

Figure 8: References (Ortiz, 2014)

And at the end of the process section, students have access to three different online dictionaries: WordReference (<a href="http://www.wordreference.com/es/">http://www.wordreference.com/es/</a>), Cambridge Dictionary Online (<a href="http://dictionary.cambridge.org/es/">http://dictionary.cambridge.org/es/</a>), and Merriam-Webster Dictionary (<a href="http://www.merriam-webster.com/">http://www.merriam-webster.com/</a>). I have decided to include these references because I wanted students to use their time using them not selecting them or even worse using other incomplete translators which are not going to help them.

#### 4.3.3. Post-questionnaire

At the end of the WQ, students completed a questionnaire about their perceptions about WQ implementation, what they have learnt while carrying it out, working in groups, usefulness and difficulty of each part and step, and their preferences regarding reading and consulting dictionaries in paper or in online format.

By means of handing out this questionnaire, both quantitative and qualitative results were collected. This distinction was established because a case study and a qualitative approach allow us to explore the phenomenon in-depth and to take into account a wider range of variables and factors that play an essential role in the process and which could not be selected in advance (Ruiz, 2005). The questionnaire consists of 24 questions of which 6 are open-ended questions; and the rest are questions in which students should choose the true answer for them. Furthermore, the questionnaire contains a section, in which students were free to comment any idea, opinion, improvements, etc.

It is necessary to mention that this questionnaire is based on the questionnaire that Isabel Pérez Torres had used for her Phd entitled "Diseño de WebQuest para la enseñanza-aprendizaje del inglés como lengua extranjera: Aplicaciones en la Adquisición de Vocabulario y la Destreza Lectora" (2006).

The issues which were expected to be arisen compiling this questionnaire are the following ones:

- Closed-questions:
- Perceptions about what they have learnt in terms of culture, reading skill, vocabulary and grammar. (nada, algo, bastante, mucho)
- o Problems during the fulfilment of the WQ.
- o Perceptions about group work.
- Usefulness and difficulty of each part, step, and resources to which they have had access.
- o Time devoted to complete each part of the WQ.
- o Preferences to read and consult dictionaries in paper or online.
- Students' opinion about the usefulness of this tool to learn content at the same time that learning English for Specific Purposes.
- Open-ended questions:
- o Usefulness of the WQ for other aspects.
- o Usefulness of the links to complete the task.
- o Students' opinion about creating themselves the groups.
- Advantages and disadvantages of using this tool in relation to traditional methodology.
- o Students' position towards using this tool next year in their English lessons.
- o Any comment they want to make.

#### 4.3.4. Students' Task

In this section the task that students should elaborate is going to be described as it is a qualitative instrument that helps me to refine in order to understand and therefore to interpret from a more comprehensive perspective the data obtained from the qualitative analysis. The task students should send by email is a word document with a main heading, a subheading followed by the questions related to Intercultural Competence, and four lists of tips each one related to a country. Moreover, students should include some photos and videos related to business practices in any of the countries.

# 4.4. Data collection and analysis

The classroom where the lessons were developed was equipped with 14 computers; therefore, the WQ was easily implemented.

Table 2: Sessions

Sessions	Content & Accions
Session 1(April 7 <sup>th</sup> ):	a pre-questionnaire regarding digital competence was completed by the students
Session 2 (April 14 <sup>th</sup> ):	It was devoted to explain to the students the reasons for using this tool in the English class, to show students the WQ that they were going to follow, and to explain them every section of it. During that lesson, students divided themselves in groups of four people. Students were given the opportunity to create themselves the groups in order to motivate them and create a good perception regarding both the following lessons and the WQ itself.
Session 3 (April 15 <sup>th</sup> ):	In groups, students did the steps number 2 and 3. In step 2, they did two Hot Potatoes exercises regarding good and bad practices about intercultural meetings and regarding the modal verb <i>should</i> . In step 3, they read a text about Intercultural Competence and answered some questions about the reading.
Session 4 (April 16 <sup>th</sup> -28 <sup>th</sup> ):	Step 4 had to be done at home and individually, so they distributed themselves the different options, read the links of their country, watch a video, and answer the comprehension questions about it.
Session 5 (April 29 <sup>th</sup> ):	Students individually created a list of tips regarding the appropriate behaviour in the country they had investigated and then the four lists of tips were included in the word document created in a previous lesson. They had one more week to revise and improve the task (using the rubric) before sending it to the

	teacher.
Session 6 (May, 5 <sup>th</sup> ):	It was devoted to fulfil the post- questionnaire regarding the students' perceptions about the WQ explained in the tools section in this paper

# 5. Results

In this section, both quantitative and qualitative results of the study are presented. These results are described according to the source we used for their collection, that is, pre-questionnaire, post-questionnaire, and students' final task.

## 5.1. Results from the Pre-questionnaire

As it has been explained in section 4.3, first of all, students completed a **pre-questionnaire** regarding digital competence whose main aim was to know students' current digital competence before doing the WQ.

Results from **question 1** show us the types of ICTs used by students (See appendix 3): almost everyone in the classroom accepted to use a PC/Laptop and to have a broadband internet connection at home. 100% out of the total number of students stated that they have a smartphone with internet connection, and only half of them claimed that they usually use a tablet.

Results from **question** 2 aim to know students' frequency of use of some digital tools (See appendix 4): all of the students said that they use word in regular basis. Regarding the use of PPT, half of them said that they have never used it, whereas the other half claimed that they use it in regular basis. As social networks are concerned, all of the students used them and most of them (62.5%) used them almost every day. Regarding WhatSapp, only 4% of students claimed that they have never used it, the others said that they use it almost every day. 12.5% of students affirmed that they have never used YouTube, whereas the rest of students used it in regular basis. Regarding search engines, 92% out of students accepted to use them almost every day. As cloud apps are concerned, 25% of students have never used them, whereas the rest use them in regular basis. Regarding blogs, 62.5% of students said that have never used blogs, whereas the other 37.5% of students use blogs. Finally, 66.6% of students use wikis, whereas the other 33.4% said that they have never used wikis.

