ESP STUDENTS’ VIEWS ON ONLINE LANGUAGE RESOURCES FOR L2 TEXT PRODUCTION PURPOSES

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Abstract

The use of online language resources for L2 text production purposes is a recent phenomenon and has not yet been studied in depth. Increasing availability of new online resources seems to be changing the very nature of L2 text production. The traditional dictionary, hitherto a default resource to help with language doubts, is being left behind while online resources are taking the lead. What are these resources? Do students need any specific training on how to use them? At what moment of L2 text production do students wish to resort to resources? Rather than analysing the usefulness of a specific kind of resource, this paper focuses on the students’ perceived needs. In particular, we would like to see to what extent our students are open to using language resources, if they are willing to master their use and, finally, if they use resources properly, which is with cognitive implication behind.

Key words: text production, L2, reference skills, dictionary, problem-solving, attitude

1. Introduction

Although in both L1 and L2 text production “writers rely on internal resources to generate content” (Leki et al. 2008: 133), L2 text production makes a wider use of resources beyond the writer’s memory (Skibniewski & Skibniewska 1986, Kipfer 1987, Béjoint 1989, Atkins & Varantola 1997, Asher 1999, Bishop 2000, Chenoweth & Hayes 2001, Corpas Pastor et al. 2001, Leki et al. 2008, Welker 2010, Enriquez Raído 2011). Not only do students look for ideas and references, they also require help with formulating their thoughts in a foreign language. As native speakers are rarely at hand to provide such help, one has to resort to language resources conceived to substitute these, among them dictionaries in the first place. Given the dictionary’s shortcomings as compared to a human language advisor, it has been necessary to conduct empirical research on the use of dictionaries in order to adapt them to a specific user or make them fit a specific occasion. The research hitherto focused on dictionaries has given rise to new resources: thesauri to better fit the memory structure, machine translators to provide ready-made
equivalents, web navigators to find co-texts, concordances to check usage in context. The results of this research are now to be evaluated in a new light: recent advances in technology displace some old debates while new concerns arise.

One of such concerns is that contemporary students would appear to be lost between, on the one hand, the abundance of resources available to them and, on the other hand, their vague ideas about how to use content and language resources in the university context in the way that would be academically acceptable. Driven by a desire to let students know what is right and what is wrong and at the same time trying to keep an escaping control over their learning processes teachers sanction some of their practices like plagiarism and machine translation and accept, though on sufferance, others like patchwriting and machine-assisted translation.

Students’ cognitive implication and awareness of existing norms seem to become main criteria in drawing the line between allowed and banned practices (Li & Casanave 2012). Stapleton (2010: 304) highlights the fact that “the present electronic environment used by most writers may be creating a shift in how cognitive resources are allocated”. Chon (2009: 29) states that “research on dictionary users and use does not give enough attention to the cognitive process of using dictionaries in L2 writing, regardless of dictionary type or medium”. At the moment when the cognitive dimension of person-resource interaction is emerging as a new area of research, we consider it essential to shed some light on students’ understanding of their L2 writing processes implying the use of both internal and external support (Rothe-Neves 2003). While internal support refers to the writer’s working memory and the information that can be retrieved from the long-term memory, external support offers a possibility to bridge the detected information gap in the writer’s memory by obtaining new information through decoding in a resource where it has been encoded by another person.

Up till now, the cognitive research in L2 writing seems to ignore the role of external support in resolving problems. The relevant studies refer instead to within-memory strategies like reformulation or the use of the mother tongue (Cumming 1990, Swain & Lapkin 1995, Roca de Larios et al. 2001, Murphy & Roca de Larios 2010). It is not only the case, as Stapleton (2010: 295) observes, that “the instruments (pen and paper) do not reflect typical approaches undertaken by L2 university students”. More than that, the cognitive approach alone seems to be insufficient to account for the mental processes and should be complemented by the inclusion of the
individual into the “communities of practice (CoP) learners wish to be part of” (Belcher 2013: 535).

As the text should not be considered without its context, L2 writing today should not be considered in isolation from the world of information that surrounds it. In this world, the distinction between language and content resources can be hardly made as there is a growing tendency towards more contextualized resources.

