TECHNOLOGY FOR ENGLISH FOR SPECIFIC PURPOSES:
CREATING DATABASES

I. Bocianu

University of Bucharest (ROMANIA)

Abstract

The present paper aims at analysing, after a semester of use, the major impact of technology for English classes that approach specialized terminology in higher education. English for Specific Purposes is a well-established practice for faculties other than foreign languages and, therefore, specialized language has to be assimilated. As the higher education system uses technology in its different forms - tools for teaching purposes such as overhead projectors, audio and video support, platforms for data storage or applications that facilitate constant communication between the instructors and the students such as Facebook and WhatsApp - it is common to make use as much as possible of the available free online applications, such as Google, other than the Google Suite for Education - which can easily be converted into a teaching tool. Under these circumstances, I have imagined the Google spreadsheet as a database for specialized language terminology with students from the University of Bucharest. The reason for choosing this software is the fact that it is free, easy to use and students can access it from their mobile devices and work on it even in the offline mode. Although the spreadsheet was initially designed for statistics and bookkeeping activities, I have found that its simple interface makes it easily convertible to teaching purposes as it facilitates the gathering of specific terminology in one place, easy to access at any time from any device connected or not to the internet, has an invitation-based access policy and 25 people can simultaneously work in real-time within the application. In order to evaluate the software usefulness from the students' perspective, I have initiated a focus group discussion regarding its effectiveness for the learning process and the possibilities for its improvement. The results confirmed the main assumption regarding its efficiency although a series of drawbacks are worth mentioning such as the limited number of real-time participants for the session. Nevertheless, after a 3-month lag time between its implementation and the examination date, the learning process has become easier for the students.

Keywords: Spreadsheets, ESP, databases, language teaching, language learning.

1 ESP FOR HIGHER EDUCATION

Technology has quite a long history of use in the education process dating back to times when computers were considered to be a “tutor” to their transition to “tool” [1] and to CALL (Computer Assisted Language Learning) for general English teaching and Languages for Specific Purposes, including ESP [2]. Nevertheless, due to their special nature, ESP and LSP involve a different approach to teaching and learning foreign languages in very precise academic contexts. In this respect, E. Arno Marcia defines LSP as a “multidisciplinary activity involving collaboration, engagement with disciplinary knowledge, innovation and flexibility, and interaction in authentic situations with realistic materials.” [3]. In the same time, inspired by Steven (1988), in 1998 Dudley-Evans and St. John establish the characteristics by dividing them into absolute and variable. According to them, the variable characteristics share the following features: a) designed for specific disciplines; b) there is a different methodology then general English; c) addresses third level adult and advanced students or is used in professional work situations [4]. Indeed, up to one point, ESP has to comply with the subjects being taught at non filologic faculties. Consequently, teaching English can be quite challenging as it involves not only teaching English grammar, lexicology, specific terminology but also attempts at recreating real-life situations deriving from the core subjects taught, so that students apprehend English for their specialised field in a more facile and applicable manner preparing them for the global work force market. Integrating technology in the ESP class is already a classic. Nevertheless, the computer-mediated ESP classes have moved on from the well-established video-sharing site such as YouTube to social networking such as Facebook, WhatsApp and alike to lay the grounds to latest teaching means. The need for gathering specialised and personalised vocabulary in an interactive manner to involve both the instructor and the students have determined me as an instructor at the Modern Languages Department of the University of Bucharest to implement for a semester the
2 SPREADSHEETS FOR TERMINOLOGY DATABASES

The need to facilitate students’ access to information discussed during the seminar as well as their need to access this information in an instant and have it all gathered in one place was the decisive factor for me to elect the Google spreadsheets application. But before moving to a depth analysis of the application use, I have to enumerate a few reasons for choosing this type of application versus the others available from other ICT (Information and Communication Technology) providers.

First of all, the option for the Google applications is derived from the advantages they provide by comparison to the Microsoft Office application – Excel. One major factor is the fact that the application is free of charge and is part of the Google suite package of applications. At the same time, it can be easily accessed from any portable device as it is an internet-based application. Consequently, the editing option provided by the app is done on the internet servers and not by the mobile web. As of 2014, the application has become available for mobile use on Android and iOS systems. At the same time, the interface has become easier to use with a “simpler, more uniform interface” which simplifies users’ management of the app. All this while, the Microsoft Office Excel has updated to a more dynamic interface, cloud storage option – following Google – and the share option. Nevertheless, it lacks a crucial feature that I found essential when using the Google app: the mobile interface. The application proves very useful for database use due to its configuration. Although designed for bookkeeping purposes, it has proven quite useful as a simple tool for creating language data bases in various fields fulfilling the role of a micro online vocabulary and beyond.

