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Thesis

APPLYING NEW TRENDS IN COURSE DESIGN AT THE INSTITUTO TECNOLÓGICO DE COSTA RICA

By
Ana Kennedy Russell

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Aknowledgement

To God be the glory for giving me strength and hope to carry on such a difficult task.

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INTRODUCTION

The objective of this thesis is to propose a new course design in teaching English to computer engineering students at the Instituto Tecnológico de Costa Rica, where, currently, these students are receiving General English courses. Based on the experience I have had teaching these courses, I have considered that the general English courses designed for students of computer engineering have not been founded on learners´ needs as defined by Hutchinson & Waters (1986) English for Specific Purpose, is a way of language teaching in which decisions as to content and method are based on the learner's reason for learning. To do so, I will incorporate the knowledge acquired as a student of the Masters Degree Program in English For Specific Purposes (ESP) offered at the Universidad Nacional Autonoma (UNAN) in Leon, Nicaragua.

Taking into account that the issue of teaching language is our first concern, it is worth to mention that after World War II, in 1945, English because of economic and social factors has become the accepted international language or *lingua franca* for technology and commerce. The reason why people learn a language has motivated many experts to come up with a more specific use of the language. For this reason in the late 1960s, a new generation of learners was concerned with ESP; demanding at the time, certain need to improve their level of proficiency. So during de 1970s, the English required by a 'special' group of people could be identified through the characteristics of their special area or work, as stated by Hutchinson and Waters (1987, p.8), tell me what you need English for and I will tell you the English that you need, becomes the guiding principle of ESP.

My concern is focused on the students at the Computer Engineering School. Here, students seeking a major as computer engineers have to take four English courses of three hours per week during a semester offered by the English department at the Science Language School. There are four courses in a sequence where one is a requirement for the other. The problem is that the name of the subject does not correspond to the content of the course; English for computing is designed as a general English course. The students are allowed to take a proficiency test instead of the regular course. As it was pointed out before, these students are in constant contact with English (mobility, internet, bibliography, etc.) and they need to be able to cope with an English input. They also need to handle English for the specific academic context of their professional area. They need to be familiarized not only with the specific lexicon but also with the discourse if they are to make the most of their academic preparation. We prepare students for their future careers; therefore we have to provide them the tools to continue developing themselves as professionals. Thus, there is a need for a new course design that may fit students of computer engineering needs.

Once awareness of ESP has taken place, teachers should deal with answers pertaining to numerable questions such as: How can I meet my student's needs in my teaching reality? (Hours per group, number of students or credit system among others), Should I spend time teaching General English? Or should I try to fulfil student's linguistic needs concerning their academic field?

It is relevant to mention that students need to be exposed to different methodologies which may empower their learning process.

English for specific purposes (ESP) started at the beginning of the 1960's when linguistic research was centered on English discourse as specific language, and so it continues to this day. According to Dudley-Evans and St.John, (1998, p.122), ESP has always been related with the needs analysis. Dudley-Evans and St John (1998, p.3) on the other hand, state that there is a primacy of need in ESP when designing English courses of a particular context.   Another consideration for this thesis is what Robinson (1991, p.3) states when referring to a limited time period and homogeneous classes for adults. Moreover, ESP courses should be related to or designed for specific disciplines and addressed to intermediate or advanced students.

In Latin America, ESP was developed first in Chile. Almost simultaneously, Brazil started its own project, one of the most well-known in Latin America, which still continues. Another effort to spread ESP in Latin America, because of the growing interest, is the ESP Latin American Colloquium, which has been held every two years since 1988. Other events were held in Venezuela, Colombia, Mexico or Cuba in the Caribbean countries.

It is important to mention that since students from all Latin America are in constant need of English, teachers are seeking to be updated, so they attend different congresses and conferences that meet ESP teachers. An example is the TESOL Symposium on Teaching English for Specific purposes held at the Universidad Argentina de la Empresa (Buenos Aires, Argentina) in 2007. Another example is the 10th Latin American ESP Colloquium, "ESP Research in Latin America", which was held in 2007.

In Central America, this is a relatively new field of research and teacher's training, although teaching ESP has been a reality in higher education. The Universidad Nacional Autonoma de Nicaragua (UNAN) in Leon offered a Postgraduate Course in ESP called "Actualización de contenidos y metodología de programas de inglés específico," which started in January, 2005, taught by instructors from two Spanish universities, Universidad de Valencia and Universidad Politecnica de Valencia. The course was advertised in Nicaragua and Costa Rica and students from both countries participated in it, mainly students from the UNAN-Leon and the Instituto Tecnologico de Costa Rica (ITCR or TEC). Later on, in July 2006, it became a Masters programme, including research in the field of ESP. It is also important to note that during the Second Congress of Teachers of English, title **Current Trends and Moves in English Language Teaching** to be held in León, Nicaragua, January, 2008, participants from the Masters program will present their findings and share their experiences with other professionals in the field of ESP.

This thesis is organized as follows: In the following chapter, I will offer a brief overview on the academic setting and student profile to narrow down information, some hints on the role of the university, its legislation and important data of the two schools of my concern will be presented. At the end of this chapter, I will provide a factually based profile of computer engineering students.

Next, in Chapter III, I present theoretical insights in order to support my proposal; relevant theoretical aspects underscore the importance and choice of the proposed course design. After reviewing the most important linguistic

theories and teaching methodology, I will finish the chapter with an overview of ESP and its importance for the course design.

Chapter IV, is divided into two broad areas: first, I will present the results of the needs analysis carried out for this project. In the second part, the proposal of the course design derived from this study will be fully developed.

Chapter V presents the conclusions and final recommendations from this project and, finally, starting on page 100 I will provide the bibliography that has deeply contributed to the development of this research as well as the complementary material placed in the Appendix. Such material includes Appendix A (Questionnaire), Appendix B (Graphs: Results of needs analysis), and Appendix C (Course design).

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CHAPTER II

THE CONTEXT

2. Introduction

In this chapter, I will discuss the academic setting which corresponds to the environment where this study will be held. I have divided this chapter into three main sections with the student of this major as a common core. First, I will provide some basic information of the university system in Costa Rica, next, I will move on to the university of my study, the Instituto Tecnológico de Costa Rica (ITCR or TEC) and, to end this chapter, I will present information of both schools involved in my research, the School of Language Sciences and the school of Computing Engineering.

2.1. The Costa Rican University System

Similarly to the rest of Latin American countries, Costa Rica faces the necessity to adjust its social and economic system to face the changes that take place at international level.

Costa Rica has been historically known by the importance given to education. Education system is not isolated. It influences the environment at the same time it is determined by it. It is subject to students' needs; such needs obey not only to literacy ones but also those for a predisposition for learning. The need to prepare pupils for a constant education within a humanistic context which enable them to face the demands of an arising millennium.

In Costa Rica, there is a legislation in educational matter that exited before 1949. The Political Constitution added a chapter about education in and culture based on a continuum to enlarge concepts and important guarantees. In the article 78 you will read that Pre-School and General Basic Education are compulsory which are financed by the state along with the Diversified and Superior Education in the public system.

The Superior Council of Education was created with the purpose of banning political influences in the educational system. This Council is a technical organism at constitutional level with the function of directing the State Education. This fuction was presided by the Minister of Education established in 1951 by law #1362 of October 8th. Later on September 25th of 1957 this law was supplemented by the law #2298 of November 22nd of 1958. This is the juridical base of the Educational System of Costa Rica. There are 49 articles of this law distributed in 10 chapters. This law according to students' psychobiological development includes 4 levels as follows: Pre-School Education, Primary Education, Middle (high school) education and Higher education.

For education administration purposes, the country is divided into regions according to geographic, cultural and financial criteria based on national development needs. Higher education encompasses both universities and higher education institutions (colleges and higher education institutes). State-owned universities perform under a coordination body, the National Council of Rectors (CONARE), with a juridical personality and a planning body, the Higher Education Planning Bureau.

According to the provisions set forth in article 84 of the Constitution, state-owned universities are autonomous, but private universities are regulated by Law n° 6693 (1981), creating the National Council of Private Higher University Education. Public higher education is State funded and institutions offer a vast array of academic opportunities at three different levels:

a) associated degree: graduate;

 b) degree: bachelor's degree

c) post-graduate: specialty, master's degree and doctorate.

2.2. The Instituto Tecnológico de Costa Rica

The ITCR was established in 1971. It is a public educational institution located in Cartago, Costa Rica.

The mission of this university is that of:

> Contributing to the integral development of the country, by means of the formation of human resources, research and extension; keeping the scientific-technical leadership, the academic excellence and the strict attachment to the ethical, environmental and humanists norms, from a state university perspective of quality and competitiveness at national and international level. (Instituto Tecnológico de Costa Rica, nd, para. 1)

The TEC offers both undergraduate and graduate studies in a wide range of fields, including engineering (construction, industrial production, electronics, industrial maintenance), computer science and business management. Besides the English courses, it offers other sport, cultural and humanistic courses.

2.3. The English Department

The School of Science Language, or ECL, is a Faculty that offers courses to different schools. It contributes to an integral formation of its students. Currently it is constituted by two departments: Communication and English.

The former, is entitled to offer the following courses in Spanish: Written Communication, and Oral Communication It also offers, Appreciation of

Literature, Technical Communication, Scientific Communication and Documental Research. The latter, assumes the responsibility of offering the following English courses: Basic English, and English for Computer Engineering (Levels I to IV), also English for Business Administration (Levels I to VII).

It is worthy to mention that the Faculty is also responsible for the administration of courses called "Centros de Formación Humanística," designed for all students of the university as well as the community of Cartago. With the courses of this center, the Science Language School supports the development of the mission of this state university. The objective of these courses is to contribute with a better off integral formation of students at this university; consequently, the courses are aimed to help our society with humanistic individuals. Some courses offered are The Language of Music, Costa Rica and its Culture, Techniques for Improving your Study Skills, and Meke I Tell Yuu [sic], just to mention a few.

2.4. The School of Computer Engineering

According to the Faculty of Computer Engineering, their mission is to develop information technologies required by various sectors of the country through the formation of the best human resource, research and extension to contribute to the development of the Costa Rican society.

 Its purpose consists in solving problems in the Central American and Caribbean regions through the execution of activities oriented to the generation, adaptation, incorporation and broadcasting of technological knowledge. The

school processes advanced computing and communication resources for Teaching and Research, as well as Internet access.

2.4.1. Training

The training programs in computer science are constantly motivating its professionals to be updated. They also offer courses and workshops addressed to people from other areas that need to know about computer science technologies to improve their professional performance.

Moreover, professional updating programs are provided in the following areas: Information System Management, Telematics System Management, Data Base Design and Refinement, Multimedia and Hypermedia, Educational Computer Science, Nets and Communication, Software Project Administration, and Software Engineering. There are also courses and workshops offered as well: Basic and Advanced Routers Programming, Bar Code Technology, C Language, Interfaces Design, Internet and its Services (use and administration), Object Orientation, etc. In addition, there are also organized programs to solve shortages in the market, for example: Programming technician, Modern Technologies for the Computer Science System Development, Electronics and Telecommunications Basis.

2.4.2. Agreements

The department has collaboration bonds with other Educational Institutions such as: University of Kansas, University of York, University of Oregon to mention some. Since these are English spoken universities, students from the TEC, definitely requires at least an intermediate level in General English and certain proficiency required for engineering to enable the student to perform as expected when visiting any of the mentioned universities.

2.4.3. Who are the students of Computer Engineering?

No much should be said at this point, regarding the student profile. But in order to make meaningful the present information, some characteristics of the population are listed:

a. They are first and second year students of Computer Engineering.

b. These students come from public high schools.

c. Students do not present an intermediate level of proficiency in English.

d. They need English to read books and articles assigned by professors of their major.

e. They may be exposed to an exchange program.

f. In the future, some of the students may attend training programs such as courses or workshops.

g. These students may attend programs that solve shortages in the market.

Unfortunately, many students of this school do not take advantage of those bonds with other universities. This is because of their deficiencies. As will be shown in the results of the survey applied to students for the needs analysis, many of them come from a public university which means that they are more likely to have a beginner level of proficiency. As experienced teachers we do know that an intermediate level is not easy to reach with just one or two English courses of three hours per week during a semester as the current university offer. This supports my reason for aiming at a new course design for these students.

I have in this second chapter presented the academic setting, which corresponds to the environment where this study will take place. Needless to say, that our students belong to a university, which fits within an educational system in Costa Rica. As mentioned, an important phrase derived from the mission of the TEC is to contribute to the integral development of the country from a state university perspective of quality and competitiveness at national and international level, hence the existing bonds with other institutions world wide.

But, what is the starting point of students' needs? The need of reading specialized articles and academic books makes them require handling the target language in a technical lexicon. Most of the courses they take, as it was mentioned in the training section of this chapter, require the use of English literature. Another aspect to be considered is that students are prompt to get

involved in exchange programs, especially those who are able to use English. Then, our concern as instructors is to support our students to gasp whatever is needed for their competitiveness. But, students' needs, lacks and wants can not be seen in isolation; they are linked to mental process of learning (theories), to methods and approaches.

In order to help students to achieve such competitiveness, a lot of underline work needs to be done. It important to start with theories on language learning and acquisition, explain how language works and how these theories have been substitute one for another according to different findings. Some of the theoretical background that lies behind the theories of language will be presented in the following chapter.

CHAPTER III

THEORETICAL OVERVIEW

3. Introduction

It was no until the last century that Language teaching came into its own as a profession. Along with this phenomenon, emerged the concept of "methods" of language teaching. The method concept in language teaching—the notion of a systematic set of teaching practices based on a particular theory of language and language learning—is a powerful one, and the quest for better methods was a highlighted inquiry of teachers and applied linguists throughout the 20th century. Howatts (1984, p.27) overviewed documents the history of changes of practice in language teaching throughout history, bringing the chronology up through the Direct Method in the 20th century.

This chapter briefly presents some theoretical aspects of this study. It aims to support, my pose as to why ESP should be adapted as an appropriate choice, when it comes on to teaching English to students of Computer Engineering at the TEC .

While the first part deals with Theories of Language in historical sequence, the second part of this chapter deals with ESP as an approach. It begins with the definition of the word ESP as well as other important terms. Then, I move on to the origins and development of ESP. Once I mentioned how ESP came into our teaching world, I will outline some key notions about ESP such as, characteristics of the ESP and types of ESP. I will not finish without stating various key issues selected because of their relevance to the needs of the proposed course design explained on pages 83 through 100.

3.1. Definition of Language Teaching Methodology

Methodology in language teaching has been characterized in many ways. A more or less traditional formulation suggests that methodology is that which binds theory and practice. Theory statements would include theories of what language is and how language is learned or, more specifically, theories of second language acquisition (SLA). Such theories are linked to various design features of language instruction. These design features might include stated objectives, syllabus specifications, types of activities, roles of teachers, learners, materials, and so forth. Design features are linked to actual teaching and learning practices.

3.2. Theories on Language Learning/ Language Acquisition

Krashen (1982) distinguishes between the concepts of learning and acquisition as he states that learning is a conscious process while acquisition is an unconscious one. On the other hand, Hutchinson and Waters (1987, pp. 40-43) identify some stages of theories of learning: Behaviourism, mentalism, cognitive code, and the affective factor.

