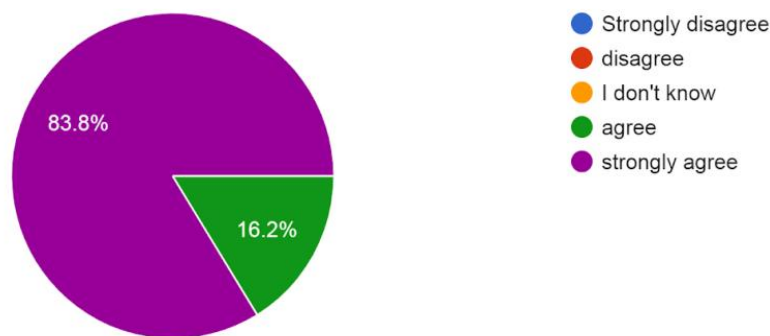


Figure 4.1. The Attitude towards learning English in the Mathematics Department.

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I like learning English.

23 responses

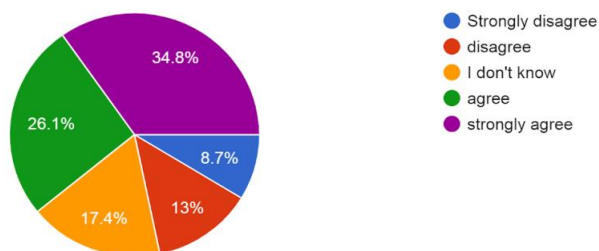


Figure 4.2. The attitude towards learning English in the Law Department.

I like learning English.

23 responses

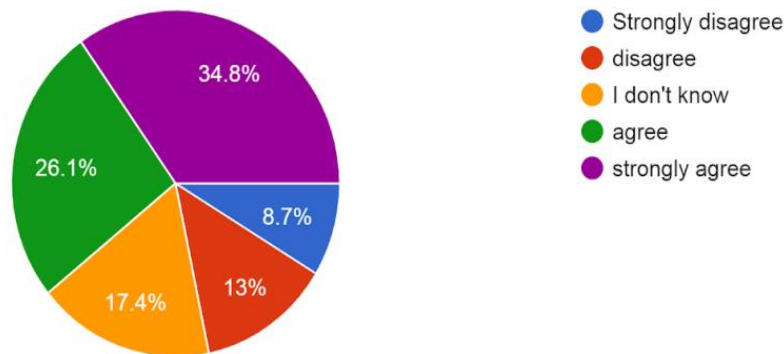


Figure 2 shows that 8 Law students strongly agree, 6 agree, 4 students do not know what to say, 3 students disagree, 2 students strongly disagree. So most students like learning English, however, there are some Law students who do not like it.

When it has been illustrated through Figures 1 and 2 that most students show their positive attitude towards learning English that motivate them to learn their content subjects. Mathematics' students seem more enthusiastic than Law students which may be due to the fact that Law students study Constitutional Law and Administrative Law during their CLIL classes which seems to be complicated to be understood by the students.

Are you satisfied with studying content subjects in English?

In Figure 3 and Figure 4, the level of satisfaction concerning studying content subjects in English is presented.

4.2 Satisfaction with Studying Content in English

Figures 3 and 4 illustrate students' satisfaction levels regarding the use of English as the medium for subject instruction. In the Mathematics group, most students indicated satisfaction, with a few expressing uncertainty or disagreement.

Law students also showed a largely positive response, though with a greater number of neutral and negative responses than their Mathematics counterparts. This variation may reflect differences in how subject matter complexity influences their comfort with English-medium instruction.

I am satisfied with studying content subjects in English.