Results from **question 3** show us the different use students make of ICTs as well as the frequency they use ICTs with (See appendix 5):

- To communicate using email: 29.16% of students participating in the study said that they have never used email to communicate with people, whereas 70.84% said that they had used it with that purpose.
- To communicate using social networks: 12.5% of students said that they have never used social networks to communicate with people. 25% of students said that they use social networks monthly to communicate with people, 12,5% stated that they use them weekly, whereas 50% students said that they use social networks every day for that purpose.
- o To communicate using WhatApp or line: 4% of students said that they have never used WhatApp or line to communicate with people, whereas 96% of them stated that use them every day for that purpose.
- For personal use (listening to music, watching videos and films, reading the news, etc.): 4.1% of students participating in this study said that they have never used ICTs for personal use. 12.5 % of students stated that they use ICTs monthly for that purpose. 8.4% of them said that they use it weekly, whereas 75% of students affirmed that they use ICTs for personal use every day.
- To find information which help to do homework from any subject: 4.2% of students participating in this study said that they use ICTs to find information which helps them to do homework for any subject monthly. 54.2% student said that they use ICTs for that purpose weekly, 37.5% of them stated that they use them every day, and 4.1% of students did not answer this item.
- To find information which help to do homework of the English subject: 4% of students participating in this study said that they have never used the Internet to find information regarding the English subject. 21% of students stated that they use the Internet for that purpose monthly. 54% of them said that they use it weekly for that purpose, whereas 21% of them said that they use the Internet for that purpose every day.

Results from **question 4** show us that students use the Internet to learn English. As figure 9 shows us 83% of students use it whereas the other 17% do not use the Internet for that purpose.

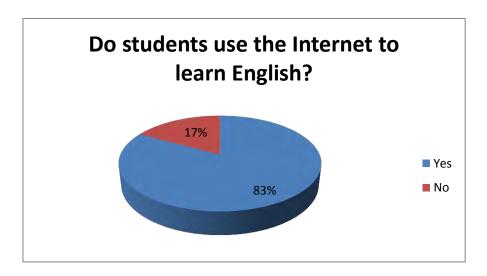


Figure 9: Q4, Pre-questionnaire

Results from **question 5** show us that 96% of students claimed that they would like their teachers to provide them with online materials, whereas 4% of them would not like it.



Figure 10: Q5, Pre-questionnaire

**Results from question 6** show us that 19% of students participating in the study were willing to use the Virtual Classroom, 7% of students said that they would like to use Social networks, 4% of students said that they would like to use blogs and wikis, and 1% of them stated that they would like to use YouTube.

Results from **question 7** allow us to know if students could bring their laptops or tablets to class. 71% of students participating in the study could bring them to classroom whereas the other 29% could not.

#### 5.2. Results related to the Post-questionnaire

Results from **question 1** show us students' opinions about the usefulness of this WQ to learn culture, reading in English, vocabulary, and grammar (See

appendix 6). Students could choose 4 items: *hardly ever*, *something*, *quite a lot*, and *a lot*. All of them agreed that this WQ has helped them to learn aspects about different cultures. As reading in English is concerned, 4% of students claimed that this WQ is *hardly ever* useful to improve reading skill, 54% of them said that it is *something* helpful, 33.5% affirmed that it is useful *quite a lot*, whereas 8.5% claimed that it is useful *a lot*. 4% of students said that this WQ has *hardly ever* been useful to learn vocabulary, 46% affirmed that it is *something* useful, 46% affirmed that it is useful *quite a lot*, and 4% said that it is useful *a lot*. Finally, 58% of students claimed that this WQ has helped them to learn grammar (*something*), 33.5% of them said that it is useful *quite a lot*, and 8,5% affirmed that it is useful *a lot*.

**Question 2** of the post-questionnaire allows students to comment any other aspect to which this WQ has been useful. We have selected some of the students' responses to this item:

- > S2: para ser consciente de que hasta en los negocios un error de protocolo a nivel de contraste intercultural, puede suponer una gran pérdida.
- > S11: para si algunos de nosotros quizás el día de mañana tenga la oportunidad de trabajar en el extranjero conozca aspectos de diferentes culturas.
- \$13: para trabajar en grupo con otras personas, basándonos en aspectos de otros países.
- > S21: para relacionarme con mis compañeros, al realizar un trabajo en grupo.

Results from **question 3** address the problems students found when completing the WQ, that is, lack of time, lack of vocabulary, group work, and reading comprehension (See appendix 7). Lack of time was a factor that worried students to a great extent. As lack of vocabulary is concerned, almost 80% of students saw it as a problem. Regarding reading comprehension, 79% of students agreed that reading comprehension was a demanding part of the WQ. As group work is concerned, 71% of them affirmed that this part has not being a problem for them.

Results from **question 4** show us the resources usefulness to prepare the final task. 100% of students participating in this study said that the WQ's resources were an essential tool to prepare the final task.

Up to that point it is important to mention that students were the ones in charge of creating their group work, by this technique we aimed to motivate our students. The **fifth question** of the **post-questionnaire** is related to RQ1; almost everyone stated that it was a really good idea to create themselves the groups; only two of them argue that it was indifferent. The main reason given by students was that if you are able to choose the people you are going to work with the result will be better; some of their responses are listed below:

- > S2: sí, porque coordinarse entre afines es mucho más rápido.
- > S7: sí. Porque al conocernos trabajamos mejor.
- > S9: si, porque si los grupos están en buena harmonía, se trabaja mejor.
- > S11: sí, porque nos unimos dependiendo de lo responsables que somos y por afinidad y estar a gusto dentro del grupo.

Results from **question 6** show us how students have seen the group work experience (See appendix 8) to what extent they have seen it easy, useful, enriched, and 100% shared task. 83% of the students said that it was an easy experience. Regarding usefulness of group work, nobody saw this experience as a useless one. Concerning whether it has been an enriched experience, 91.5% of students stated that it was an enriched experience. Finally, regarding whether the experienced has been 100% shared or not, almost everyone agreed that work was fairly shared by the members of the group.

**Question 7** asks students to write the advantages of working with a WQ in relation to the traditional methodology and these are the most claimed remarks stated by students:

- > S2: Es un tipo de "homework" más dinámico y ameno. Permite combinar el aprendizaje de vocabulario, gramática, etc., con el de otros aspectos como la interculturalidad.
- > S6: que puedes consultar en cualquier momento, y es más práctico y cómodo. Y aprendes más no solo de inglés. Ahorro de recursos.
- > S8: aporta más facilidades, tales como vídeos.
- > S13: es diferente, te diviertes más, cambiar tu actitud al hacerla.
- > S18: el fácil acceso a la información
- > S21: te motiva más, ya que es diferente al ritmo marcado habitualmente.
- > S23: es una manera innovadora y lúdica de aprender.