According to the Educational Research and Improvement, within the conception of methodology you may find a distinction made between methods and approaches. While methods are held to be fixed teaching systems with prescribed techniques and practices, approaches represent language teaching philosophies that can be interpreted and applied in a numerable way in the classroom. This differentiation is probably most usefully seen as defining a

continuum of entities ranging from highly prescribed methods to loosely described approaches.

The period which goes from the 1950s to the 1980s was method-focused. During that time a number of detailed prescriptions for language teaching were proposed. Situational Language Teaching evolved in the United Kingdom while a parallel method, Audio-Lingualism, emerged in the United States. In the middle-methods period, a variety of methods were claimed to be successors to the then outstanding Situational Language Teaching and Audio-Lingual methods. These alternatives were promoted under such titles as Silent Way, Suggestopedia, Community Language Learning, and Total Physical Response, explained in detailed during this chapter.

In the 1980s, these methods in at the time became dull by more interactive views of language teaching, which collectively came to be known as Communicative Language Teaching (CLT). Communicative Language Teaching attached to a set of principles such as these:

a. Learners learn a language through using it to communicate.

b. Authentic and meaningful communication should be the goal of classroom activities.

c. Fluency is an important dimension of communication.

d. Communication involves the integration of different language skills.

e. Learning is a process of creative construction and involves trial and error.

However, CLT advocates avoided prescribing the set of practices through which these principles could best be realized. This clearly put CLT on the approach rather than the method end of the spectrum.

Communicative Language Teaching has shared a number of off-shoots that share the same basic set of principles, but which spell out philosophical details or envision instructional practices in somewhat diverse ways. These CLT spin-off approaches include The Natural Approach, Cooperative Language Learning, Content-Based Teaching, and Task-Based Teaching.

It is difficult to describe these various methods briefly and yet fairly. However, several up-to-date texts are available that do detail differences and similarities among the many different approaches and methods that have been proposed. Perhaps it is possible to get a sense of the range of method proposals by looking at a synoptic view of the roles defined for teachers and learners within various methods. In order to have a better view of the range of methods proposed, we will take a look at the roles defined for both teachers and learners with different methods:

TEACHING METHODS AND TEACHER & LEARNER ROLES		
Method	*Teacher Roles*	*Learner Roles*
Situational Language Teaching	Context Setter Error Corrector	Imitator Memorizer
Audio-lingualism	Language Modeler Drill Leader	Pattern Practicer Accuracy Enthusiast
Communicative Language Teaching	Needs Analyst Task Designer	Improvisor Negotiator
Total Physical Response	Commander Action Monitor	Order Taker Performer
Community Language Learning	Counselor Paraphraser	Collaborator Whole Person
The Natural Approach	Actor Props User	Guesser Immerser
Suggestopedia	Auto-hypnotist Authority Figure	Relaxer True-Believer

Figure 1(from *Digest,* 1993, p.2)

As suggested by the Educational Research and Improvement, in the above chart, some schools of methodology see the teacher as ideal language model and commander of the classroom activity (e.g., Audio-Lingual Method, Natural Approach, Suggestopedia, Total Physical Response) whereas others see the teacher as background facilitator and classroom colleague to the learners (e.g., Communicative Language Teaching).

Jordan (Cited in Hutchinson, 1988, pp.129-130) highlighted nine principles of learning:

1. Learning is development.

2. Learning is a thinking process (i.e. cognitive).

3. Learning is an active process.

4. Learning involves making decisions.

5. Learning a language is not just a matter of learning the linguistic knowledge.

6. Second language learners are already communicatively competent.

7. Learning is an emotional experience (i.e. affective).

8. Learning is not systematic.

9. Learning needs should be considered at every stage of the learning process."

Emotion is quite important here. As indicated in the above list learning principles, waiting time is crucial for motivation in the classroom. If teachers can wait up to five second for an answer when asked in the classroom, students will feel more motivated to answer (Numan, 1992).

According to Krashen (1982), Adults have two distinctive ways of developing competences in second languages. Acquisition and learning (Krashen, 1982). Acquisition comes from using language for real communication, while learning is a more cognitive process.

Acquisition	Learning
implicit, subconscious	explicit, conscious
informal situations	formal situations
uses grammatical 'feel'	uses grammatical rules
depends on attitude	depends on aptitude
stable order of acquisition	simple to complex order of learning

Figure 2   (From, Krashen & Terrell 1983, p3).

3.2.1. Grammar-Translation Method (1890s-1930s): This approach consisted mainly of exhaustive use of dictionaries, explanations of grammatical rules (in English), some sample sentences, and exercise drills to practice the new structures. Little opportunity for real second-language acquisition existed at the time.

3.2.2. Cognitive Approach (1940s-1950s):   For the first time there was an approach that introduced the four principle language skills: listening, speaking, reading, and writing. Oral communicative competence became the core.

Comprehensible auditory input became important and speaking in the target language began to occur. Learning about the language was overemphasized.

3.2.3. Audio-Lingüal Method (1950s-1960s): With the advent and popularity of audio tapes, this approach ushered in the first recordings wherein the language learner could actually hear and mimic native speakers on reel-to-reel audio tapes, often used with earphones in a language lab setting. Lessons often began with a sample dialogue to be recited and memorized. This was followed up with substitution pattern and saturation drills in which the grammatical structure previously introduced was reinforced. Repetition, substitution, transformation, and translation became an everyday task. This method was strongly influenced by B.F. Skinner's behaviorist view toward learning which favored habit-forming drill techniques. Unfortunately, most students could not transfer these dialogues into their own real-life experiences.

According to Kerper (2000) the Audio-Lingual Method (ALM) relies on the principles of habit formation. This method is based on the repetition and memorization of dialogues and set phrases. Grammar is not taught through direct instruction but through the repetition of language patterns. This method was developed as a reaction to the need of speaking skills of the Grammar-Translation method.

This method is closely tied to behaviorism, and thus made drilling, repetition, and habit-formation central elements of instruction. Proponents of ALM felt that this emphasis on repetition necessitated a corollary emphasis on accuracy,

claiming that continual repetition of errors would lead to the fixed acquisition of incorrect structures and non-standard pronunciation.

In the classroom, lessons were often organized by grammatical structure and presented through short dialogues. Often, students listened repeatedly to recordings of conversations (for example, in the language lab).

Critics of ALM asserted that this over-emphasis on repetition and accuracy ultimately did not help students achieve communicative competence in the target language. Kerper (2000) argued what Noam Chomsky stated that language is not as simple as habit structure. Normally linguistic behaviour involves innovation, formation of new sentences and patterns in accordance

3.2.4. The Direct Method (1970s): This method presented discussion in the target language as the major priority. Reference to English equivalents became discouraged. Grammar learning became inductive in nature without over explanations given the pupil. Teacher/student interaction became fuller, guessing of context or content, completing fill-ins, and doing cloze exercises were the order of the day. Accuracy in pronunciation and oral expression became vital. Examples to be followed became the main intention.

 3.2.5. The Notional Functional Syllabus (1970s): Hutchinson and Waters (1987) recall the functional view of language as a result of the Concil of Europe's effort to establish some sort of equivalence in the syllabuses for learning many languages, since notions and functions represent the social behaviour and and thinking of mankind respectively. They also

added that such sullabuses were influenced by the Threshold Level (Van Ek, 1975).

Kerper (2000) says that a notional-functional syllabus is more a way of organizing a language learning curriculum than a method or an approach to teaching. In a notional-functional syllabus, instruction is organized not in terms of grammatical structure as had often been done with the ALM, but in terms of notions and functions. In this model, a notion is a particular context in which people communicate, and a "function" is a specific purpose for a speaker in a given context. As an example, the notion or context *shopping* requires numerous language functions including asking about prices or features of a product and bargaining. Similarly, the notion *party* would require numerous functions like introductions and greetings and discussing interests and hobbies. Proponents of the notional-functional syllabus claimed that it addressed the deficiencies they found in the ALM by helping students develop their ability to effectively communicate in a variety of real-life contexts for more on second-language acquisition methods.

3.2.6. The Natural/Communicative Approach (1960s-2000s): Originally developed by Tracy Terrell and Stephen Krashen, this acquisition-focused approach sees communicative competence progressing through three stages: (a) aural comprehension, (b) early speech production, and (c) speech activities, all fostering "natural" language acquisition, much as a child would learn his/her native tongue. Following an initial silent period, comprehension should precede production in speech, as the latter should be allowed to emerge in natural stages or progressions. Lowering of the Affective Filter is of paramount importance. Only the target language is used in class now, introducing the "total immersion" concept for the very first time, with auditory input for the student becoming paramount. Errors in speech are not corrected aloud. Now enters the era of glossy textbooks, replete with cultural vignettes, glossaries, vocabulary lists, and glazed photographs.

A deliberate, conscious approach to the study of grammar is considered to have only modest value in the language learning process. Pairing off of students into small groups to practice newly acquired structures becomes the major focus. Visualization activities that often times make use of a picture file, slide presentations, word games, dialogues, contests, recreational activities, empirical utterances, and *realia* provide situations with problem-solving tasks which might include the use of charts, maps, graphs, and advertisements, all to be performed on the spot in class. Now the classroom becomes more student-centered with the teacher allowing for students to output the language more often on their own. Formal sequencing of grammatical concepts is kept to a minimum.

General premises

1. The goal is 'the ability to communicate with native speakers of the target language'

2. Comprehension precedes production – the Silent Period

3. Production emerges

4. Acquisition activities are central, though some Monitoring may be useful for some people sometimes

5. Lower the Affective Filter: they won't learn if their affective barrier is too high

6. Speech emerges in stages. (Terrell et al 1997)

7. Group work encourages speech. (Terrell et al 1997)

8. Speech emergence is characterized by grammatical errors. (Terrell et al 1997)

Techniques (all acquisition activities)

a) Affective-Humanistic activities

1. dialogues – short and useful - 'open' dialogues

2. interviews – pairwork on personal information

3. personal charts and tables

4. preference ranking – opinion polls on favourite activities etc

5. revealing information about yourself – e.g. what I had for breakfast

6. activating the imagination – e.g. give Napoleon advice about his Russian campaign

b) Problem-solving activities

1. task and series – e.g. components of an activity such as washing the car

2. charts, graphs, maps – e.g. busfares, finding the way

3. developing speech for particular occasions – e.g. What do you say if …

4. advertisements

c) Games, e.g. What is strange about … a bird swimming?'

d) Content activities, e.g. academic subject matter such as maths

 (Krashen & Terrell, 1983; Terrell et al, 1997)

Communicative competence

According to William E. Bull (1965), It is a linguistic term which refers to a learner's L2 ability. It not only refers to a learner's ability to apply and use grammatical rules, but also to form correct utterances, and know how to use these utterances appropriately. The term stresses the view of language learning implicit in the communicative approach to language teaching.

The term was coined by Dell Hymes (1966) in reaction against the perceived inadequacy of Noam Chomsky's (1965) distinction between *competence* and *performance.* Chomsky's view of *linguistic competence,* however, was not intended to inform pedagogy, but serve as part of developing a theory of the linguistic system itself, idealized as the abstract language knowledge of the

monolingual adult native speaker, and distinct from how they happen to use and experience language. Hymes, rather than Chomsky, had developed a theory of education and learning.

Canale and Swain (1980) defined communicative competence in terms of four components:

1. grammatical competence: words and rules

2. sociolinguistic competence: appropriateness

3. discourse competence: cohesion and coherence

4. strategic competence: appropriate use of communication strategies

Canale and Swain's definition has become canonical in applied linguistics.

A more recent survey of communicative competence by Bachman (1990) divides it into the broad headings of "organizational competence," which includes both grammatical and discourse (or textual) competence, and "pragmatic competence," which includes both sociolinguistic and "illocutionary" competence.

Through the influence of communicative language teaching, it has become widely accepted that communicative competence should be the goal of language education, central to good classroom practice (e.g. Savignon 1998). This is in contrast to previous views in which grammatical competence was commonly given top priority. The understanding of communicative competence has been influenced by the field of pragmatics and the philosophy of language concerning speech acts as described in large part by John Searle and J.L. Austin.

Communicative Language Teaching (CLT) is an approach to the teaching of second and foreign languages that emphasizes interaction as both the means and the ultimate goal of learning a language. It is also referred to as "communicative approach to the teaching of foreign languages" or simply the "Communicative Approach".

Historically, CLT has been seen as a response to the Audio-Lingual Method (ALM), and as an extension or development of the Notional-Functional Syllabus

3.2.6. Total Physical Response/TPR (1960s-2000s): This approach, also known as TPR, was founded by James Asher. In this method, both language and body movement are synchronized through action responses and use of the imperative (direct commands). TPR may be used in conjunction with some other methods involving *psychoneuro kinetic* techniques wherein the teacher gives a host of commands with the students then responding by "acting out" the command: "Stand up", "Go to the door", "Sit down", etc. Kinetic movement of the hands and arms is incorporated in lieu of rote memorization. Student speech is delayed until they feel comfortable enough to give other students commands too. TPR is very effective in teaching temporal states, personal pronouns, and other deep grammatical structures.

3.2.7. The Silent Way (1960s-2000s): Dr.Caleb Gattegno, originally out of Alexandria, Egypt, introduced this classroom technique wherein the teacher remains silent while pupils output the language on cue through perpetual prompting. This is the *production before meaning* school of thought and

practice. A color-coded phonics (sound) chart called a *fidel*, with both vowel and consonant clusters on it, is projected onto a screen to be used simultaneously with a pointer, thus permitting the pupil to produce orally on a continuous basis in the target language, vía a sequence of phonemes or sound units. Brightly colored Cuisenaire rods, which are also used in Mathematics, are integrated into this method (used as manipulatives) for pupils to learn spatial relationships, prepositions, colors, gender and number concepts, and to create multiple artificial settings through their physical placement. Lines or blank spaces on a chalkboard represent syllables, devoid of letters in them, for a subliminal, collective memory experience in recall for the students. Students are encouraged to self-correct their pronunciation errors through manual gesticulation on the part of the instructor. Modeling of correct pronunciation for students is discouraged. The greatest strength of this method lies in its ability to draw students out orally, while the teacher "takes a back seat". This method works most effectively with round tables being used to promote small group discussion and for ample student rotation. In general, reliance on and the use of a structured textbook or an outlined syllabus is much discouraged during the initial phases of learning. The Silent Way truly gives students a spoken facility.

3.2.8. Suggestopedia (1960s-2000s): This extremely esoteric, *avant-garde* method is subconsciously subliminal in texture. It is based on the pioneering efforts in 1967 of Bulgarian medical doctor, hypnotist, and psychology professor Georgi Lozanov and on his techniques into *superlearning*. Classes are small and intensive, with a low-stress focus. Material is presented in an especially melodic and artistic way. By activating the right "creative side" of the brain, a

much larger portion of the intellectual potential can be tapped, thus drawing out long-term memory. This innovative approach to language pedagogy maximizes the learners' natural holistic talents. Background classical or baroque chamber music, oftentimes accompanied with soft lights, pillows or cushions on the floor for relaxation, accentuate active and passive meditations, séances, yoga, breathing exercises leading into the "alpha state", songs for memorization purposes, therapy sessions and stream-of-consciousness catharsis in the target language with little reliance on English. Little emphasis on grammar is given. Such non-verbal communication as kinesics, paralanguage, environmental proxemics, and oculesics can be incorporated into the method, along with Robert Rosenthal's Pygmalia used in the classroom. Soviet Hypnopedia (sleep-learning) which was developed by such researchers as A.M. Syvadoshch in Leningrad and by L.A. Bliznitchenko in Kiev, Sophrology (a memory training system), the Tomatis Approach, Schultz-Luthe's autogenic therapy, Suggestology, and the Suzuki Method of learning music are considered to be closely related to this Bulgarian approach. This method has sprung two offshoots or derivatives which include Donald Schuster's Suggestive-Accelerative Learning and Teaching (or SALT) and Lynn Dhority's Acquisition through Creative Teaching (or ACT). Like other "modern" approaches, language is perceived *globally* (in chunks or blocks), while attention to fine tuning or to detail comes later.

