Using Macedonian Students' Potentials in Designing ESP Materials

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Abstract
Macedonian universities included foreign languages as compulsory subjects in their curricula in the late seventies and early eighties of the last century. In the later decades, English gained predominance, and specialized ESP courses were offered at many universities. This entailed designing and publishing of the first pilot ESP textbooks as English language teachers' response to the restructured curricula requirements. However, the early beginnings were marked by content-based materials and still largely teacher-centered classes.
With the ever growing demands for various ESP university courses emerging from the variety of studies offered at Macedonian universities, ESP teachers found it difficult to cope with the task they were faced up to which resulted in a gradual alienation from the traditional textbook and a continuous search for different ways of supplying ESP teaching materials. This phenomenon led teachers to tailoring their own teaching materials which best reflected the needs of a particular ESP course.
The author has long contemplated with the idea of motivating ESP students to participate in tailoring ESP materials most suitable to their field of majoring. This idea finally came to fruition with the first year Transportation telematics students at the Faculty of Technical sciences –Bitola.
Keywords: ESP, ESP textbooks, content-based materials, tailor-made ESP materials, materials design

1. ESP development in Macedonia

The development of ESP in the last decades has broadened the view of both language teaching theorists and practitioners with regard to this specified field of targeted language teaching oriented towards the students' language needs in their professional setting.
In this paper, ESP refers to teaching English for specific purposes at academic level. Hence, most of the observations concern teaching English for specific purposes to adult, university students who have already obtained certain general English language competence, but are considered beginners when it comes to learning English for specific purposes. It is also important to state that, in spite of the fact that most of the addressed issues and reached conclusions have been observed as part of the experience with teaching ESP to students at the Faculty of Technical sciences in Bitola, they may prove widely applicable to many ESP academic teaching circumstances.
As a living matter subject to permanent change, languages can neither be successfully taught nor definitely mastered in their full entirety. These linguistic peculiarities account for the fact that even native speakers fail to reach a perfect linguistic mastery that would readily respond to all and every need. This statement becomes even more real when dealing with foreign language learning.
Considering the needs and purposes of English language learners with regard to the learning process has led to several divisions of English language learning. The real need of language learners to become second language users in a specific profession or branch gave rise to the development of English for specific purposes.
According to Hutchinson and Waters (1987), the post-war exceptional international activity, as well as the Oil crisis in the 1970s, brought the English language into the focus as a medium of international communication. The emergence of ESP on the other hand was profoundly boosted by the shift of linguistic interest towards language use instead of language usage. Hutchinson and Waters (1987) emphasize that the discovery of English variants is dependent on context and hence the need arising for tailoring language instruction to meet the needs of learners in specific contexts. Learner/learning- centered courses were developed in the attempt to meet individual learners' needs regarding the ways of language learning, different strategies, skills, levels of motivation etc.
In Macedonia, ESP began to develop in the early eighties of the last century through the pioneer work of individual English language university teachers, and a few course books appeared several years later. The Faculty of Technical sciences-Bitola offered only general English language courses until 1984. But with the permanent restructuring of the curricula, ESP courses were gradually introduced in all the Faculty departments. A pressing need for a specific English language course appeared in 1996 for the Air transportation engineering department because the students' needs could not be met by the existing ESP courses and textbooks. In 2001, under the sponsorship of the USA Embassy in Skopje, university ESP teachers designed ESP workbooks in Science and Technology, Medicine, Law and Arts. These workbooks were the only of the kind, and, to my best knowledge, far beyond Macedonian borders.

1.1. The impact of ECTS upon ESP

With regard to ESP, the implementation of the ECTS at Macedonian universities has served a two-fold purpose. On the one hand, English language proficiency gained on importance as a key to the door of offered opportunity for mobility which undoubtedly increased students' motivation to take ESP courses and devotedly learn English. On the other hand, ECTS requirement for obligatory, regular class attendance as one of the prerequisites for taking the exams and obtaining points that participate in the overall student's grade, additionally motivated the students to take part in the daily EL learning class activities.

The role of the ESP teacher has also undergone certain constructive modifications positioning the teachers in the place of expert professionals whose expertise could substantially enhance the balancing between students' newly emerged needs, computer assisted language classes and ESP contemporary developments.

2. ESP teaching materials

The time of classical ESP textbooks may already belong to our past. Even in cases when ESP teachers still tend to use ready-made textbooks, they try to adapt them to the needs of the course, and instead of tailoring the course according to the textbook material, they embark upon the challenging task of doing precisely the opposite: adjusting the textbook to the needs of the course. Often, in addition to the textbooks, teachers use supplementary, content-based materials relevant to the field of study.