**Question 8** asks students about the disadvantages of working with a WQ in relation to the traditional methodology, and below students' main comments are listed:

- ➤ S2: A la hora de evaluar, deberían haber estado marcados solo los mínimos, y dejar los máximos abiertos a cada alumno.
- > S4: Dependes del ordenador y de internet.
- > S5: No hay persona en el momento que hay una duda para consultar.
- > S6: que requiere disciplina y organización propia, así como de un ordenador y conexión a internet.
- > S23: si no lo tienes claro, no entiendes que hay que hacer.

Results from **question 9** show us students' opinions about the level of difficulty of each part of the WQ. Students could choose from level 1 of difficulty (being the least) to level 5 (being the most difficult). As it can be seen in Figure 11, level 1 of difficulty was assigned to the Hot Potatoes activities and also to reading the links. Level 2 of difficulty was assigned to both the individual and group questions and the tips' list.

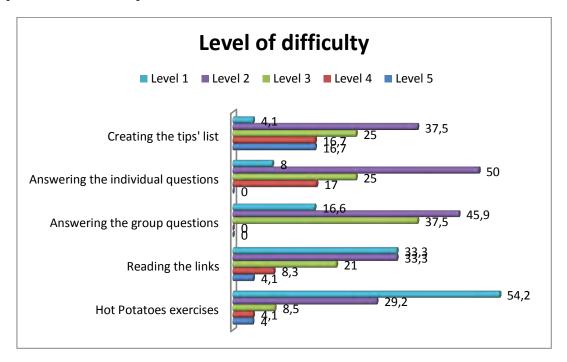


Figure 11: Q9, Post-questionnaire

Results from **question 10** show us the amount of time students employed to carry out each part of the WQ. (See appendix 9) Generally speaking, almost everyone agreed that they have lasted less than 30 minutes to do the Hot Potatoes exercises. Half of them stated that they have employed from 30 minutes to an hour to read the link about intercultural competence and to answer the group questions. They have also claimed that they have used from 30 minutes to an hour to read the links individually. Almost half of students said that they have employed from 30 minutes to an hour to answer the individual questions. Almost 60% of them agreed that they have spent from 30 minutes to an hour to create the tips' list. And finally, 70% of students claimed that they have employed from 30 minutes to two hours to share with the rest of the group and to revise the final task.

Results from **question 11** show us to what extent four resources that were chosen for this purpose have influenced to learn cultural aspects. The different items are: *hardly ever, something, quite a lot,* or *a lot* (See appendix 10). Regarding the link about intercultural competence, 71% of students agreed that it has influenced them to learn cultural aspects. As links to research about a specific country are concerned, 92% of them claimed that they have helped them to learn culture. Regarding the creation of the tips' list, 91.8% stated that this task has

influenced them to learn cultural aspects. And finally, for 83.4% of students sharing and revising the final task has helped them to learn culture.

Results from **question 12** show us the helpfulness of the Hot Potatoes exercises to accomplish the following goals: to introduce general tips about international meetings, to distinguish between good and bad practises in an international meeting, and to rephrase sentences with do using should. As it can be seen in Figure 12, all students agreed that step two has helped them to accomplish the first aim, 95.9% of students claimed that this step has helped them to accomplish the second aim; and finally, 96% of them affirmed that this step has helped them to accomplish the third and last aim, that is, to rephrase sentences with *do* using *should*.

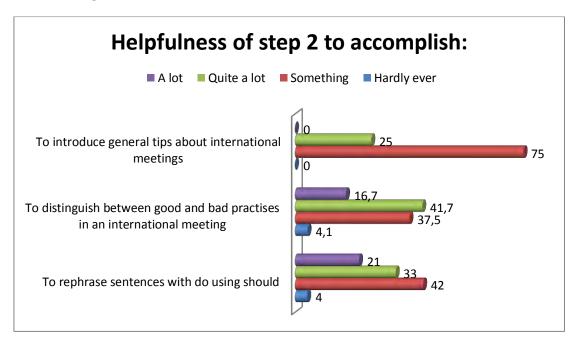


Figure 12: Q12, Post-questionnaire

Results from **question 13** show us the level of helpfulness of the step 3 to know key concepts related to international competence. As it can be seen in Figure 13, 21% of students chose *something*, 56% of them selected *quite a lot*, and 33% selected *a lot*.

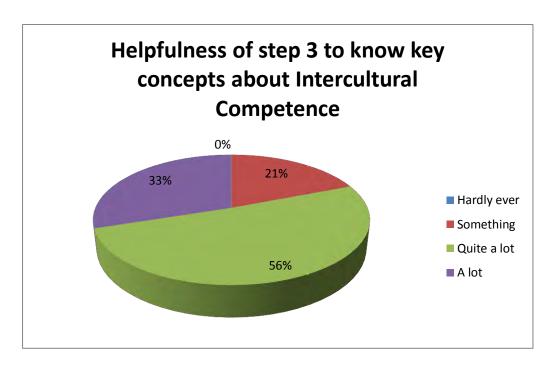


Figure 13: Q13, Post-questionnaire

Results from **question 14** show us to what extent step 4 has helped to accomplish the following objectives: to understand the culture (regarding meetings) of the investigated country, to focus the attention on the search and understanding of the specific information following the comprehension questions, and to read specific texts in English and to answer questions about them in English too. As Figure 14 show us, the three goals of this step has been accomplished quite a lot.

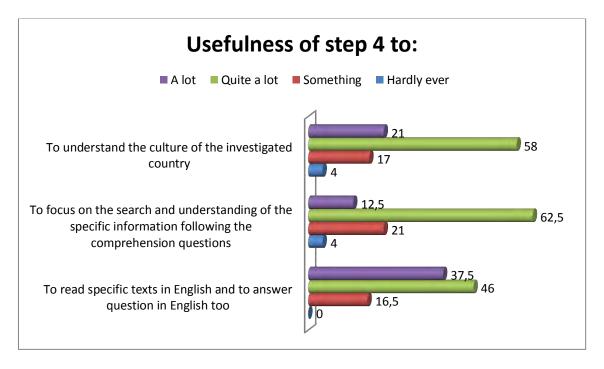


Figure 14: Q14, Post-questionnaire

Results from **question 15** show us the extent step 5 has helped to accomplish the following goals: to transform the information of the links into tips, to create complete sentences using *should* and *shouldn't*, and to comment some aspects (use of language, dress code, turn-taking, etc.). As it can be checked in Figure 15, students think that step 5 has helped them to accomplish these aims quite a lot.

