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DIPLOMA PAPER

SYSTEM OF DIDACTIC ACTIVITIES FOR TEACHING TECHNICAL VOCABULARY IN ENGLISH LESSONS FOR COMPUTER SCIENCE ENGINEERING MAJOR.

Author: Johana Bennet Goicochea
Supervisor: Prof. Leipzig Rodríguez Medina. B.A., MSc.
Adviser: Prof. Tania Morales de la Cruz. B.A., MSc

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ABSTRACT

The use of English language as a global means of communication brings a challenge to English classrooms. With the spread of the student-centered approach and the continued increasing use of the Common European Frame to develop communicative competence in students, which includes professional communication, language teachers are often faced with the task of making their lessons more meaningful and practical. The following research is intended for teachers and teachers-in-training who want to provide opportunities for their students to engage in real-life communication in the target language, with the intention of training technical vocabulary. The research brings about a scientific problem on teaching technical vocabulary in English lessons for students of Level A2 at the Majoring in Computer Science Engineering at the University of Matanzas. Designed to meet the students need, the objective is to elaborate a system of didactic activities to teach technical vocabulary in English lessons for the mentioned majoring. The systematization of the theory, supported by the application of the dialectic-materialistic method, as well as theoretical and empirical ones, gave the author the possibility to elaborate a system to be applied in the subject English Language at Level A2. The system is structured in objective, indicators to be considered for the evaluation, bibliography, and methodology, and helps students to boost technical vocabulary related to their Majoring; and takes shape in the activities of the specialization it serves. The practical significance entails the structuring of a system of didactic activities to develop technical vocabulary as a support to Face2Face activities.

INDEX

Introduction……... 1

Chapter I: Theoretical foundations for the teaching of technical vocabulary in English Language……... 6

1.1. A historical view of methods and approaches in language teaching; the teaching of vocabulary……. ……. 6

1.2. The Common European Framework of Reference for Languages (CEFR)……..... 11

1.2.1 CEFR in Cuban Higher Education……. 15

1.3 Teaching vocabulary and the place of vocabulary knowledge within the CEFR…… 17

1.4 Technical vocabulary and its importance in English teaching learning Process……. 26

Chapter II: System of didactics activities for teaching technical vocabulary for Level A2 students, majoring in Computer Science Engineering……..…..…..28

2.1. The development of vocabulary; characterization of the current state in level A2 students, majoring Computer Science Engineering ……..... 28

2.2. System of didactics activities for teaching technical vocabulary in Level A2 of Computer Science Engineering Major; theoretical foundations…… 30

2.3. Methodology for the implementation of the system of didactics activities for teaching technical vocabulary in Level A2 of Computer Science Engineering Major…… 34

2.3.1 System of didactic activities……... 35

Conclusions……..... 40

Recommendations……..... 41

Bibliography

Annexes

INTRODUCTION

In today's modern world, English language has become part and parcel of every existing field, considered as the first global Lingua Franca and the international language in communication, business, science, information technology, entertainment, among others

The unstoppable neoliberal globalization has placed a great importance on learning English as a second foreign language around the world. Latin America due to the increased need of English proficiency for business and international communication linked with prospects for economic competitiveness and the interest in learning the language has made considerable efforts to improve English language learning through different policies and programs. Nevertheless, Latin America is a region with a low level of English, countries, such as: Costa Rica, Uruguay, Chile, Cuba, Dominican Republic, Paraguay and Guatemala have achieved a moderate proficiency according to the English Proficiency Index (2019)

English as a foreign language has gone through different stages in Cuban history. Throughout the years, the strategies developed in different curricula have achieved a certain degree of satisfaction in the conception, implementation and control; however, they failed to fulfill the expectations regarding English language learning.

Cuba, has embraced the imperative necessity of acquiring English communicative competence. Economic, political, social and educational changes that take place in the country are increasingly demanding for professionals capable of mastering the four fundamental English language skills: listening, writing, speaking and reading; intended to solve the problems related to the mastery of this language through an English Language strategy.

The Cuban Ministry of Higher Education, in 2013, began a new process of improvement of the English language in the universities in order to increase the socio-economic and cultural development of the country. Although, it was intended to be applied, in 2016, as an important requirement in a new study plan: Plan E.

The plan of actions aimed at the development of English Language in Higher Education establishes that university students must reach a B1 level according to the Common European Framework of Reference for Languages (CEFR); however, what the starting level students have to achieve was changed to the A2 level as an essential exigency in order to obtain their degree. One of the majoring that embraced the English Language Strategy was Computer Science Engineering at the University of Matanzas, in the 2018-2019 academic year.

The professional model of the aforementioned major is characterized by the preparation of highly qualified professionals capable of developing processes related to computer solutions and systems, the design of software installation guides and software manuals for project presentations. According to the Plan E of the major, students should be able to know, understand, and use the English technical vocabulary aimed at their study field within the main subjects.

Nonetheless, according to CEFR (2013) A2 descriptors focusses on social communicative functions and technical vocabulary is considered as a B2 level content; what shows that the English study program doesn't accomplish with the established and future perspectives for students majoring in Computer Science Engineering.

The teaching of vocabulary has been investigated by authors, such as: Whipple (1925); Finocchiaro (1974); Nation (1990); Harmer (1993); Hatch & Brown (1995); Aeborsold & Field (1997); Coady & Huckin (1998); Cameron (2001); Ur (2009); Del Toro (2019); whom have considered vocabulary as the essence of a language. Several authors, such as: Cowan (1974); Robinson (1980); Yang (1986); Baker (1988); Cabré (1999); Woodward-Kron (2008); Alcina (2009); Nation (2013); Nazar (2016) have researched about the teaching of technical vocabulary without deepening into the importance of technical vocabulary in English lesson.

Based on the considerations previously stated, the following **scientific problem** has been formulated: How to contribute to the development of technical vocabulary in students of Level A2, majoring in Computer Science Engineering at the University of Matanzas?

To solve the previous scientific problem, it is declared as **object of investigation**. The teaching-learning process of English technical vocabulary and as **action field:** the teaching-learning process of English technical vocabulary in Level A2 students, majoring in Computer Science Engineering at the University of Matanzas.

Therefore, **the objective of the diploma paper** is to elaborate a system of activities to develop technical vocabulary in English lessons for students of Level A2, majoring in Computer Science Engineering at the University of Matanzas.

In order to fulfill the objective and to solve the scientific problem, the following **scientific questions** are proposed:

1. Which are the theoretical foundations that sustain the study of technical vocabulary in the teaching learning process (TLP) of English language?
2. Which is the current state of the development of English language technical vocabulary in students of Level A2, majoring in Computer Science Engineering at the University of Matanzas?
3. What system of didactic activities can be elaborated to develop English language technical vocabulary in students in of Level A2, majoring in Computer Science Engineering at the University of Matanzas?

To answer the scientific questions the following **research tasks** are proposed:

1. Determination of the theoretical foundations that sustain the study of technical vocabulary in the teaching learning process (TLP) of English language.
2. Characterization of the teaching of technical vocabulary in English lessons for the students in A2 level, majoring in Computer Science Engineering major at the University of Matanzas
3. Elaboration of a system of didactic activities to teach technical vocabulary in English lessons for the students in A2 level, majoring in Computer Science Engineering at the University of Matanzas

The process of the investigation is based on the **dialectical materialistic**, as the general method of knowledge that allows the systematizing and understanding of the results obtained through the applied theoretical and empiric methods.

The theoretical methods are:

The **logic-historical:** the method contributes to analyze the evolution and development for teaching vocabulary in English lessons.

The **inductive-deductive** and the **analytic-synthetic** for arriving at conclusions through the study, exploration, and deepening of the bibliography, methodological documents on the subject, and summarizing the information obtained.

Modeling to design the set of activities for teaching technical vocabulary in English lessons for the students in level A2, majoring in Computer Science Engineering at the University of Matanzas.

The empiric methods are:

The **direct observation** to characterize the teaching of technical vocabulary in English lessons for the students in level A2, majoring in Computer Science Engineering at the University of Matanzas.

The study of documents to evaluate the way the methodological guidelines for the teaching of vocabulary are expressed and if these guidelines take into account necessary requirements to work with the teaching of technical vocabulary in English lessons for the students in level A2, majoring in Computer Science Engineering at the University of Matanzas.

Surveys to students in level A2, majoring in Computer Science Engineering at the University of Matanzas to know their opinions about learning technical vocabulary

Percentage analysis: to make the percentage analysis of the data obtained

The author considers as units of study: 19 students in level A2, majoring Computer Science Engineering at the University of Matanzas

The practical significance of the present research consists on offering a practical work instrument to contribute to the development of technical vocabulary in students of Level A2, majoring in Computer Science Engineering at the University of Matanzas, its structure and implementation.

The present work consists of two chapters, conclusions, recommendations, bibliography and annexes. The first chapter gives the theoretical foundations about the teaching-learning process of English vocabulary emphasizing the particular characteristics of special lexicon and provides an analysis of the development of the teaching-learning process of English technical vocabulary. The second Chapter has four epigraphs, it shows the current situation of the

teaching of technical vocabulary in English lessons for the students in A2 level, majoring in Computer Science Engineering at the University of Matanzas, and presenting the theoretical foundations to elaborate a description of the system proposed in order to contribute to the development of technical vocabulary, and it is presented in addition to the presentation of a methodology for the implementation of this system of didactics activities.

CHAPTER I. THEORETICAL FOUNDATIONS FOR THE TEACHING OF TECHNICAL VOCABULARY IN ENGLISH LANGUAGE

The present chapter discusses the theoretical foundations of the evolutions of different approaches to language teaching and the role of vocabulary in it. It also refers to the CEFR and the vocabulary within it and the role of technical vocabulary in the professional development and communicative competence of students.

1.1. A historical view of approaches and methods in language teaching; the teaching of vocabulary.

The 20th century was characterized by many changes and innovations in the field of language teaching ideologies. In the history of language teaching approaches and methods, there was a tendency towards methods that focused on writing and reading to methods that were strongly focused on the skills speaking and listening. Even the actual questions concerning language teaching which are debated have already been discussed throughout the history of language teaching (Richards & Rogers, 2007)

In English language teaching the three key terms viz- Method, Approach and technique are used frequently and interchangeably. This tripartite arrangement is hierarchical in order (Bathia, 1972)

According to Anthony (1963) an approach is a set of correlative assumptions dealing with the nature of language teaching and learning. An approach is axiomatic and it describes the nature of the subject matter to be taught.

Harmer, (1993) considered people use the term approach to refer to theories about the nature of language and language learning which are the source of the way things are done in the classroom and which provide the reasons for doing them. He stated approach as a way for describing how language is used and how its constituent parts interlock and as a way for describing how people acquire their knowledge of the language and stated about the conditions which will promote successful language learning.

What shows clearly that an approach is an overall attitude in the process of teaching and learning. An approach describes the way language works, how the knowledge of the language is acquired and the conditions influencing successful.

The practical realization of an approach is a method, and it includes various procedures and techniques as part of its standard fare, according to Hammer (1993)

A method is an overall plan for the orderly presentation of language material, no part of which contradicts, and all of which is based upon, the selected approach. An approach is axiomatic, a method is procedural. (Anthony, 1963) Methods are too prescriptive, assuming too much about a context before the context has been identified. They are also therefore overgeneralized in their potential application to practical situation. (Brown, 1995)

To the author a method is an instrument of teaching, a practical realization of the overall mood of an approach. The method follows the attitude of the approach and fulfils its objectives through procedures that include practices, behaviors, and techniques.

According to López (2013) techniques are procedures that seek to obtain one or more specific products efficiently through a sequence.

“A technique is implementational – that which actually takes place in a classroom. It is a particular trick, stratagem, or contrivance used to accomplish an immediate objective. Techniques must be consistent with a method and therefore in harmony with an approach as well’’ (Anthony, 1963)

According to Nérici (1985), it should be born in mind depending on the breadth of application of the teaching-learning methods; they may perform as a teaching-learning technique.

The author considers that techniques determine how to carry out a process in an orderly way. Its steps clearly define how the course of actions must be guided to achieve the proposed objectives.

Throughout the history of English language teaching (ELT), literature has documented many of general and specific, traditional and contemporary methods that have been classified in diverse ways:

Grammar Translation, used to teach classical languages to the teaching of modern languages, dominated foreign language teaching from the 1840s to the 1940s. In its modified form, this approach continues to be widely used in some

parts of the world today. The fundamental goal of learning a foreign language in Grammar Translation Approach is to be able to read its literature. In order to do so, students are expected to learn the grammatical rules and vocabulary of the target language using bilingual word lists. (Chastain, 1988) It was thought that memorizing vocabulary items, grammatical rules, and translation would provide language learners with useful mental exercise, which would enhance their intellectual growth. Although the prescriptive grammatical rules, and their exceptions formulated by traditional grammarians were taught in this approach, it lacked a justified theory of language or learning (Richards & Rogers, 2007) Vocabulary lists are a familiar part of the lesson in this approach and a typical exercise is to translate lexical items or sentences from the target language into their mother tongue using dictionaries or vice versa (Larsen-Freeman, 2000). One of the critics of this approach in the 1860s was Prendergast, in his manual he described how children learn languages in ready-made chunks and listed what he believed to be the most frequently used words in English. Prendergast (1864) emphasized that the high frequency words should be taught in ready-made chunks.