3.2.9. Community Language Learning/CLL: (1960s-2000s): This creative, dynamic, and non-directive approach to language learning was first elaborated by Charles Curran. It is designed to ease the learner into gradual independence

and self-confidence in the target language. This is also known as the *Counseling-Learning method.* Curran's approach is beyond simply a methodical pedagogy, but is rather a veritable philosophy of learning which provides profound, even quasi-theological reflections on humankind! It encourages holistic learning, personal growth, and self-development. Learning a language is not viewed necessarily as an individual accomplishment, but rather as a collective experience, something to be disseminated out into the community at large at a later stage in the second-language acquisition process. Its basic premise can be found in the acronym SARD: S stands for *security* (to foster the student's self-confidence), A represents *attention* or *aggression* (the former an indication of the learner's involvement, the latter their frustration level), R equals *retention* and *reflection* (what is retained is internalized and ultimately reflected upon), and D denotes *discrimination* (the learner can now discriminate through classifying a body of material, seeing how one concept interrelates to another previously presented structure). Student "participants" are thus allowed to register abstracted grammar both peripherally and semi-consciously.

3.2.10. Corpus Linguistics

As stated by David Lee's (2007), linguistics is a relatively new method of studying languages. Corpus refers to a body. That body is one of words. The plural of corpus is corpora. Linguistics refers to the study of languages. Together Corpus Linguistics is the study of languages by way of analyzing enormous bodies of words. Only recently have computers been available that could examine bodies that held hundreds of millions of words. Today these

huge collections of words can be analyzed quickly, accurately and impartially. This is a powerful tool in the study of how languages are actually used.

The software that is used to search, categorize and display the results of this analysis is called *concordances* and they are becoming more available everyday. Concordances can be found on the Internet that is free or very reasonably priced. Some are easy to use and others require detailed instructions to perform the intricate searches and analyses that they are asked to do.

The value of Corpus Linguistics is that we can now say with certainty what words we use when we communicate. We are finding that when we write for academic purposes, the words and groups of words we actually use are different than when we write for other purposes. Those other purposes may include business, fiction writing or advertising. Even within the genre of journalism, there are different registers, such as front pages, editorials and sports reporting. Even the language of headlines within those specific registers can be unique. Language used in speech is significantly different from that used in any of the written disciplines. Speech itself can be further categorized as face-to-face conversation, telephone conversation, lectures, asking for and giving directions and even consumer purchasing. The list is as detailed as we choose to make it.

Prior to the appearance of this incredible tool we were forced to rely on our perceptions of what words we thought we used when we communicated and we are now discovering that those perceptions were inaccurate.

This ability to examine large numbers of words empirically is giving birth to another linguistic study. Through focused searches, we are discovering what can be found within all the different registers what are called *lexical bundles*, or groups of words that frequently appear in conjunction with each other. Prior to the advent of corpus linguistics these bundles of words were unknown and if they were conceived of at all, they were merely imaginary. Now their existence has been empirically verified and they are becoming powerful tools in second language acquisition.

Different corpora now exist and more are being developed. Today we can access British English, American English, Australian English and New Zealand English. Corpora are being collected from different registers and different time periods. There are corpora being compiled in languages other than English. The challenge is to collect as authentic and relevant corpora as possible. In general, the 'best' corpora are the most complete and in order to be complete, a corpus should be large. When it comes to corpora, size does matter.

As Dudley-Evans and St John (1998, pp.84-85) observe, the corpora provides the opportunity to revise a list of lexical items in general English for Academic Purpose (EAP) or English for Occupational Purpose (EOP).

Once explanation of developments in educational psychology has been clarified, as well as different learning methods, it's the moment to backup what Swales (1985) has come to realized of ESP when he stated that English for Science and Technology sets the trend in theoretical assumptions, in trends of analysing language and ways in different of teaching materials. While moving

on to the second part of this chapter it necessary to understand how ESP has come to be.

3.3. Definitions:

English for Specific Purpose

As defined by Hutchinson and Waters (1987), it is seen as an approach rather than a product, by which they mean that ESP does not involve a particular kind of language, teaching material or methodology. As for a broader definition of ESP, Hutchinson and Waters (1987, p. 19) theorize, "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning". Anthony (1997) notes that, it is not clear where ESP courses end and general English courses begin; numerous non-specialist ESL instructors use an ESP approach in that their syllabi are based on analysis of learner needs and their own personal specialist knowledge of using English for real communication.

Dudley-Evans and St John (1998,p.3) holds that ESP distinguishes between two types of characteristics: Absolute and variable.

ESP is seen by Robinson (1991) as an enterprise that includes traning, teaching, language and designing. She also consideres the primacy of needs analysis.

Dudley-Evans and St. John (1998) believe that much ESP makes use of a methodology that differes from that used in General Purpose English Teaching where methodology is defined as the interaction between the teacher and the learner.

Let us not move very far from those concepts related to ESP such as English for Academic Purposes (EAP) which is defined by Evans and John (1998) as

communication skills which are required for study purposes in formal education systems.

Hutchinson & Waters (1987) presents an outline where ESP is based on the design of courses to meet learners' needs.

Needs Analysis

As cited by Hutchinson & Waters (1987), course design involves ways of describing language, models of learning and needs analysis. And, any course should be based on an analysis of learner need. The needs analysis is the awareness of a target situation. But what do we mean by needs? And what should a need analysis tell us?

According to Hutchinson & Waters (1987) a course should be based on learners' needs, they argue that in the language–centered approach needs refer to the ability to understand and produce linguistic characteristics of the target situation. They also make a distinction between target needs and learning needs. The first refers to what the learner needs to do in the target situation and the second is about what the learner needs to do in order to learn. The target needs is about the target situation which covers the concepts of necessities, lacks and wants. The types of needs are determined by the demands of the target situation, which are called necessities. Once you identify what the learner already knows, you will be able to decide what the learner lacks.

Target proficiency needs to be match with the existing proficiency of the learner. For Hutchinson, Waters and Breen (1979), the gap between both is the

learners' gap. The learners' wants are sometimes viewed as a conflict with the perceptions of others' interests.

A questionnaire was given to students in order to identify their background and needs. The results obtained will serve as guideline to elaborate a syllabus.

Syllabus

Hutchinson & Waters (1987) define six types of syllabus. A Syllabus is a document that shows what should be learnt. In order to refer to the evaluation, they state that syllabus reflects an assumption at to the nature of language and linguistic performance. Some examples of syllabus are explained here. The organizational syllabus determines what should be the order of what is to be learnt. The materials syllabus reflects whether and how something is learnt. Finally,   the learner syllabus is referred to as an internal syllabus. Additionally, Hutchinson & Walters (1987) summarize the importance of a syllabus in terms of eight roles.

> a. It defines the constituent parts of language knowledge.
>
> b. It makes both teacher and learner's task more manageable.
>
> c. It shows some thought and planning has helped to develop the course.
>
> d. It is a statement of projected routes.
>
> e. It tells both teacher and learner not only what is to be learnt, but why it is to be learnt.
>
> f. It defines the type of text to use.
>
> g. It an attempt to reach standardisation.
>
> h. It provides a basis for testing.

The recognition of these roles will help teacher use the syllabus most appropriately.

Hutchinson & Walters (1987) also list eight criteria use to organize a syllabus in order to make unit more manageable. They name topic syllabus, structural or situational syllabus, functional or notional syllabus, skills syllabus, situational syllabus, functional or task-based syllabus, discourse or skills syllabus and skills and strategies.

Although there are many texts books on the market, I also recommend selected materials buy teachers in order to execute students' aims successfully. A better detail will be presented in the course design.

Course Design

Hutchinson & Waters (1987) summarize the application of a course design in form of syllabus, materials, methodology and assessment. The state that in order to elaborate a course design, questions which answers are basic for the process of syllabus design, material, teaching and assessment should arise. They sustain that some of those questions be find on answer with teacher's experience while other will recall on theoretical models.

A full description of the new course design is presented in chapter IV.

Although there are many texts books on the market

Among others some useful exercises applied in the new course design are matching words with pictures, complete with missing words, guess meaning from context, and reading comprehension.

Reading is included since students are expecetd to read literature with the same level of comprehension.

In conclusion, a good course design should be effective and flexible as teachers follow their own experience in teaching General English

3.4.7. The Meaning Special in ESP

One simple clarification will be made here: special language and specialized aim are two entirely different notions. It was Perren (1974) who noted that confusion arises over these two notions.

Thus, a specialized aim refers to the purpose for which learners learn a language, not to the nature of the language they learn Mountford, (1988) Consequently, the focus of the word 'special' in ESP ought to be on the purpose for which learners learn and not on the specific jargon or registers they learn.

What makes the learners' needs special is to give high importance to the language forms learners will encounter and lees importance to those they would no meet , thus Ewer & Hughes-Davies (1971) ,compared the language in Science texts with those of widely used to find out that ther widely use text books did no use compound nouns, passives, conditionals, etc. They concluded that the ESP course should include these forms.

3.3.1. The Origins and Development of ESP

Certainly, a great deal about the origins of ESP could be written. Notably, there are three reasons common to the emergence of all ESP: the demands of a Brave New World, a revolution in linguistics, and focus on the learner.

Hutchinson and Waters (1987), note two key historical periods breathed life into

Second, the Oil Crisis of the early 1970s resulted in Western money and knowledge flowing into the oil-rich countries. The language of this knowledge became English.

The general effect of all this development was to exert pressure on the language teaching profession to deliver the required goods. Whereas English had previously decided its own destiny, it now became subject to the wishes, needs and demands of people other than language teachers Hutchinson & Waters (1987).

The second key reason cited as having a tremendous impact on the emergence of ESP was a revolution in linguistics. Whereas traditional linguists set out to describe the features of language, revolutionary pioneers in linguistics began to focus on the ways in which language is used in real communication. Hutchinson and Waters (1987) point out that one significant discovery was in the ways that spoken and written English vary. In other words, given the particular context in which English is used, the variant of English will change. This idea was taken one step farther. If language in different situations varies, then tailoring language instruction to meet the needs of learners in specific contexts is also

possible. Hence, in the late 1960s and the early 1970s there were many attempts to describe English for Science and Technology (EST). Hutchinson and Waters (1987) identify Ewer and Latorre, Swales, Selinker and Trimble as a few of the prominent descriptive EST pioneers.

The final reason Hutchinson and Waters (1987) cite as having influenced the emergence of ESP has less to do with linguistics and everything to do with psychology. Rather than simply focus on the method of language delivery, more attention was given to the ways in which learners acquire language and the differences in the ways language is acquired. Learners were seen to employ different learning strategies, use different skills, enter with different learning schemata, and be motivated by different needs and interests. Therefore, focus on the learners' needs became equally paramount as the methods employed to disseminate linguistic knowledge. Designing specific courses to better meet these individual needs was a natural extension of this thinking. To this day, the catchword in ESL circles is learner-centered or learning-centered.

Let us take a look at what Dudley-Evans and St John (1998) have to say about the various trends in ESP. They argue on four headings (Register Analysis, Rhetorical and Discourse Analysis, Analysis of Study Skills, and Analysis of Learning Needs). For a quick reference to the Register Analysis Evan and John (1998) sighted Swales (1988) the assumption was that, while the grammar of scientific and technical writing is the same as in General English. A slight difference is at the grammatical and lexical level.

For the concept of Rhetoric Dudley-Evans and St John (1998) sighted Trimble (1985) to notice that this approach refers to the process a writer uses to

produce a piece of text. He recommends a writer to consider the four theoretical levels. The ides of relating language form to language use is relevant.

The analysis of skills is based according to Dudley-Evans and St John (1998) on the principle that teaching a language in itself is not enough. The growth of needs analysis identifies priority among the four well known skills.

And finally, for the analysis of learning need Dudley-Evans and St. John (1998) when they sighted Foley (1979), who provides concrete evidence for the validity of ESP.

On the other hand, Hutchinson &waters (1987) deals with five stages in ESP: Register analysis, rhetorical or discourse analysis, target situation analysis, skill and strategies and a learning – centered approach. They argued that the goal of the register analysis was to identify the grammatical and lexical characteristics that differed the different kind of English one from another. Such linguistic characteristics were then considered as their syllabus. The second stage had shifted from language at the sentence level, to that above the sentence simultaneously as ESP became engaged with the rhetorical or discourse analysis. How sentence were combined in discourse to produce meaning was its aim. In regards to the target situation analysis Hutchinson & Waters (1987) argued that there were not much added to ESP. Its aim was to establish procedures for relating language analysis to learners' reasons for learning. The skills and strategies considered the thinking processes that denote language use. This approach highlights reading and listening strategies in terms of materials. The fifth phase has marked a difference between language use and

language learning. The aim of the learning-centered approach is an understanding of the processes of language learning.

3.3.2. Key Notions about ESP

In order to consider ESP as an approach it is important to consider the implicit research denotation characteristic. It is impossible to deny the role of researcher of the ESP teacher for presenting a course design. The role of the ESP teacher is also a crucial point for Hutchinson & Waters (1987), who provide information about resources to help the teacher.

For Robinsons (1991) the key issues that we consider in relation with methodology in ESP are the bind between the methods and the students' specialism. For this thesis there were mainly two types of research methods: Questionnaires and interviews. According to Jordan (1997), both methods imply the recording of opinions and attitudes.

3.3.2.1. Characteristics of ESP

The characteristics of ESP courses identified by Carter (1983) are discussed here. He states that there are three features common to ESP courses: a) authentic material, b) purpose-related orientation, and c) self-direction.

Dudley-Evans and St.John (1998) on the other hand, claim that ESP should be offered at an intermediate or advanced level.

Purpose-related orientation refers to the simulation of communicative tasks required of the target setting. Carter (1983) cites student simulation of a conference, involving the preparation of papers, reading, note-taking, and writing. At Algonquin College, English for business courses have involved students in the design and presentation of a unique business venture, including market research, pamphlets and logo creation. The students have presented all final products to invited ESL classes during a poster presentation session. For our health science program, students attended a seminar on improving your listening skills. They practiced listening skills, such as listening with empathy, and then employed their newly acquired skills during a fieldtrip to a local community centre where they were partnered up with English-speaking residents.

Finally, self-direction is characteristic of ESP courses in that the " point of including self-direction is that ESP is concerned with turning learners into users" Carter (1983). In order for self-direction to occur, the learners must have a certain degree of freedom to decide when, what, and how they will study. Carter (1983) also adds that there must be a systematic attempt by teachers to

teach the learners how to learn by teaching them about learning strategies. Is it necessary, though, to teach high-ability learners such as those enrolled in the health science program about learning strategies? I argue that it is not. Rather, what is essential for these learners is learning how to access information in a new culture.