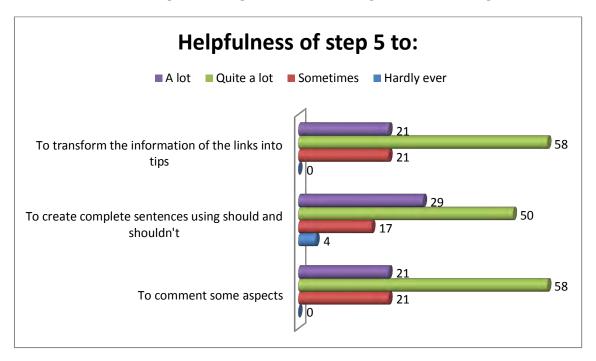


Figure 15: Q15, Post-questionnaire

Results from **question 16** show us to what extent step 6 has helped to accomplish the following goals: to explain the appropriate practices (in business contexts) in the investigated country, to know the appropriate practices in the rest of the countries, to add videos and images, and to revise all the parts of the final task using the rubric. As it can be seen in figure 16, this step has helped students quite a lot to explain the appropriate practises in the investigated country as well as in the other countries and to revise all the parts of the final task using the rubric. Students also agreed that this step has helped them something in order to add videos and images.

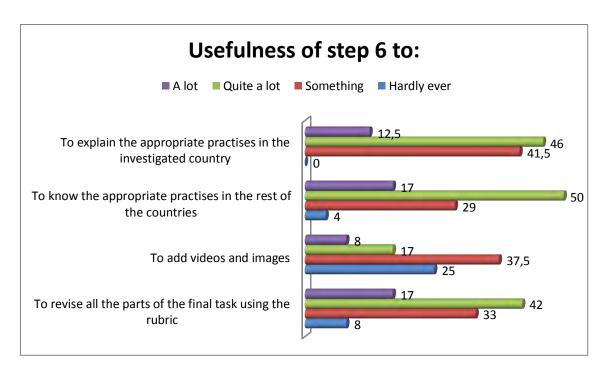


Figure 16: Q16, Post-questionnaire

Results from **question 17** show us to what extent students have or have not found all answers for the questions in the links and if they have used other resources. (See appendix 11) All of students agreed that they have found all the answers for the questions in the links; however, 50% of them have also used other resources to help them to complete the task.

**Question 18** tries to know the usefulness of the following materials: link to the explanation about the modal verb *should,* questions about intercultural competence, dictionaries, list of aspects that should be commented in the tips, and the rubric.(See appendix 12) Everyone accepted that the link about the modal verb should has helped them. Regarding both questions about intercultural competence and about the researched country, 95.9% of students said that they have helped them to understand and process the information. A dictionaries are concerned, 17% of students agreed that they have not helped them, whereas the rest of them accepted that they have helped them to a certain extent. Regarding the list of aspects that should be included in the tips, 88% of students said that it has helped them. Finally, 87.7% of students saw the rubric as a useful material to carry out the task.

Results from **question 19** show us that students think that the online dictionaries have not helped them a lot. (See Figure 17)

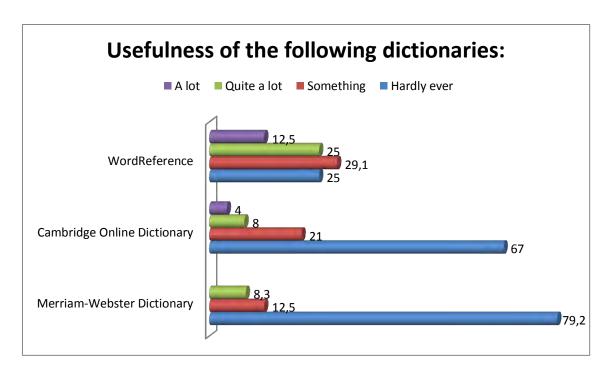


Figure 17: Q18, Post-questionnaire

Results from **question 20** show us to what extent this WQ has helped students to improve their online reading skill. 4% of students said that it has helped them hardly ever, 67% affirmed that it has helped them something, 21% argue that it has helped them quite a lot, and 8% a lot.

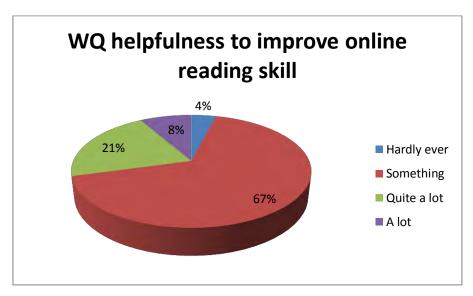


Figure 18: Q20, Post-questionnaire

**Question 21** show us that most of students (67%) prefer to read online, whereas the rest (33%) prefer to read in paper.

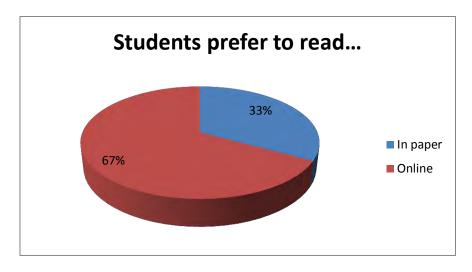


Figure 19: Q21, Post-questionnaire

Results from **question 22** show us that 96% of students said that they prefer to use online dictionaries, whereas only 4% of them prefer to use paper dictionaries.

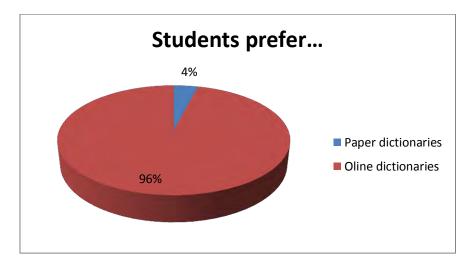


Figure 20:Q22, Post-questionnaire

Results from **question 23** show us to what extent students think this tool is useful to learn content at the same time as English for Specific Purposes. Half of them think that WQ is quite a lot useful to learn content and language, whereas only 4% of students said that WQ has not been useful to achieve this goal.