By the end of the nineteenth century, Direct Approach or Method emerged as a reaction to the Grammar Translation Approach and its failure to produce learners who could communicate in the foreign language they were studying. This approach stressed the ability to use rather than to analyze a language, as the goal of language instruction or in other words, the main goal was to train students to communicate in the target language and to have an acceptable pronunciation. The idea behind the Direct Approach was that students learn languages by hearing them spoken and engaging in conversation (Hubbared & Thornton, 1983). It is supposed that vocabulary can be acquired naturally through interactions during the lesson; therefore, vocabulary is presented in context and is graded from simple to complex. In this approach, vocabulary is emphasized over grammar (Larsen-Freeman, 2000) Concrete words are taught through objects, pictures, physical demonstration, and abstract words are taught by grouping words according to a topic or through association of ideas (Zimmerman, 1997)

The Audio-lingual Approach which was dominant in the United States during the 1940s, 1950s, and 1960s is known to be a major paradigm shift in foreign language teaching (Larsen-Freeman, 2000). Audiolingualism is structural linguistics which its fundamental tenet is that speech is language. This approach adopts the behaviorist view as its theory of learning which claims that learning is a matter of "habit formation" (Decaricco, 2001).The main emphasis in this approach is placed on the grammar of a language, which should be overlearned. The new grammatical points and vocabulary are presented through dialogues. Most of the drills and exercises that follow the dialogues are manipulative and pay no attention to content. In this approach, the major objective of language teaching is to acquire the grammatical and phonological structures of a language; thus, vocabulary learning is kept to a minimum (especially in the initial stages) and new words are introduced and selected according to their simplicity and familiarity to make the grammar practice possible (Zimmerman, 1997). Takefuta &Takefuta (1996) claim that one reason that vocabulary was "restricted" under Audio-lingual Approach is that it emphasized the phonological aspects of language learning.

The method which has dominated the last several decades of this century is the Communicative Approach which is the result of the works of anthropological linguistics like Hymes (1972) and Firthian linguists like Halliday (1973) who viewed language first and foremost as a system for communication. In the 1970's attention was drawn to the importance of communicative competence and knowledge of the rules of language use (Hymes, 1972). This led to a shift away from a focus on accuracy and the forms of language, to a focus on communication and fluency. emphasizing on fluency over accuracy, and focusing on encouraging learners to communicate their messages and intentions using the linguistic resources available to them, vocabulary has not been a primary concern of this methodology and was given secondary status, taught mainly as a support for functional language use (Decaricco, 2001) As in previous approaches, it was generally assumed that vocabulary would take care of itself; therefore, it is assumed that there is no real need for direct vocabulary instruction (Schmitt, 2000)The communicative approach 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 a communicative approach to the teaching of foreign languages or simply the communicative approach. The communicative approach has been influenced by the studies and investigations of the historical cultural school of Vygotsky (1981) who considers language as a social and historic phenomenon, which reveals the union of the affective and the cognitive, the internal and the external, the active character of conscience and the relation of teaching and development.

The principles of communicative approach:

- Classroom environment provide opportunities for rehearsal of real-life situations and provide opportunity for real communication. Emphasis on creative role-plays/ simulations/ surveys/ projects/ - all produce spontaneity and improvisation.
- Within lessons students have to cope with a variety of everyday situations
- More emphasis on active modes of learning, including pair work and group work
- It offers communicative activity to students from early stages
- Errors are a natural part of learning process
- Communicative approach is student-orientated, as it follows students' needs and interests
- Communicative approach is not just limited to oral skills. Reading and writing skills need to be developed to promote students' confidence in all language skills
- Teaching grammar is set in context, students are awarded of connection between communication and grammar
- Use of idiomatic/ everyday language (even slangs)
- Use of topical items with which students are already familiar in their own language - arouses students' interest and leads to more active participation
- Use of authentic resources, such as newspaper and magazine articles, poems, manuals, recipes, telephone directories, videos, news…etc. (http://www.aber.ac.uk)

To the author, the communicative approach is an umbrella term to describe the methodology that teaches students how to communicate efficiently. It also lays emphasis on students' responsibility for their own learning. It involves cooperation within group, self-activity, and dictionary work.

During the last three decades, the outlook on vocabulary has radically changed and researchers have shown outpouring interests towards this area. Therefore, the movement toward effective methodologies for teaching vocabulary has emerged and researchers and language teachers have also suggested many strategies and techniques for vocabulary learning, which are dependent on the efforts of each learner (Takeuchi, Griffiths, & Coyle, 2007)

1.2 The Common European Framework of Reference for Languages (CEFR)

The Common European Framework of Reference for Languages is a common framework (CEFR) of language ability divided into six main levels ranging from beginner to advance. It appeared in its published form in 2001, ten years after the Rüschlikon Conference of 1991 which concluded that a "common framework of reference" of this kind would be useful as a planning tool to promote "transparency and coherence" in language education. In the decade since its publication, this ambition has been achieved to a large extent and the document itself has been translated into 37 languages, widely disseminated in Europe and in parts of Asia and Latin America. The CEFR is one of a number of major initiatives in the language field by the Council of Europe in an engagement that has been continuous since 1964. Engagement in languages started as a means to increase international understanding, promote lifelong learning and increase the quality and practicality of language education in schools. It is evident that language education is fundamental to the effective enjoyment of the right to education and other individual human rights and the rights of minorities. Since the CEFR was published, the engagement of the Council's Language Policy Program together with its European Centre for Modern Languages (ECML) has broadened, building on the success of the CEFR and other projects. A number of policy documents and resources that further develop the underlying educational principles and objectives of the CEFR are available, not only concerning foreign/second languages but also as regards the language of schooling, and the

development of curricula to promote plurilingual and intercultural education.(https://www.coe.int/en/web/common-european-framework-reference-languages)

The Common European Framework provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc. across Europe. It describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop to be able to act effectively. The description also covers the cultural context in which language is set. The Framework also defines levels of proficiency, which allow learners' progress to be measured at each stage of learning and on a life-long basis. (https://www.uk.cambridge.org/elt)

The Common European Framework describes what a learner can do at six specific levels: A1, A2, B1, B2, C1, and C2.

• Basic User (A1 and A2)

• Independent User (B1 and B2)

• Proficient User (C1 and C2)

These levels match general concepts of basic, intermediate, and advanced and are often referred to as the Global Scale. For each level, the full CEF document complements this by describing in depth

• Competencies necessary for effective communication.

• Skills and knowledge related to language learning and competencies.

• Situations (people, place, time, organization, etc.) and contexts (study, work, social, etc. (http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf)

According to CEFR (2013) the Common Reference levels appear in practice to be a wide, though by no means universal, consensus on the number and nature of levels appropriate to the organization of language learning and the public recognition of achievement. It seems that an outline framework of six broad levels gives an adequate coverage of the learning space relevant to European language learners for these purposes.

• Breakthrough, corresponding to what Wilkins in his 1978 proposal labelled ‘Formulaic Proficiency’, and Trim in the same publication1 ‘Introductory’.

• Waystage, reflecting the Council of Europe content specification.

• Threshold, reflecting the Council of Europe content specification.

• Vantage, reflecting the third Council of Europe content specification, a level described as ‘Limited Operational Proficiency’ by Wilkins, and ‘adequate response to situations normally encountered’ by Trim.

• Effective Operational Proficiency which was called ‘Effective Proficiency’ by Trim, ‘Adequate Operational Proficiency’ by Wilkins, and represents an advanced level of competence suitable for more complex work and study tasks.

• Mastery (Trim: ‘comprehensive mastery’; Wilkins: ‘Comprehensive Operational Proficiency’), corresponds to the top examination objective in the scheme adopted by ALTE (Association of Language Testers in Europe). It could be extended to include the more developed intercultural competence above that level which is achieved by many language professionals.

The establishment of a set of common reference points in no way limits how different sectors in different pedagogic cultures may choose to organize or describe their system of levels and modules. It is also to be expected that the precise formulation of the set of common reference points, the wording of the descriptors, will develop over time as the experience of member states and of institutions with related expertise is incorporated into the description. It is also desirable that the common reference points are presented in different ways for different purposes:

C2 (Mastery): Can understand with ease virtually everything heard or read. Can summarize information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations

C1 (Effective Proficiency): Can understand a wide range of demanding, longer texts, and recognize implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use

language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.

B2 (Vantage): Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and Independent disadvantages of various options.

B1 (Threshold): Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics that are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

A2 (Waystage): Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.

A1 (Breakthrough): Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help. (Introductory Guide to the Common European Framework of Reference (CEFR) for English Language Teachers, 2013)

The stated aims of the CEFR are to:

► promote and facilitate co-operation among educational institutions in different countries;

► provide a sound basis for the mutual recognition of language qualifications;

► assist learners, teachers, course designers, examining bodies and educational administrators to situate and co-ordinate their efforts (https://www.coe.int/en/web/common-european-framework-reference-languages)

The view of competence in the CEFR does not come solely from applied linguistics but also applied psychology and socio-political approaches. However, the different competence models developed in applied linguistics since the early 1980s did influence the CEFR. Although they organized them in different ways, in general these models shared four main aspects: strategic competence; linguistic competence; pragmatic competence (comprising both discourse and functional/actional competence), and socio-cultural competence (including socio-linguistic) competence. Since strategic competence is dealt with in relation to activities, the CEFR presents descriptor scales for aspects of communicative language competence in CEFR.

The author considers that the CERF is a successful tool that facilitates and guarantees the teacher for designating the student an adequate level taking into account descriptors in which the main aim is to develop the communicative language.

1.2.1 CEFR in Cuban Higher Education

The Cuban Higher Education inclusion within this European frame began in 2013, according to Splunder &Perez (2018), a new process to improve the teaching of English language in Cuban universities, with the goal of training a professional with a broad profile, and to achieve a better quality in the use of English language by graduates, which will result in their insertion in international spaces for a greater influence on the socio-economic and cultural development of the country. The CEFR as a tool to assist the planning of curricula, courses and examinations by working backwards from what the users/learners from over 20 schools worldwide has adopted; Cuban Universities included.

According to the new strategy implemented by the Cuban Higher Education, the current vision of the English language projects the gradual incorporation of all university majoring into a new modality where from the standards established by the CEFR, students have four courses to certify that they are able to understand and express themselves writing and orally in English language, with proficiency at a B1 level. The initial level to be reach (B1) was modified due to the low level of language acquired by students from previous levels of education and A2 was determined as a minimum level to be certified.

According to Ministerio de Educación Superior (2013) the methodological dimension of the new strategy considers the conception of the teaching of the English language with the adaptation of the CEFR as the basis of national policy regarding the design of standards, English courses for general and specific purposes; the teaching materials and assessment instruments. On the other hand, the administrative dimension includes the creation of language centers and the restructuring of the educational process in tune with the precepts of the CEFR. In the implementation, stage of the actions for the improvement of the English, Face2Face syllabus was selected as the basic bibliography for the courses by levels.

According to British Council (2020) Face2Face syllabus by Redston & Cunningham (2013) is a flexible, easy-to-teach, 6-level course (A1 to C1). It is informed to the Cambridge English Corpus and its vocabulary syllabus has been mapped to the English Vocabulary Profile, meaning students learn the language they need to know at each CEFR level.

The CEFR is currently an important reference at the international level that links the use of languages with different disciplines and knowledge. The British Council has promoted an action-oriented approach to describe the uses of languages. According to the British Council (2020) the approach focuses on action insofar as it considers students who learn a language as members of a society, which has tasks for performing in a given set of circumstances

The author considers that the CEFR has been an important factor in the process of improvement of the English language in Cuba, allowing for greater quality and excellence in training of professionals.

1.3. Teaching vocabulary and the place of vocabulary knowledge within the CEFR

One of the general components, which have to be mastered well by the students in learning English, it is vocabulary. If the students have a lack of vocabulary, they will have difficulties in using English to know what vocabulary is. According to Vygotsky L. (1985), the understanding of the language is a chain of associations that emerge in the mind, under the influence of well-known images of the words. The researcher would like to present several definitions suggested by linguists,

Vocabulary is the words that people teach in the foreign language. However, a new item of vocabulary may be more than a single word: for example, post office and mother-in-law, which are, made up of two or three words but express a single idea. There are also multi-word idioms such as call: a day, where the meaning of the phrase cannot be deduced from an analysis of the component words. A useful convention is to cover all such cases by talking about vocabulary 'items 'rather than 'words'. (Ur, 2009)

According to Neuman&Dwyer (2009) vocabulary is the words people must know to communicate effectively; words in speaking (expressive vocabulary) and words in listening (receptive vocabulary). Vocabulary is central to language and of critical importance to the typical language learning (Coady & Huckin, 1998).
Vocabulary is the collection of words that an individual knows (Linse, 2005). Hatch & Brown (1995) define that vocabulary as a list of words for a particular language or a list or set of words that individual speakers of the language might use. Laufer (1997) stated that vocabulary learning is at the heart of language learning and language use. In fact, it is what makes the essence of a language. Without vocabulary, speakers cannot convey the meaning and communicate with each other in a particular language.
Vocabulary can loosely be defined as “word knowledge”. Therefore, vocabulary can be defined as single words, easily translatable from one language to another (Whipple, 1925)
The definitions above show that vocabulary is a component of language and the number of words that is used by a person, class, profession, etc. on communication and every aspect such as in trade, education, business, etc.

To the author of this research vocabulary is the total number of words that are needed to communicate ideas and express the speakers' meaning.

There are many classifications made by the experts in the language area about the classifications of vocabulary. According to Nation (1990), Aeborsold & Field (1997), Hatch & Brown (1995), Finocchiaro (1974) there are two types of vocabulary: active or productive vocabulary and passive or receptive vocabulary. Active vocabulary refers to putting items, which the learner can use appropriately in speaking or writing, based on this fact; it is more difficult to put it into practice. It means that to use the productive vocabulary, the students are supposed to know how to pronounce it well, they must know and be able to use grammar of the target language, they are also hoped to be familiar with the collocation and understanding the connotation meaning of the words, this type is often used in speaking and writing skill. Passive vocabulary refers to language items that can be recognized and understood in the context of reading or listening, also called receptive vocabulary. Passive vocabulary or comprehensions consist of the words comprehended by people, when they read or listen.