In other cases, teachers decide to tailor their own teaching materials to meet their students' needs and respond most appropriately to the course goals. By designing their own teaching materials teachers not only slowly abondon classical textbooks, but open up an enormous variety of possibilities in teaching ESP.

2.1 Ready-made vs. tailor-made materials

The choice between a textbook and tailor-made materials keeps reoccurring and is often subject to many discussions. Let us therefore take a brief look into the advantages and disadvantages of the textbook. Among the most prominent advantages of textbooks we can list the fact that they conform to the syllabus providing its structure central core, standardized instruction as well as numerous learning resources, language models and input. They are often visually appealing and quite efficient. In addtion, they help maintain quality and may serve as a source of initial teacher training.

On the other hand, texbook disadvantages may range from containing inauthentic language, offering an idealized world view, being expensive and all the way to reducing the teacher's role in making decisions, not reflecting students' needs and being expensive.

When and if textbook limitations are detected, or they potentially outweigh advantages, varoius remedial actions can be taken into account and applied appropriately. These would include adapting or supplementing books or giving guidance and support to teachers concerning the way textbooks can be used most appropriately.

In spite of the fact that textbooks are the first tool and choice of the teacher, tailor-made materials seem like the best option suitable for various teaching circumstances. The fact that, unlike GE textbooks, ESP textbooks can not be easily re-adapted to all teaching situations, accounts for the substantial need to design content-specific materials that could respond to the students' needs in the best possible manner. Tailor-made materials have certain distinct advantages that fully justify the attempt to produce them. They range from selecting authentic materials and suitable content, conforming entirely to the course goals and students' needs, to facilitating the teaching/learning process and increasing students' motivation.

On the other hand, class size (large groups), class level (heterogenous) and target needs (dissimilar) may be seen as factors that might shed some discouraging light upon the design and use of tailor-made materials that match student's individual needs. It should always be kept in mind, however, that the analysis of the ready-made materials and the design of their own teaching materials requires high expertise on the part of the teachers and can not be adequately performed by unexperienced teachers.

Teachers should, apparently, consider the use of a textbook whenever an (even) approximately suitable one is available. It is important that they are well trained to engage successfully in materials anaylisis and make decisions concerning the suitability of materials to the course, readily and competently.

ESP in academic settings exhibits one crucial advantage over other branches of ELT. As a matter of fact, there is one readily available resource that must never be underestimated. It is the students' technical knowledge in their professional field of study. More often than not, students will have much greater scope of knowledge in this field than the ESP teacher will.This is precisely why it is wise that this potential be used appropriately through engaging the students not only during the teaching process, but in creating the teaching materials as well. In this way, students will become active participants in the teaching process which will, in turn, undoubtedly raise their learning motivation.

2.2 Students' participation in designing ESP materials

I have focused myself for quite some time on the sustainability of the idea to engage students in ESP material design. When my Faculty offered a study program in Transportation telematics this year, I knew that I would

have to engage in conflict with my own doubts and make the most of the students' knowledge and potential if I were to make the course relevant and interesting for them.With my own knowledge on the subject being truly restricted, I was certain that the best option was to engage my students into the mutual exchange of knowledge based on both their desire to learn and my almost thirty year ESP teaching experience. Prior to this decision, I had extensively examined the availability of an appropriate textbook, but none of those on offer seemed to meet the course criteria.

An English for computer science textbook (beginners's course) has been successfully used with computer science students for several years now. It was chosen because it completely coresponded to the proposed syllabus. The textbook comprises twelve units and accounts in detail for the most significant aspects of ESP. However, the textbook did not seem suitable for Transportation telematics engineering students.

The English language course for Transportation telematics engineering students was a beginner's ESP course, lasting one semester, five classes per week. The group comprised thirty-five students and was extremely heterognous, not only with respect to their English language level, but also concerning their social, cultural and national background. All these parameters contributed towards a genuinely complex classroom situation.

2.3 Designing students-tailored ESP materials

To begin with, students were asked to find web-pages that would provide subject- related content. After some serious consideration (and negotiation), they agreed that the following web-pages could best serve their needs: http://www.etsi.org.

http://www.tandfonline.com/doi/full/10.1080/15472450802644439

These content-specific web pages presented relevant resources and contained a number of ESP aspects planned by the course syllabus. Most of the students found they could cope with the upper-intermediate level of the language used. The final decision was in favor of the suitability of these web-pages to the students' needs and the course syllabus.