37 responses

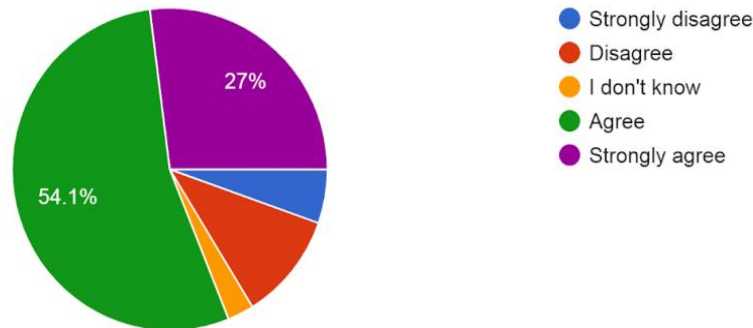


Figure 4.3. The attitude towards content subjects studied in English in the Mathematics Department.

Figure 3 shows that 10 Mathematics students strongly agree, 20 students agree, 1 student does not know what to say (respectively), 4 students disagree, and 2 students strongly disagree.

I am satisfied with studying content subjects in English.

23 responses

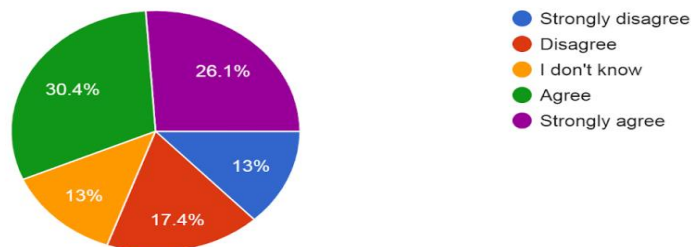


Figure 4.4. The attitude towards content subjects studied in English in the Law Department.

It can be noticed in Figure 4 that more than half of Law students seem to be satisfied with learning their content subjects in English. However, some of the students do not know what to say while some others seem to be not satisfied with learning their content subjects in English.

All in all, when we look at Figure 3 and Figure 4, most students from both departments tend to be satisfied with studying content subjects in English, especially the Mathematics Department's students. They like learning their content subjects in English very much more than the Law department's students do. This could be due to the content that has been given to Mathematics' students, which includes some mathematical scientific terminology, is easier than the content that has been given to Law's students.

4.3 Engagement in English-Medium Lectures

Figures 5 and 6 present student perceptions of whether English-taught classes are more engaging than those in Arabic. Mathematics students largely reported increased interest in English lectures, while Law students showed a more balanced distribution of responses. This contrast may relate to differences in subject matter accessibility or teaching strategies used in each department.

The classes/lectures which are in English are more interesting than the classes/lectures which are in Arabic.

37 responses

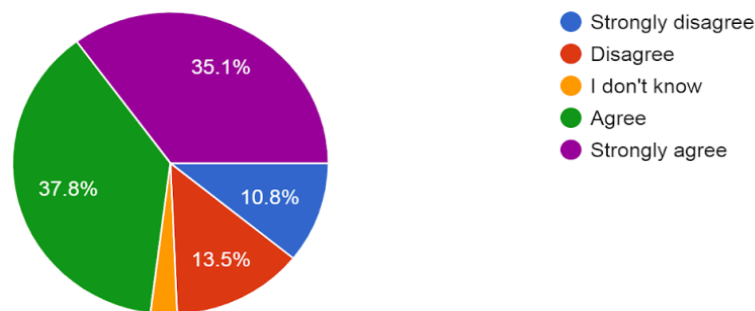


Figure 4.5. The opinion concerning the attractiveness of classes/lectures in English in the Mathematics department.

Obviously, it can be seen in Figure 5 that Mathematics students seem so interested in English classes to learn their material in the foreign language rather than using their mother tongue, Arabic. 13 students strongly agree, 14 agree, 1 student does not know what to say (respectively), 5 students disagree, and 4 students strongly disagree. So there are students in the Mathematics department who seem not interested in the foreign language.

The classes/lectures which are in English are more interesting than the classes/lectures which are in Arabic.