Later, Dudley-Evans and St John (1998) modified Strevens' original definition of ESP to form their own. The definitions presented have their validity and weakness, they argue. Let us begin with Strevens. He defined ESP by identifying its absolute and variable characteristics. Strevens' (1988) definition makes a distinction between four absolute and two variable characteristics:

I. Absolute characteristics:

ESP consists of English language teaching which is:

- a. designed to meet specified needs of the learner;
- b. related in content (i.e. in its themes and topics) to particular disciplines, occupations and activities;
- c. centred on the language appropriate to those activities in syntax, lexis, discourse, semantics, etc., and analysis of this discourse;
- d. in contrast with General English.

II. Variable characteristics:

ESP may be, but is not necessarily:

- a. restricted as to the language skills to be learned (e.g. reading only);

b. not taught according to any pre-ordained methodology (pp.1-2).

Anthony (1997) notes that there has been considerable recent debate about what ESP means despite the fact that it is an approach which has been widely used over the last three decades. on ESP, Dudley-Evans and St. Jonh (1998, pp. 4-5). offered a modified definition. The revised definition postulate is as follows:

"I. Absolute Characteristics

- ESP is defined to meet specific needs of the learner;

- ESP makes use of the underlying methodology and activities of the discipline it serves;

- ESP is centred on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities.

II. Variable Characteristics

- ESP may be related to or designed for specific disciplines;

- ESP may use, in specific teaching situations, a different methodology from that of general English;

- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;

- ESP is generally designed for intermediate or advanced students;

- Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners

Dudley-Evans and St. John (1998) have removed the absolute characteristic that 'ESP is in contrast with General English and added more variable characteristics. They assert that ESP is not necessarily related to a specific discipline. Furthermore, ESP is likely to be used with adult learners although it could be used with young adults in a secondary school setting.

3.3.2.2. Types of ESP

As definition, characteristis and key notions are clear as towards ESP, the next step is to recall on the types of ESP. Hutchinson &waters (1987) clearly defines two types of ESP: English for Academic Purpose (EAP) and   English for Occupational Purposes/ English for Vocational Purpose or Vocational English as a Second Language (EOP/EVP/VRSL).

 David Carter (1983) identifies three types of ESP:

   a. English as a restricted language

   b. English for Academic and Occupational Purposes

   c. English with specific topics.

The language used by air traffic controllers or by waiters are examples of English as a restricted language. Mackay and Mountford (1978), clearly illustrate the difference between restricted language and language with this statement:

... the language of international air-traffic control could be regarded as 'special', in the sense that the repertoire required by the controller is strictly limited and can be accurately determined situationally, as might be the linguistic needs of a dining-room waiter or air-hostess. However, such restricted repertoires are not

languages, just as a tourist phrase book is not grammar. Knowing a restricted 'language' would not allow the speaker to communicate effectively in novel situation, or in contexts outside the vocational environment (pp. 4-5).

The second type of ESP identified by Carter (1983) is English for Academic and Occupational Purposes. In the 'Tree of ELT' Hutchinson & Waters (1987), ESP is broken down into three branches: a) English for Science and Technology (EST), b) English for Business and Economics (EBE), and c) English for Social Studies (ESS). Each of these subject areas is further divided into two branches: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). An example of EOP for the EST branch is 'English for Technicians' whereas an example of EAP for the EST branch is 'English for Medical Studies'.

Hutchinson and Waters (1987) do note that there is not a clear-cut distinction between EAP and EOP: "· people can work and study simultaneously; it is also likely that in many cases the language learnt for immediate use in a study environment will be used later when the student takes up, or returns to, a job" (p. 16). Perhaps this explains Carter's rationale for categorizing EAP and EOP under the same type of ESP. It appears that Carter is implying that the end purpose of both EAP and EOP are one in the same: employment. However, despite the end purpose being identical, the means taken to achieve the end is very different indeed. I contend that EAP and EOP are different in terms of focus on Cummins' (1979) notions of cognitive academic proficiency versus basic interpersonal skills. This is examined in further detail below.

The third and final type of ESP identified by Carter (1983) is English with specific topics. Carter notes that it is only here where emphasis shifts from

purpose to topic. This type of ESP is uniquely concerned with anticipated future English needs of, for example, scientists requiring English for postgraduate reading studies, attending conferences or working in foreign institutions". Rather it is an integral component of ESP courses or programs which focus on situational language. This situational language has been determined by// based on the interpretation of results from needs analysis of authentic language used in target workplace settings.

3.3.3. Key Issues Suggested in ESP Curriculum Design

Hutchinson and Water (1987) staes that the main difference between ESP and General English is not the precence of a need but rather an awraeness of the need.

The most important difference lies in the learners and their purposes for learning English. ESP students are usually adults who already have some acquaintance with English and are learning the language in order to communicate a set of professional skills and to perform particular job-related functions. An ESP program is therefore built on an assessment of purposes and needs and the functions for which English is required.

ESP concentrates more on language in context than on teaching grammar and language structures. It covers subjects varying from accounting or computer science to tourism and business management. The ESP focal point is that English is not taught as a subject separated from the students' real world (or wishes); instead, it is integrated into a subject matter area important to the learners.

However, ESL and ESP diverge not only in the nature of the learner, but also in the aim of instruction. In fact, as a general rule, while in ESL all four language skills; listening, reading, speaking, and writing, are stressed equally, in ESP it is a needs analysis that determines which language skills are most needed by the students, and the syllabus is designed accordingly. An ESP program, might, for example, emphasize the development of reading skills in students who are preparing for graduate work in business administration; or it might promote the development of spoken skills in students who are studying English in order to become tourist guides.

As a matter of fact, ESP combines subject matter and English language teaching. Such a combination is highly motivating because students are able to apply what they learn in their English classes to their main field of study, whether it be accounting, business management, economics, computer science or tourism. Being able to use the vocabulary and structures that they learn in a meaningful context reinforces what is taught and increases their motivation.

The students' abilities in their subject-matter fields, in turn, improve their ability to acquire English. Subject-matter knowledge gives them the context they need to understand the English of the classroom. In the ESP class, students are shown how the subject-matter content is expressed in English. The teacher can make the most of the students' knowledge of the subject matter, thus helping them learn English faster.

Specific in ESP refers to the specific purposes of learning English. Students approach the study of English through a field that is already known and relevant

to them. This means that they are able to use what they learn in the ESP classroom right away in their work and studies. The ESP approach enhances the relevance of what the students are learning and enables them to use the English they know to learn even more English, since their interest in their field will motivate them to interact with speakers and texts.

ESP assesses needs and integrates motivation, subject matter and content for the teaching of relevant skills.

Materials Development Dudley Evans and St. John (1998) identify five key roles for the ESP practitioner:

     a. teacher

     b. course designer and materials provider

     c. collaborator

     d. researcher

     e. evaluator.

It is the role of ESP practitioner as course designer and materials provider that this work addresses. The premise of this paper is based on David Nunan's observations about the teacher as a curriculum developer.

> It seems fairly obvious that if teachers are to be the ones responsible for developing the curriculum, they need the time, the skills and the support to do so. Support may include curriculum models and guidelines · and may include support from individuals acting in a curriculum advisory position. The provision of such support cannot be removed and must not be seen in isolation, from the curriculum. (Nunan, 1987, p. 75).

Nunan recognized that issues of time, skills and support are key for teachers faced with the very real task of developing curricula. The intent of this thesis is to provide the ESL instructor as ESP course designer and materials provider with theoretical support.

Do ESP textbooks really exist? This is central question Johns (1990) addresses. One of the core dilemmas he presents is that "ESP teachers find themselves in a situation where they are expected to produce a course that exactly matches the needs of a group of learners, but are expected to do so with no, or very limited, preparation time" (Johns, 1990, p. 91).

In the real world, many ESL instructors/ ESP developers are not provided with ample time for needs analysis, materials research and materials development. There are many texts which claim to meet the needs of ESP courses. Johns (1990) comments that no one ESP text can live up to its name. The only difference between this resource bank and the one that is available in every educational setting -- teachers' filing cabinets -- is that this one is to include cross-indexed doable, workable content-based (amongst other) resources. If teachers are so pressed for time, will they have the time to submit and cross-index resources? Rather, I believe that there is value in all texts - some more than others. Familiarizing oneself with useful instructional materials is part of growing as a teacher, regardless of the nature of purpose for learning. Given that ESP is an approach and not a subject to be taught, curricular materials will unavoidably be pieced together, some borrowed and others designed specially. Resources will include authentic materials, ESL materials, ESP materials, and teacher-generated materials. An excellent point of departure for novice ESP

curriculum developers is with lists of ESL publishers which have been made

publicly available on-line (See Communicative Language Teaching, 1993).

CHAPTER IV

ENGLISH FOR COMPUTER ENGINEERING COURSE DESIGN

4.1. Introduction

The previous chapter was an attempt to describe theories of learning and language methodologies that may benefit the learning process. I have learnt that there is no one single answer to what is best for our students since there are different aspects and level of language some of which are manifested in my syllabus.

According to Hutchinson & Waters (1997, p.65),

> Course design is the process by which the raw data about a learning need is interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge. In practical terms this entails the use of the theoretical and empirical information available to produce a syllabus, to select, adapt or write materials in accordance with the syllabus, to develop a methodology for teaching those materials and to establish evaluation procedures by which progress towards the specified goals will be measured.

The Course design about to be presented, considers the teaching of English as a tool for the students own needs. So as to propose an appropriate design, a needs analysis have been considered in order to identify students of Computer Engineering needs. This chapter is divided into two main sections: First, the interpretation of the results of the needs analysis carried out in order to determine an appropriate course for students of computer engineering; then, in the second part, the proposed course design will be presented.

It is important to remember that need analysis is an approach used to get new ways of learning strategies in teaching English here used at the university level mainly.

4.2. Course Design

4.2.1. Preliminary Considerations

The objective of this thesis is to present an ESP based course design which I hope will serve as a model for future out coming syllabus as we move on to a new trend in teaching English at the TEC.

The ESP teacher needs to consider three important questions. 1. Who do we design the course for? 2. How are we going to assure that they receive what they need? 3. What are we going to offer? The first question refers to who needs what, for the second, the teacher will decide upon methodology and for the last he or she will refer to the content, activities and material to be used.

Before heading towards the chosen method and the target needs, it is worthy to consider the following features of context where the needs analysis has taken place:

a. Institutional policies: Escuela de Ciencias del Lenguaje is not allowed to modify aspects related to courses without consultation of university authorities.

b. Time: Numbers of courses are not enough to fulfill the students' expectations. They receive a three hour course during two semester.

c. Tutors: Lack of ESP experience.

d. Motivation of students: Their attitudes and expectations. Students showed a negative attitude toward the text book.

e. Common sense: To convince the academic staff of the need of designing and implementing an ESP course.

What can I do if I don't have the teaching hours needed? I realize I don't have enough time, therefore I have to choose between spending the time teaching General English, as current courses are stated at the TEC, or try to transmit to the students the linguistic aspects concerning their academic field along with developing alternative methodologies based mainly on self learning and monitoring. The combination of methodologies is called eclectic approach, which will be described next.

4.2.2. Eclectic Approach

I do not intend to go deeply into this topic, since a clearly presented overview can be referred to in chapter III, where communicative approach is described, and the ESP as an aproach, is considered for this purpose. Its origins are many, insofar as one teaching methodology tends to influence the next. The communicative approach could be said to be the product of educators and linguists who had grown dissatisfied with the audiolingual and grammar-translation methods of foreign language instruction. They felt that students were not learning enough realistic, whole language. They did not know how to communicate using appropriate social language, gestures, or expressions; in brief, they were at a loss to communicate in the culture of the language studied.

Interest in and development of communicative-style teaching mushroomed in the 1970s; authentic language use and classroom exchanges where students engaged in real communication with one another became quite popular.

The communicative approach has been adapted to the elementary, middle, secondary, and post-secondary levels, and the underlying philosophy has spawned different teaching methods known under a variety of names, including *notional-functional, teaching for proficiency, proficiency-based instruction, and communicative language teaching.*

Communicative language teaching makes use of real-life situations based on communication. The teacher sets up a situation that students are likely to encounter in real life. Unlike the audiolingual method of language teaching, which relies on repetition and drills, the communicative approach can leave students in suspense as to the outcome of a class exercise, which will vary according to their reactions and responses. The real-life simulations change from day to day. Students' motivation to learn comes from their desire to communicate in meaningful ways about meaningful topics.

This is why many experts has agred that language is interaction; it is interpersonal activity and has a clear relationship with society. In this spectrum, language study has to look at the use (function) of language in context, both its linguistic context (what is uttered before and after a given piece of discourse) and its social, or situational, context (who is speaking, what their social roles are, why they have come together to speak). Communication in meaningful ways also depeds on meaninful exercises for the learner to develop in class.

What are some examples of communicative exercises?

In a communicative classroom for beginners, the teacher might begin by passing out cards, each with a different name printed on it. The teacher then proceeds to model an exchange of introductions in the target language: *"Guten Tag. Wie heissen Sie?"* Reply: *"Ich heisse Wolfie,"* for example. Using a combination of the target language and gestures, the teacher conveys the task at hand, and gets the students to introduce themselves and ask their classmates for information. They are responding in German to a question in German. They do not know the answers beforehand, as they are each holding cards with their new identities written on them; hence, there is an authentic exchange of information.

Later during the class, as a reinforcement listening exercise, the students might hear a recorded exchange between two German freshmen meeting each other for the first time at the Gymnasium doors. Then the teacher might explain, in English, the differences among German greetings in various social situations. Finally, the teacher will explain some of the grammar points and structures used.

The following exercise is taken from a 1987 workshop on communicative foreign language teaching, given for Delaware language teachers by Karen Willetts and Lynn Thompson of the Center for Applied Linguistics. The exercise, called "Eavesdropping," is aimed at advanced students.

Instructions to students: Listen to a conversation somewhere in a public place and be prepared to answer, in the target language, some general questions about what was said.

1. Who was talking?

2. About how old were they?

3. Where were they when you eavesdropped?

4. What were they talking about?

5. What did they say?

6. Did they become aware that you were listening to them?

The exercise puts students in a real-world listening situation where they must report information overheard. Most likely they have an opinion of the topic, and a class discussion could follow, in the target language, about their experiences and viewpoints.

Communicative exercises such as this motivate the students by treating topics of their choice, at an appropriately challenging level.

Another exercise taken from the same source is for beginning students of Spanish. In "Listening for the Gist," students are placed in an everyday situation where they must listen to an authentic text.

Objective: Students listen to a passage to get general understanding of the topic or message.

Directions: Have students listen to the following announcement to decide what the speaker is promoting.