2.3.1 Grammar

According to the syllabus, during the first class we had to focus on the English articles. Together, we made an attempt to recall certain facts about the English articles they were already familiar with. Then, they were divided into groups, and each group had to analyze a paragraph from the text. They had to find the articles and try to guess their function in each particular case.Then each group made a table of the found examples and the functions of the articles. Each group then copied their paragraph without the articles. Copies were afterwards exchanged, and each group had to correct the copy by inserting the articles where appropriate. Then the copies were exchanged again, and each group checked and corrected them.Then they discussed the mistakes and inferred the rules.

The next step was the use of the indefinite article in making definitions. This is an important ESP aspect which students will often have an oporunity to use. They found various concepts in the texts and then made definitions for them. (For example: One of the key applications of IT to traffic and transport analysis is the identification of the location of moving objects using the Global Positioning System (GPS). *A Global Positioning System is a system used to identify the location of moving objects.)*

2.3.2 Present tenses

The structure and use of present tenses was also analysed on the basis of previous knowledge and texts found on the web sites cited above. The procedure was similar to that for the articles, but this time students were asked to choose the most representative text (text having a lot of verbs in one of the present tenses). Once they had completed this task, they were asked to look at the structures and try to define the structural components of each tense. They then made interrogative and negative forms of the sentences and made questions afterwards.

The function and use of each tense (Present simple and Present continuous) was then discussed and students composed sentences in which they used each tense. They were amazingly creative indeed when composing exercises for practising the use of the tenses. For example, one student suggested describing a situation and asking the rest of the class to complete a sentence related to that particular situation. (For example: Situation: There is a red traffic light.There is a car. The car_____(not move) (isn't moving).

Another activity that they enjoyed was to speak of habits and then say that in a certain case the habit is not followed.(For example: John always drives along King's road. Today, he _____(take) another route. (is taking).

Similar approach was applied when revising other tenses.

2.3.3 Passive voice

Since passive voice is apparently of great prominence in technical English, it is usually thoroughly practiced in class. In the case of this particular group, we chose a paragraph with a lot of passive constructions: http://www.etsi.org/index.php/technologiesclusters/clusters/transportation.

Then we analyzed the structures and verb tenses in passive. We compared these structures to the active verbs and noted down the differences. Steps taken to obtain a passive construction were defined, and then students tried to turn the active sentences in the text into passive ones. We came to conclusions about the passive construction

itself as well as about its functions and situations when the use of passive voice was appropriate.

2.3.4 Lexical material

Besides recognizing lexical categories and the functions they can perform in a sentence, the focus of the syllabus is on word –formation processes and their potential to both enlarge and enrich English vocabulary. Students easily concluded that this is a significant aspect of English vocabulary that can help them broaden their lexical knowledge and refine their expression.

We focused on affixation and its significance in word-formation, particularly the use of prefixes and suffixes in deriving new words. First, students analyzed a chosen text to look for prefixes and try to infer their meaning. They placed the prefixes in tables and next to each of them wrote down the meanings and found examples. For e.g.

Negative and positive prefixes

Table 1. Negative and positive prefixes

	PREFIX	MEANING	EXAMPLES
NEGATIVE	un-	not, not good enough	unreal
	im-		impossible
	in-		incomplete
	il-		illegal
	ir-		irrational
	non-	not connected with	non-impact
	dis-	opposite feeling/action	disadvantage
POSITIVE	re-	do again	reorganize
	over-	too much	overheat

Table 1: Examples of some positive and negative prefixes, their meaning and use

A similar technique was used during the next class to analyze suffixes in a given text: (http://www.tandfonline.com/doi/full/10.1080/15472450802644439). Suffixes typically used to derive various word categories from a given word category (such as for example, nouns from verbs, or verbs from adjectives, etc.) accompanied by some examples were again placed in tables.

Noun forming suffixes:

From verbs:

Table 2. Noun forming suffixes from verbs

Suffix	Verb	Noun
-ication	apply	application
-ion	locate	location
-ment	develop	development
-er	receive	receiver
-ance	perform	performance

Table 2: Examples of suffixes used to form nouns from verbs

From adjectives:

Table 3. Noun forming suffixes from adjectives

Suffix	Adjective	Noun
-ity	stable	stability
-ity	available	availability
-ty	difficult	difficulty

Table 3 :Examples of suffixes used to form nouns from adjectives

Adverb forming suffixes:

From adjectives:

Table 4. Adverb forming suffixes from adjectives

Suffix	Adjective	Adverb
-ly	statistical	statistically
-ly	direct	directly

Table 4: Examples of adverbs formed from adjectives by using the suffix –ly

Divided in groups, students analyzed paragraphs in which they could find derived words.The next activity included searching for basic word forms and trying to derive a new word by using the suffix that seemed most appropriate.The newly derived word (if exsistent) was then looked up in the dictionary. The derived words were later used in sentences composed by the students. To practice affixation, they played a game in which each student suggested a word and the other students derived as many words as they could by using prefixes and suffixes.