23 responses

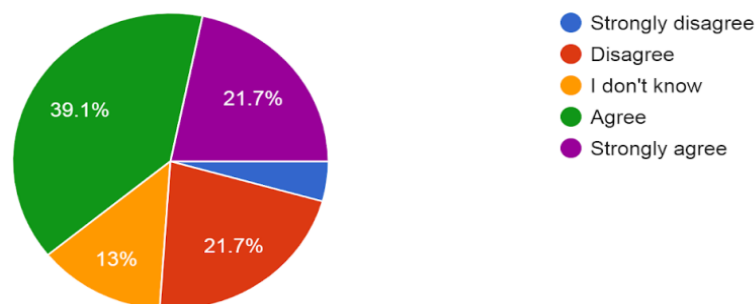


Figure 4. 6. The opinion concerning attractiveness of classes/lectures in English in the Law Department.

Figure 6 presented that more than half of the students think that they are interested in learning their content subjects in English while 3 students think that it can be just interesting or very interesting; and 6 students do not think so at all.

When these data are analyzed, it can be clearly noticed that most of the students from both departments are keen on classes/lectures in English. The reason behind this result can be the teaching method that is followed by their teachers in teaching the content subjects which makes it different from other classes/ lectures which are in Arabic. There is a clear difference between Mathematics and Law interest in English classes/lectures, which means that Mathematics students have a positive attitude towards their CLIL classes/lectures. While Law students are less interested in their content that is taught in English. The problem can be the fact that the content does not fill the language gaps that students of the Law Department need, which does not give them ways to practice what they learn by their content subjects taught in English that makes it less interesting. Is content knowledge acquired in English useful outside the University?

4.4 Perceived Usefulness of English-Acquired Knowledge

Figures 7 and 8 show how students perceive the usefulness of content learned in English beyond the university context. A significant majority in both departments believed that such knowledge has practical value in future careers, though a few students expressed uncertainty. This positive outlook suggests that CLIL instruction is seen as beneficial beyond the academic setting.

The content knowledge acquired in English is useful outside the university.

37 responses

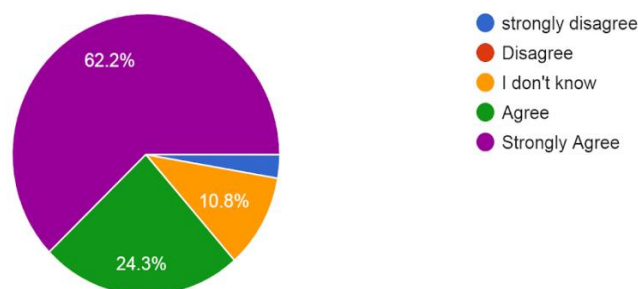


Figure 4.7. The usefulness of content knowledge acquired in English in the Mathematics Department.

The content knowledge acquired in English is useful outside the university.

23 responses

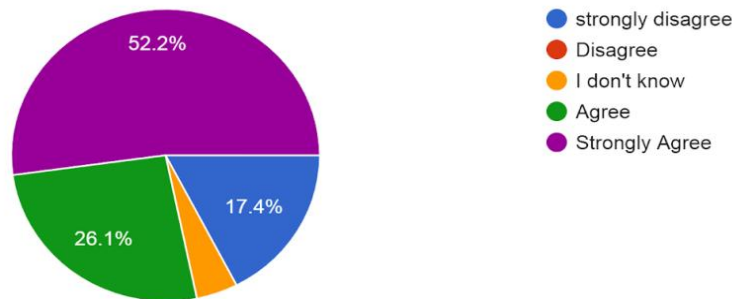


Figure 4.8. The usefulness of content knowledge acquired in English in the Law Department.

From Figure 7 and Figure 8 the data analysis shows that students of both departments think that content knowledge acquired in English using the CLIL approach is very useful outside University while a small number of students do not think so at all and 1 student from the Law Department and 4 students from Mathematics Department do not know what to say. Through the data, it can be suggested a reason for this high percentage for agreeing on the usefulness of knowledge acquired in English by the content that is taught which is students from both departments tend to have very high expectations and seem to think that knowledge acquired in English will be useful outside the University. Also, it can be used after they graduate to have better carriers.

