CLIL in the English as a Foreign Language (EFL) University Class: Incorporating Thematic World maps in Learning

CLIL en inglés como lengua extranjera en clases universitarias: incorporando mapamundis temáticos en el aprendizaje

Ezana E. Habte-Gabr*

Abstract

CLIL (Content Language Integrated Learning) has increasingly gained recognition as a methodology for teaching mainstream courses at Colombian universities to foster the learning of English through academic subjects in the social sciences. This is a report of how overlaying thematic maps to identify correlating data has been used to develop support for essays which focus on social issues. As students overlaid thematic...
maps to identify the relationship between social indicators, they were able to sustain a thesis for their essay thesis topics through geographic research. Hence, the exercise demonstrated the simultaneous learning process advocated by CLIL as students acquired map skills to support a thesis in an essay.

**Key words:** CLIL, geography, maps, essay structure, meaningful learning

**Resumen**

El Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (CLIL, por sus siglas en inglés) ha ganado cada vez más reconocimiento como una metodología para enseñar cursos regulares en las universidades colombianas, con el fin de fomentar el aprendizaje del inglés a través de materias académicas en las ciencias sociales. Este es un reporte sobre cómo realizar mapas temáticos para identificar el modo en que la información correlativa ha sido usada para desarrollar soportes para ensayos, los cuales se enfocan en asuntos sociales. Debido a que los estudiantes realizaron mapas temáticos para identificar la relación entre indicadores sociales, estos fueron capaces de mantener una tesis para los temas de sus ensayos a través de investigaciones en geografía. Por consiguiente, el ejercicio demostró el proceso simultáneo de aprendizaje sostenido por el CLIL, ya que los estudiantes adquirieron habilidades para usar mapas y así respaldar una tesis en un ensayo.

**Palabras clave:** CLIL, geografía, mapas, estructura de un ensayo, aprendizaje significativo.

Increasingly, English as a Foreign Language (EFL) courses have become required components of the Colombian higher education curriculum. While academic programs and students realize the importance of bilingualism to meet the demands of a globalized work and academic environment, outcomes in EFL courses tend to be lower in comparison with other courses, which is of concern given that EFL courses in higher education seek to enhance “the linguistic competence to improve communications and science” (Zambrano, 2008). This can largely be attributed to two factors, time constraints and student motivation. Often, the course components in beginning to intermediate EFL courses at institutions of higher educations are geared to false beginners; hence much of the course content is a repetition of secondary school English. Both students and instructors seek effective strategies, but their effectiveness should be mutually perceived at the learning and instructional levels (Bernaus & Gardner, 2008). Hence, Content Based Integrated Learning lessons, such as the one discussed in this paper, could foster language learning when specific content skills like thematic map interpretation are incorporated with essay writing, a specific language skill.

This exercise was developed in an intermediate university English as a Foreign Language (EFL) course, which has sought to enhance the writing of essays about global issues using world thematic maps to provide contemporary data to support opinions. Students simultaneously acquire skills for enhancing academic writing in addition to their Place Location Knowledge (PLK), having compared two world thematic maps with correlating data and used this information in the body of their essays as supporting information for a thesis. As students seek to discuss supporting empirical information, correlating data obtained from thematic maps, a pedagogically interactive
learning mode is established in essay writing as they have to discuss data that correlates. This generates a need for more language in terms of vocabulary, sequencing, comparing, contrasting and speculating. From a PLK perspective, students inherently learn about the location of countries around the world as they look for correlating data in choropleth maps as they contextualize countries within world regions according to statistical data, such as GNP and income distribution measured by the Gini Coefficient.

Methodologically, this approach has been obtained from the Content Language Integrated Learning (CLIL), which has been used in the teaching of foreign languages and the teaching of mainstream subjects, content, in non-native languages. The Content Language Integrated Learning (CLIL) approach has been employed in a university English as a Foreign Language (EFL) course to enhance student motivation in the learning and usage of English as specific geographical skills are tacitly linked to the grammar skills in the program’s curriculum. It is assumed that as students in the areas of finance, government, international relations, administration, communication and accounting are exposed to political and thematic world maps, their motivation to use English would increase as the maps provide content relevant to their areas of study and general exposure. The EFL course is an intermediate level course which students at this stage have a working knowledge of the language. Undertaking a geographic activity, such as spatial correlations, is not that difficult when it comes to comprehension as there are generally true cognates between Spanish and English.