2.3.5 Synonyms, antonyms

Availability of computers enabled access to an online thesaurus to find synonyms and antonyms of the words encountered in the text or those derived through affixation. Working in groups, students made a lsit of the synonyms and antonyms which were later exchanged and shared.The lists made up quite a large corpus of words which they had to take into account for their exam.

2.3.6 Acronyms

A number of unfamiliar acronyms present in the texts of the mentioned web-pages captured students' attention. Since the texts contained most of the explanations for these acronyms, students dilligently wrote them down against each acronym in the list of acronyms they composed. Then each group tried to guess the possible explanations of acronyms that another group had found; if their guess failed, their classmates gave them the right acronym explanation. This kind of activity seemed to have boosted both their imagination and desire to learn.

- CTI-Center for testing and interoperability
- CAM-Cooperative Awareness messages
- DENM-Decentralized Environmental Notification Messages

2.3.7 Noun phrases

Noun phrases encountered in the texts were translated into their long forms.But, where there originally appeared long forms in the text, students tried to transform them into noun phrases (for example 'of the presence of the vehicular network' would be modified into'the vehicular network presence').

2.3.8 Functions

Several ways of expressing functions were taken into consideration as they are relevant to technical English and students will often need to express them when performing their jobs. For this purpose, they first tried to find various ways in which functions are expressed in English. Once they had found as many ways of expressing functions as were available in the texts, they made a list of them. Then they transformed each found function several times, using all the possible ways.

The functions of certain technical devices mentioned in the texts were then expressed in several ways and when the lists were completed, students exchanged their papers and checked them. In this way, all of them had a chance to practice expressing the functions of numerous objects. The functions of these objects were later discussed in class with students getting an opportunity to understand how each of the chosen objects perform in given circumstances.

2.3.9 Resulting ESP materials

The aim of this approach was to produce ESP teaching materials that best suited students' needs, were content-specific and reflected the specific features of technical English used in transportation telematics.

Materials produced were to be collected, analysed and revised by the teacher and then proposed as material that needed to be studied for the exam.

By the end of the course, this material comprised content-specific texts, tables of rules and examples, various in-class composed exercises,etc. In cases when students didn't come up with an appropriate solution, the teacher was expected to have an available" plan B", which meant that the teacher needed to come to class truly well prepared. No decisions "on the spot" could have been made for the simple reason that there was no other material to rely on.

2.3.10 Testing

Students'participation in designing ESP teaching materials was later extended to preparing sample tests. Although initially it seemed as an impossible mission, students came up with some inspiring items that were later indeed included in the tests. This ceratinly decreased the usual pre-test anxiety commonly preeceding the testing period, particularly because they knew perfectly well what to expect.

3. Conclusion

The results obtained through the use of the above elaborated strategy have still not been subject to a deeper analysis and have only been superficially considered on the basis of the two mid-term and one written exam taken by the students of Transportation telematics during the January 2014 exam term. About 70% of the students passed the exam; two thirds of the successful students achieved an average result, and one third of them obtained grades above the average.

Successful students described their course experience as rewarding, motivating and pleasant. Most of them agreed that:

- the compiled materials were content-relevant
- the conducted activities corresponded to their needs
- their motivation, confidence and responsibility were increased by their active role
- the unconventional approach to grammar facilitated both learning and retention
- grammatical exercises corresponded to their level of knowledge and were therefore not difficult

- exam stress and anxiety commonly caused by the unknown were reduced, etc…

With the narrow time span between the one term ESP course and the publishing of this article, it is impossible to detect precisely the reasons for the temporary failure of the unsuccessful students, although it might be partially associated with the low level of their previously acquired EL proficiency or failure to regularly attend classes.

Another aspect of this strategy was the given opportunity for the group to work closer together and establish cooperative and trusting relations in the process. In addition, the students-teacher exchange of technical and linguistic knowledge is an opportunity for real communication and results in a unique situation: the subject taught is in the same time a medium of communication.

But, we must not oversee the other side of the coin and fail to mention the shortcomings of this approach. Mainly, they resulted from the heterogeneity of the group which accounted for students' different individual English language proficiency which, in turn, affected the outcome of some activities and occasionally impeded the class pace. Yet, the advantages by far outweigh the limitations, so much so with regard to the increase of students' enthusiasm and motivation. It goes without saying that this approach is very time consuming with regard to preparation and in-class time and requires a full and complete exploitation of teacher's professional expertise.

It is my deepest hope that further application of this approach will enable a closer, more profound analysis of its outcomes and other possible observations, answers and findings that this paper doesn't pretend to address and therefore remain open for future research.

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