Passage: *Situacion ideal . . . Servicio de transporte al Aeropuerto Internacional . . . Cuarenta y dos habitaciones de lujo, con aire acondicionado . . . Elegante restaurante . . . de fama internacional.*

(The announcement can be read by the teacher or played on tape.) Then ask students to circle the letter of the most appropriate answer on their copy, which consists of the following multiple-choice options:

    a. a taxi service   b. a hotel   c. an airport   d. a restaurant

(Adapted from Ontario Assessment Instrument Pool, 1980, Item No. 13019)

Gerngross, G., & Puchta, H. (1984 p.89). explains an English teacher in Austria, gives an example of how he makes his lessons more communicative. He cites a widely used textbook that shows English children having a pet show. Even when learners act out this scene creatively and enthusiastically, they do not reach the depth of involvement that is almost tangible when they act out a short text that presents a family conflict revolving round the question of whether the children should be allowed to have a pet or not the communicative approach "puts great emphasis on listening, which implies an active will to try to understand others. This is one of the hardest tasks to achieve because the children are used to listening to the teacher but not to their peers. There are no quick, set recipes. That the teacher be a patient listener is the basic requirement.

The observation by Gerngross (1984, p 89) on the role of the teacher as one of listener rather than speaker brings up several points to be discussed in the next portion of this thesis.

How do the roles of the teacher and student change in communicative language teaching?

Teachers in communicative classrooms will find themselves talking less and listening more, becoming active facilitators of their students' learning Larsen-Freeman (2000). The teacher sets up the exercise, but because the students' performance is the goal, the teacher must step back and observe, sometimes acting as referee or monitor. A classroom during a communicative activity is far from quiet, however. The students do most of the speaking, and frequently the scene of a classroom during a communicative exercise is active, with students leaving their seats to complete a task. Because of the increased responsibility to participate, students may find they gain confidence in using the target language in general. Students are more responsible managers of their own learning.

With regard to this study concern, the selected approach follows the lead of the previously mentioned authors. We consider outlining three basic principles of language learning which will determine a Learning- Center methodology in our course design.

    a. Language learning is an active process.

    Because the learners have to use their cognitive capacities to organize the new information acquired during the learning process in order to make things meaningful in the target situation.

b. Language learning is a decision-making process.

It is essential for learners to be an active participant of the language learning process. Since language is challenging, both teachers and students will take risks.

c. Learning is an emotional experience.

Making language learning a positive experience implies a great deal of motivation, interest and variety.

Based on this Learning – Center Approach we have considered communicative techniques and tasks

TECHINIQUES

- Variety
- creativity
- involvement
- an integrated methodology

TASKS

- role play and simulation
- case study
- project work
- gap

SKILLS

Although five skills are very important, this syllabus design is focused on listening, and speaking skills without minimizing the importance of reading and writing.

According to Hutchinson & Waters (1987) an eclectic approach consists of taking what is useful from each theory and trustting also in your own experience as practitioners. For instance, they state that a teacher may prefer a behaviorist approach to teach pronunciation, an affective criteria when it comes on to text

selection and may even use a cognitive approach to teach grammar. So as to find out learner's needs we will fully explain the method of needs analysis used in the following section.

4.2.3. Target Needs

Students were asked to complete a questionnaire in Spanish so as to facilitate accurate answers. The survey is completely confidential and anonymous. So students will no be asked to identify themselves and the information gathered will not be used for any purpose other than compiling data to better instruct English language learners. This questionnaire can be found in appendix A.

INTERPRETATION OF DATA

General results

a. Most students were in their first year of this career, representing forty-five. While thirty students were on their second year. Since it is compulsory most students decide to register from the first year of their major.

b. Before entering this university, thirty students manifested that they had a moderate or average experience in using the English Language. This is probably because the general English recied at high school, was not satisfactory according to their need, wants and lacks.

c. Sixty-five students believed that English is necessary for their professional career. Most students represented by twenty-one considered that attending workshops, conferences and training sessions

are the most important activities for their working field. When doing so they will need to take notes, so their listening skills should be improved. Besides, seventeen students manifested that making presentations accounts for the second place in importance. Which means that the development of their oral skills should also be considered in the syllabus design. On the other hand, twenty–one students stated that writing reports, memos or other documents are not important. And finally the least important item is telephoning.

d. Thirty-five thought that there are other important tasks that were not mentioned in the questionnaire. Such as working abroad, communicating with clients, using material from internet, and elaborating software among others. While thirty-one believe that those are the only mentioned tasks. Once againg the importance of the oral skills, written, listening and speaking are needed. According to the function of the language, the students considered two main fields: work and skills needed to perform in the target language. The results showed that in the working field communication with clients is a very important function, and in relation to skills, reading technical documents is highly required by the students. They also stated that they required to know the language in case they have the opportunity to work in a foreign country. Inthis work I also mentioned vocabulary lits, and realia are some examples of what must be learnt while less importance is given to grammatical concepts in the The survey indicated that the gender distribution of students of English I, corresponds to fifteen females and fifty-one males.

e. Students between sixteen and twenty years old were fifty-two. There were thirteen students ages twenty–one to twenty-five years old.

f. There were sixty-five Costa Rican students and just one foreign student.

g. Out of sixty-six students, thirty-five graduated from public high schools. This indicates supposes that they have received General English for five years.

h. unit designed placed in appendix C.

i. Thirty students considered that oral production is very important. Thirty-six students believed that listening comprehension is relevant.

j. Forty-three students manifested that English I fulfils their professional expectations. While twenty three believed this course does not meet their professional wants. One of the reasons for manifesting their satisfaction with the course was that it serves as review. This group of students, considered the level of the course not too basic. On the other hand, some students find it hard to manage the profile required for this level.

k. Forty-five students believed that there should not be any variation in the number of hours assigned to this English course because of their academic load. Although they consider that English is very important for their professional career, they also find it difficult to dedicate more than three hours per week to take their English course.

l. Forty-six said that the materials are not related with the content of their field of study. This is because material is based on a general English syllabus. Students then are not motivated since learning content is not

related to their study filed as ESP implies. Worthy to make reference on the difference between a General English approach and an ESP one denoted from page 56 through 58.

m. Fifty–two agreed that the text is acceptable.

n. In general, the students suggested the use of audiovisual material and software to enhance classes. This because materiall seems not motivating for these learners.

Let us analyse the learners' needs. First of all it important to say that the student of computer engineering take the two English courses because it is compulsory.

In 2005, I decided to develop a curriculum for a 16-week course for a select group of students of the Instituto Tecnológico of Costa Rica. The course that helped me to do so was an ESP post graduate program, held at the UNAN-León of Nicaragua in 2005 buy the professor Pilar Bonnet . To do so, both a questionnaire applied to students of computer engineering as well as an interview to Professors of the major were the starting point. Both tools are at the appendix A of this study.

Hutchinson and Waters (1987) states necesities as the type of need determined by the demands of the target situation that is what the learner has to know so as to function effectively in the target situation.

This work is about the needs analysis of Computer Engineering students at the Instituto Tecnológico de Costa Rica (ITCR). It is divided into seven steps as follows:

a. Purpose of analysis.

The purpose of this analysis is to identify the needs of communication in English of the students from the career of Computing Engineering of the ITCR who have to take English I and II as part of the curriculum.

b. Delimit of the student population.

The student population consisted of sixty-six students who took English I during the first semester of 2005. Their ages ranged from seventeen to twenty-one.

c. Decide upon the approach needed.

Our analysis was a combination of Present Situation Analysis, Learning Situation Analysis and Target Situation Analysis ,

d. Acknowledge constraints/limitations.

We acknowledge the following constraints and limitations in the process of needs analysis:

1. Class size: 30 students

2. Time: There are only two English courses in the curriculum of Computer Engineering

3. Materials: The textbook used in English I contains topics that are not related with the specialized content of study.

e. Select methods of collecting data.

Dudley-Evans & St John (1998), present a list of six collection methods for needs analysis. The most used are questionnaires, analysis of authentic spoken and written texts, discussions, structured interviews, observations, and assessments. They state that questionnaires are used for quantitative information. They also consider that all questionnaire should be piloted

before extensive use. The methods of collecting data used for the needs analysis in this thesis were a questionnaire to students of Computer Engineering School and a structured interview to English instructor of the ECL. Holme (1996), suggests the use of the class questionnaire since it is one of the most popular tool used for needs analysis

The questionnaire consisted of three main sections: students' background, course design and materials**.** The structured interview was also divided into three parts: the general information of the course, the student's profile and collaboration from school of English Science and the School of Computer Engineering.

f. Collect data.

The questionnaire applied to sixty-six students and the structured interview to instructor of English I were carried out in July, 2005.

g. Analyze and interpret data.

According to the interview applied to the teachers of English, we have reached to the conclusion that they all agreed on the following aspects: The English Course I for Computer Engineer has both mornings and afternoons schedule. There are up to thirty students per group, students level of English is very low with only few exceptions; this because the *New Interchange Program II* is just a review of high school subject.

4.2.5. The Subject/ Courses

Although, the Name of the course in English For Computer Engineering, the course design is that of a general English formulated.

According to Ellis & Johnson (1999), the objectives of the course are indicated by the needs analysis. This is what the learner is expected to do.

Since ESP is devoted to preparing language learners for the use of English in specific environments, the needs of the learners must be analyzed before any syllabus can be developed to address the course's objectives. The course must be both efficient and relevant to the learners' needs in order to elicit the highest measure of motivation from the students. They must be assured that they won't be subjected to learning extraneous bits of English. Additionally, since ESP classes never have an unlimited amount of time or other resources available, the course itself must be presented effectively. There has been considerable criticism regarding the practice and effects of needs analysis for ESP which can be briefly categorized as falling within one of three classifications.

Those classifications and summaries of typical responses are:

1. Language learners can be channelled into marginal occupations at the behest of employers seeking to exploit vulnerable employees. General English instruction can always be offered and encouraged as a supplement to the English for whatever the specific purpose might be.

2. A gap may exist between what language learners want and what they need or are capable of learning. In other words, objective and subjective needs may not coincide and the learners' motivation can suffer. There must be some sort of reconciliation between what the student perceives as proper and the actual needs that the learner will encounter. Using authentic source material rather than textbooks for instructions addresses this issue.

3. Language used in specific situations is too unpredictable and the student can never be adequately prepared. Oftentimes the syllabus is too rigid and fails to provide for the infinite variety of language use.

Downey Bartlett (2006) addresses this issue in her article. Service takes place in two coffee shops and at a coffee cart. Using actual service encounters, she was able to present a prototypical dialogue using the features uncovered by analyzing sample conversations. This approach avoided any dependancy on texts and instead it made reference to authentic language use. In short, the prototypical dialogue offered a sample of what could be offered to the language learner by incorporating what was found from a Conversational Analysis instead of relying on textbooks. As Downey Bartlett (2006, p. 338) states, "although natural interactions are somewhat complex and reveal variability, there is a predictable overall nature." Regardless of the specific circumstances or situation, it is critical that regular and conscientious revisions be performed so as to ensure that the course is relevant.

Once the ESP teacher is aware of the students needs, other factors have to be taken into consideration. How can meet my student's needs in my teaching context (academic rules, credit system, hours per class etc) in other words, the syllabus.

4.3. Course Planning

The list of roles reflects an acknowledgement of the complexity of a syllabus. The syllabus is then, an attempt to guarantee the satisfaction of needs. With this in mind we use the syllabus most appropriately.

Syllabus As to what the learners need to learn that from the 66 students who participated in the questionnaire almost half needed to improve their listening skills and the other found that speaking is what they need. For this reason objectives of the present syllabus are defined in terms of both skills. Even though, activities that may help develop the syllabus are not restricted only to these skills.

Course CI-1301 is compulsory before graduating.

Course Duration: 16 weeks

Course length: 96 hour sessions plus 12 hours of extraclasswork.

Class size: 30 students.

English experience: intermediate

Requirements: This course does not have any requirements and students can take it throughout the academic year.

General Objectives: Students will be able to improve their listening and speaking skills needed in target situations.

Specific Objectives: The students will be able:

To identify information on the basis of vocabulary and structure studied in class.

To express ideas through oral presentations and simulated conversations.

Material

The teacher may use some authentic materials such as manuals or real components parts of the computer. Also an English spanish diccionary will be required along with a speciallized diccionary for computer users. Updated and

motivating readings from internet . In addition the instructor will make use of some selected software for learning English. Finally the text book (Infotech) which has a work book and student book.

Methodology

The use of a method that is flexible and may multifunctional is quite important. For this reason the selected approach includes notional-functional, teaching for proficiency, proficiency-based instruction, and communicative language teaching. The eclectic Approach which is refered to in chapter III on pages 66 of this work. Here teachers may make use of communicative strategies. Baring in mind the teachers role of facilitator. As presented in the chart on page 27, the teacher in the communicative or natural approach is also seen as a user motivator, as one who prompts learners to learn.

Content

According to Hutchinson & Walters (1987), in order to make unit more manageable topic syllabus is an acceptable one. See bibliography below for more detail.

Evaluation

Diagnostic, formative and summative will be the three types of evaluation to be considered. The diagnostic featured determines the knowledge the student may have of the subject. The formative is applied throughout the course which tends to be flexible as it may be modified as required. The different role of syllabus already mentioned, justify this characteristic. And lastly there is the summative feature that corresponds to instruments and

techniques used to determine student's success or failure to achieve the objectives of the course.

Textbook used:

(See Remacha, E. 2002a, 2002b, 2002c.)

ACADEMIC SYLLABUS DESIGN

The course length is sixteen weeks distributed as follows:

Week 1:

Unit 1: Evolution of computers
Objectives: Students will be able to: understand the basic structure of a computer system Recognize differences between types of computers Use basic vocabulary connected with computers

Language:
    Grammar: Present simple passive
      Past simple passive past
    Vocabulary: Basic terminology: CPU, keyboard, printer…

Skills:
    Reading: Understanding specific information about the elements of a computer system.
 	
    Listening: Listen for specific information about computer system systems.

Tasks: Go to internet and look up information about history and development of computers.
Additional activities: Teachers can take a real computers with its hard

componets for students to identify.

You may also wish to play bingo with the vocabulary studied in the unit.

Week 2:

Unit 2: Computer Applications
Objectives: Students will be able to: Talk about computer applications in every day life

Language:
 	
    Grammar: Present simple passive
 	
      Past simple passive past
 	
    Vocabulary: Computer in education, sports, entertainment, medicine,…

Skills:
 	
    Reading: Looking for new uses of computers in a text.
 	
    Listening: Listening for specific information in short descriptions.
 	
    Speaking: Discussing what computers can do in particular areas.

Tasks: Go to internet and find information about different usage of computers.
Additional activities: Brainstorm with students about the different use of computers have them make a graph to represent the frequency of those use among their classmates.
Evaluation: Short test #1. Based on week 1

Week 3:

Unit 3: Computer Essentials
Objectives: Students will be able to: understand the basic structure of a computer system

Language:
 	
  Grammar: Compound adjectives
 	
     Past simple passive past
 	
  Vocabulary: Basic terminology: Hardware, software, input…

Skills:
 	
  Reading: Understanding specific information about the elements of a computer system
 	
  Listening: Understand the gist of a lecture about the old computer systems

Tasks: Go to internet and look up information about wearable computers.
Additional activities: Teachers can ask students to bring in advance computers with its periferical componets for students to identify.

Week 4:

Objectives: Students will be able to: understand the structure of the central processing unit an the different functions of its ellements. To distinguish between main memory (RAM and ROM) secondary storage.

Language:
    Grammar: Contextual reference
      Defining relative clauses.
    Vocabulary: Microprocessor, silicon chip, control unit, arithmetic logic unit, register, expansion, slot, clock speed, main memory…

Skills:
    Reading: Understanding the basic structure of the CPU.
    Understanding different types of memory.
 	