Is there more cooperation between the teacher and the students during classes/lectures that are in English?

In Figure 9 and Figure 10, cooperation between the teacher and the students during classes/lectures, which are in English, is presented.

4.5 Teacher-Student Interaction

Figures 9 and 10 examine the extent to which students feel there is increased teacher-student interaction in English-medium classes. In both departments, most students reported enhanced engagement, though a few Law students disagreed. The data suggest that English-taught content may encourage more dynamic classroom interaction, particularly when content is accessible.

The content knowledge acquired in English is useful outside the university.

23 responses

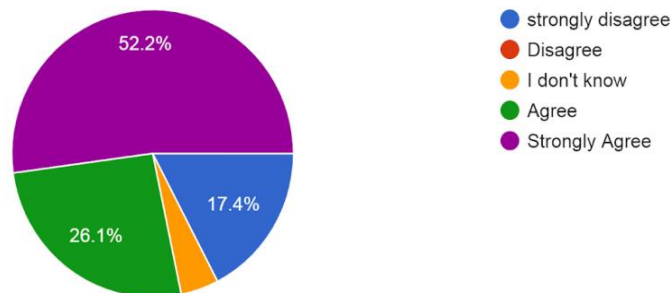
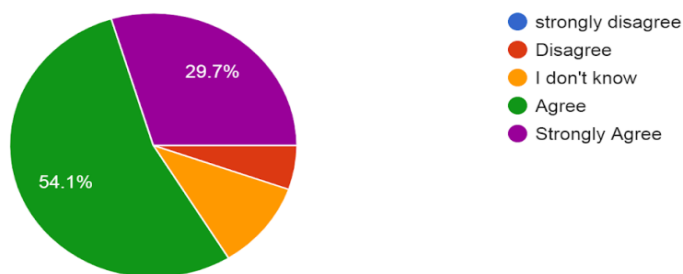


Figure 4.9. Cooperation between the teacher and the students in the Mathematics Department.

There is more cooperation between the teacher and the students during classes/lectures which are in English.

37 responses



There is more cooperation between the teacher and the students during classes/lectures which are in English.

23 responses

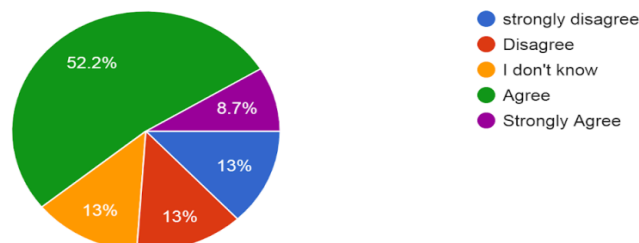


Figure 4.10. Cooperation between the teacher and the students in the Law Department .Figure 9 and Figure 10, students from the Mathematics Department think that there is definitely more cooperation between the teacher and the students and only 2 students do

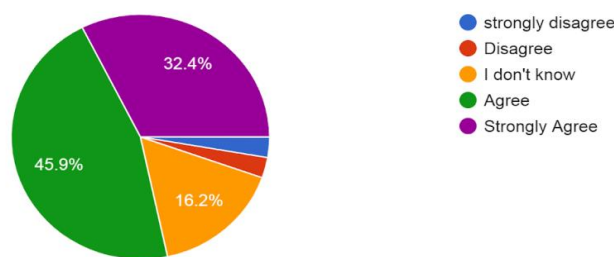
not think so. Similarly, most of the Law Department's students think that there is more cooperation between the teacher and the students, however, 6 students do not think so.

There is a significant difference between two data results for those students from both departments who think that there is no cooperation between the teachers and the students can be connected to the problem that the knowledge that is the content subjects included, the teacher explains the concepts of the content subjects in the foreign language which makes an impression that there is a distance between the teacher and the students. Perhaps, the teacher want to give the students a serious impact of the content in the foreign language.