In addition to the importance of a spatial perspective, geography was selected because the author of this paper is trained as a geographer and gravitated towards EFL through teaching Geography in English at the school and university levels in Colombia.

**CLIL as a methodology in Higher Education**

CLIL is perhaps one of the most contending methodologies for teaching English at all educational levels, as it relates language learning directly to the student’s courses. The term was coined by the linguist David Marsh (2002), who notes that its aims are “duel focused” as learning a subject in a foreign language enhances the acquisition of both content and language. It has increasingly become an established teaching approach in Colombian private schools and universities (McDougald, 2009). CLIL has largely been used in higher education in countries in the European Union whose students are largely non-native English Speakers studying in English. A mainstream course taught in a foreign language would foster broader linguistic skills as opposed to language course (Bounce-Rodriguez, 2011). Hence, the geography being taught in the EFL class brings about a natural assimilative language acquisition as the student is using the target language: English. Papaja and Urbaniak (2009) note the attractiveness of geography as a CLIL course given and its emphasis on current issues. Zafeirriades and Kosma (2017) suggest that geography is most appropriate for CLIL instruction given the cognitive skills it fosters. The outcomes of this lesson show that CLIL does enhance EFL learning, but at the same time confirms studies which show its limitations in terms of grammar proficiency. A previous CLIL geography project at a Colombian university revealed that geographical knowledge and technical English were enhanced through geography content courses (Bryan & Habte-Gabr, 2008). In the case of this lesson, it was found that both language and content objectives could also be attained in an EFL course.
Literacy skills in geography

Global interconnectedness through the internet has brought about an a-spatial world, where students are not compelled to have knowledge of places as previously was the case. Moreover, in the social studies curriculums, geography has been peripheral to knowledge construction and spatial analysis has not been employed as a tool to foster the understanding of the world. As curriculums move away from memorization to analytical learning, geography tends to be less taught. This occurs when geography learning is reduced to memorizing the location of geographical phenomena without considering geography as fostering an explanation for the unfolding of human and physical geographic activity. Furthermore, professional geographic work carried out in GIS and cartography is rarely incorporated in the school geography curriculum (Rodriguez de Moreno, 2010, p. 18). Arguably a class activity which fosters student’s analytical skills using geographic tools, such as correlations, which would meaningfully promote PBL as students spatially correlate social data based on countries around the world. As students use a foreign language to undertake “complex performances” (Morowaski & Budke, 2017) there would be a need for more advanced language. In the case of conducting correlations through thematic maps, students at the Pre-intermediate English Level saw the need for the use of comparatives and superlatives as they wrote and discussed their findings. Markovic, Penjat and Adendekovic (2016) note that the fostering of spatial intelligence contributes to “effective language learning”.

Income distribution and economic growth were selected as they are issues that come up in classroom discussions on social issues, such as education, crime, development and Latin American countries within the global setting. Given the broader scope of knowledge to the address these issues, they tend to be dealt with more advanced English levels. Therefore, having the map correlation activity fostered visual support to student’s discussions, while enhancing PLK and elicited more vocabulary and grammar.

In addition to PLK, students were also introduced to the rudiments of Geographical Information Systems (GIS). This is a means of interpreting and analyzing data by overlaying thematic maps in order to identify correlations of information. In this case, the correlation being analyzed was that between the wealth of countries and inequality.

Procedure

This lesson would take a complete class session as it involves the introduction of thematic cartography, specially choropleth maps. In addition to this introduction, at the intermediate EFL level, the class should also review essay structure. In this case, not all students were familiar with economic indicators and thematic maps, so time was required to illicit and supplement information. Students were shown different thematic maps prior to the exercise, in order to accustom them to this sort of reading.