Regarding regular databases, which, outside the world of professional info technology refer to any collection of related data, necessitate the use of DMS (Data Management System). So, the preference for a much simplified mobile-facilitated application is quite obvious. At the same time, only few applications designed for the computer version are relevant for the purpose of the ESP vocabulary builder and these are complemented by the mobile features that prove very useful in an age of speed and instant need to access information.

The Google spreadsheet is a free internet-based application that can be easily downloaded and installed on any mobile device. It has a quite limited range of fonts and colours available to distinguish between the rows. The rows are numbered from 1 to 1,000 while the columns are ordered in an alphabetical order from A to Z. Access to the database is initiated by an instructor and is invitation-based. The invitation is done provided all users own a Google account e-mail address although Yahoo account owners can also access it the time elapsed between sending and receiving the notification is prolonged. Nevertheless, as Android systems prevail among the students, the vast majority own Gmail accounts so this was not an issue. Further on, the interface benefits by a simplified version of a chat-like option where inquiries and other type of information can be disseminated. At the same time, the invitation can be sent by the students themselves not only by the instructor which can be a time-saving activity. There is a limited range of fonts to choose from, there are also the basic options for text alignment and the add and delete rows and columns. Some important features include the possibility to integrate a link to the materials used during the seminar and to convert the database into a PDF document and send it.

What is also relevant to a certain extent is the fact that the mobile version of the application uses few of the functions that allow the use of mathematic formulae useful for changes desired such as: upper to lower cases and the other way around or alphabetical order of the words composing the database. Nevertheless, the preference for the present state of the jumbled ordering of the words is due to the need to have the bulk of the information first as it is encountered in the exercises discussed at the seminar with a later purpose of turning the database into a dictionary-like online entries so that information can be accessed in the chronological order as discussed during the seminars. Also, the database is intended to be stretched and turned into an interactive tool so that improvement to its content can be done at any time as students accumulate knowledge and desire to extend the terminology as much as they can – which is another major advantage offered by the application. This leads to the next important issue in relation to mobile technology used as a teaching tool.

When using mobile applications to teach something, this is what they actually are – tools for teaching. What mobile technology is actually missing is the possibility to make the application interactive and enable learners to produce content related to the subject learned. Students are usually tested by pre-
definite testing programs provided by these technologies but are not able to contribute anything to the content itself [9]. It is precisely for this reason that I have personally chosen to develop the classic spreadsheets into mobile tools as the ability to work together with the students in the application itself and the students to contribute with content for the development of their vocabulary and metacognitive abilities of associating already known notions to new content and thus develop an analytical mind. Down below the screenshot of the application is provided with a capture of the Sheet 1 with two columns providing the translation of the words from English into Romanian.

As seen in Figure 1, the system interface is quite simple and very efficient and effective as its basic functions provide the perfect grounds for mobile apps with the purpose of teaching and learning, interactivity online being a great feature of the present app.

3 WORKING WITH SPREADSHEETS FOR ESP

As already mentioned, the spreadsheet used as a database is quite useful for specialized languages. After becoming familiar with the application, I had students introduced to it. As students have all access to the Internet either via their own devices or the free WiFi within the university, it was quite easy to access during the second seminar of the first semester. After the application was presented to them, their e-mail addresses have been collected and invitations were shared. After discussing the seminar text, the new terminology and the unknown words, the vocabulary builder database was used for introducing the new terminology. For this, few of the students who were logged on the application were asked to introduce the new words in the rows. The simultaneous users are easy to tell apart as each is highlighted with a different colour. So, the data introduction was done by several students by introducing the British terminology first in column A and the Romanian translation in column C. Also, the column F was used in order to add synonyms (separated by slashes) and antonyms (separated by crossed equal mark signs) to certain words as well as explanations to words than needed more details and clarifications.