    Listening: Transfering information from a description to a diagram.
 	
    Speaking: Describe one's ideal computer system.

Tasks: Bring to class a real microprocessor chip,or memory chips computers if not bring pictures about these and explain the type of memory.
Additional activities: Teachers can provide students with acronym finder.
Evaluation: Short test #2. Based on weeks 2,3.

Week 5:

Unit 5: Bits and Bits
Objectives: Students will be able to: understand the value of different units of memory (bits, bytes, KB, MB, GB).   To build new words by using prefixex.   To understand the diffrence bewteen pixels (on the screen) and bits (in the memory).
Language: **Vocabulary:** Units of memory (bits, bytes, KB, MB, GB) ASCII code, binary notation, deciman notation…

Skills:
     Reading: Understanding the units of memory in a computer.
 	
     Writing: Defining the terms related to unit of memory.

Tasks: Go to an unline computer dictionary.
Additional activities: You may also wish to play bingo with the vocabulary studied in the unit.

Week 6:

Unit 6: Buying a Computer
Objectives: Students will be able to: enquire about computers in a shop.   To undesrstand technical specifications of different computers.   To select the most suitable computers for particular people.
Language: Language of enquiry.

Skills:
 	
     Reading: Understand technical specifications.
 	
     Listening: Listening for specific information and language in a dialogue.
 	
     Speaking: Role play in a computer shop.

Evaluation: Short test #3. Based on weeks 4-5.

Week 7:

Unit 7: Type, Click and Talk!
Objectives: Students will be able to: Describe input devices. Identify differents keys on a keyboard and explain their function. Identify basic mouse actions.

Language:
     Grammar: Describing objects: for + ing , relative pronoun + verb, relative pronoun +is used + to + infinitive, used + to+ infinitive.
     Vocabulary: keyboard, mouse, scanner, trackball, graphics tablet…

Skills:
     Reading: Identify keys on a diagram from information in the text. Reading for specific information.
 	
     Listening: Identify particular devices from descriptions Understanding features of speech recognitiontechnology.
 	
     Writing: Describing a joystick.
 	
     Speaking: Exchanging information about different types of imput devices.

Tasks: Have students go to internet and talk to their computer.
Additional activities: Teachers can take a real objects from the computer room and a standard keyboard to have students taolk with the computer.

Week 9:

Unit 8: Capture you Favorite Image
Objectives: Students will be able to: to show understanding about a written text about a scanner, a digital camara or a camcorder.   To distinguish between facts and opinions in advertisements.   To distinguish between different types of scanners.

Language:
 	
     Grammar: Comparative and superlative adjectives.
     Vocabulary: Scan,flatbed scanner, slide scanner, digital camera,…

Skills:
 	
     Reading: Finding specific information.
 Distinguishing between facts and opinions in advertisement.
 	
     Listening: Completing notes.

Additional activities: Teachers can take advertisement from magazines and ask students to describe them using comparative and superlative forms.

Week 10:

Unit 9: Viewing the Output
Objectives: Students will be able to: Understand how a computer display works. Explain tables and charts with technical specifications about monitors. Understand warnings and instructions for the use of the monitor.

Language:
 	
    Grammar: PInstructions and advice; imperatives, should, ought to
    Vocabulary: Pixel, resolution,hertz, flicker, refersh rate…

Skills:
 	
    Reading: Understanding technical explanations.
 	
    Listening: Listening for specific information in order to complete sentences.
 	
    Speaking: Describing the screen of a computer.
 	
    Writing: Write a description from information ina table.

Tasks: Go to internet and look up information about flat screens.
Evaluation: Short test #4. Based on week 8.

Week 11:

Unit 10: Choosing a Printer
Objectives: Students will be able to: understand the most important technical features of printers. Compare different kinds of printers. Recognize reference signals and linking devices(discourse cohesion).
Language: 　　**Grammar:** Descourse cohesion: reference signals; linking devices 　　Revision of comparatives and superlatives. 　　**Vocabulary:** Types of printers: dot-matrix,ink-jet, bubble-jet, laser.
Skills: 　　**Reading:** Complete the table with technical information given in the text. 　　**Listening:** Listent to find if sentences are true or false. 　　**Writing:** Write a paragraph describibg the pros and cons of a particular printer. 　　**Speaking:** Describing your ideal printer.
Additional activities: Teachers can encourage students to describe their ideal printer as creative as they can. You may also wish to play bingo with the vocabulary studied in the unit.

Week 12:

Unit 11: I/0 devices for the Disabled
Objectives: Students will be able to: Understand what sort of input/output devices disabled people can find. To talk about how computers can be adapted for blind and motor-impaired users.

Language:
 	
    Grammar: Noun phrases
      Range of modifiers: adjectives, participles, 's gentitive nouns.
    Vocabulary: Braille, speech synthesis system, magnification…

Skills:
 	
    Reading: UndReading to find specific information.
 	
    Listening: Take notes.
 	
    Speaking: Discussing problems faced by computer users with different disabilities and kinds of devices which helpo to overcome these problems.

Tasks: Go to internet and look up information about products for disabled computer user and picture them.
Evaluation: Short test #5. Based on weeks 9-11.

Week 13:

Unit 12: Magnetic Drives
Objectives: Students will be able to: Describebetween different types of magnetic disks and drives. Give instruction and advice on how to protect data.

Language:
    Grammar: PInstructions and advice: IOmperatives, must/mustn't.
    Vocabulary: Floppy, track, sector, format, magnetic…

Skills:
    Reading: Understanding technical information.
 	
    Listening: Listening for specific information.
 	
    Speaking: Giving advice.

Week 14:

Unit 13: Optical Breakthrogh
Objectives: Students will be able to: Develop reading skills by recognizing the most relevant information. Acquire technical vocabulary associated with optical storage devices.
Language: 　　**Grammar:** Referent signals, connectors and modifiers 　　　Past simple passive past 　　**Vocabulary:** Optical disk, optical drive, Acronymms and abbrebiations: CD-rom, CD-R, CD- RW, DVD-Rom, DVD-R…
Skills: 　　**Reading:** Identify technical pecs And uses of particular optiical disks. 　　**Listening:** Understand the most relevant information
Tasks: Go to internet and look up information about DVD technologies.
Evaluation: Short test #6. Based on weeks 12-13.

Week 15:

Extra activity (Software)
Objectives: Students will be able to: Develop an activity seen in previous units with a program. Then present it to the rest of the class.
Evaluation: Evaluation of the software presented.

Week 16: Final test: Based on weeks 8-14.

Criteria of the Evaluation

Types of evaluation	Percentage
6 short tests (5% each): written, oral, listening, and reading comprehension.	**30%**
Mid term and Final test (30% each): Written part:5%, reading comprehendion:5%, oral 10%, listening comprehension: 10%	**60%**
Special Activity with software	**10%**

General criteria:

The passing score is 70.

Final test is compulsory.

Score on special activity will be assigned after applying the final test.

Learners may fail the course for up to 14 absences.

15 minutes late on arrival to class is considered an absence.

CONCLUSIONS AND RECOMMENDATIONS

Sixty-five students believed that English is necessary for their professional career. Hutchinson & Waters (1987) noticed that as English became the accepted international language of commerce and technology, it brought along, a new generation of learners who knew specially why they were learning the language. They also noticed that from its beginnings in the 1960s ESP has faced four phases of development and is about to enter its fifth stage.

Widdowson (1978) denoted a shift in the theories of language teaching which went from describing rules of English usage to discovering the ways in which language is actually used in real communication. This idea gave rise to the view of actual differences between the English of commerce and that of engineering. Such difference is exactly what motivates ESP teachers to implement research in the flied where ever they work. That is why as a teacher at the TEC my pose is to convince authorities to adapt this approach.

The idea is to interest this University in the new tendencies in English teaching. It is well recognized as a contributor to the development of the country by means of human resources, researches and extension services.

As stated before, the TEC has gotten an English department concerned about teaching English to different majors of the university. The school of Science of Language is divided in two areas: The Communication and the English one. The English area supports the different carriers offered with at least two courses and here is where ESP will perfectly fit in. But to do so some theories, methods and approaches had to be considered.

In Chapter III I reviewed the theories of language acquisition underpinning the different methods of organizing the content of the course aimed to achieve the established objectives. Contrary to preview methods, the communicative approach is based on a variety of programs. Hutchison and Waters (1987), on pages 85-88 I mentioned up to eight different types of ESP syllabus. We also saw in chapter III that the learning-Centered approach is the most effective. This has shown that the Eclectic approach was the right choice.

This thesis has discussed the origins of ESP, addressed key notions about ESP and examined issues in ESP curriculum design. The content of the study was determined by a need identified based on my professional experience as an ESL teacher designing and delivering an example of an Academic course design for students of Computer Engineering. These issues, where possible, have been supported by current and pertinent academic literature. It is my sincerest hope that these observations will lend insight into the challenges facing the ESL instructor acting as ESP curriculum developer.

According to the results obtained from the needs analysis, students felt they have been exposed to English for a certain period of time. In relation with language functions, students mentioned attending workshops, conferences and training sessions as the most important activities for their working field. Students stated listening and speaking as the most important skills to develop, while writing and reading are less relevant. Following, you will find a list of assumptions and recommendations.

Recommendations

    a. Here is a list of assumptions and recommendations:

b. Students consider attending workshops, meetings, conferences and training sessions as the main target situations. Listening and speaking are the most important skills.

c. Teachers should be motivated to move on to ESP due to the lack of materials they may encounter.

d. The need to conduct a needs analysis before performing any changes to our established curricula.

e. The need to redesign the current courses for the students of computer engineering.

f. In the absence of text books, teachers often produce their own ESP material. Materials are real things you can touch. They are ingredients. The right combination of these, produce a good recipe.

g. It is recommended the use of the authentic material because the language they use is real. Authenticity is important because it provides update information to develop or to complement the books. Remember that good materials should be: Interesting, motivating, funny, and enjoyable. On the other hand there is a list of necessities to consider such as: The need to recognize the importance of applying needs analysis at the university.

These will definitely give a great turn over to the English curricula at the TEC.

h. Among others, the TEC is recognized as the best technologically oriented State University of Costa Rica. It is well recognized as a

contributor to the development of the country by means of human resources, researches and extension services.

i. Extension services granted by The Science of Language of School, which is divided into two areas: Communication and English. The English area supports the different degrees/majors offered with at least two courses. The Computer Engineering School has received two of our courses until the end of last year. Since the beginning of the current year four courses four courses have been offered.

It is hoped that the course design presented here, will contribute as an example to prompt authorities of the field to move on to current course design.

Impact

Since, the Computer Engineering School, has received two of our courses until the ending of the past year, I propose a shift from a General Language teaching to a Specific one, although for the coming year they have being offered, four courses.

Future implications

Finally, it is my intention to continue my research based on student needs, and to propose further implementation of course designs similar to the one presented here. I will also continue to follow the evolution of ESP as a mode of teaching English to speakers of other langauges.

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APPENDICES

APPENDIX A

Questionnaires

INSTITUTO TECNOLÓGICO DE COSTA RICA
ESCUELA DE CIENCIAS DEL LENGUAJE
MÓDULO 1 DEL PROGRAMA DE ESP

CUESTIONARIO

Estimado estudiantado:

Este cuestionario forma parte de un trabajo de investigación, del Módulo I del Pos-Grado de Inglés para Fines Específicos (ESP) de la Universidad Nacional Autónoma UNAN en convenio con el TEC y la Oficina de Cooperación Española para Centroamérica . Tiene como objetivo identificar las necesidades de comunicación en el idioma inglés del estudiantado de la carrera de Ingeniería en Computación del ITCR.

Por esta razón le solicitamos leer cada pregunta y completar los espacios o marcar con X según sea el caso. Sus respuestas son confidenciales.

1. ¿Cuál es su género?
 Masculino _____
 Femenino _____

2. Edad en años cumplidos:

 De 16 a 20 años
 De 21 a 25
 De 26 a 30
 De 31 a 40
 De 41 a más

3. ¿Cuál es su Nacionalidad?

 Costarricense

 Extranjero

4.   Indique la Institución educativa de procedencia

 Técnica
 Científico
 Vocacional
 Diversificada (4to y 5to) _____Educación pública_____ Educación privada
 Abierta
 Otra (especifique)_____

5. ¿Qué año de la carrera cursa usted?

Primer año
segundo año
Tercer año
cuarto año

6. Indique ¿Cuál ha sido su experiencia en el uso del idioma Inglés antes de ingresar a la carrera?

Ninguna
Limitada
Moderada
Amplia

7. ¿Cree usted que el inglés es importante para su carera profesional?

Mucho
Poco
Nada

8. ¿Cuál cree usted que sería la funcionalidad del Inglés en su Campo laboral? Ordene su respuesta del **1** al **5**, siendo **1 el más importante**.

_____ Hacer presentaciones.
_____ Contestar llamadas telefónicas.
_____ Redactar informes, cartas, memos u otros documentos afines.
_____ Asistir a talleres, conferencias y otros cursos de capacitación.
_____ Participar en reuniones con fines laborales.

9. ¿Considera usted que aparte de las funciones mencionadas existen otras de mayor importancia?

Si
 No

10. Si su respuesta es afirmativa enumere **tres** funciones que usted considera que son importantes pero que no han sido mencionadas anteriormente.

1. _____
2. _____
3. _____

11. ¿Cuáles destrezas, considera usted, que necesarias para su carrera. Ordene su respuesta del **1** al **4**, siendo el numero **1** la de **mayor importancia**.

_____ Compresión de lectura
_____ Comprensión auditiva
_____ Producción oral
_____ Producción escrita

12. (Si usted cursa Inglés II pase a la pregunta 13) En su opinión ¿ El curso de Inglés I para Computación cumple sus futuras expectativas profesionales?

Sí
No

¿Por qué?
_____
_____

13. En su opinión ¿ El curso de Inglés II para Computación cumple sus expectativas profesionales?

Sí
No

¿Por qué?
_____
_____

14. (Si usted cursa Inglés II pase a la pregunta 15)¿ Considera usted que sería de beneficio para usted aumentar las horas del curso de Inglés I en su carrera??

Sí
No

¿Por qué?
_____
_____

15. En su opinión. ¿ Sería de beneficio para aumentar las horas del curso de Inglés II en su carrera?

Sí
No

¿Por qué?
_____
_____

16. En su opinión ¿El material didáctico de los cursos de Inglés para Computación relacionado con las necesidades de su carrera?

Sí
No

17. Dicho material didáctico es de su agrado?

Sí
No

18. Además del libro de texto, ¿Qué otro material considera usted que se debe utilizar en los cursos de Inglés para Computación?

Especifíque_____

_____

Le expresamos nuestro más sincero agradecimiento por su valiosa colaboración.