A choropleth map shows quantitative data within geographically defined boundaries of countries, departments, states, provinces and other spatial units. We often see choropleth maps in the media during election time, showing the percentages of votes for a candidate or political party. Information is shown through colors or shades of a color. The higher the information the number or percentage of information, the darker the color. For example, this map shows the percentage of people working in the industrial sector
in a country. The industrial sector consists of people working in factories and production. Thus, the darker the blue, the higher the number of people working in industry. Lighter blue indicates fewer people working in industry. The countries colored white have few people working in industry. They completed information obtained from a thematic map and completed information such as the chart below.

**Student map skill exercise form**

<table>
<thead>
<tr>
<th>Make a list of ten countries in Africa that have less than 9-5 percent of their population working in the industrial sector.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. __________________  b. __________________  c. __________________  d. __________________</td>
</tr>
<tr>
<td>e. __________________  f. __________________  g. __________________  h. __________________</td>
</tr>
<tr>
<td>i. __________________  j. __________________</td>
</tr>
</tbody>
</table>

Following the map warm-up exercise, students marked an “x” on a world map with countries which had high GDPs and those with low GDGs. On another world map, they identified the Gini coefficient of these countries as being high or low. The closer the coefficient is to 1, the higher the level of inequality.

Following the map exercise, students were provided with the three components of an opinion essay: introduction, body and conclusion. They were informed that this structure was chosen as its recommended for English proficiency exams, such as the IELTS and TOEFL, which are requirements for graduating from many Colombian universities. Their thesis had to be evident towards the end of the first paragraph along with an idea of supporting arguments which would follow in the body of the essay through the examples obtained in the map correlation activity. After brainstorming ideas about the relationships between wealth and inequality, they worked on mind mapping their essay in the following procedure.

**Essay structure presented to students**

<table>
<thead>
<tr>
<th>Paragraph one (outline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Introduction</td>
</tr>
<tr>
<td>- Thesis statement (there is or there is not a relationship between inequality and the wealth of a country).</td>
</tr>
<tr>
<td>- Plan to prove or disprove this thesis (“I will look at the relationship between the wealth and inequality of twenty countries around the world”).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph two</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Students developed a list of twenty countries spread around the globe.</td>
</tr>
<tr>
<td>- On blank maps they selected countries with both very high and very low GDGs and marked them on a blank world political map. Likewise, they identified the Gini Coefficient as being high or low for these countries.</td>
</tr>
<tr>
<td>- They developed a list of countries whose GDP and Gini Coefficient correlated as being high or low.</td>
</tr>
<tr>
<td>- In this paragraph they discussed the correlations. For example, they noticed that developed countries with a high GDP tended to have a lower Gini Coefficient and that developing countries with strong economies, such as Brazil, Colombia, India and South Africa, positively correlated with a high level of inequality.</td>
</tr>
</tbody>
</table>
Paragraph three

Conclusions. Here they summarized their findings and made predictions, such as “economic growth needs state support to benefit the overall population”. Many students noticed that developed welfare states had the lowest Gini Coefficient, hence recommending “A welfare system.”

Results based on student observations

A focus group was conducted with the class and eight students completed a T-chart, which identified their learning about language and geography through the exercise.

a. Focus group: Student’s opinions regarding the “map exercise” were solicited. As their instructor and designer of the lesson was the instructor bias towards positive feedback was expected. Therefore, to control this, subsequently an anonymous survey was applied. As it was an intermediate English course, students could use Spanish in the focus group. It was interesting to note that they tried to use English as much as possible. This could perhaps be alluded to the fact that they had just completed a technical task in English.

When asked about the impact the exercise had on essay writing skills, students noted while the exercise did not enhance grammar or sentence construction skills, it did foster essay writing structure and specifically paragraphing. This was because in the instructions they were told that they had to express a thesis statement about the relationship between GDP and inequality. In the body of the essay, they had to use specific countries that correlated as examples and try to explain the relationship. Finally, in the conclusion they restated their thesis based on the correlations discussed in the body.