4.6 Cultural Interest

Figures 11 and 12 assess whether studying in English increases students' interest in British and American cultures. Mathematics students expressed stronger cultural curiosity compared to Law students. This difference could be attributed to the type of content presented, with the former possibly offering more culturally embedded examples or themes.

Content subjects in English raise my interest in British and American cultures.
37 responses



Figure

4.11. The influence of content subjects in English on interest in British and American cultures in the Mathematics Department.

In Figure 11, it can be seen that most of the Mathematics Department's students are very interested in British and American cultures through their content subjects, but 6 students do not know what to say, respectively, and only 2 students disagree.

Content subjects in English raise my interest in British and American cultures.
23 responses

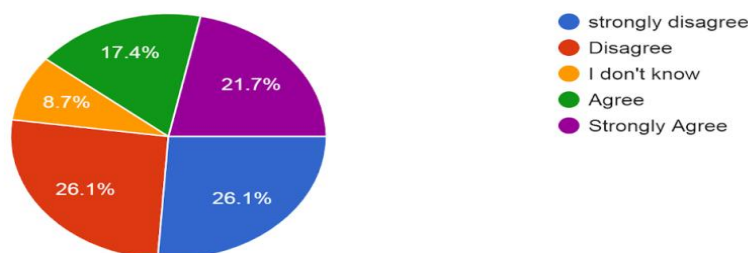


Figure 4.12. The influence of content subjects in English on interest in British and American cultures in the Law Department.

Nearly half of the Law students think that content subjects do not raise their interest in British and American cultures, 2 students do not know what to say, and 9 students have a positive influence on content subjects in English on their interest in British and American cultures.

It can be pointed out that students who choose “do not know, disagree, and strongly disagree”, they could mean that the content taught in their classes/lectures gives them only a particular information that enhance their interests in their major or their comprehension of their content subjects and not their interests in the foreign language culture.

Do you take up more additional work during CLIL classes?

In Figure 13 and Figure 14, the students’ effort to take up more additional work during CLIL classes is presented.

I take up more additional work (e.g. project participation, discussions, etc.) during classes taught in English.

37 responses

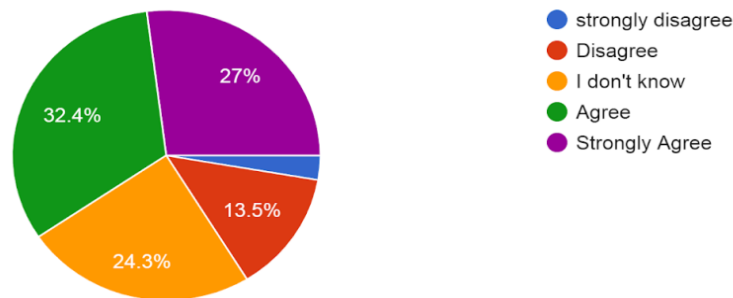


Figure 4.13. Students' effort to take up more additional work in the Mathematics Department.

It can be seen in Figure 13 that 10 students strongly agree that they take up additional work during their CLIL classes, 12 students agree also, 9 students do not know what to say, 5 students disagree and 1 student strongly disagree that they take up additional work in their classes/lectures taught in English.

I take up more additional work (e.g. project participation, discussions, etc.) during classes taught in English.

23 responses

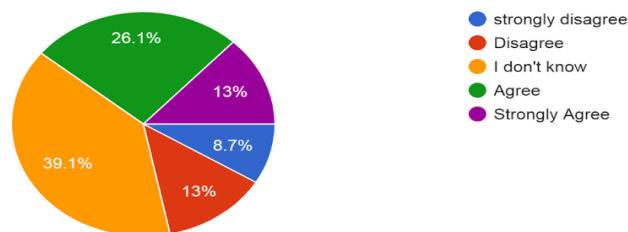


Figure 4.14. Students' effort to take up more additional work in the Law Department.

Figure 14 shows that only 5 students respond that they do not take additional work during their CLIL classes/lectures while other students respond that they take additional work, and 9 students do not know what to say.