APPENDIX B

Graphs

Gender

Male
Female

22%

78%

Group Age

Legend:
- 16-20 years
- 20-25
- 26-30

2%

20%

78%

Nationality

2%

98%

Foreigner
Costa Rican
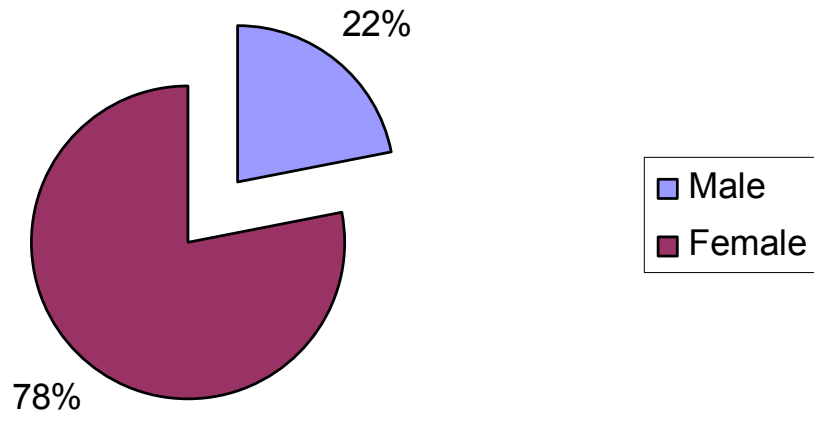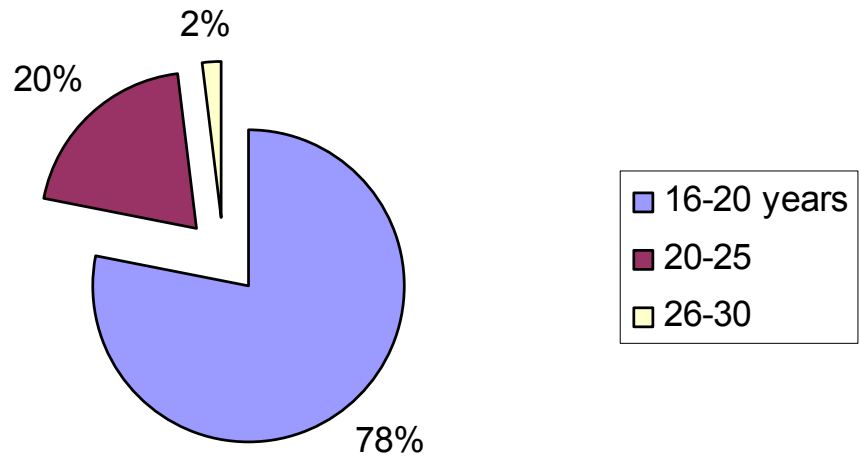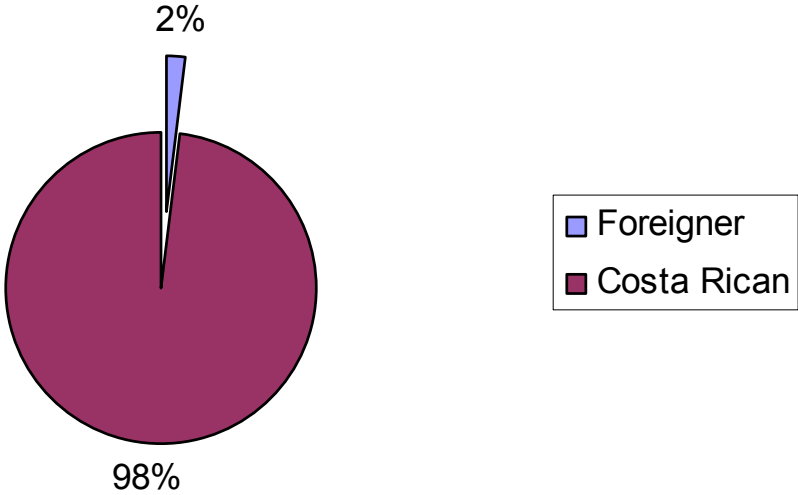
Educational background

- Technical Education — 20%
- Scientific Edudation — 7%
- Vocational — 6%
- Public Education — 61%
- Institutes — 6%

University year

5%

8%

20%

67%
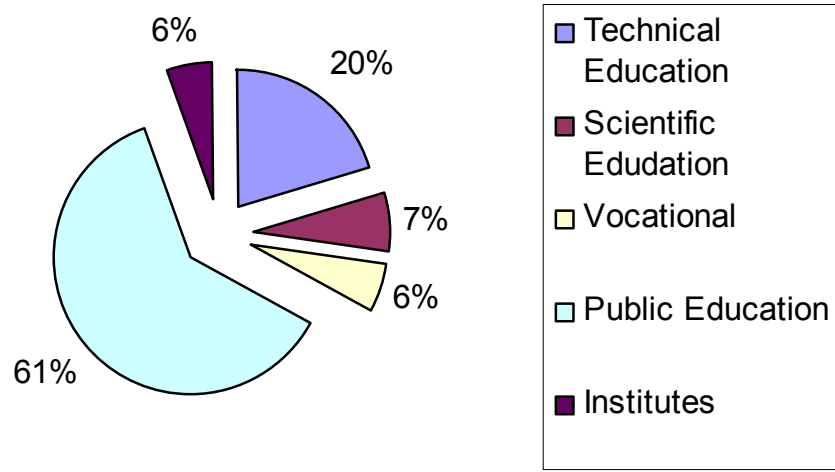
- First Year
- Second Year
- Third Year
- Fourth Year
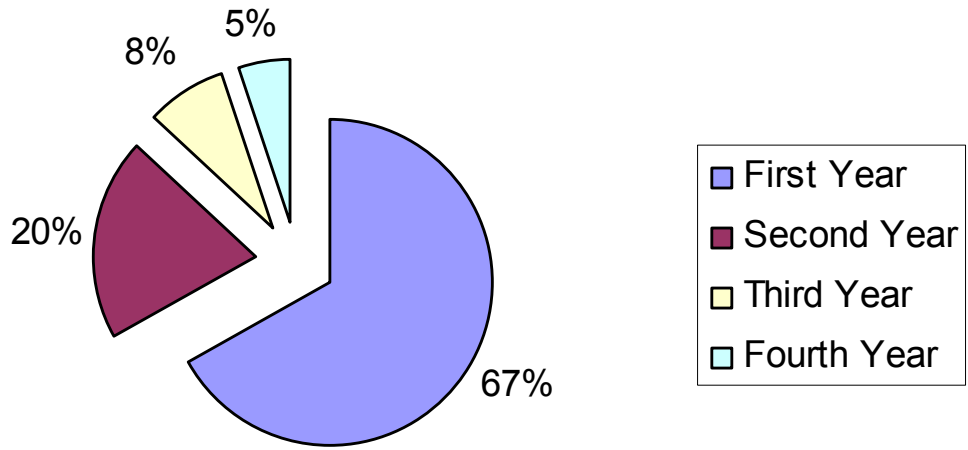
Experience with the language

- No experience: 12%
- Limited experience: 38%
- Moderate experience: 45%
- Extensive experience: 5%
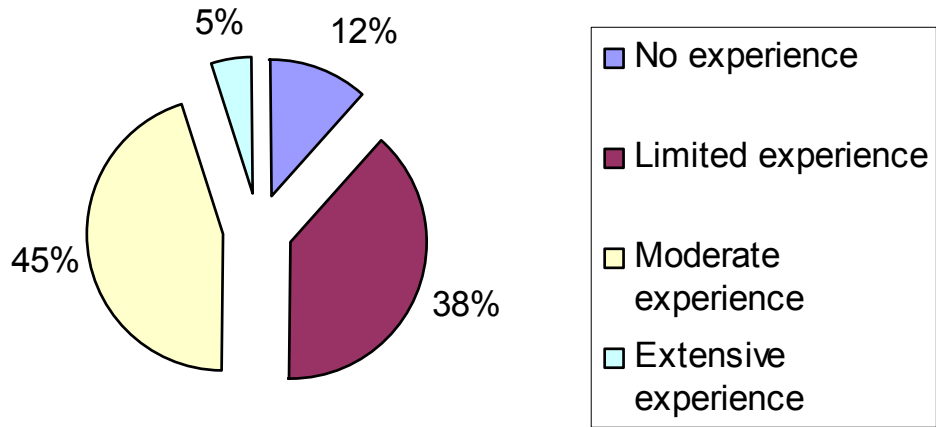
Importance of the language

2%

98%

Legend:
- ☐ A lot
- ☐ A little
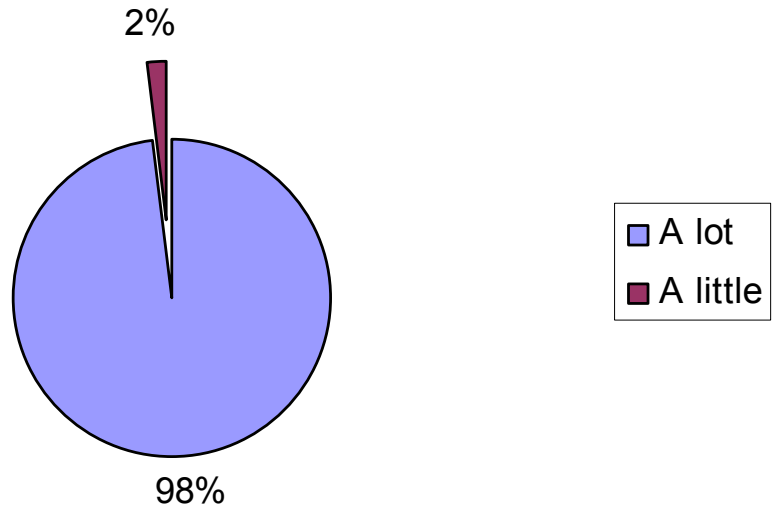
Functions not mentioned

47% 53%

Yes
No

Skills

0%

45%

55%

Reading
Listening
Oral
Written
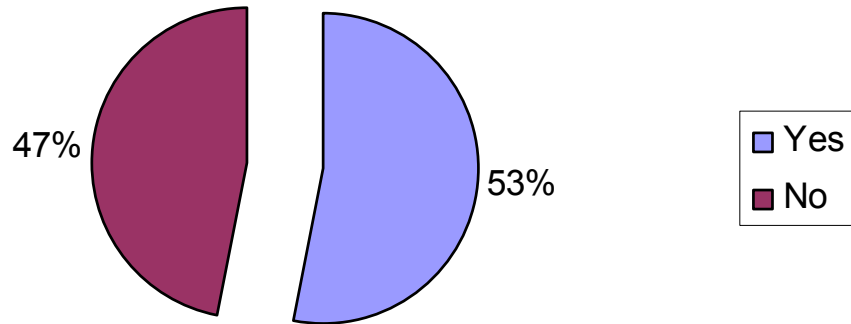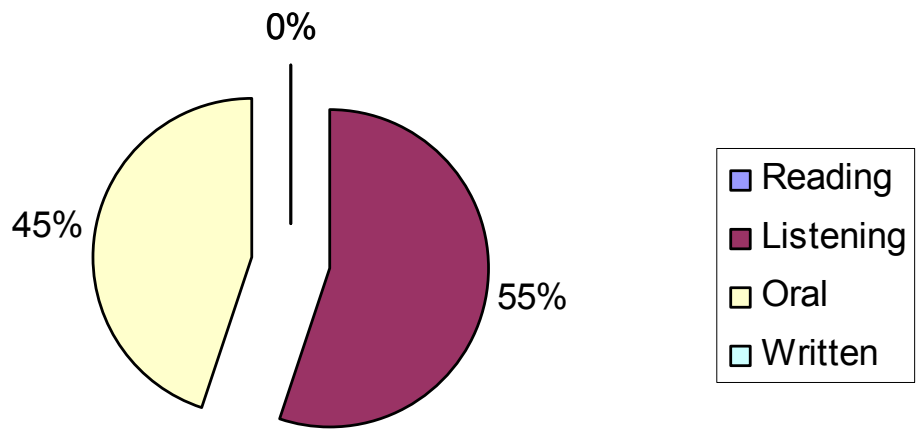
Fulfilled expectations

35%

65%

- Yes
- No
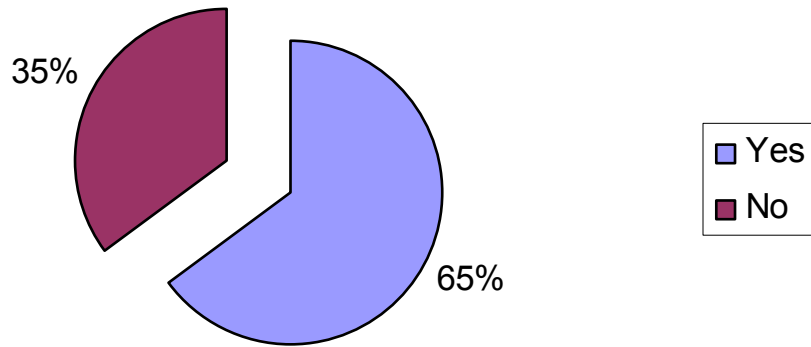
Important to increase number of hours

3%

97%

Yes
No
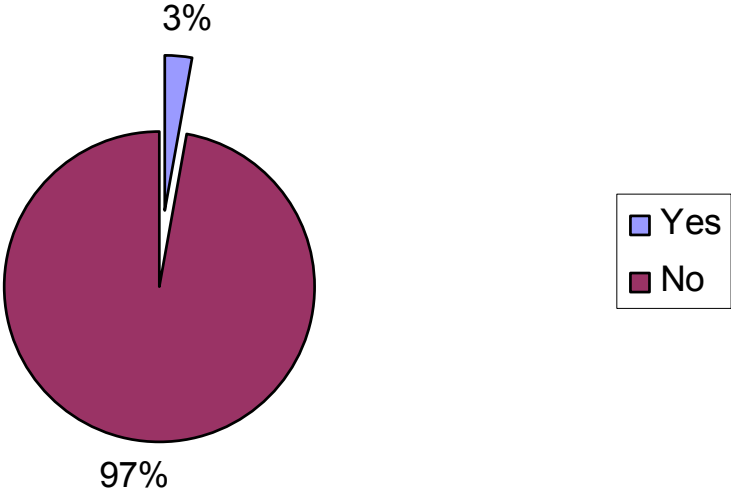
Relation of material with the Course

0%

30%

70%

- No
- A little
- A lot
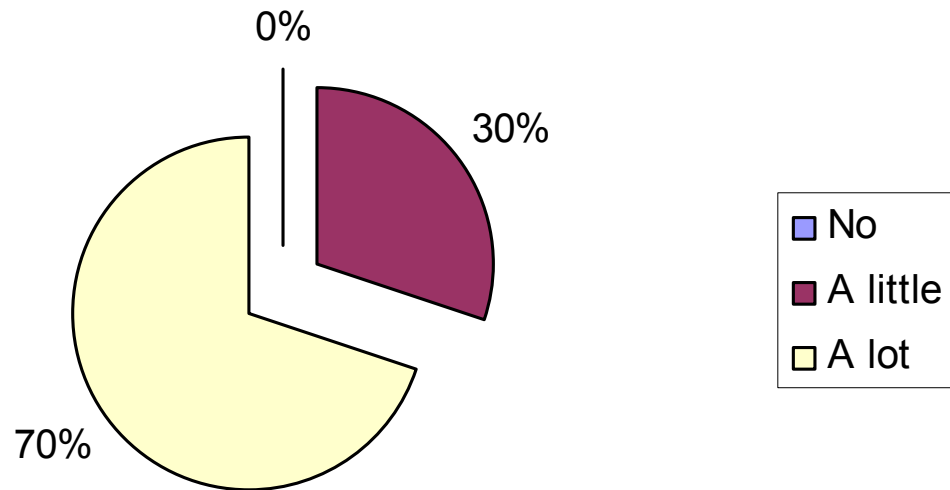
Satisfaction with material

21%

79%

Yes
No
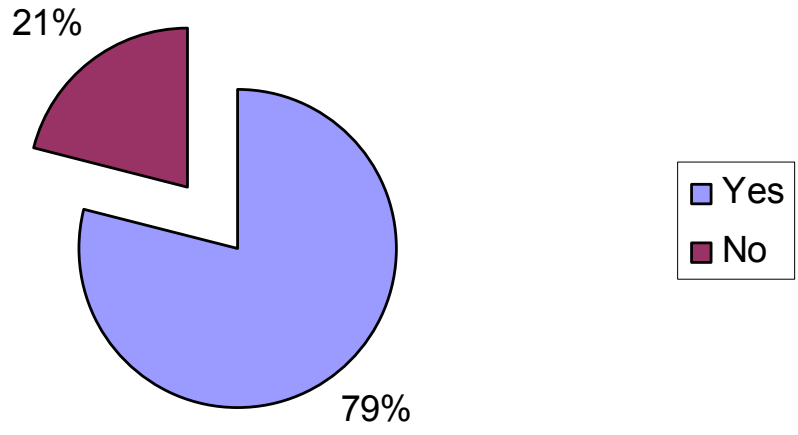
APPENDIX C

Course Design Unit 1

Unit 1:

Topic: Evolution of Computers.