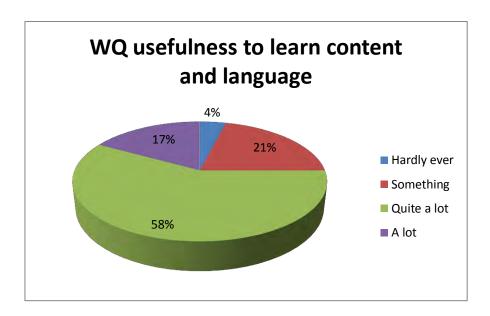


Figure 21: Q23, Post-questionnaire

**Question 24** is the last one in the post-questionnaire; and results from that question show us that 83% of the students said that they would like their teachers to use WQ next year in the English lessons and 13% of them said that they would not like it.

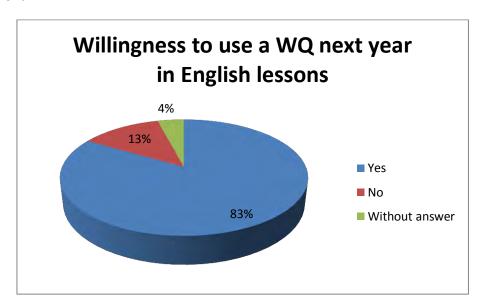


Figure 22: Q24, Post-questionnaire

At the end of the post-questionnaire students were able to add any comment they wanted to, and these are the most claimed remarks for using this tool next year in the English lessons:

- S5: Sí. Me parece interesante y ameno
- S6: sí. Porque es más dinámico y ágil.
- > S7: Porque es bastante más fácil aprender inglés de este modo.

- > S11: sí, porque es más entretenido trabajar en una web que en papel. Me ha gustado la experiencia de ver costumbres de lugares tan remotos y hacer comparaciones entre los compañeros de grupo.
- > S18: sí, manera más rápida y fácil de acceder a la información.
- > S23: sí, es innovador y no tan mecánico como las clases tradicionales.

#### 6. Discussion

The present study concerning the use of a WQ in the classroom has shown us the effects of applying this learning methodology in a vocational context in terms of students' motivation and students' learning process. The following section includes the discussion of results above described and paves the way for the conclusion section. The discussion of the results draws from the triangulation of the results obtained in the pre-questionnaire, post-questionnaire, and students' final task. We have attempted to understand and relate the results and compare them with the theoretical basis framing this study as shown in Figure 23.

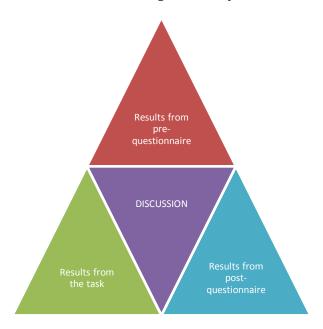


Figure 23: Triangulation

# 6.1. Discussion related to Research question 1

Regarding research question 1 of the study, that is, **to what extent using WQ contributes to promote students' positive attitudes towards the ESP learning process in a vocational training context**; we could say that according to the results obtained, using a WQ highly promoted students' positive attitudes towards the ESP learning process in a vocational training context.

First, results from questions 5 and 6 of the pre-questionnaire are going to be discussed. From students' comments, it can be deduced that they were eager to

use technological tools and devices for gaining knowledge, since they considered them a useful and motivational novelty which had not been dealt with in class.

Secondly, from questions 6 and 24 of the post-questionnaire it can be deduced that group work experience was a high factor in students' motivation, since the 83% of students agreed that group work has been an easy experience. In addition, all of them had seen group work as a useful experience. Furthermore, 91.5% of students said that this experience has enriched them quite a lot, whereas 96% of them affirmed that group work has been a 100% shared experience. It was decided to allow students to form their group work, whose main aim was to motivate them and to present the whole task as an entertaining process.

In this sense, the cooperative and group work, non-critical elements of the WQ designed for this purpose had been highly appreciated by most of the students. Almost everyone felt motivated by this decision because they were more comfortable within the group and they think that this is going to improve their performance as well as their final task, since students are positively interconnected, which may result in a more creative and elaborated project as stated by Jonassen (1994).

Almost all students (83.4%) are willing to continue using the Internet to learn a language and to repeat this methodology as it can be seen in some of the comments collected from question 24 of the post-questionnaire:

- > S7: Porque es bastante más fácil aprender inglés de este modo.
- ➤ S11: Sí, porque es más entretenido trabajar en una web que en papel. Me ha gustado la experiencia de ver costumbres de lugares tan remotos y hacer comparaciones entre los compañeros de grupo.

A WQ has been proved to be an interesting and easy way to learn English language as well as content. Students reported to be satisfied with using this learning tool because they found it more innovative, interesting, and enjoyable than traditional ones.

All this leads us to deduce that the use of WQ seems to promote positive attitudes towards aspects such as significant introduction of ICTs and the integration of cooperative learning and group work are basic for an effective development of students' learning process. Therefore, although some authors such as Dodge (1995) and March (1997) regard these collaborative approaches as non-critical elements of WQ (See section 2.1.3.2 of the present Mth), the results from this study suggest that they should be considered critical, since students' perceptions were influenced by them in a positive way.

## 6.2. Discussion related to Research question 2

Regarding research question 2 of the present study, that is, **to what extent WQ contributes to improve students' digital competence in an ESP context**, from the results obtained, it might be pointed out that students' digital competence has improved to a certain degree taking into account that they were already digital natives. Yet it is interesting to point out that they used the Internet mainly for personal use rather than for improving their linguistic competence in English. Results related to this research question come from questions 1, 2, 3, and 4 of the pre-questionnaire and from questions 20, 21, and 22 of the post-questionnaire.

Before carrying out the WQ, almost everyone in the classroom used a PC/laptop in regular basis and most of them had broadband at home. Furthermore, everyone had a smartphone with internet connection. Students used ICTs everyday mainly for personal use (listening to music, watching videos and films, reading the news, etc.) and for communicating using WhatApp. They also said that they used ICTs to find information which help them to do homework regarding other subjects. In the case of the ESP subject, 83% of students said that they used the Internet to help them to learn English mainly using translators and dictionaries.

After completing the WQ, students consider that this tool has helped them to improve their online reading skill to an extent. Indeed results from questions 20 and 21 already presented in the results section show us that 67% of students preferred to read online whereas only 33% of them preferred to read in paper. Their digital competence could have also been improved as some competences that are directly related to the digital medium, such as information classification and usage of the different available tools that facilitate learning process, have been developed. 96% of students also stated that they preferred to use online dictionaries than paper ones when studying English. It might seem to be as a consequence of the facilities online dictionaries provide us with, for instance users are able to listen to the pronunciation of the word as well as its phonetic transcription, and synonyms and opposites can also be checked. Results from question 22 of the post-questionnaire also show us that the use of online dictionaries has been promoted to since after completing the WQ 96% out of the total number of students preferred to use this type of dictionary.