In the discussion, students noted that they could acquire technical vocabulary related to areas in economics and finance. Many of them were unaware of terms, such as Gross Domestic Product (GDP) or Gross National Product (GNP). While concepts, such as Gini Coefficient, the indicator of inequality, were studied in other courses, they felt that this hands-on experience of mapping enhanced their understanding of the indicator. Furthermore, their knowledge of Place Location was also meaningfully enhanced as they spatially correlated the Gini Coefficient with GDP. Some students noted that this approach triggered an interest in geography as it was meaningful.

The relationship between wealth and equality was also seen as being a lot more complex as the wealthiest developing countries tend to be the most unequal. Concepts of governance were triggered as they sought to explain why equality did not always positively correlate to wealth. Hence, issues such as the importance of state intervention as is the case with welfare states were part of their conclusion.

b. Survey. Below there are shown some statements obtained from T-Charts: Through these responses, the dual learning of language and content could be asse...
**Figure 3.** Survey compiled by the author

<table>
<thead>
<tr>
<th>What I learned about essay writing</th>
<th>What I learned about geography</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student 1</strong>&lt;br&gt;When I write I be aware need more vocabulary. This very interesting because is a motivation for me ..........</td>
<td><strong>Student 1</strong>&lt;br&gt;I learned vocabulary and the economic geography, through this activity it's a more interesting class.</td>
</tr>
<tr>
<td><strong>Student 2</strong>&lt;br&gt;I learned a lot about the correct writing in both languages. Too, how is the use of capital letters, the introduction, body essay and conclusion.</td>
<td><strong>Student 2</strong>&lt;br&gt;I learned that was GNP around the world from the poorest counties to the wealthiest. Also, with the Gini Coefficient. I identified countries that before I didn't know</td>
</tr>
<tr>
<td><strong>Student 3</strong>&lt;br&gt;Aprendí a diferenciar la redacción en inglés y en español utilizando adecuadamente las signas de puntuación.</td>
<td><strong>Student 3</strong>&lt;br&gt;Aprendí la ubicación de los países, su pronunciación en inglés.</td>
</tr>
<tr>
<td><strong>Student 4</strong>&lt;br&gt;Aprendí a redactar utilizando la economía del lenguaje siendo más precisa a la hora de decir alguna idea.</td>
<td><strong>Student 4</strong>&lt;br&gt;El ejercicio me ayudo a ampliar mi conocimiento geográfico.</td>
</tr>
<tr>
<td><strong>Student 5</strong>&lt;br&gt;New Vocabulary&lt;br&gt;Comma's use</td>
<td><strong>Student 5</strong>&lt;br&gt;Gini coefficient&lt;br&gt;New countries&lt;br&gt;New places&lt;br&gt;Gross Domestic Product</td>
</tr>
<tr>
<td><strong>Student 6</strong>&lt;br&gt;Nuevo vocabulario&lt;br&gt;Como usar los conectores&lt;br&gt;Las mayúsculas&lt;br&gt;Dale sentido a un parágrafo</td>
<td><strong>Student 6</strong>&lt;br&gt;Aprendí algunas ciudades, hasta donde iban los continentes</td>
</tr>
<tr>
<td><strong>Student 7</strong>&lt;br&gt;Aprendí a usar mejor la gramática, a organizar mis ideas y los conectores.</td>
<td><strong>Student 7</strong>&lt;br&gt;Aprendí y repasé más sobre geografía</td>
</tr>
<tr>
<td><strong>Student 8</strong>&lt;br&gt;Aprendí a escribir bien con conectores a redactar, dar sentido a las palabras</td>
<td><strong>Student 8</strong>&lt;br&gt;Aprendí donde a ubicar algunos países que no conozco&lt;br&gt;Donde hay más requisas en donde no</td>
</tr>
<tr>
<td><strong>Student 9</strong>&lt;br&gt;I learned to Mahatma Gandhi, because I didn’t know who was he, and I learned new vocabulary</td>
<td><strong>Student 9</strong>&lt;br&gt;I learned some things, for example where stay some countries</td>
</tr>
<tr>
<td><strong>Student 10</strong>&lt;br&gt;Vocabulary&lt;br&gt;Grammar&lt;br&gt;Etc.</td>
<td><strong>Student 10</strong>&lt;br&gt;I learned about&lt;br&gt;Cities&lt;br&gt;Countries&lt;br&gt;Gini Coefficient&lt;br&gt;Places</td>
</tr>
</tbody>
</table>
The fact that students had undergone a “dual approach”, the simultaneous acquisition of language and content, is evident from the response to the first statement. Stressing the dual purpose of the exercise prior to its implementation through the discussion on choropleth maps and the importance of economic indicators for student’s areas of study may have made them more aware of the purposes of the lesson. Also, from the teacher’s point of view, the notion of simultaneously teaching both language and content (Papaja, 2013) was clear from the onset as the writing skills corresponded to specific geographical skills.