2. Lexical resources for L2 text production

According to the classification made by McArthur (1986: 158), it is possible to distinguish between “workbook option” reference sources that put an emphasis on vocabulary and its characteristics and those of “encyclopaedic option” that handle world reality. Encyclopaedia articles present coherent texts where terms are found in their natural environment. In fact, their real natural environment is authentic texts, many of which can be found readily available for consultation in the digital format. Their availability in combination with possibilities offered by search engines facilitate access to vocabulary units, which turns the Internet into a resource in its own right.

2.1. Progress made in dictionaries

Empirical research into dictionary use has hitherto been directed at dictionary users’ needs and skills with the aim of creating new types of dictionaries and improving dictionary quality (Benson 1989, Bogaards 1996, Atkins & Varantola 1997, Rundell 1999, Nesi 2000, Corpas Pastor et al. 2001, Tono 2001, Al-Ajmi 2002, Campoy Cubillo 2002, Thumb 2004, Kipfer 2007, Welker 2010). As a result, and also partly thanks to corpus technology, dictionaries have become more user-friendly, providing more authentic examples, grammar comments in the margin, and recommendations for use. Thanks to the advent of dictionaries in the digital format there are virtually no limits on dictionary size, and it is possible to switch from a bilingual to a monolingual mode with just a click.

However, our challenge today is to make students aware of their information lags and teach them how to obtain the information they require by using whatever key they are able to generate as their starting point. Whilst the lexicographer’s role is to create new and better dictionaries by satisfying users’ needs “all in one”, or by matching the specific user to the
occasion, the role of L2 teachers is to develop students’ reference skills so that they may obtain maximum benefit from resources, both dictionaries and other, often combining their use.

2.2. Other resources

The range of online resources familiar to university freshmen may vary considerably and would strongly depend on their previous experiences at high school or out of class. We could speak of many online language resources that could be useful for L2 text production purposes provided there is a specific training behind: concordances, corpora, machine-assisted translation tools, Add-Ins, to name but a few (White et al. 2008, Stapleton 2010, Sanchez Ramos 2004, Krajka 2007, Enríquez Raído 2011, Presas and Kozlova 2012a, 2012b). However, as Stapleton (2012) reports, even among L2 graduates few go beyond spell- and grammar checkers and online translators when revising their drafts. Expertise in combining multiple resources is reserved for language specialists, in particular, translators. As recent research in translator’s web search behaviour reveals, there is a similar tendency observed in young translators’ behaviour: combining “the use of a single dictionary with selected encyclopedic information and several parallel texts” (Enríquez Raído 2011: 472). As White et al. (2008: 591) found, translators “use dictionaries intensely” and that “[w]hen the dictionaries do not provide acceptable answers, [they] move beyond them to different types of resources.”

Whilst dictionaries, now online ones, continue to have their use as a main resource in L2 writing, their use is being complemented by online texts to be implemented for both language and content purposes. In fact, the recent studies in the use of “sources” in writing speak in favour of students using sources for L2 text production, which is however, strongly associated with the issue of plagiarism. Within this context, L2 writers are often accused of using sources (that is, original texts) as resources (that is, making instrumental use of them). This phenomenon, known as patchwriting, has recently received strong support within the context of L2 writing (Bloch 2012, Li and Casanave 2012), provided there is a certain degree of cognitive implication behind the instrumental use of sources.

3. Reference skills and language teaching

Multiple authors have defended the need to teach dictionary use (Kipfer 1987, Dolezal and McCreary 1999, Al-Ajmi 2002, Carduner 2003, Chi 2003, Sánchez Ramos 2004, Wingate 2004,
Béjoint 1989, Welker 2010). Kipfer (1987: 50) claims that “intermediate-level students are not having problems for which the dictionary can be held responsible: they are just not using them efficiently or fully”. Within the context of translation Varantola (1998: 188) confirms the fact that “user skills determine the ultimate success or failure of the dictionary use”. Although teachers complain about their students’ poor reference skills, few include explicit course instruction on how to use printed dictionaries (Bishop 2000a, Carduner 2003, Wingate 2004, Santos García and Saldaña Salazar 2007) or online resources (Sánchez Ramos 2004, Krajka 2007, Stapleton 2010).

