

## USING AUTHENTIC WEB-BASED MATERIALS TO TEACH DESCRIBING GRAPHS

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### **Abstract**

*With the advent of computing and the Internet, language teachers have been given a new tool that could be used in English language teaching classrooms. However, the use of technology is showing its drawbacks and the biggest one is definitely the sense of déjà vu. Students too often use the Internet to find already made solutions for their take-home-assignments and simply copy-paste them. In order to battle plagiarism (more) successfully, we decided to have our students do one of their tasks in the computer lab during class. It was believed that doing this task in the lab would also increase student motivation and encourage peer correction and cooperation. This paper will present the results of using web-based materials with first-year, second-semester students of Tourism, enrolled in the course "English in Tourism II" at the Faculty of Economics, University of Split.*

**Keywords:** authentic material, English for Specific Purposes, technology, the WWW, graph

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### **Introduction: Technology and Language Learning**

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In the 21-st century, technology is a part of our everyday life and a part of both foreign language learning and language teaching. Technology in its widest meaning has been part of the teaching / learning process for years. The teachers who followed the grammar-translation method used the blackboard, if we classify it as a form of technology. Then came the overhead projector, audio-tape, video and language laboratories, at least in some countries. Thirty years ago ELT saw the emergence of Computer Assisted Language Learning (CALL), i.e. computer-based materials. Early CALL tasks provided students with simple exercises such as match or gap fill which are still used as they provide students with instant feedback. CALL then expanded to embrace the use of the Internet and web-based tools as access to Information and Communications Technology (ICT) became more widespread. In the 1990s, a new term appeared to refer to the growing possibilities offered by the Internet and communications technology. The term is TELL, i.e. Technology Enhanced Language Learning. (Warschauer, 2000 and Dudeney, 2007)

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Although TELL is present, it is not used widely. It is, however, likely that it will be in the future for several reasons: technology is a part of everyday life of both adults, who are already learning/teaching languages and of children who are growing with it and who will either learn or teach languages, or maybe both. Technology is a part of foreign language learning materials in the form of CD-ROMs, DVDs, and web sites. It offers new possibilities for teaching and learning a language. CDs and DVDs complement the L2 classroom and are popular with teachers. The web sites, or more widely speaking the Internet, are a source of authentic materials in any language. It can be used for communication and collaboration of students and teachers in various parts of the world. Furthermore, Internet access is becoming a standard (even a constitutional right as of 2009 in Finland) and not a privilege.

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### ***Technology in the FL Classroom***

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As seen in the introduction, there is not only one technology but rather an array of technological tools that can be used to learn a foreign language. Foreign language teachers have found various ways of integrating technology into classroom instruction. Technology can help teachers “Create visual aids for teaching; Improve access to resources, such as online literature libraries; Review and comment on student work more efficiently; Integrate video clips into presentations and Broaden choices for students to demonstrate learning.” (Christy, 2005)

One of the technological tools that can help teachers is the Internet. It offers a range of services and resources such as the World Wide Web, instant messaging, Internet forums, social networking, e-mail, etc. Having discovered the Internet as a new tool, English language teachers set out to explore possible ways of using it in their classrooms. After the initial enthusiasm, it has by now showed its drawbacks. The biggest one is definitely the sense of *déjà vu* ELT and ESP teachers in Croatia get when reading students’ assignments. The Internet has definitely made it easier for students to access information, papers, articles, and the like (although the information found on-line, in our opinion, should be taken with a grain of salt). However, students more often than not use those papers, articles, etc. not as a source of information for their own papers and/or assignments or as a basis they could build on but they simply copy-paste them. Students often use their computers as digital typewriters and the Internet as a source of ready-made assignments. Teachers have to find a way to distinguish plagiarized work from the original material as well as to design tasks that would help battle plagiarism. This paper presents a possible way of doing that.

As stated previously, technology has eased the way students find information and changed the way they use them. Technology has also changed the way students learn making them more autonomous. It is believed that having students do a task in the computer lab, i.e. within a cooperative situation, would be beneficial to students’ social skills. As Johnson et al (1994) suggest individuals seek outcomes beneficial to themselves and all other group members, which means students work

together to maximize their own and each other's learning. The literature reviewed also shows that when learning is centered on cooperation and collaboration, individuals seek outcomes beneficial to themselves and all other group members. This specific learning environment can also be used to accomplish shared goals, which in this case is drawing two graphs and writing their respective descriptions. It was therefore believed that students would enjoy doing this task in the lab as it provides them with the opportunity to work with their colleagues. In this paper, it will be shown how it was done.