Thornbury (2007) divides vocabulary into some kinds of vocabulary, they are:

- Word Classes: Word classes that words play different roles in a text. They fall one of eight different word classes like Part of Speech: Noun, Pronoun, Verb, Adjective, Adverb, Preposition, Conjunction, and Determiner.
- Word Families: A Word family comprises the base word plus it is in foreign language and its most common derivatives, for example play, play + er, play + ful etc. Research suggests that the mind groups take different forms of the same word together. Therefore, it is rather about the number of word families.
- Word Formation: In English, there are some kinds of formation: compounding, blending, conversion and clipping.
- Multi-word units: several words are not joined to form compounds in groups of more than one word, such as bits and pieces, look for, can function as a meaningful unit with a fixed or semi-fixed form. Technically these are known as multiple-word units.
- Collocation: The term collocation generally refers to the way in which two or more words are typically used together.

- Homonyms: Words that share the same form but have unrelated meanings.

From the explanation above, the researcher concluded that every expert in every book differs in classifying the kinds of vocabulary, because every person has different ways of showing and telling their opinions and ideas. It means that vocabulary contains two kinds of functions and content words.

According to Toro (2019) English teachers and English learners are lucky because not all the English words need to be learned. Del Toro considers that there is not time to teach all the words and everything teachers do to teach vocabulary has to be focused on the following didactic principles:

- Building the learner's 'start up' or initial vocabulary.
- Developing the learner's understanding of what learning words means.
- Showing the learner how to learn the words most effectively
- To develop the learners as independent word learners.

Teaching vocabulary is a crucial aspect in learning a language as languages are based on words (Alqahtani, 2015). It is almost impossible to learn a language without words; even communication between human beings is based on words. Berne & Blachowicz (2008) research indicates that teaching vocabulary may be problematic because many teachers are not confident about the best practice in vocabulary teaching and at times, they do not know where to begin to form an instructional emphasis on word learning.

From the explanations above, the author concluded that there are different types of vocabulary; this is relevant to the fact that people have different ways in understanding words in terms of visual, aural, oral and written words. Not all words suit what learners need, so vocabulary selection is important to be considered to teach learners.

Commonly, there are several techniques concerning the teaching of vocabulary. Techniques employed by teachers depend on some factors, such as the content, time availability, and its value for the learners (Takač & Singleton, 2008)

Experts like Takač & Singleton (2008) stated the following techniques for teaching vocabulary:

- Using Objects: Using this technique includes the use of visual aids and demonstration. They can be used to help learners in remembering vocabulary better, because our memory for objects and pictures is very reliable and visual

techniques can act as cues for remembering words. In addition, Gairns & Redman (1986) state that the real objects technique is appropriately employed for beginners or young learners and when presenting concrete vocabulary. Objects can be used to show meanings when the vocabulary consist of concrete nouns. Introducing a new word by showing the real object often helps learners to memorize the word through visualization. Objects in the classroom or things brought to the classroom can be used.

- Drawing: Objects can either be drawn on the blackboard or drawn on flash cards. The latter can be used repeatedly in different contexts if they are made with cards and covered in plastic. They can help young learners easily understand and realize the main points that they have learned in the classroom.
- Using Illustrations and Pictures: Pictures connect students' prior knowledge to a new story, and in the process, help them learn new words. There are plenty of vocabularies that can be introduced by using illustrations or pictures. They are excellent means of making the meaning of unknown words clear. They should be used as often as possible. The list of pictures includes: posters, flashcards, wall charts, magazine pictures, board drawings, stick figures and photographs. Pictures for vocabulary teaching come from many sources.
- Enumeration: An enumeration is a collection of items that is a complete, ordered listing of all of the items in that collection. It can be used to present meaning. In other words, this technique helps when any word is difficult to explain visually. (Harmer, 1993)
- Mime, Expressions and Gestures: Klippel (1994) implies that "mime or gesture is useful if it emphasizes the importance of gestures and facial expression on communication. At the essence it can not only be used to indicate the meaning of a word found in reading passage, but also in speaking activity as it stresses mostly on communication.
- Translation: Even though translation does not create a need or motivation of the learners to think about word meaning (Cameron, 2001), in some situations translation could be effective for teachers, such as when dealing with incidental vocabulary (Thornbury, 2007), checking students' comprehension, and pointing out similarities or differences between languages, when these

are likely to cause errors (Takač, 2008). There are always some words that need to be translated and this technique can save a lot of time.

- Drilling: Drilling is employed to make learners get accustomed to the word form especially to how it sounds. To make learners more familiar with the word, drilling should be clear and natural (Thornbury, 2007) Drilling is very necessary since learners need to say the word to themselves as they learn it to recall the words from memory (Read, 2000)
- Spelling the Word: The primary means of spelling is actually memorizing words. Word spelling needs to be considered since spelling forms of English words is not always inferred by the pronunciation.

In the teaching and learning of vocabulary, it is essential to distinguish between different types of vocabulary, which need different focus and treatment or some types of vocabulary should be given priorities and emphasis in the teaching learning process according to the learners 'different aims of learning.

1) Spoken and written vocabulary: According to Cambridge International Corpus written data and spoken data, the written list is mainly made up of function words, non-lexical, non-content items including pronouns, prepositions, and conjunctions, while spoken list seems to embrace some lexical words. According to Schmitt & McCarthy (1997) spoken language is the main source of exposure to language for communication, but written language will always remain a fundamental source of input for language learning

2) Core and non-core vocabulary: It refers to those words that are more central to the language than other words and tend to be the most frequently occurring ones.

3) Discourse structuring vocabulary and procedural vocabulary: They are commonly used in dictionaries to give definitions; learners may find them useful when learning other words for the accumulation of their vocabulary.

4) Technical vocabulary: Words or phrases that are used primarily in a specific line of or work or profession.

5) Academic vocabulary: It contains 570-word families that occur reasonably, frequently on a very wide range of academic texts and the list is not restricted to a specific discipline, which means that the words are useful for learners studying humanities, law, science and commerce.

Considering the complexity of vocabulary learning task, it is impossible for the teachers to give explicit teaching of all vocabulary to learners. Besides, learners can be encouraged to learn how to continue acquiring vocabulary after elemental level vocabulary teaching. The researcher agrees with Richards (1976) who considers that since individual learning of vocabulary will benefit learners, it is necessary for teachers to encourage learners to develop their own vocabulary learning strategies, such as:

1) Contextual guessing: contextual guesswork means inferring meaning from clues in the context

2) Memorizing: memory strategies involve relating the word to be retained with some previously learned knowledge.

3) Affixes learning: Another popular strategy for learners to develop is the knowledge of affixes. In English, there are relatively small groups of very useful accessible affixes that can be introduced to learners when learners are at appropriate levels of their language development.

4) Repetition and recycling a word: There is such a lot to learn about a word, one class is not at all sufficient. Knowing a word covers widely, which includes its occurrence, spelling derivation, appropriateness in different situations and word associations.

5) Relating the word in reality: the use of visual images in the classroom is highly appreciated in vocabulary teaching. It is better to try to imagine the new words by using wall charts, flashcards and pictures.

6) Brainstorming activities: It generally refers to brainstorming associations that a word has and then diagramming the result.

This shows that teachers are suggested to conduct planned presentations of vocabulary as various as possible, so it is better that teachers present word meaning and form by combining more than one technique.

Vocabulary knowledge is often viewed as a critical tool for language learners because a limited vocabulary in a second or foreign language impedes successful communication. Underscoring the importance of vocabulary acquisition, Schmitt (2000) emphasizes that lexical knowledge is central to communicative competence and to the acquisition of a second language.

Nation (2001) further describes the relationship between vocabulary knowledge and language use as complementary: knowledge of vocabulary enables

language use and, conversely, language use leads to an increase in vocabulary knowledge.

Researchers such as Laufer and Nation (1997); Nation (2001; 2005); Maximo (2000); Read (2000; 2004); Gu (2003); Marion (2008); Susanto (2016) have realized that the acquisition of vocabulary is essential for successful foreign language use and plays an important role in the formation of complete spoken and written texts. Learning vocabulary items plays a vital role in all language skills (e.g. listening, speaking, reading, and writing (Nation, 2001). Alqahtani (2015), furthermore, argued that the acquisition of an adequate vocabulary is essential for successful foreign language use because without an extensive vocabulary, a language learner will be unable to use the structures and functions people may have learned for comprehensible communication.

The author considers that vocabulary is an important part of the English teaching process. It is supposed to be a very effective communicative device as it carries the highest level of importance within peoples´ verbal interaction.

Attention is paid in the CEFR description to several aspects of vocabulary knowledge and the terms vocabulary range, vocabulary control and vocabulary size are all used.

Descriptors are available for Range (subdivided: Morpho-syntactic range, later renamed General linguistic range; Vocabulary range); Control (subdivided: Grammatical accuracy and Vocabulary control), Phonological control and Orthographic control.

Size, *range* and *control* of vocabulary are major parameters of language acquisition and hence for the assessment of a learner's language proficiency and for the planning of language learning and teaching. https://www.uk.cambridge.org/elt

Vocabulary range concerns the breadth and variety of words and expressions used. Vocabulary range is generally acquired through reading widely. Key concepts operationalized in the scale include the following:

► range of settings – from A1 to B2, then unrestricted;

► Type of language: from a basic repertoire of words and phrases to a very broad lexical repertoire including idiomatic expressions and colloquialisms. http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf)

Vocabulary range has different characteristics in each level that according to the CEFR (2013):

C2: Has a good command of a very broad lexical repertoire including idiomatic expressions and colloquialisms; shows awareness of connotative levels of meaning.

C1: Has a good command of a broad lexical repertoire allowing gaps to be readily overcome with circumlocutions; little obvious searching for expressions or avoidance strategies. Can select from several vocabulary options in almost all situations by exploiting synonyms of even fewer common words. Has a good command of common idiomatic expressions and colloquialisms; can play with words fairly well. Can understand and use appropriately the range of technical vocabulary and idiomatic expressions common to his/ her area of specialization.

B2: Can understand and use the main technical terminology of his/her field, when discussing his/her area of specialization with other specialists. Has a good range of vocabulary for matters connected to his/her field and most general topics. Can vary formulation to avoid frequent repetition, but lexical gaps can still cause hesitation and circumlocution. Can produce the appropriate collocations of many words in most contexts fairly systematically. Can understand and use much of the specialist vocabulary of his/her field but has problems with specialist terminology outside of it.

B1: Has a good range of vocabulary related to familiar topics and everyday situations. Has a sufficient vocabulary to express him/herself with some circumlocutions on most topics pertinent to his/her everyday life such as family, hobbies and interests, work, travel, and current events.

A2: Has sufficient vocabulary to conduct routine, everyday transactions involving familiar situations and topics. Has a sufficient vocabulary for the expression of basic communicative needs. Has a sufficient vocabulary for coping with simple survival needs.

A1: Has a basic vocabulary repertoire of words and phrases related to particular concrete situations.

Vocabulary control concerns the user/learner's ability to choose an appropriate expression from their repertoire. As competence increases, such ability is driven increasingly by association in the form of collocations and lexical chunks, with one expression triggering another. Key concepts operationalized in the scale include the following:

► Familiarity of topics (A1 to B1);

► Degree of control (B2 to C2). http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

According to the CEFR (2013) the vocabulary control must being differentiate taking into account each level:

C2: Consistently correct and appropriate use of vocabulary.

C1: Uses less common vocabulary idiomatically and appropriately. Occasional minor slips, but no significant vocabulary errors.

B2: Lexical accuracy is generally high, though some confusion and incorrect word choice does occur without hindering communication.

B1: Shows good control of elementary vocabulary but major errors still occur when expressing more complex thoughts or handling unfamiliar topics and situations. Uses a wide range of simple vocabulary appropriately when talking about familiar topics.

A2: Can control a narrow repertoire dealing with concrete everyday needs.

A1: No descriptors available

Based on the previously stated, the author concluded that unlike syntax and phonology, vocabulary does not have rules the learners may follow to acquire and develop their knowledge. In other words, it is not clear in foreign language vocabulary learning what rules to apply or which vocabulary items should be learned first. Furthermore, many learners see foreign language acquisition as essentially a matter of learning vocabulary and therefore they spend a great deal of time on memorizing lists of foreign language words and rely on their bilingual dictionary as a basic communicative resource. As a result, language teachers and applied linguists now generally recognize the importance of vocabulary learning and they are exploring ways of promoting it more effectively.

Since the primary evidence for language acquisition, progressively, is the emergence of new forms and not their mastery, the Range of language at the

user/learner's disposal is a primary concern. Secondly, attempting to use more complex language, taking risks and moving beyond one's comfort zone, is an essential part of the learning process. When learners are tackling more complex tasks, their control of their language naturally decreases, and this is not a healthy process. Learners will tend to have less control over more difficult than when they stay within their linguistic comfort zone.

1.4 Technical vocabulary and its importance in English teaching learning process.

The researcher of the paper considers that technical vocabulary seems to be a straightforward term referring to lexical items used with specialized meanings in subjects mainly known by certain users. According to Nation (2013) technical vocabulary has become an established term in applied linguistics for referring to a specific category of specialized words different from academic terms.

A close examination of researches concerning the topic have revealed a lack of consensus about how to define technical vocabulary but also on how to label it. Technical vocabulary has been referred as "discipline specific vocabulary" (Woodward-Kron, 2008); "domain-specific glossaries" (Periñán-Pascual, 2015), "scientific/technical terms" (Yang, 1986), "specialized lexis" (Baker, 1988), "specialized vocabulary" (Robinson, 1980) and "terminological units" (Cabré, 1999).

According to Nation (2013) nowadays, with better understandings of technical vocabulary and its importance, most expects consider that specialized words can and should be taught and studied in a variety of complementary ways.