Objectives: Students will be able to: understand the basic structure of a computer system

Recognize differences between types of computers

Use basic vocabulary connected with computers

Language:

    Grammar: Present simple passive

       Past simple passive past

    Vocabulary: Basic terminology: CPU, keyboard, printer…
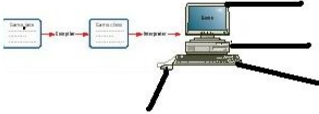
Skills:

    Reading: Understanding specific information about the elements of a computer system

    Listening: Listen for specific information about computer system systems.

    Optional materials:
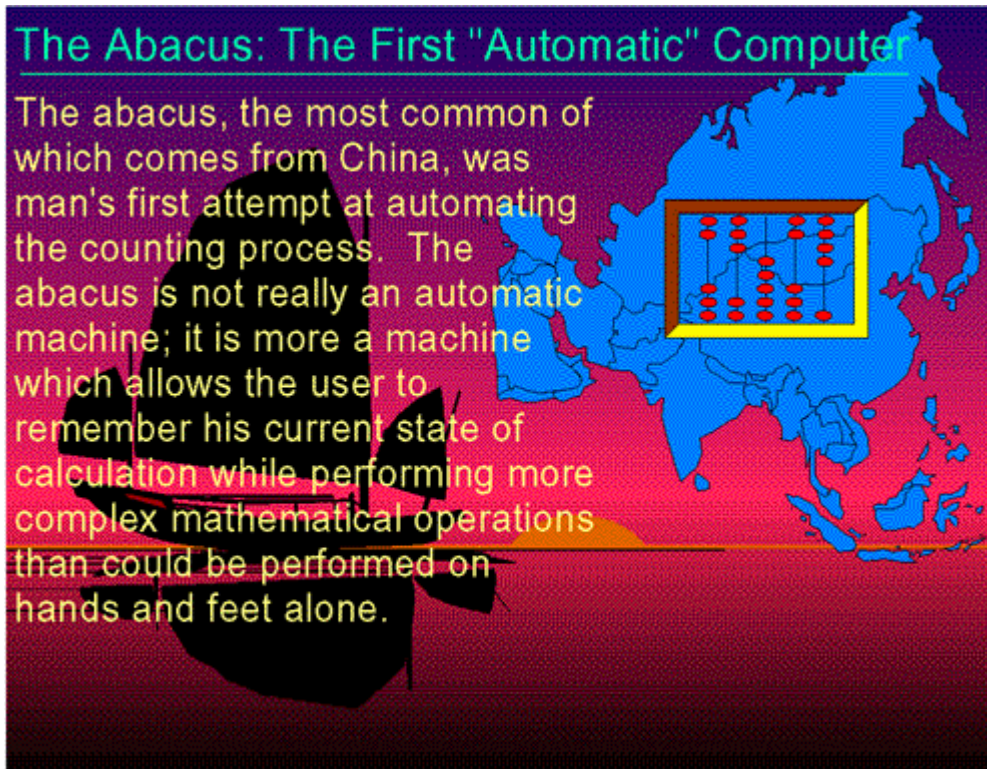
A real computer system, computer magzine

Teacher's activities	Student´s activities
1. Warm – up Introduce the unit by asking students (SS) to write the main parts of a computer and brainstorm words that they associate with computer. You may like to show them a real computer if possible.	SS suggest words and written them on the board or on a piece of paper and label the computer.
2. Reading Walk around and check problems with technical terms that students may present. Comprehension check: give feed back on the text. **3. Listening** Check the answers with the whole class.	Students may use their dictionary to understand some technical terms. Do all the exercises. SS label while they listen to the lecture about parts of a computer. (screen/ monitor, Cd or Dvd drive, CPU (inside), keyboard, mouse, floppy disk and printer)
4.. Language work: ask student to complete the exercises.	SS a. Complete the sentences with the simple present and past tense of the passive form of the given verbs. b. Read the article again and find the correct form of the given word

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Reading

Unit 1: PCs: History and Development

'Computers : From the Past to the Present'

The Abacus: The First "Automatic" Computer

The abacus, the most common of which comes from China, was man's first attempt at automating the counting process. The abacus is not really an automatic machine; it is more a machine which allows the user to remember his current state of calculation while performing more complex mathematical operations than could be performed on hands and feet alone.

Meanwhile in Asia, the Chinese were becoming very involved in commerce with the Japanese, Indians, and Koreans. Businessmen needed a way to tally accounts and bills. Somehow, out of this need, the abacus was born. The abacus is the first true precursor to the adding machines and computers which would follow. It worked somewhat like this:

The value assigned to each pebble (or bead, shell, or stick) is determined not by its shape but by its position: one pebble on a particular line or one bead on a particular wire has the value of 1; two together have the value of 2. A pebble on the next line, however, might have the value of 10, and a pebble on the third line would have the value of 100. Therefore, three properly placed pebbles--two with values of 1 and one with the value of 10--could signify 12, and the addition of a fourth pebble with the value of 100 could signify 112, using a place-value notational system with multiples of 10.

Thus, the abacus works on the principle of place-value notation: the location of the bead determines its value. In this way, relatively few beads are required to depict large numbers. The beads are counted, or given numerical values, by shifting them in one direction. The values are erased (freeing the counters for reuse) by shifting the beads in the other direction. An abacus is really a memory aid for the user making mental calculations, as opposed to the true mechanical calculating machines which were still to come.


Hollerith's machine though had limitations. It was strictly limited to tabulation. The punched cards could not be used to direct more complex computations. In 1941, Konrad Zuse(*), a German who had developed a number of calculating machines, released the first programmable computer designed to solve complex engineering equations. The machine, called the Z3, was controlled by perforated strips of discarded movie film. As well as being controllable by these celluloid strips, it was also the first machine to work on the binary system, as opposed to the more familiar decimal system.

The binary system is composed of 0s and 1s. A punch card with its two states--a hole or no hole-- was admirably suited to representing things in binary. If a hole was read by the card reader, it was considered to be a 1. If no hole was present in a column, a zero was appended to the current number. The total number of possible numbers can be calculated by putting 2 to the power of the number

of bits in the binary number. A bit is simply a single occurrence of a binary number--a 0 or a 1. Thus, if you had a possible binary number of 6 bits, 64 different numbers could be generated. $(2^{(n-1)})$

Binary representation was going to prove important in the future design of computers which took advantage of a multitude of two-state devices such card readers, electric circuits which could be on or off, and vacuum tubes.

* Zuse died in January of 1996.
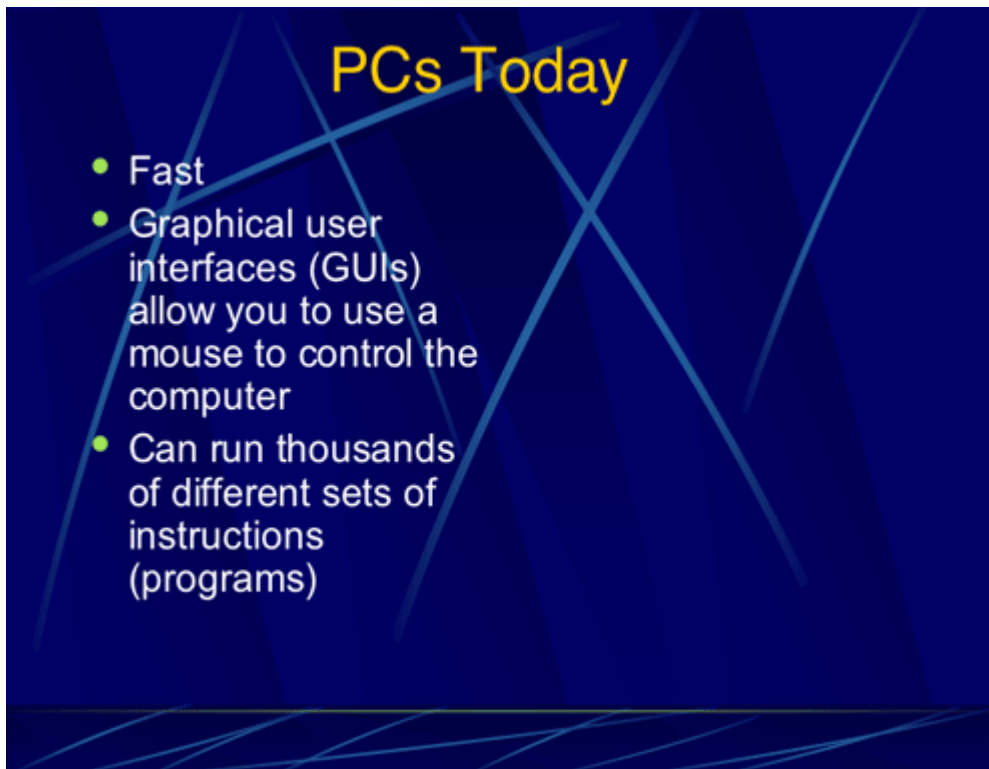
A lecture presented by Michele A. Hoyle
http:// www.eingang.org/Lecture

**A** Follow this link, and read the lecture. Read it through and find:

1. the device used in China as a calculating machine, 4000 years ago
2. the first mechanical calculator
3. the machine used by H. Hollerith in 1890 to read the US census
4. the computer developed by Konrad Zuse in 1941
5. the first computer with a graphical user interface and a mouse

B Find the meaning of the following terms:

1. computer science
2. calendar
3. abacus
4. punched card
5. vacuum tube
6. transistor
7. integrated circuit
8. personal computer
9. application
10. word processor

Listening
 Listen to the lecture as you label the part of the computer
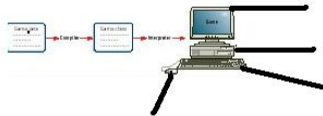
 Answers : screen/ monitor, Cd or Dvd drive, CPU (inside), keyboard, mouse, floppy disk and printer
Language: A. Complete the sentences with the simple present and past tense of the passive form of the given verbs

1. Value _____ by its shape and position
2. Few beeds _____ to depict large numbers.
3. The beads _____, or _____ numerical values.
4. The values _____ by shifting the beeds.
5. Hollerith´s machine _____ limited to tabulation.
6. the binary system _____ of 0´s and 1´s.

B. Complete the chart with the missing word

Nouns	Verb	Adjectives
		Graphical
Instructions	Designed	
	Performed	

Value		

Evaluation of the unit:

Instituto Tecnológico de Costa Rica   Total: 21 Points
Science Language School
English Department   Total: 5 %
Short written test
Prof. Ana Kennedy
Student _____ grade _____ ___pts _____%

A. Read the text and match a heading to a paragraph. 5 Pts.

Ready for the Internet

Fast, secure and reliable

What's Windows 2000?

Built-in support for new devices

Easy to use

1 ....

Microsoft Windows® 2000 is the operating system for the next generation of PCs. It offers a user-friendly interface, NT technology, integrated web capabilities, and support for mobile computers and new devices. There are two main Windows systems: Windows 2000 Professional for desktops and laptops, and Windows 2000 Server family for networks, web servers and high-performance workstations.

2 ....

Windows 2000 includes a built-in safeguard called Windows File Protection, which prevents core system files from being deleted or changed by users or applications. If a system file is altered, this feature repairs that file avoiding many system crashing found in previous versions.

Windows 2000 is 25 percent faster than Windows 9x on systems with 64 MB and lets you run more programs and do more tasks at the same time than previous versions. It protects your hard drive by using encryption and decryption systems. It also supports Kerberos, an Internet standard which protects corporate networks or intranets.

3 ....

The graphical user interface has been improved. You can personalise the Start menu and display applications you use most often. You can use step-by-step wizards for numerous tasks. The Hardware Wizard lets users add and configure peripherals. The Network Connection Wizard helps you connect to networks. The Microsoft Installer helps you install, configure and upgrade software easily.

With IntelliMirror Technology, based on Active Directory service, desktop administrators can easily manage and back up user's data.

4 ....

With Internet Explorer integrated into the desktop, Windows 2000 allows you to search files and folders on your PC, find pages on your company intranet or surf the web. Internet Explorer automatically corrects mistakes on common URL conventions such as http, .com and .org. It also lets you download complete web pages with graphics for viewing off-line.

NetMeeting video-conferencing software enables participants to talk to and see each other, share programs and ideas. It supports Dynamic HTML and Extensible Markup Language (XML) which help programmers create new ways of exchanging and displaying information.

5 ....

It supports the latest technologies, from digital cameras and music players to USB devices. USB (Universal Serial Bus) lets you easily connect and remove peripherals without configuring or rebooting your PC. It also offers support for storage devices such as DVD and Device Bay.
Mobile users can share files between wireless devices (laptops or desktop PCs) through the IrDA (Infrared Data Association) protocol.

B. Read the text again and find:6 Pts.

1. the tool that protects important system files._____
2. the protocol adopted for network authentication and security._____
3. the web browser included with the operating system._____
4. the Internet tool used to do video-conferencing._____
5. the component that allows you to add and remove hardware devices without restarting the   computer._____
6. A popular infrared protocol used in wireless communication._____

C. Vocabulary search. Find the words in the text that correspond to the following:10 Pts.

Paragraph 1
        1. pieces of hardware _____

      2. portable computers _____

Paragraph 2
      3. characteristic _____
      4. internal corporate networks _____

Paragraph 3
      5. set up a system in a particular way _____
      6. improve a piece of software _____

Paragraph 4
      7. browse (the web) _____
      8. web address _____
Paragraph 5
      9. restarting the computer _____
      10. without cables _____

KEY

A.
1. What's Windows 2000?
2. Fast, secure and reliable
3. Easy to use
4. Ready for the Internet
5. Built-in support for new devices

B.
1. A built-in safeguard called Windows File Protection
2. Kerberos
3. Internet Explorer
4. NetMeeting
5. USB (Universal Serial Bus
6. The IrDA (Infrared Data Association) protocol.

C.
1. devices
2. laptops
3. feature
4. intranets
5. configure
6. upgrade
7. surf (the web)
8. URL
9. rebooting
10. wireless