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### ***Our Problem***

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The students who enroll into any of the Business English courses at the Faculty of Economics, University of Split have to do a portfolio of assignments which are adapted to their field of study (Tourism, Business or Economics) and to their curricula. All of the assignments are homework assignments that students do on their own and then either hand them in at the end of the semester or upload them via moodle for their teacher to correct. The main purpose of the portfolio is encouraging students to greater autonomy and responsibility in acquiring knowledge and skills in the business foreign language. The portfolio assignments are based on the course book used in class and all the necessary guidance is given by the teacher. The typical assignments are writing business letters (formal and informal e-mails and letters, memos, cover letters), analyzing case studies and providing solution(s) to the problems presented there, and completing various tasks based on searching the Internet to e.g. find examples of company structures and then compare them, compare hotel facilities, etc). The teachers attempt to make students responsible for their own learning and to make them independent. (Marinov, Pašalić, 2008).

While reviewing and grading those portfolio assignments previous years, we were often struck by the "perfect" English our students (who are levels B2 or C1 according to the European Framework for Languages) were delivering. Although we wished they had done all the assignments themselves, it was crystal clear they, or at least most of them, copied the text(s) from the Internet. The previously explained purpose of the assignment(s) was lost. The students were not being independent learners and did not put to the actual use the language they were taught in class.

Various approaches were then used in an attempt to address this problem. One of them was to give students more assignments that they would work on at home and provide their own opinion on it, to assign simple research tasks carefully guided by a number of questions provided by the teacher, to give pair or group assignments in which students have to put various materials together and negotiate the final version for submission, and the like. The students also always received clear instructions on approaching the source material so as to adjust it to the needs set out by the assignment and to their own level of English. In such a way, they would be able to discuss their assignment in class or at the exam. Finally, they were also

asked to refrain from copying as it would have negative consequences on their final grade. All of the attempts were often fruitless, partly because students tended not to have very high expectations of their final grade (Duplančić Rogošić, 2012) and merely wanted to complete the assignment to meet the course requirements. It should also be noted that it was time-consuming for teachers to compare students' assignments to see whether they copy one from another and to surf the Internet to prove the text was copied from it.

In an attempt to put the time students spend in front of the screen to good use, we decided to try another approach and have the students do one of the assignments in a computer lab. This meant that by means of a more guided exercise, students could be taught how to take on responsibility for their own learning and become independent. Furthermore, it definitely did not mean teachers were evading responsibility but were rather taking more on. In order to use computers in a more guided way and put more emphasis on students' procedural part of the assignment, one portfolio assignment was chosen by the teachers to be done in the computer lab instead as a part of students' homework. The experiment was carried out with the first-year, second-semester students of Tourism, enrolled in the course "English in Tourism II" at the Faculty of Economics, University of Split. In all, two teachers and 58 students participated, one group consisted of 24 and the other of 28 students. The teachers opted for the assignment in which the students had to make a line graph and a pie chart and then describe them. This was considered the best task for our little experiment for several reasons that can be divided into linguistic reasons and pedagogical reasons. The language reasons would be as follows:

- the material was up-to-date and available on line.
- the online material was in both English and Croatian side by side, which would help weaker students (and would enable all students to learn some new vocabulary).
- language-wise, the task was rich in vocabulary and language patterns which were positioned rather high up at students' comprehension levels but low at students' production levels, i.e. there was work to be done on transferring it from the passive to the active area of language use.
- students were rather familiar with applying the skills thus acquired as they had previous experience from other modules (in their mother tongue).

The pedagogical reasons, on the other hand, would be:

- students would use both their language and computer skills in a controlled environment. By the term 'controlled' it is meant that the teachers' presence in their respective groups prevents students from copying-pasting a pie chart and a graph and their descriptions from the Internet but they would have to draw them themselves and to write their own descriptions.
- students would be more motivated seeing their peers working on the task simultaneously and facing similar problems.
- students would work together and peer-correction and cooperation would be achieved.

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## *The Task*

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### *Preparation before work in the computer lab*

This is how this task was conducted in our classroom. The prerequisites for the successful outcome of the task are as follows:

- a computer lab with one computer per student
- a word processing program and a spreadsheet application
- a Web browser
- an Internet connection.

If there is a lack of IT facilities in some schools/universities, students can be asked to download the necessary publication at home and the rest of the task can be then done in class. Instead of uploading the task or sending it to the teacher, the students can use their or their teacher's USB flash drive to transfer it to the teacher's computer.