Researchers as Cowan (1974), Higgins (1966) and Baber (1962) have considered the teaching of technical words as not related to the English teacher's job. However, Alcina (2009) stated that through proper training and self-study, language teachers may be able to develop adequate knowledge in a technical field and can learn strategies and methods to help learners more effectively acquire teaching vocabulary.

On the other hand, Strevens (1973) points out that students who become familiar with the scientific field may have little difficulty with technical words. Godman& Payne (1981) argue that a technical term only makes sense when other related terms are also recognized.

The author considers that language teachers should get acquainted with the core vocabulary of the study field and curricular design in order to integrate both into content area as well in English language.

Based on Alcina (2011) the most important useful strategy in teaching technical vocabulary is to engage learners in active meaningful learning activities, such as, having learners identify technical terms and build term banks in their field on their own and the teacher' s role is as a facilitator. Nation (2013) considers that contextual information may often enable learners to figure out and better understand the meanings of technical words. Also, studying technical words in context enables students to learn the typical collocates, which are very important information in technical vocabulary. (Nazar, 2016).

Through the investigation, the researcher realized that not many experts have devoted their research to the teaching of technical vocabulary. Nevertheless, for its work in class, the strategies and techniques of the teaching vocabulary are taken as reference. Furthermore, the importance of technical vocabulary is not clearly observed because it is usually linked to the academic vocabulary value.

The author considers that the development of science and technology characterized by the neoliberal globalization have given to the technical vocabulary an essential importance in the teaching learning process of English language, in order to develop students' communicative competence. Besides that, the need of knowing the scientific terms is as a crucial factor to expand the comprehensive formation of the future professionals. Also, to combine technical vocabulary and English language can be highly motivating for students because they will be able to apply what they learn in English lessons to their main study field.

Chapter II: System of didactics activities for teaching technical vocabulary for Level A2 students, majoring in Computer Science Engineering.

The chapter presents an exploratory study of the current state of the development of technical vocabulary in Level A2, majoring in Computer Science Engineering. The information obtained from the empirical questionnaire, let the authoress arrived to the essential content of the investigation expressed in the foundation and characterization of the system of didactic activities for the development of the teaching learning process of English vocabulary in level A2, majoring in Computer Science Engineering. The structural elements, including the methodology to apply them are presented.

2.1. The development of technical vocabulary; characterization of the current state in Level A2 students of Computer Science Engineering Majoring

To characterize the current state of the technical vocabulary in A2 level students, majoring in Computer Science Engineering at the University of Matanzas, the following empiric methods were applied by the authoress to obtain information:

- Revision and analysis of legal documents to detail the treatment given to the technical vocabulary in A2 level students, majoring in Computer Science Engineering.
- Survey to 19 A2 level students of Computer Science Engineering Majoring at the University of Matanzas to take into account students' opinion about the importance of technical vocabulary for their professional training.
- The direct observation to characterize the current state of the teaching of technical vocabulary in English lessons for students in A2 level majoring in Computer Science Engineering at the University of Matanzas

As part of the mentioned diagnosis, the authoress decided to carry out a deeper study of Study Plan "E" of Computer Science Engineering. The document made known to the authoress the necessary of the study of English language for completion of student studies. It tackles that students must reach a B1 level in the four macro-skills according to the CEFR. (See Annex 2)

On the other hand, the document: "Educational teaching plan of Computer Science Engineering" shows the importance of technical vocabulary in subjects, such as: Data Structure, Database, Approximate Reasoning, Computer

Architecture and Computer Networks, because the main terminologies are in English language. (See Annex 3)

Moreover, The CEFR was analyzed by the author to be acquainted with the descriptors referring to the vocabulary and technical vocabulary at each level. A2 level does appear to reflect the level referred to by the Waystage specification. It is at this level that the majority of descriptors stating social functions are to be found. The revision of the CEFR shows that technical vocabulary is considered as a Vantage (B2 level) content (See Annex 4)

Face2face Elementary syllabus were also object of study for the development of the research. The books have not enough technical vocabulary aimed to Computer Science, showing just one unit (Unit 6) with some technological words and phrases. (See Annex 5)

The survey to the 100% of A2 level Computer Science Engineering students enrolled in the Languages center of the University of Matanzas, understood as unit of study, was applied to determine the students' opinion about the English technical vocabulary in their majoring. (See Annex 6) The group is formed by 14 men and 5 women. Their age range is from 18 to 21 years old and according to the World Health Organization (2000), they are classified specifically in the young-adults stage.

1) 94.7% of them stated that English language is important in their vocational training because English is considered as the universal language and it is a communication channel around the world. 5.3% of them stated that it is important for them because the bibliography of Computer Science Engineering is in English language most of the time.
2) 100% agreed that English technical vocabulary as an important factor for studying Computer Science because the main subjects include many terminologies in English, and they usually need it in their lessons.
3) 100% considered that the English technical vocabulary is very used in their major
4) 84.2% of them stated that they learn not much technical vocabulary aimed to their majoring in English lessons. 15.8% of them considered that technical vocabulary is not used in English lessons.

5) 63.2% of them considered that they would feel more identified in English lessons if the exercises of technical vocabulary, related to their majoring, were increased because they will use it to understand in a better way their main subject classes. 36.8% of them stated that they would feel identified because they will use it in their future projects and for reading important books about Programming.

The researcher designed an observation guide in order to watch the methodological requirements for teaching technical vocabulary in English language lessons of Computer Science Engineering. (See Annex 8)

The author was able to see with the direct observation that the teaching of vocabulary has some attention at several moments in class and it is always guided by the methods proposed by Face2face syllabus. Vocabulary strategies focuses on the thematic vocabulary most of the time because the existence of technical vocabulary is very scarce. Teachers have difficulties interacting with students when they use technical vocabulary in the English lesson. Teachers do not usually bring lists with technical vocabulary for working with students to class.

As a conclusion, it can state that according to the instrument applied by the author the main strengths are:

- The study plan of the majoring gives a special importance to the English technical vocabulary
- Students consider English technical vocabulary as an important element for their future development as professionals.

On the other hand, it can be stated that the main weaknesses are:

- Face2face Elementary books have little emphasis on the real objectives of Computer Science Engineering.
- Classes are focused in communicative abilities but using just thematic vocabulary.
- Teachers are not familiar with the core vocabulary of the field of study

During the development of the research, the author could verify that in A2 level Computer Science Engineering English lessons there are difficulties with the development of teaching technical vocabulary. That is why, she proposes the following system of didactic activities in order to solve this problem.

2.2. System of didactics activities for teaching technical vocabulary in Level A2 of Computer Science Engineering Majoring; theoretical foundations.

Cuban pedagogy conceives the formation of the subject as the result of a complex process in which a system of influences characterized by its systematic and coherent organization converges, in order to promote a conscious and creative way of acting. Modeling as a reach method allowed the author to perceive the complexity of the pedagogical process and show its manifestation in reality.

The system of didactic activities has been elaborated taking into account the analysis made about the current situation of the English teaching learning process of the technical vocabulary in A2 level students from Computer Science Engineering aimed at solving the theoretical and practical difficulties presented by students. Several definitions of system, activity, and system of activities were considered necessary to prepare the proposal by the author of this research.

According to Corona Camaraza (1985) a system is a hierarchical whole following a determined way which has a structure (diagram of relations) that materializes that structure in certain circumstances to perform certain functions.

Gastón Pérez et al (2002) consider that system is all what provide the general orientation for the study of phenomena as a comprehensive reality formed by components that carry out determined functions and keep stable forms of interaction among them.

Another definition about system is the one offered by Kursanov (1979), system is a comprehensive set of elements that are closely linked one with another and they appear as a unique whole respect to the circumstantial conditions and other systems.

The study made allows the authoress of the research to assume the definition given by Scull (2005).

´´A system is a group or structure of related elements, they relate to each other in a general way, the main estimate of the proposal is based on the communicative approach, then it tries to establish a group of activities of learning and they should play strategic norms and procedures toward the use of the oral expression skill, the comprehension and reflection permitting to integrate its own practice of the communicative interaction. The approach implies reflecting about

its uses. It supposes priorizing in the acquisition of strategies which permit the comprehension of semantic and pragmatic aspects involved in the communicative practice”

Authors like Addine Fernández, F in the investigation report “Approximation to the systematization and contextualization of the Didactics Contents and its relationship” considered that activity is a joint system of interrelated elements and formed a unity to reach any a goal. (Addine, 1998)

Álvarez de Zayas (1998), from the static-dynamic point of view he defined activity as the joint of components interrelated with each its operation aims for three objectives.

Moreover, according to Rosentall & Ludin, (2000) activity is the function of the subject in the interaction process, a specific link with the environment that surrounds it, stimulated by the need, which is oriented towards an objective that satisfies that need that is carried out through a system of actions, definition assumed by the authoress of the research.

According to Blumenfield (1960) a system of activities is set of real or imaginary elements, which are differentiated due to the means of the existing world.

From the activity theory perspective, an activity system is the minimal unit of analysis for understanding human actions. The components of an activity system include the subject (individual or group) from whose point of view the activity is analyzed and the object (the individual or group who is acted upon) and the dynamic relations among them mediated by various artifacts (sings, tools, instruments). The basic structure (subject, object, and artifact) has been expanded to include other meditational elements of rules, community and division of labor. After having analyzed and understood separately the given concepts about system and activity it is acceptable to say that the authoress of the investigation assumes the concept of system of activities given by the Dr. Luis Ernesto Martinez who Expresses: “´´Set of related activities, making an integrity which contributes to the achievement of a general objective as solution for a planned scientific problem.´´ (Martinez, 2008)

In this respect, the authoress intends that the systems of activities could be didactic taking into consideration the concept also given by Martinez (2008) who defines that: “When its objective is to contribute to the improvement of the TLP into the class or others of its forms of organization”

The system of didactic activities is based essentially; on the materialistic-dialectical conception of the Marxist and Leninist philosophy, mainly on what is referred to the postulates of the theory of knowledge. Besides, it takes on the existing relation between thought and language from the theory of the activity; that is why, the use of the language as a means of communication and a vehicle of thoughts and feelings expression is considered as an essential principle. In connection with this, the authoress assumed the position of Federico Engels: “The language and thought are both of social nature which are a product of the necessity of the men to communicate to each other” (Engels, F, 1975). On the other hand, Romeu (1978) cited by Leon (1986) referred that there is no language without thought and vice versa. The following philosophical categories were considered by the authoress:

- The general: it contains the general features that are manifested, without an exception, in all the objects of a class.
- The particular: it integrates the specific features of some objects of a certain class.
- The singular: it determines the peculiar features of an object that make it unique and not repeated and allows the professors to join them certain lessons.

For the previously stated, it can be considered that the philosophical categories express the objective connections of the world, and also the different levels of its development. The categories are related with the part, the complex and the simple, and also the analysis and the synthesis, aspects that must be taken into account to carry out any investigation.

From the psychological point of view, the authoress of the investigation assumes the cultural-historical approach of Vygotsky and his collaborators. The use of the concept of “Zone of proximal development” offers the possibilities for the teacher to know the real capacities of the students to face the activities by themselves and the activities in which they need support. The system of didactic activities proposed by the authoress considers language as an essential tool in transmitting

social knowledge and experience, in the formation of concepts, in analysis and classification of phenomena from reality, and in ordering and generalizing facts and experiences.

The pedagogical area assumes the TLP's potentiality to the formation of the personality of the students because it develops the relationship between the knowledge area and the affective one in the context of the university educational model of Cuba.

The proposal of the system of didactic activities is based on the principals of the Cuban Education:

- Contextualized: for assuming the seat as a cultural institution because it has the social role of forming and development from intellectual, moral, ideological, physical and professional point of view, the subjects that participate in the educational process and according to the new strategy for teaching-learning English in Cuban universities.
- Intentional: because it has a defined objective aimed at developing of the technical vocabulary in Computer Science Engineering.
- Flexible: because it can be applied and adapted taking into account the level and development of students
- Participatory: It propitiates the students-students relation as well the student-teacher relation and its activities are students-centered.
- Systemic approach: It is determined by the relationships between the exercises, organization according to the different levels of assimilation and contents.

The author considers the CEFR as a foundation of the system proposed because it describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so they can be able to act effectively.

2.3. Methodology for the implementation of the system of didactics activities for teaching technical vocabulary in Level A2 of Computer Science Engineering Major.

Due to the current complex situation in the country for the Covid-19 pandemic the author was not able to apply the system of didactic activities proposed to obtain the necessary information for answering the scientific question 4.

Therefore, the researcher, for answering the orientations given by the Language Faculty Scientific Commission, presents the methodological indications to apply the system of didactic activities proposed.

2.3.1 System of didactic activities.

The system of didactic activities is composed by 20 activities and it is proposed as an extra lesson complement for the Face2face Elementary books (A2), unit 6 because the study program of the books has little emphasis on the real objectives of Computer Science Engineering.

The objective of the system of didactic activities is: to contribute to the teaching of technical vocabulary in English lessons for students of the level A2 majoring in Computer Science Engineering in University of Matanzas.

The author considers that the application of the activities doesn't interfere with the dynamics of the lesson because it can be used as motivational exercises, as independent study or as part of the development of the class itself.

The roles of teachers are the followings:

- Teacher as educator: Teachers are educators, leads, role models and identifications for the students and in their environment. Therefore, indeed being a teacher must have specific standards and qualities that must be met.
- Teacher as a learner: Teaching and learning is a continuous process and wherein strategies may differ with the moving generations. People might find many changes in the education system, but the role of a teacher will remain the same but with slight changes. The teacher's job is to convince the student that education fulfills their needs of learning in the classroom. Teachers have to think from the learner's perspective before they plan an interaction with the students. When teachers plan from the learners' perspective and start teaching, students can receive the information without any hesitation to assimilate the given contents.
- Teacher as facilitator: It is very important that students sense that their teacher care about them and thus the teacher becomes the best facilitator to them in all the aspects. As a facilitator, he/she has to direct and support students in learning for themselves as a self-explorer. Teachers should develop the best learning environment, which would be reflected in the students' life in social,

intellectual and linguistic occurrences. As a facilitator, a teacher should lay a strong foundation for their growth.