In order to see the students’ attitude towards the application, I have conducted a small survey with the students, whose results come to highlight the importance to adjust teaching to the prevailing mobile technology nowadays. In order to do this, the previous class was taught in a classic traditional manner with the new terminology discussed during the class and written on the blackboard while students were taking down notes in their notebooks. The classic method was useful to a certain extent as writing on their won, students exercise handwriting – a skill whose extinction is foreseeable in the near future with Finland intending to implement writing on touchscreens for pupils from 1st to 3rd form and only in the 4th grade to switch to handwriting which would be a mistake in my opinion. Nevertheless, the activity has given me the opportunity to notice the evolution of the students’ rapidity and willingness to use technology in every aspect of their life, including learning. Also, in my teaching career so far (14 years) I have witnessed the speedy transition from classic to modern methods for teaching foreign languages (which are known for using technology starting from the classic VHS
cassettes) to today’s opportunity to do an entire foreign languages seminar only using the mobile technology – if desired.

**Attitudes.** In order to find the students’ attitude towards the application, we had a one-hour discussion and 5-question questionnaire regarding the efficiency of using mobile-mediated technology during the ESP class. Thus, the students provided important feedback as follows. The first question regarded the easiness to access the application. In a proportion of 90% the students have answered that it is easily accessible, downloadable and recognizable naming it as the “green app” as well as easy to use. Only 10% of the students found it more difficult to access it as they had the iPhone devices which could not support it or had a Yahoo account which can harden the access to the app. The next question addressed the range of options offered by the interface of the mobile version. 67% of the students have declared themselves satisfied with the interface while 19% answered that they were quite satisfied in spite of the lack of all options provided by the computer version and 14% have said that they find the application boring. Regarding the use of the app, 80% of the students are happy to use it as it facilitates access to information for their professional interests while the remaining 20% seemed no too much into the app as they are more traditionally-oriented regarding the means of instructions and appreciate more hand-written rather than mobile-mediated information. Regarding the efficiency of the app, 78% of the students answered that they find it very efficient to use the application as they can access it at any times on their mobile devices which makes them less dependent on the computer version of it. At the same time, 16% of the respondents have answered that the application is not as efficient as it requires them to have access to the internet at all times which is not quite possible to have real time update of the database in all locations and only 6% have answered they find it quite inefficient as it makes them feel addicted to the device. Regarding future use, a vast majority of the students have answered that they appreciate the app and will ask me to use it in the future as it facilitates they learning and practicing skills by using the devices they are fondest of. The group discussion highlighted these aspects of the problem and also mentioned the fact that the application is quite useful for the purpose of rehearsal before the final examination in English as it facilitates access to information and is easy to have access to terminology necessary for the class and the subject itself.

4 **CONCLUSIONS**

After three months of using the application, I can definitely assert that the application provided by Google is quite useful. It provides a virtual storage of essential information for ESP students as it plays the role of a micro online vocabulary containing all relevant information discussed during the ESP seminar. It is free of charge, has an easy to use interface and a micro forum to disseminate information for all students logged on. At the same time, the information can be accessed in the offline mode as the application has this option available. It facilitates communication with the students and I can easily post a link for the materials used during the seminar. Nevertheless, there are a few drawbacks worth mentioning. First of all, it takes a two-hour seminar in order to make students familiar with the application and its characteristics, have them download the app and sent an invitation to each one at a time. At the same time, the mobile app is a basic version of its computer counterpart and thus lacks lots of its features. It somehow obliges users to have Gmail accounts and takes too long to access from Yahoo mails. At the same time, in order to make sure all students have access to the information displayed on the application, I had to convert the database into a PDF document and send it to their WhatsApp groups account so there would be no barriers to vocabulary rehearsal. All in all, the application proves to be very useful in the teaching/learning process and it helps students have continuous contact with the information relevant for their examination, easy access to terminology and practice at any time on the bus, on the way to university or on the train. It also aids students develop critical thinking as they themselves negotiate, translate and think of possible explanations, synonyms, antonyms that help them build vocabulary and develop analytical skills. Also, my future intention is to extend the terminology database from English major to French and German minor by asking the LSP colleagues, together with the students, to gather the relevant translations of the terminology so that we can create an elaborate micro database in several languages to reflect the terminology studied according to the faculty profile.

**REFERENCES**