Before taking the students to the computer lab (that in our case had to be booked in advance), it is necessary to pre-teach students what graphs are, what they are used for, what types of graphs there are, what type of information is suitable for what type of graph, how to write a description of a graph. The teacher also needs to provide students with the necessary and helpful words and phrases, and to practice describing the graphs the teachers bring to class. All of these steps need to be taken before taking the students to the computer lab.

### *Work in the computer lab*

Each group did the task with its respective teacher in two different computer labs. Both teachers did the task the same way and the outcomes were similar. Students worked in the lab during a 90 minute-block. The first 45 minutes were spent on choosing appropriate information and drawing the line graph and the pie chart. The remaining 45 minutes were used to describe the line graph and the pie chart. Once in a computer lab, the following assignment was given to the students:

“Follow these steps to do your last portfolio assignment.

1. Go online and go to [http://www.dzs.hr/default\\_e.htm](http://www.dzs.hr/default_e.htm)
2. First choose “Released Data“
3. Then under “Publications“ find “Statistical Yearbooks”
4. Now open the statistical yearbook for the year 2011
5. Choose any information suitable to be presented in a pie chart and line graph. Think about what kind of information is suitable to be presented using a pie chart and which are more suitable to be presented in a line graph (remember our discussion in class).
  - a. Draw a pie chart and describe it
  - b. Draw a line graph and describe it.
6. Upload the two graphs and their respective descriptions in one document.”

The students were allowed to bring and use all the material covered in lectures and practical classes, as they would have been allowed to do it at home. Before students started doing their task, all the guidelines given previously as to how to choose the appropriate information for the two types of graphs and how to draw them were repeated because it was essential that the students knew what was expected from them. The descriptions were limited to 7-8 sentences to stay within the limited time and to obtain the educational goal.

Students were expected to work on their own as there was one computer per student. However, they could ask for help from both the teacher and the peers. When put in front of a computer, the students were quite enchanted by the actual task (or maybe the PC) and they were all quite eager to start working and learning, which was not often the case during regular classes. The students had previous experience in the computer lab as they had had classes in other subjects there and did not need any guidance as to turning on the computer, going online or opening first an excel spreadsheet and then a word document. It could be concluded that the students were computer literate. However, some of them needed help in drawing the graphs, i.e. using the application. Help was provided by both the teacher and one or two students willing to help their colleagues. In addition, some students needed guidance as to what information was suitable for what type of graph and the teachers had to explain once again what type of information was suitable for pie charts and what for line graphs respectively.

The teachers circulated among students to check on their progress, provide help, guidance and support, to clarify issues or ask questions, to give hints and provide encouragement. Surprisingly, or maybe not, students were also very eager to ask for help and clarification much more than they normally were during regular classes. The teachers could also praise the strong points and correct the weak ones. When the students finished the assignment, they were asked to upload it. The teachers evaluated the work after class. The feedback was given to students via moodle as this task was done during the last two classes in the semester.

As can be seen from the presented task, the language teachers had a dual task. They provided both the language and the specific purpose background knowledge. Although it is commonly suggested that in an ESP class the students have the background knowledge of the specific field studied, it is not the case with our students who, at this level, still lack a lot of content knowledge in their area of study, i.e. tourism. Therefore, at this educational level the ESP teachers teach students not only the language but the content as well. Namely, teaching content cannot be separated from teaching vocabulary, specific terminology and the typical language patterns in any ESP course.

**Outcome**

Follow examples of four average student's tasks as they were handed in. For simplicity reasons, only the textual parts of the assignment with all the mistakes are presented.