The students positively responded to the second statement because of the essay structure was incorporated into the map correlation exercise as they were aware that the relations of the country were the content of the body section and that the thesis, which was stated in the introduction, was being supported by the body. This was evident from two written statements of students who noted that their understanding of paragraph construction had increased. Here we see a scenario where Content Knowledge (C) and Language Knowledge (L) were at equilibrium:

\[ C = L \]

As content skills, such as country location, spatial correlations, concepts such GDP and Gini Coefficient were being learned, the student was acquiring the structure of an essay as they placed they organized their findings in the essay. One the other hand, the third statement, which measured PLK, tended to lean more towards content as students learned about the existence of countries for the first time and language was limited to know the English names of countries.

\[ C > L \]

In the fifth response, students noted the high effectiveness of the lesson in terms of acquiring essay structures. The exercise elicited the need for connectors and knowledge for sentence construction to more effectively express the correlations noticed, suggesting the effectiveness of implicit learning when it comes to grammar acquisition. This was evidenced when they solicited as they wrote their essays in class. Of course, the impact of this approach on acquiring grammatical structures would require a longitudinal study. However, for the purposes of immediate task completion, students admitted that they used more complex forms of grammar and vocabulary as the use of thematic maps generated more need for language. Spada and Tomita (2010) have shown that explicit learning of grammar has been more effective, suggesting the need to test long terms acquisition of the structures written the essays.

\[ L > C \]
Discussion and Conclusion

Based on the focus group discussion and the survey, the lesson was quite effective at its time of implementation. “Dual learning” was evident. Geographic skills, such as PLK, concepts of GIS and terminology, were acquired in a non-traditional manner as most students were previously exposed to geography through memorization. Silva (2017) suggests that to improve geographical education in Colombia, it must go beyond its encyclopedic nature which has been based on mere memorization. This exercise generated knowledge of places using maps for analysis. Furthermore, students were able to see the importance of geography and thematic maps when it comes to dealing with social data, such as GDP and the Gini Coefficient. Moreover, the fact that they were in constant interaction with this data as they interacted with maps, gave the indicators more relevance. Of course, the long-term impact of the lesson on acquisition of geographical tools and analysis would require an effective tool for measurement.

While the lesson proved to be of interest and use to students, its long-term effectiveness can only be measured through a longitudinal study, which incorporates the approach through different levels of and EFL program. Also, its impact on proficiency exams would have to be measured once it has been repeatedly used in writing classes.

Often, essays written in EFL classes tend to be solely based on the student’s opinion. Language proficiency tests do not require a whole lot of factual knowledge to support an idea. Hence, university preparation in EFL courses tends to diverge from mainstream course research-based writing and focus on opinion essays. This lesson shows that while the product of university EFL courses may be an opinion essay, in class “hands on activities” which foster other academic skills do contribute to effectively teaching essay structure. Furthermore, as students strive to write a more academically based essay, a simple opinion essay should be easier as they have undergone an actual research process to acquire supporting arguments for a thesis.

The lesson also seemed to be meaningful in that it integrated the student’s curriculum through themes studied in their disciplines. The need for geographical skills and knowledge became important as they presented factual evidence based on correlations. Catalán & Llach’s (2017) observation that CLIL does contribute to vocabulary learning was also clearly seen in the lesson. Finally, both writing and geographical skills were meaningfully developed as students focused on developing a factually based essay.

References