3.1. Attitudes towards using resources

Already three decades ago Ard (1982) observed that although dictionary use is allowed at certain classrooms, it is rarely encouraged. Curiously enough, this situation persists today despite recent technological improvements, thereby leading to an increasing mismatch between the resources students use while writing at home and during exams (Yi 2010). Welker (2010) observes that those who possess these skills have an enormous advantage over those who do not. This advantage, often negatively viewed in a learning context, however, proves to be an important asset in the professional world.

In the academic context, the decision as to whether to use a dictionary or not is closely related to the student’s and the teacher’s attitude towards its use. In case of teachers, their attitude is often negative, which is certainly related to the fact that within L2 text production the use of a dictionary is not clearly linked to an improvement in composition quality. The possibility of using a dictionary forces L2 writers to use words and expressions slightly beyond their threshold level (Uzawa 1996), which is certainly positive in the learning context but is counterproductive when performance evaluation is being primed. It has been observed that the use of bilingual dictionaries provoked immediate errors (Ard 1982) and further problems (Chon 2009), although it was not demonstrated that the use of dictionaries was responsible for the overall increase in the number of mistakes made (Kobayashi and Rinnert 1992). It was found that using a dictionary while writing reduced fluency (Skibniewski and Skibniewska 1986). Asher (1999) concluded that, from the normative perspective, the availability of a dictionary is “counter-productive […], diminishing rather than improving pupils' performance”. For all these reasons, students were dissuaded from writing “with a dictionary at hand” (Chastain 1976: 377, Christianson 1997) and
it was suggested that “writing should precede dictionary consultation” (Béjoint and Moulin 1987).

Students, on the contrary, would appear to be aware of the benefits of using a dictionary as it helps them solve some of their lexical, if not grammatical, problems. Steiner (1989: 255) states that “if there were a law against them [bilingual dictionaries] users would create them surreptitiously and consult them secretly as a crib”. Hurman and Tall (1998) report an increase in General Certificate of Secondary Education (GCSE) exams scores when dictionary use is allowed. This is attributed to lower stress by Bishop (2000b), and to students’ greater confidence by East (2006). Asher (1999) reports that students have a more open attitude towards using dictionaries at the examinations compared with their teachers, whose attitude is predominantly negative.

3.2. Studying cognitive implication and attitudes

In our earlier papers (Presas and Kozlova 2012a, 2012b) we have already dealt with students’ strategies and attitudes in problem-solving processes as a part of L2 text production. In particular, we studied how students identified, defined and solved lexical problems, as well as what attitudes they demonstrated towards the problematic situation and the need to use external resources to solve it. In particular, we compared the lexical search strategies of translation and ESP students. One of our conclusions was that translation students showed deeper motivation and their searches often involve a series of consecutive look-ups, while ESP students tended to reformulate their text under construction when faced with a lexical problem.

In an earlier paper, Kozlova (2007) showed that the use of external resources, demonstrated by one of several student groups, led to a significant improvement in correcting mistakes previously indicated by the teacher. While those who used only internal resources were able to find acceptable solutions for 50% of the mistakes indicated by the teacher, those who used external resources were able to find acceptable solutions for 90% of these mistakes. Students’ own cognitive implication became the focus of another paper (Kozlova 2010). If resources in L2 writing are to be viewed as a means of filling in lexical knowledge gaps (Kozlova and Presas, forthcoming), it is necessary to study how students understand the relation between internal and external support and whether they are willing to take an effort of making actual use of resources and learning more about their use.
4. The study
Provided that the aim of this study is to get a deeper insight into students’ views on using external language resources for production purposes, we obtain our data from a questionnaire that was filled out by our students after a writing task, first in its “pen and paper” version and later with printed dictionaries and Internet resources available. For this reason, the questionnaire (presented in the Appendix) should not be considered in isolation but within a specific context, where external support is believed to possess a potential to improve one’s draft written with pen and paper only.

Analyzing each question and triangulating them allows us to determine possible contradictions in students’ views of their consultation processes for L2 writing purposes and make suggestions on providing instruction on reference skills.