**Table 1. Examples of four students' task**

Student #	Line graph	Pie chart
1	"Touris resorts by types of accommodation facilities. This bar chart shows tourist resorts by types of accommodation facilities from 2006 to 2010. There is a steady fall from 2006 to 2009 with only a slight increase in 2010."	"Beds by types of tourist resorts. The pie chart shows the percentage of beds by types of tourist resorts in 2010. The highest percentage went to seaside resorts. Zagreb, mountain resorts, bathing resorts and other tourist resorts accounted for 1 percent each. Additional 4 percent went to non-tourist resorts."
2	<b>THE NUMBER OF NIGHTS TOURISTS FROM BRAZIL.</b> This graph shows us the fluctuation in the number of nights tourists from Brazil. On the Y-axis in this graph are number of nights in hundreds. On the X-axis are years. Line graph describe change. So, in this case we can see that the number of nights tourists from Brazil increased from 2006. to 2010. The number of nights tourists from Brazil in 2006. were lass then 100, and in 2010. were 460. So there was increase of about 400. "	<b>"TOURISTS NIGHTS, BY TYPES OF ACCOMMODATION FACILITIES.</b> This pie chart tells us about tourist nights by types of accommodation facilities in Croatia. The total number of nights is 3217 divided into 12 categories. The biggest t percentage were tourist resorts with 60 %. Overnight accommodation made up about 11 % of total expenditure. At the bottom end are camping sites, smalle camps and spas with less then 1 % . In conclusion this pie chart shows us that over half of tourists spend their nights in tourists resorts."
3	"In this line graps we can see that tourist arrivals in seaside resorts grow rapidly in the first quarter, in 2006. There has been a slight increase in arrivals in 2007. Arrivals have reached a peak in 2008. and then gradually decline in 2009. Since then, it has fallen steadily."	"This pie chart show us tourist arrivals in 2006. The biggest segment were seaside resorts. They cover 90% of this pie and it show us that most tourists selected seaside resorts in 2006. Zagreb was the second most highest visited, then mountain resorts with only 3%. Other resorts is visited only 2% tourist and bathing resorts just 1% tourists."
4	"This graph shows the number of rooms by types of tourist resorts from 2006 to 2010. The numbers grew steadily from 310,716 in 2006 to 333,237 in 2009 when it reached its peak. After	"The pie chart shows tourist arrivals by types of tourist resorts in 2007. It is divided into six categories. The biggest segment is seaside resorts. They made up 69% of total arrivals. Zagreb is the second highest

	<p>2009 there is a fall of 315,864 in 2010.</p> <p>This graph shows the percentage of beds by types of tourist resorts in bathing, seaside, mountain, other and non-tourist resorts.</p> <p>The biggest segment were seaside resorts with 93%. Bathing, mountain and other tourist resorts accounted for 1%. Finally, non-tourist resorts accounted for 4%. However, seaside resorts are the major area.</p> <p>The graph shows the fluctuations in number of domestic tourist arrivals in spas over 4 years.</p> <p>There was a sharp increase between 2006. and 2007., when the number of tourists arrivals increased by 6 000. In 2008 the number of arrivals start climbing steadily and reach it's peak of 21 000 arrivals. After 2008 tourist arrivals suffered a sharp drop and continued to decrease slightly in 2010.</p> <p>Overall, the graph shows that domestic tourist arrival was the biggest in 2008 and the lowest in 2006.</p>	<p>destination with 10%. Other resort accounted for 175 000 arrivals, or about 9% of total. Bathing resorts and other types of tourist resort took 5% of total arrivals. At the bottom end is mountain resorts with only 41 000 tourist arrival, or about 2% of total.</p> <p>This chart shows us that the seaside resorts are still the most popular type of resorts in Croatia.“</p>
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### *Comments on the work in the lab and the outcome*

As can be seen from the examples in Table 1, the students did not write their descriptions without mistakes. Some of the mistakes, i.e. the spelling ones and extra or no spaces between words, could have been avoided if they had used the spell-checker. Other mistakes, such as structural, syntactic, and lexical ones, would have been avoided had the students exploited the example material made available to them fully and extensively. Analyzing students' output, however, it was noticed that certain students succeeded in exploiting it skillfully and effectively. The latter students' texts reflected the actual examples and materials studied in class while the former ones approached the task in a more improvisational manner. Although the latter copied the text structure, language patterns as well as some isolated words from the example texts provided, plagiarism was prevented because the newly acquired language was being applied to an original piece of writing. Other pieces of writing which digressed more towards improvisation and thus lacked in accuracy provided us with a good source of less successful linguistic choices that could be further analyzed. The results of this analysis could then be applied to correcting the common errors and improving the weak points in our students'

writing by designing a set of exercises or tasks aimed specifically at the problems that emerged.

The students mostly used their mother tongue when talking to their peers, but it did not mean they were not motivated and willing to work. Doing the task with peers who shared the same problems related to language use, seemed to help boost our students' self-esteem. Furthermore, stronger students helped weaker ones since students prefer asking for help from their colleagues than from their teacher. The students learned more as they were actively collaborating in their own learning process because more emphasis than usually was put on the process of making and describing graphs. The final product was not the only important aspect of the task, as it had been previously in the case of homework assignments.