All this leads us to deduce that the implementation of this WQ seems to contribute to the improvement of students' digital competence in the academic setting, since they were already digital natives but they do not employ this skill for academic purposes; considering digital competence as the ability to interact with new text formats, new ways of interaction between the reader and the text implying a high level of both cognitive development and metacognitive development (Ruiz-Madrid, 2014), a basic competence to be able to improve the linguistic competence in an academic environment in the ICT society.

#### 6.3. Discussion related to Research question 3

Regarding research question 3 of this study, that is, **to what extent a WQ is an effective methodological tool in an ESP learning context**, now we can conclude that, from the results obtained in this particular study, a WQ is so.

On the one hand, positive aspects of this WQ are going to be commented and these results come from the questions 1, 2, 4, 7, 11, 12, 13, 14, 15, 16, 17, 18, and 23 of the post-questionnaire. First of all, it might seem that the fulfilment of this project has been linked directly with the acquisition of language as well as culture and business practices, that is, students think that WQ is a useful tool to learn language at the same time as content. This is directly related to the idea of interdisciplinarity explained in the theoretical part of this study. Students saw this WQ as a useful one for their future career as they stated in their comments in question 2 of the post-questionnaire:

- > S2: Para ser consciente de que hasta en los negocios un error de protocolo a nivel de contraste intercultural, puede suponer una gran pérdida.
- ➤ S11: Para si algunos de nosotros quizás el día de mañana tenga la oportunidad de trabajar en el extranjero conozca aspectos de diferentes culturas.

Students' positive perceptions towards their acquisition of content and language have been possible because of the use of a variety of resources, which were previously checked and selected by the teacher, as it suggested by Dodge (2001) and Fiedler (2002); and because of the practical approach to the topic, that is, first they were exposed to input that had to be processed and then they transformed that input in a constructivist way, they have learnt by doing being active constructors of their own knowledge. Some of the main constructivist principles were developed or employed during the WQ, such as learning requires a language as well as social activity, the learning process starts with relevant topics for students, and knowledge and development are interactive, inductive, and collaborative. Therefore, this WQ has motivated students and so that it helps them to have positive attitudes towards language learning as well as WQ contents, it has been shown in the results from the post-questionnaire where students had shown positive attitudes and assessment towards WQ steps, scaffolding, and resources. From students' final task, we can also deduced that this WQ has motivated students as all of them had fulfil all the steps and the results have been quite good. An example of students' final task can be checked in Appendix 13.

In question 7 of the post-questionnaire, students were able to write down any advantage of working with a WQ in relation to the traditional methodology and they agreed that it is more motivational:

- > S2: Es un tipo de "homework" más dinámico y ameno. Permite combinar el aprendizaje de vocabulario, gramática, etc., con el de otros aspectos como la interculturalidad.
- > S21: Te motiva más, ya que es diferente el ritmo marcado habitualmente.
- > S23: Es una manera innovadora y lúdica de aprender.

Everyone said that resources have been the essential guide to perform the task and that with these materials they were able to complete the task. Despite this, 50% of them stated that they have consulted external resources such as translators or dictionaries. It might seem that students prefer to use other dictionaries than the ones included in the WQ, the main reason would be that there is a vast amount of resources at our hand and probably they are used to employ other online dictionaries. The rubric was considered by students as useful material to carry out the task since students can know what it is expected from them since the beginning; as Hanson (2001) stated, the rubric functions as a part of the scaffolding of a WQ.

On the other hand, as problems or negative aspects to complete the WQ are concerned, considering results from this study, it might be deduced that more time is needed mainly because of language problems but also in minor dimension because of lack of interest. Some students had a lack of interest because it is a new approach to learning and they have never worked in this way so their first reaction is to reject it. Furthermore, as Pierce (2011) claimed, carrying out a WQ implies individual and group responsibility and sometimes students are not willing to take that responsibility. Results show us that the WO task that has been more difficult for students was to answer the individual questions regarding the researched country. It was supposed to be a topic-specific reading and maybe it had been seen as a problem by students because of their low domain of the language, and in this part students should read, understand, and transform the information. Finally, in question 8 of the post-questionnaire, students were able to write down any disadvantage of this methodological tool in relation to traditional ones. Dependence on the Internet and personal discipline were seen as the main negative aspects of that methodology:

- > S4: Dependes del ordenador y de internet.
- ➤ S6: Que requiere disciplina y organización propia, así como de un ordenador y conexión a internet.

All this leads us to deduce that WQ is a useful methodological tool in an ESP context due to the fact that it encourages students' positive attitudes towards the acquisition of both content and language using a variety of resources to learn by constructing their own knowledge. All critical elements of WQ have been proved to be essential to accomplish all the WQ's objectives. From results of this study, we can suggest that some of the negative aspects or weaknesses of the

implementation of this WQ are language problems and lack of interest from a reduced number of students who refuse to change their passive role to a more active one in their learning process.

#### 7. Conclusion

WQ was born in the nineties and it has a career path of 20 years. There are several studies regarding WQ, as it has been seen in the theoretical section, and millions of WQ available on the Internet. This shows us that WQ, which was born as a learning tool, has now become a learning methodology which is here to stay. I first knew WQ when I studied the English Studies degree and when I arrived at the high school where I carried out my internship, taking into account the context present there, that is, a ESP context, I realised that it could be a great idea to implement a WQ. These have been my reasons for carrying out the research here presented, I wanted to know to what extent WQ can due to the constraint of time and the corpus of this study which is considered to be a Mth I decided to do a limited and modest study regarding the possible effect of WQ in students' attitudes. This leads me to propose three research questions:

RQ1: To what extent does using a WQ contribute to promote students' positive attitudes towards the ESP learning process in a vocational training context?

RQ2: To what extent does WQ contribute to improve students' digital competence in an ESP learning context?

RQ3: To what extent is a WQ a methodological effective tool in an ESP learning context?

After presenting the theoretical framework, describing the results, and presenting the triangulation of these in the discussion section, now the main ideas or reflections that could be considered as the conclusions of this research are stated.