4.1. Participants
Our data were collected from the population of first-year university students in the Degrees of Political Science and Sociology (N=42) in a Spanish public university. These students (± 20 years of age) enrolled in a compulsory course on English for Social Sciences in two successive academic years: 2009-2010 (14 subjects) and 2010-2011 (28 subjects). The relevance of our study, however, could be extended to the universe of Spanish students entering university just after high school as the data was taken on the very first day of class.

All subjects had English language level at the beginning of the course ranging from A2 to B2 of the European Common Reference Framework for Languages, according to the results of the Computer Adaptive Test taken at the UAB campus-wide Language Service.

As was later revealed during the academic year, students normally had a computer with Internet access available in their homes (if they had laptop computers, these were not used normally in class), in the university library, or in the university computer rooms. This ensured regular access to online resources both for academic and social purposes. It was also revealed that subjects possessed printed dictionaries at home, as advised by their secondary and high school English teachers. In addition, other electronic dictionaries, for example, on mobile phones, were used by some students.
4.2. Research questions

Our research questions were aimed at studying the three abovementioned aspects of using external support for L2 text production purposes: a) cognitive implication of their consultation; b) familiarity with resources and the range of resources used as reported by students; c) openness to learning more about resources and their usage. Therefore, we had formulated our research questions as follows:

- Are students aware of the need to rely on internal support?
- Are students familiar with a variety of resources?
- Are students open to learning more about resources?

4.3. Design and procedure

Data were obtained from students’ answers to the questionnaire (provided in the Appendix). The questionnaire, originally designed for didactic purposes to evaluate students’ needs in what refers to their future training in lexical resources, was based on our model of L2 text production as problem-solving using external resources (Kozlova and Presas, forthcoming) and aimed at evidencing students’ opinions concerning their use of external resources.

The responses to each question were triangulated, which enabled us to observe the inconsistencies of the informants (Gibbs 2007: 94), on one hand, and find certain tendencies in their behaviour, on the other hand. Finally, through multivariant analysis, we obtained common patterns of students’ strategies and attitudes towards resources, following the idea of “internal generalizability” (Maxwell 2005: 115). These patterns help us to detect the possible directions in which to develop reference skills training.

4.4. Results and findings

Descriptive statistics were used to summarize data obtained from the answers to each question in the questionnaire. Relative frequencies for each category were computed and represented graphically. Bivariate analysis was carried out to analyse the relationship between answers to the questions in the questionnaire. Proportions were tested using a Chi-Square Test for homogeneity if application conditions were satisfied; alternatively a Fisher’s Exact Test or LR Test was used. The confidence level was set to 0.95.
In relation to our first research question, “Are students aware of the need to rely on internal support?” we compared the students’ answers to Q5 “What comes first: thinking or consulting resources?” and Q2 “Do you think having access to resources before starting your writing would improve it even further?” of the questionnaire.

The data obtained from responses to Q5 indicated that students are generally aware of sequencing in relation to the use of internal and external support. In particular, almost all stated that thinking (using internal resources) comes before consulting resources (using external resources) (97.6% of answers to Q5). At the same time, the data obtained from responses to Q2 indicated that the majority of our students (79% vs. 21%) think that having access to resources before starting to write would improve the quality of their compositions.

In relation to our second research question, “Are our students familiar with a variety of resources?” we analysed subjects’ answers to Questions 8 and 9:

Q8: Which do you think is better: knowing many resources superficially or knowing only some of them well?
Q9: What are your favourite resources?

The data collected from answers to Q8 showed that the majority of students declared their preference for knowing some resources well (78.95%) rather than many superficially (21.05%). Answers to Q9 provided heterogeneous data that were treated in two ways. First, a frequency analysis of items in the corpus of subjects’ answers to this question was carried out, which allowed us to detect the most frequently mentioned resources: Internet (28 occurrences), dictionary (27 occurrences), reference to translating tools (10 occurrences), Google (8 occurrences). The answers were then classified according to two criteria: variety (more than one resource mentioned) and specificity (at least one specific resource mentioned, for example, wordreference.com). Most subjects (57.15%) mentioned more than one resource as opposed to 42.85% of subjects who mentioned a single resource. Only 38.10% of subjects made specific reference to at least one of their favourite resource. When combining the two criteria, the most frequent pattern (38.10%) was one of subjects who cited more than one resource as their favourite but their reference was generic rather than specific.