In spite of the mistakes, the teachers were happy with the final outcome as the task was done by students and not simply-copy pasted from the Internet. All the tasks done by students were usually take-home projects, all the work was carried out at home. When students uploaded their results, they were often not too good at commenting on them because they were not actively doing them. The aims of this experiment were achieved: plagiarism was prevented, students collaborated on the task and learner autonomy was developed. The teachers were satisfied to see students working together to maximize their own and their colleagues' learning. The students were not only learning but were also teaching each other in a learner-centered fashion.

In conclusion, we saw that this type of task allowed not only individual students' work and individual approach to each student, but collaborative learning and peer help and correction. Technology was integrated into the foreign language learning field and cooperative strategies were adopted in order to make the learning process more active and successful. Although previous research had shown that individual and collaborative learning were suitable for different types of exercises and tasks (Čudina-Obradović and Težak, 1995) we did not see them as being mutually exclusive.

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### ***Conclusion***

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Technology has become an inseparable part of most peoples' lives in the twenty-first century and many disciplines are putting it to good use including second language learning and teaching. Technically savvy language teachers have been using technology for years, while some still shy away from it. The new generations of students are growing up with the new technologies which should be used in teaching so as to ease the learning and make it more interesting. In this article we have shown how technology can be employed in language teaching and learning having multiple goals in mind: tackling a particular ESP problem; motivating students by adding variety to their English language classroom, combining content learning with language learning, focusing as much on communicating the idea as

on the form, i.e. the accuracy of language used, offering individual approach to task but still in a safe, guided, classroom environment with the aim to contribute to developing the language learning autonomy, to creating such a learning environment where students help each other with their tasks. It was a means to an end and a supplement to traditional classroom instruction.

It is up to the teachers to consider what types of activities are best suited for their students and their syllabi. Technology in our case did not replace the traditional teaching but complemented it. We rather used technology in an attempt to create a better learning environment for students. It also shows how this environment can change for the better when integrated in the syllabi. To conclude, this task provides an example of a learner-centered classroom where students felt, hopefully, more self-confident and were fully integrated into the foreign language learning process. Furthermore, students and the teacher collaborated in a new and fruitful way and used technology to their mutual benefit.

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### *References and bibliography*

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- Blake, R. J.** 2008. *Brave New Digital Classroom Technology and Foreign Language Learning*, Washington D.C.: Georgetown University Press
- Christy, J.** 2005. *Integrating Technology into the Language Arts Classroom*. New York: Glencoe/McGraw-Hill. Accessed July 16<sup>th</sup> 2012  
[http://www.glencoe.com/sec/teachingtoday/subject/int\\_tech\\_lit\\_la.phtml](http://www.glencoe.com/sec/teachingtoday/subject/int_tech_lit_la.phtml)
- Čudina – Obradović, M. and D. Težak.** 1995. *Mirotvorni razred*. Zagreb: Znamen
- Dudney G. and N. Hockly.** 2007. *How to teach English with technology*, Harrowgate: Pearson Education Limited
- Duplančić Rogošić, G.** 2012. *English, Business, or both? ELTA Newsletter*. May 2012
- Hooper, S. and L. P. Rieber.** 1995. 'Teaching with technology', in A. C. Ornstein (Ed.), *Teaching: Theory into practice*, Needham Heights, MA: Allyn and Bacon: 154-170
- Johnson, D., R. Johnson and E. Holubec.** 1994. *Cooperative Learning in the Classroom*. Alexandria: Association for Supervision and Curriculum Development
- Jolliffe, W.** 2007. *Cooperative Learning in the Classroom: Putting it into Practice*. London: Paul Chapman Publishing
- Marinov S. and M. Pašalić.** 2008. *Stav studenata prema izradi studentske mape za kolegij Poslovni engleski jezik, Strani jezici: časopis za unapređenje nastave stranih jezika (ur. Jelena Mihaljević Djigunović, 37 (2): 159-168*
- Narančić Kovač, S. and I. Cindrić.** 2007. "Engleske jezične potrebe hrvatskih studenata", in *Metodika*: 8 (14): 51-67
- Tsui, L.** 2008. "Cultivating Critical Thinking: Insights From an Elite Liberal Arts College" in *Journal of General Education*, 56 (3/4): 200-227

**Warschauer, M.** and **C. Meskill.** 2000. 'Technology and Second Language Teaching and Learning', in **J. Rosenthal** (ed.). 2009. *Handbook of Undergraduate Second Language Education*. Mahwah, NJ: Lawrence Erlbaum

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