In the analysis of the data, it can be said that students tend to have additional work during their classes/lectures when their content subjects are taught in English. This could mean that they have a positive attitude towards learning their content subjects in English and towards the teaching method as well. Also, the students give an impact to the teacher that they are interested in their classes and like to have additional work.

5. Discussion

The purpose of this study was to investigate how university students perceive and respond to CLIL-based instruction, particularly in terms of motivation and engagement with both English and their academic subjects. The findings confirm that, overall, students demonstrate a positive attitude toward receiving instruction in English, though the degree of enthusiasm varies between disciplines.

Mathematics students exhibited consistently strong motivation and interest in English-taught classes. Their responses suggest that they find English-medium instruction both beneficial and engaging. This enthusiasm may be due in part to the nature of their subject, which often relies on technical terms and structured content that can be more accessible even in a second language. In contrast, students in the Law Department, while still showing overall positive responses, expressed greater levels of uncertainty and resistance. The legal content—characterized by complex theoretical and contextual knowledge—may present greater challenges when delivered in English, thereby affecting comprehension and confidence.

The analysis also highlights that most students believe English-medium instruction will benefit them beyond the university context. This belief appears to act as a motivational driver, reinforcing their willingness to engage with both the content and the language. Furthermore, students' interest in taking on additional tasks during English-taught classes indicates that CLIL may foster a more proactive and involved learning attitude.

Regarding classroom dynamics, students reported improved cooperation and communication with instructors during English-based lectures. This may reflect a more interactive and participatory learning environment often associated with CLIL methodology. However, some students—particularly in the Law Department—felt that the use of English may sometimes widen the communicative gap between teachers and learners, particularly when complex legal concepts are difficult to grasp without clarification in the native language.

In terms of cultural awareness, Mathematics students were more likely to report an increased interest in English-speaking cultures through CLIL instruction. This enthusiasm may stem from the integration of global examples and terminology that often accompany STEM-related content. Law students, on the other hand, appeared less influenced culturally, possibly because the curriculum remains more localized or less explicitly connected to foreign legal traditions or cultural references.

Finally, the data suggest that students appreciate the opportunity to develop both linguistic and academic competencies simultaneously. Many participants appeared to embrace the challenge of working in a dual-focus learning environment, though differences in content complexity and linguistic proficiency may influence how students from different departments respond to this method.

5.1. Conclusion

The findings of this study indicate that university students—particularly those studying in the Mathematics and Law departments—generally hold positive attitudes toward CLIL-based instruction. The data suggest that integrating subject content with English as a medium of instruction fosters greater motivation and engagement among students, especially when the content is perceived as accessible and practically relevant.

Mathematics students, in particular, demonstrated high levels of satisfaction and enthusiasm, likely due to the structured and terminology-based nature of their subject matter, which may lend itself more easily to English instruction. Law students also responded positively overall, though their engagement appeared to be moderated by the abstract and linguistically dense nature of legal content.

Students across both departments acknowledged the value of acquiring knowledge through English, viewing it as advantageous not only for academic success but also for future career opportunities. They also expressed a willingness to participate more actively in classes and undertake additional academic work when the content was delivered in English. These responses reflect a strong inclination toward integrative learning and suggest that CLIL can be an effective tool in promoting dual language-content acquisition in higher education.

However, the study also recognizes certain limitations. The sample size was relatively small and unbalanced in terms of gender and departmental representation. Additionally, no pre-test was conducted to assess students' initial academic levels or language proficiency, which may have influenced the outcomes. These limitations highlight the need for further research involving larger, more diverse populations and more robust experimental designs to deepen our understanding of CLIL's long-term impact in the university context.

Overall, the CLIL approach appears to offer promising pedagogical value in Iraqi higher education settings. When implemented thoughtfully, it may help bridge the gap between language learning and subject mastery, encouraging students to become more confident, motivated, and culturally aware learners.

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