Concerning research question number 1, we could conclude that WQ has contributed to develop students' positive attitudes towards the ESP learning process; for example, group work has been evaluated in a highly positive way. Students have also valued the use of the Internet, which is one of the basic elements of WQ. In addition they have also valued the innovative aspect of this methodology. However, it is interesting to see that collaborative work and group work, which is the most valued aspect by the students, are considered by the main authors as non-critical elements of WQ.

Regarding research question 2, as it has been shown in the pre-questionnaire, students participating in this study, due to their age and features, were students with a high level of digital competence but it was limited to daily activities. It is not a digital competence which is transferred to their academic lives. Therefore, after

the experience, many of them said that this WQ had made easier for them to read online. Obviously, resources previously selected and presented in a teacher-guided way, has been the perfect guide to help students to read online avoiding cognitive overwhelming as Conklin stated in 1997. Therefore, it seems that, in a way, these students have reflected upon the way in which their digital competence, high in daily routines, is not transferred automatically when they are using it to learn a language and it needs training, as Ruiz-Madrid pointed at in 2014.

As research question number 3 is concerned, both results from the questionnaires and comments from students lead us to think that when WQ has been designed for an ESP context, that in this particular case the topic was international meetings, makes students reflect upon the special features of a specific language. The structure in steps and a previous choice of resources have contributed to this, as well as the integration of online dictionaries as linguistic tools to help students acquire specific vocabulary.

Bearing all these in mind, we could conclude that the WQ designed for the purpose of this study contributes to students' evaluation of the WQ in an ESP context as satisfactory.

### 8. Limitations and suggestions for further research

Obviously, every single research has some limitations that should be taken into account in order to understand the conclusions obtained. In this case, this study also presents some limitations that should be born in mind:

- 1) The context. This study has been conducted within the Master de Profesorado with a very specific aim in mind, that is, elaborating a Mth related to educational purposes.
- 2) The number of students. We have only 28 students involved in this study. We do not know whether a different number of students could corroborate or not the results obtained.
- 3) The elaboration of the WQ, which has been designed for a very specific purpose, could be considered as a limitation. Maybe a different WQ with different resources and a different learning goal could lead to different results.

However, these limitations should be understood as the framing of this study in a constructive way and lead us to suggest different areas for further research. As for example:

- 1) Using a WQ in a different context like General English context.
- 2) Designing a different WQ or redefying the present one considering the comments and results obtained in this study and using it again.

Apart from that, and taking into account the conclusions of this study, we could also propose other aspects to be considered for further research:

- Research on the context of collaborative work and group work as critical or non-critical elements. Up to now, they are considered as a non-critical element but the results of this study lead us to reconsider this. That could be part of a future research focused only on this aspect.
- The transfer of the digital competence from students' daily life to their academic context. Further research is needed in order to know how we could help students to transfer what they already know and what they already do in their daily life to the academic context. So it could be necessary to explore how we could help students to make this transfer in a foreign language learning context.

These are aspects that we have considered as the most significant ones taking into account the results obtained and the conclusions derived from them, but the field of technology and language learning opens millions of possibilities for further research that I would like to explore in my future life as a teacher.

#### 9. References

- ADELL, J. (1997): "Tendencias en educación en la sociedad de las tecnologías de la información". *In EDUTEC, Revista Electrónica de Tecnología Educativa*, nº7, ISSN: 1135-9250.
- ARNOLD, J. & FONSECA, M. (2004): "Multiple Intelligence Theory and Foreign Language Learning: A Brain-based Perspective". *International Journal of English Studies*, 4:199-136, University of Murcia.
- BRUCKLACHER & GIMBERT (1999): "Role-playing software and WebQuests-what's possible with cooperative learning and computers". *Computers in Schools*, 15, 2: 37-48.
- CROOKES, G. & SCHMIDT, R. (1991): "Motivation: reopening the research agenda". *Language Learning*, 41: 469-512.
- DECRETO 102/2008, de 11 de julio, del Consell, por el que se establece el currículo de la Educación Superior no universitaria.
- DODGE, B. & PICKETT, N. (2001): *Rubrics for lessons*. http://webquest.sdsu.edu/rubrics/weblessons.htm. [Last Access 08/09/2014]
- DODGE, B. (1995): Some thoughts about WebQuests. <a href="http://edweb.sdsu.edu/courses/edted596/about webquests.html">http://edweb.sdsu.edu/courses/edted596/about webquests.html</a>. [Last Access 07/09/2014]
- DODGE, B. (1998): Building blocks of a WebQuest. http://projects.edtech.sandi.net/staffdey/buildingblocks/p-index.htm.
   [Last Access 07/09/2014]

- DODGE, B. (1999): WebQuest task design worksheet. <a href="http://webquest.sdsu.edu/task-design-worksheet.html">http://webquest.sdsu.edu/task-design-worksheet.html</a>. [Last Access 07/09/2014]
- DODGE, B. (2001): "FOCUS: Five rules for writing a great WebQuest". Learning & Leading with Technology, 28, 8: 6-9. http://www.webquest.futuro.usp,br/artigos/textos outros-bernie1.html. [Last Access 07/09/2014]
- DODGE, B. (2002): *WebQuest taskonomy: a taxonomy of tasks.* <a href="http://webquest.sdsu.edu/taskonomy.html">http://webquest.sdsu.edu/taskonomy.html</a>. [Last Access 08/09/2014]
- DODGE, B.; BELLOFATTO, L.; BOHL, N.; CASEY, M.; KRILL, M. (2001): A rubric for evaluating WebQuests.
   <a href="http://webquest.sdsu.edu/webquestrubric.html">http://webquest.sdsu.edu/webquestrubric.html</a>. [Last Access 08/09/2014]
- FIEDLER, R. (2002): WebQuest: a critical examination in light of selected learning theories. <a href="http://www.msfiedler.com/wq/fiedler.pdf">http://www.msfiedler.com/wq/fiedler.pdf</a>. [Last Access 08/09/2014]
- GALLEGO, D. & GUERRA, S. (2007): "Las WebQuest y el aprendizaje cooperativo. Utilización en la docencia universitaria". *Revista Complutense de Educación.* Vol.18. Num.1. 77-94. ISSN:1130-2496.
- GARCÍA, V. (2011): "WebQuest: a learning opportunity? A case study on writing, learning skills and integrating new technologies". *Didáctica. Lengua y Literatura*. Vol.23; 143-169.
- GARDNER, H. (1999): *Intelligence reframed. Multiple intelligences for the 21 century.* New York: Basic Books.
- HANSON, K. (2001): Beyond read and recall: an introduction to web-based learning using WebQuests.
   <a href="http://athene.riy.csu.edu.au%7Ekhanson/webquests.htm">http://athene.riy.csu.edu.au%7Ekhanson/webquests.htm</a>. [Last Access 08/09/2014]
- JONASSEN, D.H. (1994): "Thinking technology: Toward a constructivist design model". *Educational Technology*, 34, 4: 34-37.
- KELLER, J. (1983): "Motivational design of instruction". In C.M. REIGELUTH (ed.). *Instructional Design Theories and Models: An Overview of their Current Status. Hillsdale*, NJ: Erlbaum; 383-434.
- KELLY, R. (2000): "Working with WebQuests: making the Web accessible to students with disabilities". *Teaching Exceptional Children*, 32, 6: 4-13.
- MARCH, T. (1996): *Thinking through linking*. http://www.ozline.com/learning/thinking.html. [Last Access 08/09/2014]
- MARCH, T. (1997): The WebQuest design process. <a href="http://www.ozline.com/webquests/design.html">http://www.ozline.com/webquests/design.html</a>. [Last Access 08/09/2014]
- MARCH, T. (1998): WebQuest rubric. http://www.ozline.com/webquests/rubric.html. [Last Access 08/09/2014]