- Teacher as an assessor: Assessing is one of the important tools for evaluating students' knowledge by giving continuous feedback. The teacher's role is not complete just by teaching a lesson. Assessing is an effective tool for making students learning perfect. A teacher has to first assess its own conclusion before assessing a student, as to what extent a student will be benefitted with a correct assessment.
- Teacher as a manager: The teacher' role as a manager has a very significant and imperative role in managing a class. The teacher has to plan well in advance remembering to handle the class within the stipulated time, covering academics as well as interpersonal skills with various teaching techniques, which is obviously a path to practical approach. Perfect classroom management by a teacher using the major mechanisms will lead to success of the teaching- learning methods.
- Teacher as an evaluator: The teacher has to be an effective evaluator while evaluating the student. A teacher should do true and fair evaluation in order to do justice to a student's major.

The system of didactic activities was conceived taking into account the following structure for each activity:

- Activity
- Title
- Learning goal
- Level of performance
- Teaching Aids.
- Type of practice
- Procedure
- Pacing

Activity# 8

Title: Social Networking

Learning goal: Students should be able to use words and expressions about social networks

Teaching aids: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the activity and introduce the new vocabulary asking if they know the phrases and words aimed to social networking using questions, such as:

- Do you know these words and phrases?
- What do they mean?
- When do you use them?

Then, the teacher should explain the activity and use a clear example so that students can see the correct usage. He / She can use the blackboard if necessary, for analyzing and checking if students understood the activity.

Students answer the activity in pairs. For checking the exercise, students should practice the micro-dialogues through dramatizations.

Level of performance: Recognition/ Reproduction

Pacing: 10 minutes

Complete the mini-dialogues with the words and expressions below.

Device Delete Out-of-date Downloaded Go online
Do a search User-friendly Store Apps information

1. A: What's this little_____?
   B: It's a memory stick for the computer I use it to save_____.
2. A: I'm afraid that the information in this book about Finland is_____.
   B: That's OK. Let's_____ and _____ to look up the latest information.
3. A: Oh, no! I_____ the wrong_____. I don't want these games.
   B: No problem. It's easy to_____ them.
4. A: I really want a new mp4 player. I got mine three years ago. It's not _____

b) Work in pairs. Practice the mini-dialogues with your partner

The author proposes a set of recommendations and methodological steps for the future implementation of the system of didactic activities in order to contribute to

the teaching of technical vocabulary in A2 level students in Computer Science Engineering Major.

The recommendations state by the author are the following:

- Take into account the learning strategies and focus on the student's individual learning.
- Take into account the techniques for teaching new vocabulary and how they can contribute to the better understanding of the contents by students

The researcher proposes to use five different exercises per lesson. One of these exercises can be used as a motivational exercise or part of the development of the lesson as an additional practice. The chosen exercise should be considered by the teacher as the most integrating, and should not exceed ten minutes as pacing, thus respecting the time allocated to the lesson; while the rest of the exercise can be assigned as independent study.

In the first moment, the teacher presents students the new information with enough details. The first part of the presentation would be introducing the meaning of the new language. Next, the teacher must use clear examples so that students can see its correct usage. Finally, the teacher needs to confirm that presentation is successful and that the students understand the new language. At its simplest, this moment is simply asking students to confirm that a particular example is correct, though teachers can use a more elaborate activity at their discretion.

Then, the teacher is advised to insert the exercises. The practice stage can be long, containing multiple activities to reach the entire class. There is a good chance this could take up more time than any other stage. However, drilling can also be brief if the new language is simple or easy for a particular class to grasp.

In the third and final stage, students use what they just learned to synthesize new examples, either written or in spoken form. However, it is important to notice that the production stage is likely to be the most challenging for low-level beginners. In that case, the stage would take a back seat to additional practice.

The teacher must assign a mark (from 5 to 2) to each student according to their answers and on how they use the new vocabulary. (Table 1)

MARK	ASPECTS
5	The student understands and answer the activities correctly and he/she can use the technical vocabulary learned according to the communicative functions
4	The student understands and answer most of the activities correctly and can use the vocabulary learned but with some mistakes.
3	The student understands and answer some questions but can use some words learned very well
2	The student does not answer most of the activities correctly. He/she cannot use the vocabulary well and cannot use it in a communicative function.

Table.1: Marks and Aspects to follow

For evaluating the system of didactic activities, the author proposed to evaluate the exercise used in lesson orally because it allows the teacher not to spend too much time checking the activities and they can correct the pronunciation of the words. Students can also debate and clarify doubts on the subject and they can interact with each other, using real communicative functions (questions and answers, mini-dialogues) about their major and using the technical vocabulary they have learned. Exercises for independent study can be evaluated in writing and the teacher can check, highlight and observe the main spelling mistakes.

CONCLUSIONS

The study of technical vocabulary in the teaching learning process of English language have been tackled by several authors and they have assumed diverse points of view towards the conceptions of teaching English methods. The theoretical foundations are linked to the strategies and techniques related with the different ways in understanding words.

The diagnosis allowed determining the current state of the teaching technical vocabulary in level A2 students of Computer Science Engineering at the University of Matanzas and it shows that the inclusion of technical vocabulary in English lessons is an actual necessity for their development as future professionals.

The formulated system of didactic activities is intended to contribute to the development of English language technical vocabulary in students in of Level A2, majoring in Computer Science Engineering at the University of Matanzas based on the principles and fundaments of Cuban education. The methodology implementation is proposed in order to solve the main difficulties presented.

RECOMMENDATIONS

- To apply the system of didactic activities in students in A2 level of Computer Science Engineering Majoring.
- To implement activities for developing English technical vocabulary in A1 level English lessons to guarantee a better work with students of Computer Science Engineering in subsequent levels.

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ANNEXES

Annex 1: Guide of documents study:

Objective: To verify the treatment given to teaching technical vocabulary of English language in the revision of legal documents:

- Study Plan E of Computer Science Engineering
- Educational teaching plan of Computer Science Engineering
- Common European Framework of Reference for Languages
- Face2Face Elementary Student's book

Indicators:

- Projection on English language in Computer Science Engineering

-Projection of the Syllabus on the development of technical vocabulary.

-The descriptors of the CEFR and the treatment to technical vocabulary within them

-The Syllabus of Computer Science Engineering recognize the importance of English language in the teaching learning process in the major

Yes_____ No_____

-The Syllabus of Computer Science Engineering includes the development of the technical vocabulary in students.

Yes_____ No_____

Annex 2: Analysis of documents: Study Plan E of Computer Science Engineering.

12 de julio de 2017

CARRERA: Ingeniería Informática
CALIFICACIÓN: Ingeniero Informático
TIPO DE CURSO: Curso Diurno
DURACIÓN DE LA CARRERA: 4 años

No	DISCIPLINA	CANTIDAD DE HORAS		
		TOTAL	CLASE	PRÁCTICA LABORAL
CURRÍCULO BASE				
1	Matemática Superior	320	320	
2	Marxismo Leninismo	152	152	
3	Historia de Cuba	52	52	
4	Preparación para la defensa	68	68	
5	Economía Empresarial	48	48	
6	Infraestructuras de Sistemas Informáticos	240	240	
7	Inteligencia Computacional	320	320	
8	Ingeniería y Gestión de Software	562	562	
9	Práctica profesional	1042	42	1000
10	Educación Física	112	112	
TOTAL DE HORAS DEL CURRICULO BASE Y POR FORMA ORGANIZATIVA		**2804**	**1804**	**1000**
CURRÍCULO PROPIO + OPTATIVO Y ELECTIVO				
TOTAL DE HORAS DEL CURRÍCULO PROPIO Y DEL CURRÍCULO OPTATIVO Y ELECTIVO		**948**		
HORAS TOTALES				
TOTAL DE HORAS DEL CURRÍCULO		**3752**		

NOTA: Para tener derecho al ejercicio de culminación de los estudios, el estudiante debe haber aprobado el requisito de Idioma Inglés en un nivel B1+. (Solo para el Curso Diurno, si aplica la política de inglés)

OBSERVACIONES: Este documento oficial es parte integrante del plan de estudio de la carrera, al igual que el modelo del profesional y los programas de las disciplinas; los que fueron elaborados y defendidos con éxito por la Comisión Nacional de la carrera, y obran en todas las universidades que la desarrollan. La carrera finaliza con un tipo de culminación de los estudios que se define por cada universidad.

Comprensión auditiva

Identificar ideas generales y detalles específicos en textos (hablados, de audio solamente, audiovisuales) sobre temas cotidianos y académicos con los que esté familiarizados y que sean expuestos con un discurso claro (bien articulado y con un acento estándar).

Comprensión de lectura

Citar fuentes de referencia con el fin de desarrollar una tarea profesional específica –en inglés o español-integrando información procedente de distintas partes de un mismo texto o de diferentes textos.

Resumir en forma de esquema la información leída, como apoyo a una presentación oral o visual.

Comprender instrucciones relativas a su actividad profesional con cierto grado de complejidad.

Reconocer información relevante (ideas generales y detalles específicos) en textos sencillos (cartas, convocatorias a eventos, formularios).

Expresión oral

Formular y responder preguntas sobre una presentación oral, con fluidez y espontaneidad sin que estas supongan tensión para sí mismo o el público.

Elaborar breves declaraciones ensayadas sobre un tema de su especialidad que resultan inteligibles a pesar de estar marcadas por un acento y entonación inconfundiblemente extranjero.

Brindar información personal profesional (afiliación, intereses profesionales, líneas de investigación).

Leer en alta voz un comunicado breve previamente ensayado (presentación de un orador, propuesta de acción).

La estrategia de trabajo con el idioma inglés se basa en los principios siguientes:

- Los estudiantes al graduarse deben ser usuarios independientes del idioma inglés, lo que equivale al nivel B1+ del Marco de Referencia Europeo para las Lenguas, estándar reconocido internacionalmente, incluso para otros idiomas.
- Las centros de educación superior (CES) emitirán un certificado correspondiente al mencionado nivel de inglés que será colegiado con los empleadores potenciales de nuestros graduados y, por lo tanto, reconocido para el desempeño de funciones que requieran este nivel de idioma. Igualmente se trabajará para que las instancias acreditadoras internacionales reconozcan dicho certificado.
- Se aceptarán igualmente –como variante de convalidación-certificados del nivel B1+ emitidos por instituciones reconocidas y acreditadas internacionalmente.

Se deberá lograr que los estudiantes comprendan que el objetivo de ser competentes al mencionado nivel B1+ implica, ante todo, su esfuerzo, dedicación y gestión personal para poder ser un participante activo en su propia formación profesional.

Annex 3: Document Analysis: Educational teaching plan of Computer Science Engineering

Asignatura:	**Estructuras de Datos**			
CD	Año: 2	Semestre: 1	Horas: 80	EF
CPE	Año: 2	Semestre: 2	Horas: 70	EF

Objetivos generales

Aplicar, con un alto nivel de profesionalidad, los principios de la programación prescriptiva en la automatización de cualquier aplicación.

Consultar literatura en idioma inglés relacionada con las técnicas y tecnología que utilicen.

Aplicar buenas prácticas para organizar y dirigir el desarrollo, implantación y puesta en marcha de los sistemas informáticos acorde con las tecnologías y paradigmas que se utilice

Aplicar el enfoque sistémico al desarrollo de los sistemas informático

Desarrollar productos informáticos tanto de manera individual como en equipos.

Diseñar las estructuras de datos adecuadas para la solución informática de cualquier aplicación.

Asignatura:	**Bases de Datos**			
CD	Año: 2	Semestre: 2	Horas: 80	TC
CPE	Año: 3	Semestre: 1	Horas: 48	TC

Objetivos generales

Aplicar, con un alto nivel de profesionalidad, los principios de la programación prescriptiva en la automatización de cualquier aplicación.

Consultar literatura en idioma inglés relacionada con las técnicas y tecnologías que utilicen.

Aplicar buenas prácticas para organizar y dirigir el desarrollo, implantación y puesta en marcha de los sistemas informáticos acorde con las tecnologías y paradigmas que se utilicen.

Desarrollar los procesos básicos de gestión de software, asegurando la calidad de los productos informáticos.

Desarrollar productos informáticos tanto de manera individual como en equipos.
Utilizar herramientas CASE para auxiliarse en todas las etapas de trabajo de desarrollo de sistemas informáticos.
Aplicar el enfoque sistémico al desarrollo de los sistemas informáticos.

Asignatura:	**Razonamiento Aproximado**			
CD	Año: 2	Semestre: 1	Horas: 70	EF
CPE	Año: 3	Semestre: 2	Horas:32	EF

Objetivos generales:
Desarrollar hábitos de lectura, de estudio sistemático e independiente y de actualización constante.
Desarrollar la capacidad de razonamiento, el pensamiento lógico y el nivel de abstracción mediante la participación activa y colaborativa en el proceso de enseñanza aprendizaje.
Aplicar un enfoque científico en la comprensión y modelado de problemas, sobre la base de establecer correspondencias entre la naturaleza de los problemas y los contenidos que permitan enfrentarlos.
Modelar la estructura de un problema de decisión, identificando las relaciones entre los datos para descubrir la información que permita llegar al conocimiento del problema, aplicando técnicas estadísticas.
Representar datos, informaciones y conocimientos usando varios modelos, para enfocar a partir de ellos la solución de problemas.
Aplicar creativamente los métodos matemáticos y aproximados para contribuir a la solución de problemas de su profesión de manera pertinente, incluyendo el modelado, la selección del método de solución, la determinación de su aplicabilidad, su formulación, su solución e interpretación práctica.
Manejar la incertidumbre y la variabilidad, vinculándola con los conceptos básicos de la teoría de la información y su utilidad práctica en el trabajo profesional.
Describir los fundamentos conceptuales y metodológicos de los métodos que se incluyen en la asignatura.