A within-category bivariate analysis of subjects’ answers to Q8 and Q9 was conducted to study the possible relation between citing more than one resource and a preference for knowing a variety of resources. The difference between the subjects’ preference for knowing a wide variety
of resources and the number of resources cited as their favourite was not statistically significant 
(p = 0.4210). However, it may be observed that subjects who stated their preference for knowing 
many (rather than some) resources (Q8) in 75\% of cases appeared to be consistent in their 
preference for a wider variety of resources citing more than one resource as their favourite (Q9). This contrasts with a lower percentage (53.30\%) of subjects whose preference in Q8 was knowing some (rather than many) resources (Table 1).

Table 1. Contingency table of Q8 by Q9.

<table>
<thead>
<tr>
<th>Contingency table of Q8 by Q9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8</td>
</tr>
<tr>
<td>Frequency Col Pct</td>
</tr>
<tr>
<td>“many [...] superficially”</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>“some [...] well”</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Frequency Missing = 4</td>
</tr>
</tbody>
</table>

In relation to our third research question, “Are our students open to learning more about 
resources?” we analysed subjects’ answers to Questions 11 and 12.

Q11: Do you think you need to know them [your favourite resources] better?
Q12: Do you think you need to know other resources?

Data obtained from the answers to these two questions showed that subjects, overall, 
demonstrated a positive attitude towards learning more, on the one hand, about already familiar 
resources (73.81\%) and, on the other, about new resources (83.5\%). A within-category bivariate 
analysis compared the answers to Q11 and Q12 and found the results statistically significant (p = 0.0022), with 80\% of students who answered “yes” to Q11 also answering “yes” to Q12 (Figure 1).
Finally, a multivariate analysis of questionnaire data was conducted in order to establish possible profiles of subjects as regards their attitude towards the use of external resources. The results of this analysis have allowed us to suggest there may be two profiles of subjects corresponding to Group A and Group B (Table 2).

**Table 5.** Profiles determined via multivariate analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Modality</th>
<th>% of the modality in the group</th>
<th>% of the modality in the sample</th>
<th>% of the group in the modality</th>
<th>Weight</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 2</td>
<td>Yes</td>
<td>94.12</td>
<td>71.43</td>
<td>53.33</td>
<td>30</td>
<td>0.007</td>
</tr>
<tr>
<td>Question 7</td>
<td>No (not specified)</td>
<td>64.71</td>
<td>28.57</td>
<td>91.67</td>
<td>12</td>
<td>0.000</td>
</tr>
<tr>
<td>Question 8</td>
<td>“some [...] well”</td>
<td>94.12</td>
<td>71.43</td>
<td>53.33</td>
<td>30</td>
<td>0.007</td>
</tr>
<tr>
<td>Question 9</td>
<td>1 resource (not specific)</td>
<td>47.06</td>
<td>23.81</td>
<td>80.00</td>
<td>10</td>
<td>0.005</td>
</tr>
<tr>
<td>Question 10</td>
<td>Yes (not specified)</td>
<td>76.47</td>
<td>45.24</td>
<td>68.42</td>
<td>19</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**Figure 1.** Bivariate analysis of Q11 by Q12.
The results of multivariate analysis encouraged us to believe that Question 8 could help us explain some subjects’ negative attitude towards learning about resources expressed in responses to Questions 11 and 12. Thus, we decided to conduct bivariate analysis of data obtained from these two questions and Q8. While there was no statistically significant correlation found between Q11 and Q8 (p=1.0000), the bivariate analysis of Q12 and Q8 demonstrated statistically significant differences (p=0.0011). Of those subjects who answered Q12 negatively (they did not want to learn more about already familiar resources) 83.33% had earlier said in their answers to Q8 that it was better to know many resources superficially rather than some well (Figure 2).
However, further research is required to investigate the two profiles of our subjects.