- MARCH, T. (1999): *Transforming Information into Understanding*. <a href="http://www.web-and-flow.com/help/transformation.html">http://www.web-and-flow.com/help/transformation.html</a>. [Last Access 08/09/2014]
- MARCH, T. (2003): "The learning power of WebQuests". *Educational Leadership*, 61, 4: 42-47
- PÉREZ TORRES, I. (2006): Diseño de WebQuests para la Enseñanza/Aprendizaje del Inglés como Lengua Extranjera: Aplicaciones en la Adquisición de Vocabulario y la Destreza Lectora. Granada, Editorial Universidad de Granada.
- PIAGET, J. (1972): *The Psychology of the Child*. New York: Basic Books.
- PIERCE, J. (2011): La Aplicación de la Teoría del Constructivismo al Aprendizaje de Lenguas para Fines Específicos a través de la WebQuest. Madrid, Universidad Politécnica de Madrid.
- RUIZ MADRID, M.N. (2005): Learner Autonomy in Computer-Assisted Language Learning. A comparative case-study of learners' behaviours in the English as a Foreign Language Context. Universitat Jaume I: Departament de Filologia Anglesa i Romànica. <a href="http://hdl.handle.net/10803/10440">http://hdl.handle.net/10803/10440</a> [Last Access: 25/09/2014]
- RUIZ MADRID, M.N. (2014): Apuntes assignatura SAP404 Aprenentage i ensenyança de la Llengua i la Literatura i enseñança d'idiomes.
- SPANFELNER, D. (2000): "WebQuests, an Interactive Approach to the Web". *Community & Junior College Libraries*, 9, 4: 23-28.
- STARR, L. (2000): "Meet Bernie Dodge –the Frank Lloyd Wright of learning environments!". *Education World.* <a href="http://www.educationworld.com/a tech/tech020.shtml">http://www.educationworld.com/a tech/tech020.shtml</a>. [Last Access 08/09/2014]
- SUMMERVILLE, J. (2000): "WebQuests: an aspect of technology integration for training preservice teachers". *TechTrends*, 44, 2: 31-35.
- VIGOTSKY, L.S. (1978): *Mind in Society: The Development of Higher Psychological processes.* Harvard University Press, Cambridge, MA.
- YODER, M. B. (1999): "The Students WebQuest". Learning and leading with technology: the ISTE journal of educational technology practice and policy, 26, 7: 6-11. <a href="http://www.jcu.edu/education/dshutkin/ed186/studentwebquest.pdf">http://www.jcu.edu/education/dshutkin/ed186/studentwebquest.pdf</a>. [Last Access 08/09/2014]

# 10.Appendix

# **Appendix 1**: Rubric Group Work

	Bad	Fair	Good	Perfect	Mark
	0-1	1-2	2-3.5	4	
Organization of the document	Information is disorganised, without headings and without photos/videos.	Information is more or less organised, with headings but without photos or videos.	Information is organised, with headings and photos.	Information is perfectly organised, with headings. Some photos or videos related to the topic are included.	
Amount of information	The Word document does not contain neither all the questions related to Intercultural Competence nor a list for each country.			The Word document contains all the questions related to Intercultural Competence and a list for each country.	
Quality of information	The answers for the questions about Intercultural Competence are not good and they are written in not accurate English.	for the questions about Intercultural	The answers for the questions about Intercultural Competence are full sentences using correct English.	for the questions about	

			English. (Correct grammar and spelling)
Delivery	The Word document is not send by email on time.		The Word document is send by email on time (on the deadline or
			before).

**Appendix 2**: Rubric Individual Work

	Bad	Fair	Good	Perfect	Mar k
	0-1	1-2	2-3.5	4	K
Comprehensi on questions	You have not handed them the first day after Easter.	You have handed them the first day after Easter, but half of the answers are not correct.	You have handed them the first day after Easter, but some questions are not correct.	You have handed them the first day after Easter and the answers are correct.	
Number of tips	You have included less than 8 tips.	You have included between 8 and 10 tips.	You have included 10 tips.	You have included more than 10 tips.	
Plagiarism	Your tips are copy and paste from the sources.			Your tips are not copy and paste from the sources.	
Topics commented in the tips. (*)	Your tips contain information only about few of these aspects.	Your tips contain information about 3 or 4 of these aspects.	Your tips contain information about 5 or 6 of these aspects.	Your tips contain information about 7 of these aspects/topic s.	

Use of	Your tips are	Your tips are	Your tips are	Your tips are	
language	not full	short	full sentences	full sentences	
	sentences and	sentences with	with fair	with correct	
	the language	fair grammar	grammar and	grammar and	
	used is not	and spelling.	spelling. The	spelling. All	
	accurate. The	Not all the	sentences are	the sentences	
	sentences are	sentences are	comprehensibl	are	
	not	comprehensibl	e. You have	comprehensib	
	comprehensib	e. You have	used "Should	le and have	
	le and do not	used "should	or should not"	sense. You	
	have sense.	or should not"	in almost all	have used	
	You have not	only in some	the tips.	"should and	
	used "should	sentences.		should not"	
	or should not"			for creating	
	for creating			the tips.	
	the tips.				