Desarrollar habilidades para la comunicación oral y escrita en el desempeño de su trabajo, adquiriendo hábitos de trabajo en grupo.
Reconocer y utilizar el vocabulario técnico básico de la disciplina en idioma inglés, manejando literatura en ese idioma.
Utilizar software en la solución de los diferentes problemas abordados en la disciplina.
Valorar con espíritu crítico y autocrítico su trabajo, conjugando exigencia, cuidado de la ética y la estética, organización personal, vocabulario correcto, dignidad, responsabilidad, objetividad, receptividad, y capacidad de persuasión en la elaboración y defensa de las tareas que se le asignen.
Desarrollar su pensamiento y actuación, enfatizando en aspectos tales como la defensa de la patria, la eficiencia económica, el ahorro, el uso racional de la energía y de los recursos materiales y laborales.
Actuar con modestia y sencillez, no obstante, lo sofisticado de las tecnologías y técnicas empleadas.

Asignatura:	**Arquitectura de Computadoras**			
CD	Año: 2	Semestre: 1	Horas: 70	-
CPE	Año: 3	Semestre: 2	Horas: 36	-

Objetivos generales
Consolidar la concepción científica del mundo a partir de la evolución experimentada en el campo de la informática, en lo relativo al hardware y software asociado.
Desarrollar hábitos de organización personal que se requieren en la actividad de programación y explotación de los recursos de computación.
Describir los principios físicos que rigen los dispositivos fundamentales presentes en una computadora.
Describir las características, el funcionamiento y las aplicaciones de los dispositivos fundamentales presentes en una computadora.
Utilizar la programación de bajo nivel en lenguajes de alto nivel cuando se requiera.

Decidir los medios técnicos de cómputo adecuados a ser utilizados en cada aplicación concreta, atendiendo a las limitaciones que pueden existir para disponer de esos medios.

Explotar con una adecuada eficiencia el aseguramiento técnico disponible, teniendo presente la eficiencia económica, el ahorro, el uso racional de la energía y de los recursos materiales y laborales.

Utilizar herramientas para instalar y mantener un medio de cómputo.

Manejar vocabulario técnico básico en idioma inglés con respecto a la temática de arquitectura de computadoras.

Desarrollar habilidades para la comunicación oral y escrita en el desempeño de

Asignatura:	**Metodología de la Investigación (Propia)**			
CD	Año: 2	Semestre: 2	Horas: 42	
CPE	Año: 4	Semestre: 1	Horas: 26	

Objetivos generales

Consultar literatura en idioma extranjero inglés para identificar los conceptos fundamentales y los trabajos relacionados con la solución informática que se proyecte desarrollar

Analizar una organización con enfoque sistémico para evaluar la necesidad de soluciones informáticas que le generen un valor tangible o intangible.

Aplicar los principios de la metodología de la investigación para la identificación de problemas y la concepción de sistemas informáticos que ayuden a enfrentarlos.

Desarrollar hábitos de disciplina, trabajo en equipo, independencia, creatividad, organización personal y responsabilidad ante el trabajo que permitan enfrentar su trabajo, adquiriendo hábitos de trabajo en grupo

Asignatura:	**Práctica Profesional de 2do año (Propia)**			
CD	Año: 2	Semestre: 2	Horas: 320	TC

Objetivos generales

Aplicar de manera independiente y con profesionalidad lo aprendido a fin de proponer soluciones informáticas a una amplia diversidad de problemas

Utilizar las tecnologías adecuadas para el desarrollo de soluciones informáticas.

Consultar literatura en idioma extranjero para identificar los conceptos fundamentales y los trabajos relacionados con la solución informática que se proyecte desarrollar.

Documentar la ejecución de proyectos de sistemas informáticos con artefactos ingenieriles adecuados en función de la complejidad y la naturaleza del proyecto.

Analizar una situación con enfoque sistémico para evaluar la necesidad de soluciones informáticas que le generen un valor tangible o intangible.

Aplicar procedimientos para la planificación, organización, desarrollo, implantación y puesta en marcha de sistemas informáticos de propósito específico.

Desarrollar los procesos de gestión de software y sus infraestructuras tecnológicas atendiendo a las particularidades del proyecto profesional y asegurando su calidad.

Presentar las propuestas de soluciones informáticas basado en decisiones fundamentadas y argumentos claros y coherentes.

Desarrollar hábitos de disciplina, trabajo en equipo, independencia, creatividad, organización personal y responsabilidad ante el trabajo que permitan enfrentar

Solucionar con mejor calidad las tareas que se presenten como profesionales de la informática,

Consolidar hábitos de auto superación que posibiliten mantener un nivel profesional de acuerdo al acelerado desarrollo científico-técnico en la informática.

Annex 4: Document Analysis: CEFR

Common European Framework of Reference for Languages: learning, teaching, assessment

	VOCABULARY RANGE
C2	*Has a good command of a very broad lexical repertoire including idiomatic expressions and colloquialisms; shows awareness of connotative levels of meaning.*
C1	*Has a good command of a broad lexical repertoire allowing gaps to be readily overcome with circumlocutions; little obvious searching for expressions or avoidance strategies. Good command of idiomatic expressions and colloquialisms.*
B2	*Has a good range of vocabulary for matters connected to his/her field and most general topics. Can vary formulation to avoid frequent repetition, but lexical gaps can still cause hesitation and circumlocution.*
B1	*Has a sufficient vocabulary to express him/herself with some circumlocutions on most topics pertinent to his/her everyday life such as family, hobbies and interests, work, travel, and current events.*
A2	*Has sufficient vocabulary to conduct routine, everyday transactions involving familiar situations and topics.*
	Has a sufficient vocabulary for the expression of basic communicative needs. *Has a sufficient vocabulary for coping with simple survival needs.*
A1	*Has a basic vocabulary repertoire of isolated words and phrases related to particular concrete situations.*

	VOCABULARY CONTROL
C2	*Consistently correct and appropriate use of vocabulary.*
C1	*Occasional minor slips, but no significant vocabulary errors.*
B2	*Lexical accuracy is generally high, though some confusion and incorrect word choice does occur without hindering communication.*
B1	*Shows good control of elementary vocabulary but major errors still occur when expressing more complex thoughts or handling unfamiliar topics and situations.*
A2	*Can control a narrow repertoire dealing with concrete everyday needs.*
A1	*No descriptor available*

Annex 5: Document Analysis: Face2Face Elementary; Unit 6

			Vocabulary	Grammar	Real World
6A	Google it!	p48	the internet	Past Simple (3): negative, *yes/no* questions and short answers	
6B	Changing technology	p50	mobile phones and TVs; past time phrases	*can/can't; could/couldn't*	
6C	The news	p52	verbs from news stories		talking about the news
6D	Mario Man	p54	articles; *a, an* and *the*		
Extra Practice 6 and Progress Portfolio 6 p120			Self-study DVD-ROM 6		

Speaking	Listening	Reading	Writing
My internet Find someone who ...	Planet Google	The Google guys	Negative Past Simple sentences Past Simple *yes/no* questions
My mobile, computer and TV	**Help with Listening** *can* and *can't*	Our first colour TV The first mobile phones	My first mobile
Telling news stories	Here is the news VIDEO Talking about the news **Help with Listening** Sentence stress (3)	Two news reports	
Video games	The father of video games	Shigeru Miyamoto fact file	
HELP WITH PRONUNCIATION Past Simple of regular verbs p55		**Reading and Writing Portfolio 6** Text me! Workbook p74	

Annex 6: Students Survey in A2 level in Computer Science Engineering

Objective: To identify students' interest in the English technical vocabulary aimed at their major.

Dear student: an investigation is being made as a part of a degree paper, and you are expected to respond with honesty and clarity. It is anonymous:

1. Do you consider English language important for your development as a future professional?

   Yes_____ No_____

   Why? _____

2. Is technical vocabulary in English language important for the development of professional competencies in your major?

   Yes_____ No_____

   Why? _____

3. Do you use technical vocabulary in English in your major?

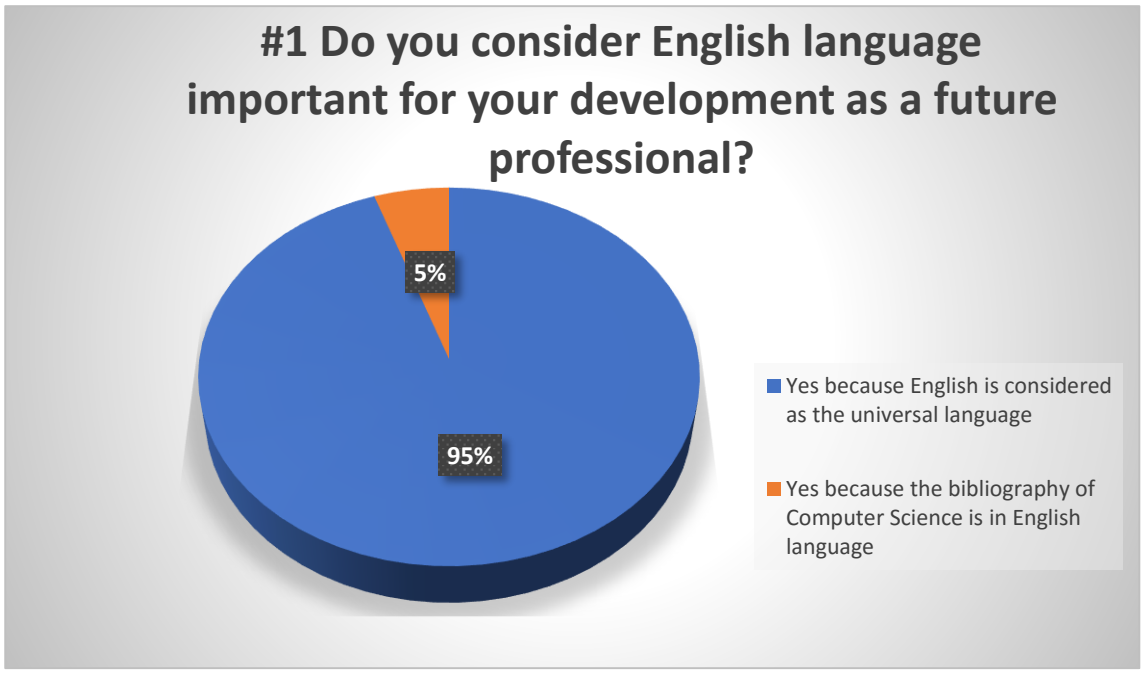
   A lot_____ Sometimes_____ Rarely_____ Never____

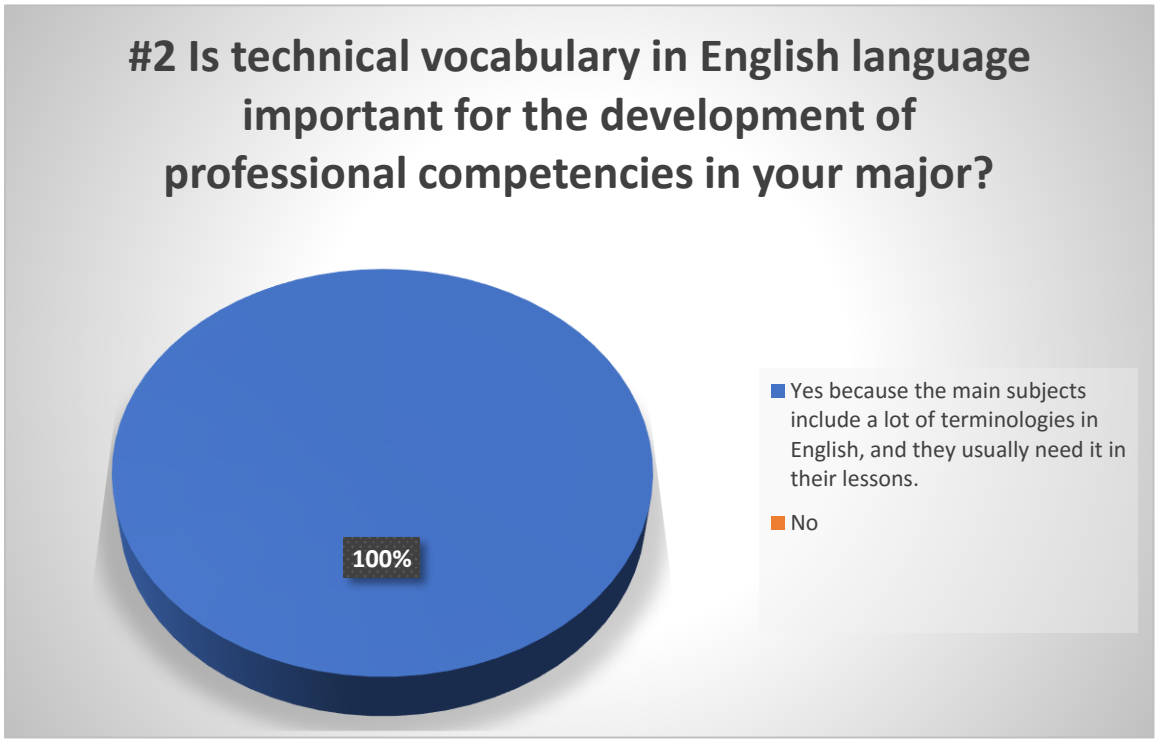
4. Do you think that the technical vocabulary in English related to your major in English lessons is:
   Too much_____ Sufficient ____ Not much_____ Not used_____

5. Would you feel identified with activities about technical vocabulary if they were increased in English lessons?

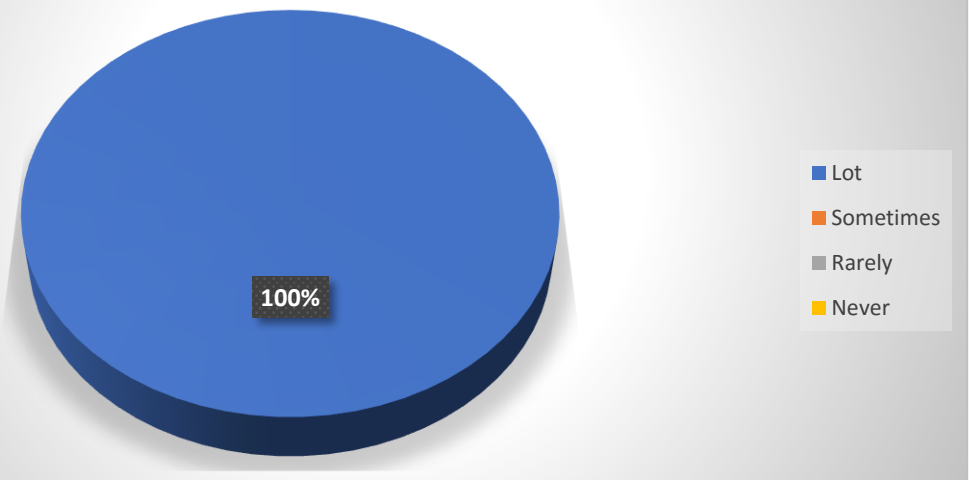
   Yes_____ No_____ Why?