5. Discussion

It would appear that our students already possess basic knowledge and skills necessary for consulting resources. In particular, they know a number of resources (the majority mention more than one resource), they are aware of the need to combine internal and external support, and are able to describe the sequencing of the process. Students demonstrate motivation to use external resources as it allows them to solve some of their doubts but research has shown that only skilful dictionary use improves their writing performance. To guarantee the effectiveness of such training it should be relevant to students and adjusted to their current knowledge. Therefore, research on dictionary use in writing should be placed in a cognitive perspective.

The results suggest that students were aware of the need to depend on internal resources for L2 text production. In particular, almost all our students regarded thinking (use of internal resources) as necessarily preceding consultation (use of external resources). However, the majority of our students stated their wish to have access to external resources even at the planning stage of text production, when it was virtually impossible for them to have detected problems in their encoding process. Only a few showed awareness of the fact that a dictionary is best used when text production, based exclusively on internal resources, fails, and additional information must be found in external resources. This finding once again evidences the lag between the students’ and teachers’ attitude towards using external resources. The teachers want their students to defer their consultations till the end of the text production process: Béjoint and Moulin (1987: 106) suggest that “writing should precede dictionary consultation”, Chenoweth and Hayes (2001: 96) recommend to “write it down, even if flawed, and revise it later”, Chastain (1976: 377) and Christianson (1997) try to dissuade students from writing “with a dictionary at hand” and still other researchers discourage the use of dictionaries while writing (Ard 1982, Chon 2009, Skibniewski and Skibniewska 1986, Asher 1999). The students, on the contrary, wish to have resources available during the whole production process. If we take into account that content generation is based on internal support, this probably means that students use the results of their search as provisional decisions and they help them to go on with their writing.
Certain patterns of students’ behaviour seemed to emerge in relation to their knowledge of resources and attitude towards learning more about resources. According to our data, the majority of students reported not limiting themselves to one resource. This encouraging tendency, however, was undermined by the fact that only a minority demonstrated familiarity with at least one specific resource (citing them in a specific way, like wordreference.com). The fact that subjects found in Group B as identified by multivariate analysis placed emphasis on the variety of resources both in Q8 and Q9 seems to suggest that there is an emerging awareness among students of the need to know and how to combine the use of several resources.

However, as bivariate analysis of Q12 and Q8 reflects, focusing on variety seems to make students reluctant to learn more about already familiar resources. This conclusion, however, could partially owe itself to the design of the questionnaire that presented the variety of resources and the degree of familiarity with the resource as opposing issues (see the formulation of Q8 in Appendix and bivariate analysis of Q12 and Q8 in Section 5). Fortunately, we found that the majority of students declared they were open to both learning more about already familiar resources and learning about new resources, which is encouraging to us teachers who wish our students to master their reference skills.

6. Final conclusions
While our findings are consistent with the idea that consulting external resources helps to update internal resources, it is the writer’s internal support where the decision is finally taken that makes the difference. For this reason we believe that students’ needs in what refers to dictionary training may vary depending on their current preferences, attitude and motivation in using information coming from external resources.

In order to achieve better performance results students should make their consultation process explicit: it could be helpful that students analyse task requirements distinguishing certain features in their prospective output and relate these to their existing vocabulary knowledge thus identifying their personal information needs. This procedure would help students acquire greater autonomy in combining external and internal support and help them control their own performance. In addition, it will enable teachers to determine at what stage certain students systematically fail in their problem-solving process, and, taking advantage of the reported students’ open attitude towards learning about resources, propose the corresponding training.
References


**Appendix**

Questionnaire ¹

1) Do you think having access to resources improved the quality of your composition?
2) Do you think having access to resources before starting your writing would improve it even further?
3) Do you think having more time to consult resources would improve it even further?
4) Do you think you could write a composition using resources but without thinking?
5) What comes first: thinking or consulting resources?
6) What comes after consulting resources?
7) Do you think it is possible to answer any question using resources?
8) Which do you think is better: knowing many resources superficially or knowing only some of them well?
9) What are your favourite resources?
10) Do they answer any question of yours?
11) Do you think you need to know them better?
12) Do you think you need to know other resources?
13) Describe the kind of resource you would always like to have at hand.
14) Describe the best resource you think your English teacher would approve of.

¹ The reference to L2 text production is implicit in the formulation of the questionnaire and is justified by the fact that it was responded after a composition exercise that required use of resources.