Annex 7: Survey for A2 level Students in Computer Science Engineering: Graphics.

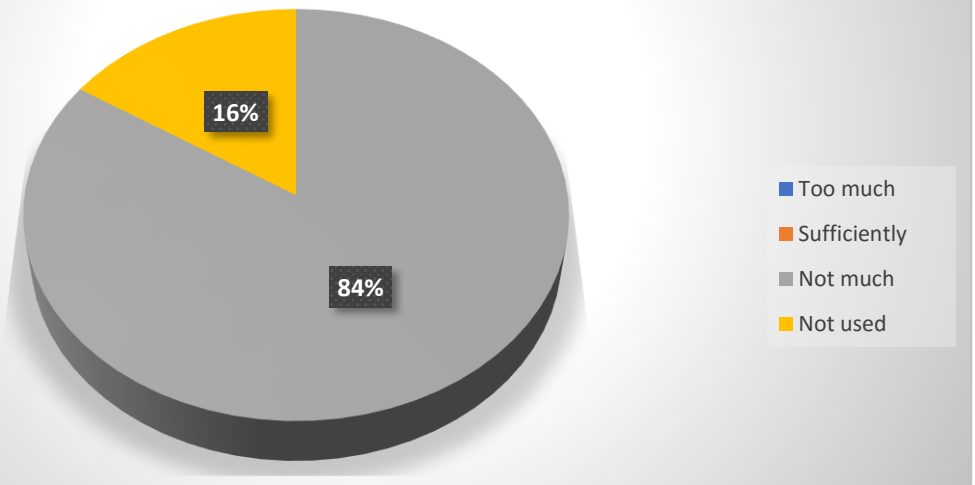


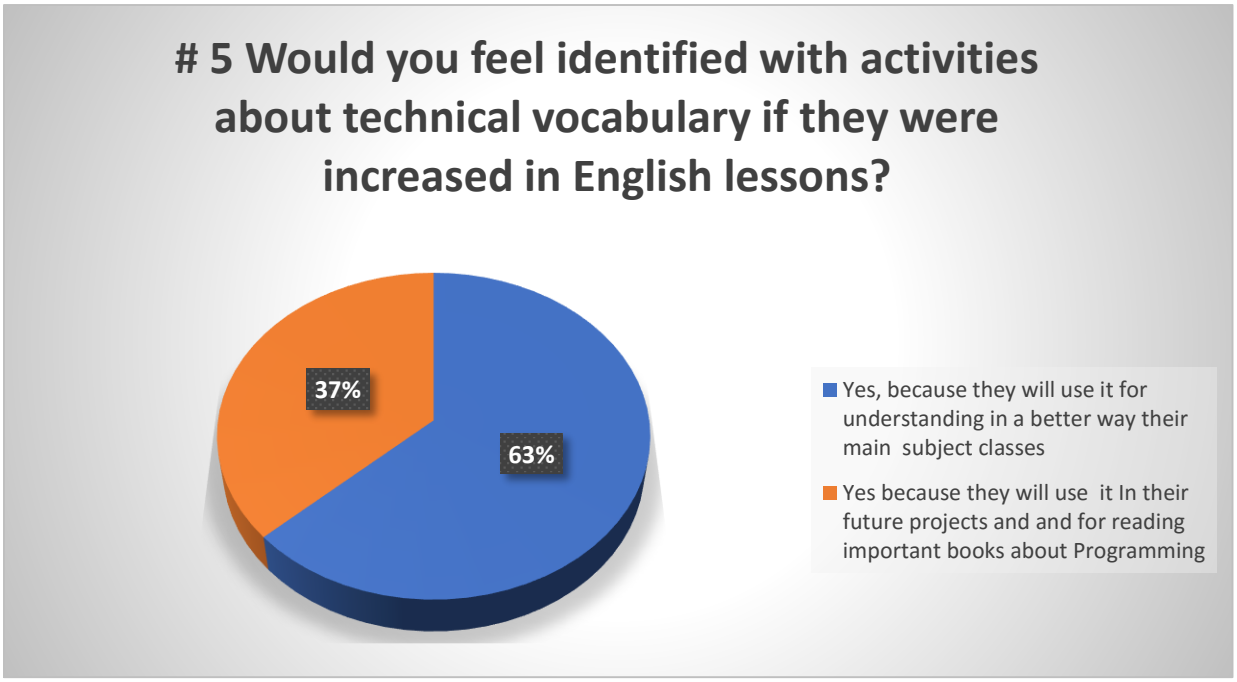


3 Do you use technical vocabulary in English in your major?



#4 Do you think that the technical vocabulary in English related to your major in English lessons is:





Annex 8: Observation Guide

Objective: To observe the methodological requirements for teaching technical vocabulary in English language lessons for Computer Science Engineering.

Parameters to measure.	**It is observed**	**It is not observed**
Vocabulary teaching is conceived in class.		
It is oriented and motivated towards the objectives related to teaching technical vocabulary		
A socio-psychological climate is fostered that favors an adequate perception of the technical vocabulary		
The availability of materials for the study of technical vocabulary is ensured and organized		

Vocabulary learning in classes is regulated and controlled		
Students are encouraged to communicate through activities using technical vocabulary.		
Technical vocabulary potential is used to carry out education labor		
Mastery and security are observed in the procedures uses for teaching technical vocabulary		
Search is stimulated about the way technical vocabulary is learned in class and in independent activities		

Annex 9: System of didactic activities to develop technical vocabulary.

General learning goal: To contribute to the teaching of technical vocabulary in English lessons for students of the level A2 majoring in Computer Science Engineering in University of Matanzas.

Activity#1

Title: Computer parts

Specific learning goal: Students should be able to recognize the computer tools

Teaching resource: Teacher's voice, flashcards.

Type of practice: Controlled

Procedure: The teacher should focus students on the pictures. He/she can ask questions as:

- Do you know what they are?
- What are they?

The possible answers are:

- Computer tools.
- Computer parts.

Then, the teacher should explain the activity and use a clear example. Students answer the activity on their own. To check it, the teacher selects a student who is going to be the first to ask a partner using the information of the flashcards:

- Is this a/an_____?
- What's this?

Students continue asking and answering each other. The teacher must make sure that each student asks and answers correctly.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Find the correct word and write it on the line below.

b) Check the answers with your partners.

Activity#2

Title: Who am I?

Specific learning goal: Students should be able to identify and match the technical words with the correct picture

Teaching resource: Teacher's voice, pictures.

Type of practice: Controlled

Procedure: The teacher should focus students on the pictures and explain the activity. Students answer the activity on their own. To check it, the teacher selects a student who is going to be the first to ask a partner using the pictures:

- What's this?

Students continue asking and responding each other and they must check and correct answers in every case.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/ Written

Complete the table using the correspondent technical machine with the correct name.

Monitor	Keyboard	CPU tower	Webcam
Mouse	Tablet	DVD driver	Flash drive
Speakers	Printer	Headphones	Video Cam
Camera	Blank CDs	Microphone	E-Reader

b) Check the answers with your partners.

Activity# 3

Title: Finding!

Specific learning goal: Students should be able to identify the technical words in the word search

Teaching resource: Teacher’s voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the words search. He/she can explain what a word search is. If necessary, can translate “word search” on the board for a better understanding. The teacher must explain the exercise. He should select a student who is going to answer the activity by spelling each word and its partners should say if it is right or wrong in every case and correct it.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Find ten technical devices in the word search.

R	L	T	A	B	L	E	T	I	T
C	A	M	C	O	R	D	E	R	S
W	P	D	W	E	B	C	A	M	C
A	T	S	I	V	R	T	E	I	A
K	O	N	M	O	B	I	L	E	N
T	P	R	C	A	M	E	R	A	N
U	S	B	P	E	N	O	N	M	E
R	P	R	I	N	T	E	R	P	R

b) Check your answers with your partners.

Activity#4

Title: Internet

Specific learning goal: Students should be able to identify the technical words and phrases.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the word list and check if students know the words. Then, the teacher explains the activity and use a clear example so that students can see its correct usage. He/she must use the blackboard if necessary. Students should work on their own. Students check the activity one per item and the rest of them must focus, correct and evaluate their partner's answers.

Level of performance: Recognition

Pacing: 5-8 minutes

Evaluation: Orally/Written

Match:

1. Check	a. to the Internet
2. Surf	b. a computer
3. Play	c. music
4. Use	d. a thumb drive
5. Download	e. the Internet
6. Upload	f. an email account

7. Open	g. your email
8. Plug in	h. an email
9. Connect	i. photos
10. Send	j. online games

b) Check the answers with your partners.

Activity# 5

Title:

Learning goal: Students should be to correspond the technical words and phrases according to each picture.

Teaching resource: Teacher's voice, pictures.

Type of practice: Controlled

Procedure: Teacher should focus students on the pictures and explain the activity. Students answer the activity on their own. To check it, the teacher selects a student who is going to be the first to ask a partner using the pictures:

- What's this?

Students continue asking and responding each other and they must check and correct the answers in every case.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: orally/Written

Select the correct word with the picture taking into account what each picture suggests.

1. Networks 2. Connect 3. Global 4. Router

5. Servers 6. Data 7. Spam 8. Hacker

9. Security 10. Cloud 11. Hashtag 12. Crowdfunding computing

_____

_____

_____

_____


#
SOCIAL
MEDIA

_____

_____

_____

_____

_____

_____

_____

_____

b) Check answers with your partner.

Activity# 6

Title: My grandma!

Specific learning goal: Students should be able to complete the sentences using the correct technical words from the list.

Teaching resource: Teacher’s voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the word list and check if students know the words. Then, the teacher explains the activity and use a clear example so that students can see its correct use. He/she must use the blackboard if necessary. Students should work on their own and check the activity with their partner.

Extra Idea: The teacher can assign students for reading the text. It is important that the teacher or an advance student in the class read for the first time to give a good example of reading.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: orally/Written

1. Put the words from the list below into the gaps.

Silly, smart, program record, settings, set, watch

Grandmother always asks..... (a) questions about the..... (b) gadgets in the house. The other day she wanted to know how to .....(c) the video, as she wanted to..... (d) a film late at night. Frank showed her the buttons and..... (e) but Granny did not really understand it. "Will you ..... (f) the alarm clock for me, dear?" I will wake up and..... (g) it during the night.

b) Check answers with your partners

Activity# 7

Title: Security and safety

Specific learning goal: Students should be able to correspond technical words with their purpose.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the word list and check if students know the words. Then, teacher explains the activity and use a clear example so that students can see correct usage. He/she must use the blackboard if necessary. To check it, the teacher selects a student who is going to be the first to ask a partner:

- What does_____ do?

The rest of them must focus on their partner's answers for evaluating them and correcting them if necessary.

Level of performance: Recognition

Pacing: 5-10 minutes

Evaluation: Orally/Written

Match the security solution 1-5 to its purpose a-e

1. a firewall	a) prevents damage that viruses might cause
2. antivirus software	b) make sure only authorized people access the network
3. authentication	c) checks the user is allowed to use system
4. username, password and biometric	d)blocks unauthorized access codes scanning
5. encryption	e) protects the system from public access

b) Check with your partners.

Activity#8

Title: Social Networking

Specific learning goal: Students should be able to use words and expressions about social networks

Teaching resource: Teacher’s voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the activity and introduce the new vocabulary asking if they know the phrases and words related to social networking using questions, such as:

- Do you know these words and phrases?
- What do they mean?
- When do you use them?

Then, the teacher should explain the activity and use a clear example so that students can see its correct usage. He / She can use the blackboard if necessary, for analyzing and check if students understood the activity.

Students answer the activity working in pairs and later, students should practice the micro-dialogues through dramatizations.

Level of performance: Recognition/ Reproduction

Pacing: 10 minutes

Evaluation: Orally/Written

Complete the mini-dialogues with the words and expressions below.

Device Delete Out-of-date Downloaded Go online

Do a search User-friendly Store Apps information

5. A: What’s this little_____?
   B: It's a memory stick for the computer I use it to save_____.
6. A: I'm afraid that the information in this book about Finland is_____.
   B: That's OK. Let's_____ and _____ to look up the latest information.
7. A: Oh, no! I_____ the wrong_____. I don't want these games.
   B: No problem. It's easy to_____ them.
8. A: I really want a new mp4 player. I got mine three years ago. It's not

_____

b) Work in pairs. Practice the mini-dialogues with your partner.

Activity# 9

Title: Computers & Internet

Specific learning goal: The students should be able to complete the sentences using the correct technical words from the list.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the word list and check if students know the words. Then, the teacher explains the activity and use a clear example so that students can see its correct usage. He/she must use the blackboard if necessary. Students should work on their own. Students check the activity one per item and the rest of them must focus on correcting and evaluating their partner's answers.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Complete the 15 sentences with the correct technical words in the list.

LIST

Attachment	E-book	Laptop
Blog	E-mail address	Link
Delete	File	Password
Document	In-box	Online
Download	Keyboard	Sign in

1. I can send you a message if you let me know your_____.
2. If you click on that_____, it will take you to a new website.
3. I sent you a message this morning. Did you check your_____?
4. How many hours a day are you_____?
5. I bring my _____ computer to work.
6. How do you upload and _____ files?
7. Be careful when you decide to open a _____. It may have a virus!

8. I write about my travel experiences on my own personal_____.

9. You can _____ any computer document or e-mail message that you do not want to keep.

10. Oh, no! I just spilled my coffee on my computer _____! My boss will be really angry.

11. I almost never buy books at a bookstore anymore. I usually read_____.

12. You can _____ to your e-mail address account with your username and password.

13. Our teacher sent us an e-mail with an attachment called homework.doc- “doc” means_____.

14. My _____ is a secret. Only I know it.

15. I took a photo of our school yesterday and sent it to you as an _____.

b) Check the answers with your partners.

Activity#10

Title: What are they?

Specific learning goal: students should be able to correspond the technical words with their concepts.

Teaching resource: Teacher’s voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the speech bubble and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What’s is a/an_____?

B- It’s_____

Students should pay attention to their partners’ answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Correspond the following concepts with the words in the speech bubble

Tablet	Play Station	Printer	Scanner	MP3 player
Webcam	Calculator	Television	Camera	Laptop

1. A machine that prints words from a computer_____.
2. A thing that you use for taking photographs_____.
3. A thing that feeds its images in real time to a computer_____.
4. A mobile computer that is operated by touching the screen_____.
5. A portable media player that can store and play digital media_____.
6. A personal computer for mobile use_____.
7. A series of several video game consoles_____.
8. A machine like a box that shows moving pictures with sound_____.
9. A machine that gives a picture of the inside of something_____.
10. An electronic instrument that adds, subtracts, multiples and divides_____.

b) Check with your partners.

Activity# 11

Title: Hardware

Specific learning goal: Students should be able to correspond the technical words with the definitions.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the speech bubble and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What's is a/an_____?

B- It's_____

Students should pay attention to their partners answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Fill in the gaps:

Software	Mouse	CD	Speakers	Monitor
Mouse pad	keyboard	Hardware	Printer	Flash Driver

1. A computer has many parts called_____
2. Programs that control how the computer hardware works are called_____
3. Which two pieces of computer hardware do people use to tell the computer what to do? _____ &_____
4. Which two pieces of hardware does the computer use to tell people what it is doing? _____&_____
5. A flat piece of material designed to provide a surface for the mouse is called a _____
6. Which hardware device prints a document? _____
7. What is the abbreviation for Compact Disk? _____
8. A small storage device that is used to transport files from one computer to another is called_____

b) Check answers with your partners

Activity#12

Title: What are we?

Specific learning goal: Students should be able to correspond the technical words with their concepts.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the speech bubbles and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What's is a/an_____?

B- It's_____

Students should pay attention to their partner's answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Circle the letter of the appropriate answer to the following sentences.

A_____ is an electronic device that executes the instructions in a program.

a. Hardware	b. Software	c. Input	d. Computer

An_____ provides an user interfaces for users to manage files, start programs, and customize computer settings and other tasks.

a. Operating system	b. Hardware	c. Data	d. Default

Basic and Pascal are examples of:

a. Hardware	b. Software	c. Operating system	d. Speed

What makes a computer powerful is?

a. Size, expense and ability	b. speed, reliability and storage	c. data, information default	d. Netbook screen, PDA

Examples of computer types are

a. Windows and Linux	b. Digital and electronic	c. VAIO and ACER	d. Laptop and Palmtop

b) Check answers with your partners

Activity# 13

Title: What is…?

Specific learning goal: Students should be able to correspond the technical words with the definitions and uses.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the word list and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What's is a/an_____? / What does____ do?

B- It's_____

Students should pay attention to their partners' answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/written

Match the words from the list with the following definitions and uses.

Restart dial a phone number Task Manager User name

Crash infect replace delete freezes

a. A virus can do this to your computer. .....

b. To start your computer again. .....

c. This happens to a program if you can see NOT RUNNING in the status column. .....

d. The synonym of "cancel". .....

e. You have to give this data to the helpdesk if you have a problem with the Internet. .....

f. You do this when you phone somebody or connect to the Internet.....

g. You do this with the ink cartridge when you install a new one. .....

h. The synonym of `go wrong/completely stop working`. .....

i. You can see the list of programs running here. .....

b) Check answers with your partner

Activity#14

Title: Computer and process

Specific learning goal: Students should be able to correspond the technical words with the definitions and uses.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher should focus students on the word list and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What's is a/an_____? / What does____ do?

B- It's_____

Students should pay attention to their partners' answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Evaluation: orally/Written

A- Match each word with its definition.

-Format	a. to assemble by cutting and rearranging
-Convert	b. an arrangement of facts and numbers in rows or blocks, material
-Insert	c. to produce in s specified form or size
-Edit	d. to wipe out, to eliminate by blotting out
Table	e. transform, to change from one function to another

-Portrait mode

-Delete

f. to put or thrust in

g. vertical format

B- Fill in the gaps from the list. Format, convert, insert, edit, table, portrait mode, delete

a. You can ..... a document when you decide on its final layout.

b. If you use different styles, and change the font size and color, you can..... a document.

c. She can make charts and graphs easily from statistical.....

d. You can use..... when the short edge of the paper is horizontal.

e. If she does not want to use some parts of a text, she can..... them.

f. You can easily..... tables into graphs with Excel.

g. He can also ..... pictures and photos into the document with word processor.

c) Check answers with your partners.

Activity#15

Title: Tick me!

Specific learning goal: Students should be able to identify the correct technical words in each situation.

Teaching resource: Teacher’s voice, chalk and Blackboard
Type of practice: Controlled

Procedure: The teacher must focus students on the activity and check if students know the words. Then, the teacher explains the activity and use a clear example so that students can see its correct usage. He/she must use the blackboard if necessary. Students should work on their own. Students check the activity one per item and the rest of them must focus on their partners ‘answers and correct them if necessary.

Level of performance: Recognition

Pacing: 10 minutes.

Evaluation: Orally/Written

Choose the correct word in each of the following situations.

1 The speed with which a modem can process data is measured in –

a) __ bandwidth b) __ bits per second (bps) c) ___signal

2 Cables consisting of several copper wires each with a shield are known as - cables.

a) __ twisted pair b) ___ optical fiber c) ___power cables

3 Computers that are connected together within one building form a -'

a) ___ WAN b) ___ ISP c) ___ LAN

4 If you transfer a file from a remote computer to your computer, you -'

a) ___ download b) ____ upload c) ____ run

5 To send out information is to -'

a) ____signal b) ____ packet c) ____ transmit

6 A document containing information and graphics that can be accessed on the internet is

a) ____ a website b) ____ a web page c) _____ the World Wide Web

b) Check answers with your partners.

Acitvity#16

Title: Combine us!

Specific learning goal: Students should be able to identify the concepts and to correspond them.

Teaching resource: Teacher's voice, chalk and Blackboard.

Type of practice: Controlled

Procedure: The teacher should focus students on the word list and explain the activity using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

A- What's is a/an_____? / What does____ do?

B- It's_____

Students should pay attention to their partners' answers and correct them if necessary, using the right answer.

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/Written

Combine one word from A and one word from B and match it with the appropriate definition in C.

Create	Products	__a monitor will do this on a computer screen.
Central	Information	__ this describes the format of O and 1 in which information is stored.
Software	Processing	__these enable a computer to perform unit word

		processing, to create databases, and to manipulate numerical data.
Display	Card	__when two or more components are combined and then incorporated into an integrated single package.
Digital	Files	__to make new programs, utilities or documents.
Computer	Network	__a group of electronic machines connected by cables or other means which can exchange information and share equipment (such as printers and disk drives)
Circuits	Data	___the principal microchip that the computer is built around.

Complete each gap in the following text with a phrase from the table above.

1 The computer monitor will_____ _____ so you can see it on screen.

2 Information is stored on a computer as_____ _____.

3 Spreadsheet and graphic software are examples of _____ _____

4 Digital communications and_____ _____ have allowed developments in hardware to be made.

5 In order to organize data you should _____ _____ where you can store data.

6 When several computers are linked together you have a _____

_____ .

7 The part of the computer, which interprets and carries out instructions, is the _____ _____.

8 An_____ _____can be inserted in your computer to give your computer extra capabilities.

c) Check answers with your partners.

Activity# 18

Title: Data Processing.

Specific learning goal: Students should be able to correspond the headings with their step.

Teaching resource: Teacher's voice, chalk and Blackboard.

Type of practice: Controlled.

Procedure: The teacher must focus students on the word list. He/she can explain what a word search is. If necessary, he can translate '' headings'' and '' steps'' on the board for a better understanding. Teacher must explain the exercise using a clear example. Students answer it by working in pairs and then they must check the activity orally with their partner by micro-dialogues:

- What does data_____ do?

Level of performance: Recognition

Pacing: 10 minutes.

Evaluation: Orally/Written

Match the headings in the box to the data processing steps a-f.

Data coding Data collection Data sorting

Data tabulation Data entry Data validation

a._____ gather the raw which you want to process.

b._____ arrange and systemize the data.

c._____ clean the data and double-check for faults.

d._____ enter the data into a system.

e._____ arrange the data into table format so that it can be analyzed.

f._____ create categories to organize the data into relevant groups.

b) Work in pairs. Check answers with your partner.

Activity# 19

Title: Websites.

Specific learning goal: Students should be able to complete the sentences using the correct technical words from the list.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the word list and check if students know the words. Then, the teacher explains the activity and use a clear example so that students can see correct usage. He/she must use the blackboard if necessary. Students should work on their own and check the activity with their partners.

Extra Idea: The teacher can assign students for reading the text. It's important that the teacher or an advance student in the class read for first time to give a good example of reading.

Level of performance: Recognition

Pacing: 10 minutes.

Evaluation: Orally/Written

Fill in the blanks with one of the words from the following list.

Accessible, links, location, graphics, navigation, support, rules, visitors, troubleshooting, map

If you want to form an opinion about a website you have to follow some important..... (a) Besides the design ... (b) is very important. If .....(c) to the site cannot easily find their way they will never return. Do not use too many..... (d) you can base on text..... (e) A site..... (f) will offer a good overview, a useful..... (g) page will help with FAQ and..... (h) Try not to change the..... (i) of the navigation elements on each page. Try to make every page..... (j) within four clicks.

b) Check answers with your partners.

Activity#20

Title: Quiz: Computers and Internet

Specific learning goal: Students should be able to identify the concepts and to correspond them in every situation.

Teaching resource: Teacher's voice, chalk and Blackboard

Type of practice: Controlled

Procedure: The teacher must focus students on the activity and explain it giving a clear example. If necessary, he can translate "Quiz" and "vocabulary knowledge''.

Students must answer the activity by their own and they can check it by asking the questions from each item to a partner. They can also score their technical vocabulary: 13-14: Excellent 11-12: Good 9-10: Study More!

Level of performance: Recognition

Pacing: 10 minutes

Evaluation: Orally/ Written

Answer the following fourteen questions:

1. What do people do when they change something on a "document"?

a) They attach it

b) They chat

c) They download it

d) They edit it

2. A "font" describe which of the following things?

a) A kind of computer

b) An e-mail accounts

c) Letters

d) Keys

3. In which of the following places can you always find a “home page"?

a) At home

b) In a book

c) On the World Wide Web

d) In a printer

4. Which of the following words best describe the word "icon"?

a) Picture

b) Number

c) Color

d) Size

5. Which of the following things can you find in an "inbox"?

a) A blog

b) An e-mail messages

c) Hardware

d) A monitor

6. What kinds of things can you find on a "keyboard"?

a) Memory

b) Words

c) Letters

d) Software

7. Which of the following things can a "link" do?

a) Open an Internet café

b) Close a file

c) Help you save information

d) Bring you to another website

8. Which of the following things can a computer "mouse" do best?

a) Create a program

b) Buy computer software

c) Move your cursor

d) Eat cheese

9. What should you do before you "paste" something onto a document?

a) Send an e-mail

b) Copy something

c) Sign out

d) Turn on a printer

10. Which of the following words best describes “password"?

a) program

b) Memory

c) Technology

d) Secret

11. Which of the following things do you do when you “save" something?

a) Change it

b) Insert it

c) Delete it

d) Keep it

12. Which of the following things can a “search engine" do?

a) Help you find information

b) Shut down your computer

c) Help you sign in

d) Start your computer

13. Which of the following words is opposite to “shut down"?

a) Start

b) Access

c) Copy

d) Close

14. Which of the following things can a "virus" do?

a) Create an e-mail account

b) Go online

c) Crash your computer

d) Chat with you

II) Check answers with your partners.