







The Integration Process in English Courses for Specific Purposes according to the Common European Framework of Reference

El proceso de integración en los cursos de inglés con fines específicos desde el Marco Común Europeo de Referencia

Silvia Miriam Morgan Scott*¹  , Wilfredo Carbonell Limonta¹   y Adys María Nassiff Samón¹  .

Guantánamo University. Cuba 

*Corresponding autor

Recibido: 19/03/2024

Aceptado: 10/06/2024

Resumen

El presente artículo aporta una propuesta didáctica encaminada al perfeccionamiento del proceso de enseñanza aprendizaje de los cursos de inglés con fines específicos desde la nueva política implementada para el aprendizaje del idioma inglés en su estudio como lengua extranjera, lo que ha implicado asumir nuevos retos y tendencias para el desarrollo en la formación de los diferentes profesionales en el contexto de la universidad cubana. Se asume como sustento teórico la integración de las habilidades comunicativas y las profesionales de la carrera Ingeniería Informática con base en el Marco Común Europeo de Referencia. Se emplearon métodos teóricos y empíricos, que permitieron sintetizar las fuentes más relevantes del tema. Los resultados que se presentan resultan de utilidad tanto teórica como práctica y sirven de guía para la preparación de dichos estudiantes con el objetivo de lograr mayores niveles de eficiencia en la comunicación linguo-profesional en este idioma, aspecto de gran relevancia en el mundo actual.

Palabras clave integración; inglés con fines específicos; Marco Común Europeo de

Abstract

This article provides a didactic proposal aimed at improving the teaching-learning process of English courses for specific purposes from the new policy assumed for learning the English language in its study as a foreign language, which has implied taking on new challenges and trends for the development of the training of different professionals in the context of the Cuban university. The integration of the communication and professional skills of the Computer Engineering major based on the Common European Framework of Reference is assumed as theoretical support. Theoretical and empirical methods were used, which allowed synthesizing the most relevant sources about the topic. The results presented are of both theoretical and practical use and serve as a guide for the preparation of these students with the aim of achieving higher levels of efficiency in linguo-professional communication in this language, an aspect of great relevance in today's world.

Keywords: integration; English for specific purposes; Common European Framework of



Introduction

The transformations that take place in Cuban Higher Education as a result of the improvement process in which it is immersed, have motivated substantial changes to be made in the direction of the comprehensive training process of professionals; therefore, mastery of the English language as one of the most widely disseminated languages internationally becomes a strategic objective of this training, particularly in light of the needs and projections of the country's development.

Since 2015, the Ministry of Higher Education (MES in Spanish) in Cuba has introduced the national English policy, which establishes gradually incorporating into the study plans of all careers the approval of mastery of the intermediate level of said language equivalent to B1 as students, graduation requirement following the level structure established from the Common European Framework of Reference for Languages (CEFR). (Harsch et al, 2020).

From that moment on, the process of teaching, learning, and evaluating English began to be resized, for the training of students of all university courses that take as reference both the rich Cuban pedagogical tradition and the international trends and standards of the CEFR. This system of level objectives guides work in the national context. It constitutes "A common reference base for developing course programs, consultancies, self-learning, and evaluation both standardized and non-standardized." (MES, 2019, p. 7).

Hence, the teaching of the English language in universities in Cuba has also been involved in an evolutionary process of methods and approaches to achieve mastery of the language based on the challenges, requirements, and needs demanded by the development of society. These approaches have been aimed at training professionals capable of communicating effectively in this foreign language, within the framework of their work and professional activity.

The English language training of higher education students is developed simultaneously in three directions; one of them is intensive training through a system of courses for general purposes and specific purposes, as well as other academic services, which are offered in the universities outside the Teaching Process Plan. (MES, 2019).

The logic of the teaching-learning process of English for specific purposes (ESP) courses in the Computer Engineering degree has also been involved in the evolution of methods and approaches, to achieve mastery of the language based on the challenges, requirements, and needs that the development of society demands for the training of a professional capable of communicating effectively in this foreign language to solve professional problems in their sphere and fields of action.



The approach to solving problems, as their causes are multifactorial, provides a result that in effect provokes new professional contradictions of greater complexity. Therefore, this solution requires a process of integration of the aforementioned skills in the teaching-learning process of ESP courses that allows the Computer Engineering student a contextualized communicative interaction, as an element that contributes to the development of linguo-info-technological communication.

Professional contradictions reveal the relevance of a process of analysis of communication needs. The aforementioned needs are understood as the deficiencies that emanate from the relationship between the professional problems that teachers must solve and the social and individual needs of the aforementioned students.

Thus, it is necessary to delve deeper into the interdisciplinary links to understand the particularities of the aforementioned integration, not sufficiently addressed by the Didactics of Foreign Languages, which is why the need for theoretical constructs emerges to promote the integration of skills that promote systematization of textual and interdisciplinary analysis and its contextualization in the development of linguo-info-technological communication.

Discussion

In the analysis of the systemic nature of the teaching-learning process of ESP courses based on the CEFR, its diachronic relationship with the subjects of the General English cycle that precedes it is recognized, and its synchronous relationship with the Database subject, object research, belonging to the Main Comprehensive Discipline (MCD) Software Engineering and Management.

Consequently, a didactic conception of the integration of communication skills and info-technological professionals is proposed, which contributes to the improvement of the student's modes of action, through the so-called integration as a fundamental category of the teaching-learning process of the courses of ESP.

This didactic conception is structured into two basic subsystems: Interactive linguo-computer instruction and linguo-info-technological contextualization.

Interactive linguo-computer instruction is composed of three components of a didactic nature: linguo-computer articulation, communicative textual articulation, and contextualized info-technological interaction and is responsible for facilitating the interdisciplinary nexus in the learning of the linguistic knowledge in the English language necessary to understand and produce messages inherent to info-technological processes. Furthermore, it manifests the interrelation between synchronous and diachronic communicative connections, from the internal relationship between the didactic components of the teaching-learning process of ESP courses.



Therefore, interactive linguo-computer instruction is defined as the process that promotes the integration of communication skills and info-technological professionals from the relationships of interdependence between the objectives, content, and method, in the teaching-learning process of the aforementioned courses, which reflects, synchronically, its relationship with the object of the Main Comprehensive Discipline (MCD) Software Engineering and Management and diachronically with the ESP. (Morgan, 2015).

The integration of didactic, linguistic, and textual elements of a computer nature presupposes considering the harmonious unity of the parts, where the textual-computer guides the didactic and the linguistic. The linguistic is oriented from the didactic based on the work with the text and the didactic is based on a predominant professional approach for the appropriate selection of said text. All of this provides a coherent treatment for the integration of communication and professional info-technological skills, by the interrelation of the content of the ESP and the MCD in the solution of professional problems in the sphere of action.

The formative linguo-info-technological contextualization is revealed as the second subsystem of the conception, the essence of which lies in the necessary link that must exist between the integration of communicative skills and professional info technological skills in the teaching-learning process of ESP courses given in the relationship between education, instruction and the developmental nature of the training process in higher education.

This subsystem is manifested from the relationship of coordination and subordination between the components: info-technological educational systematization, technical-instructive execution, and professional developmental performance, which are synthesized in the linguo-info-technological communication as a quality of superior order.

This subsystem is based on the problem-object-objective relationship of linguo-informatics professional nature, which is an expression of the basic ideas of Cuban higher education: the relationship between education and instruction and the work-study relationship. For this reason, it is stated that the integration object of study, from Didactics, has an educational, instructive, and developmental character.

The objective of the formative linguo-info-technological contextualization is to facilitate the direction of the integration process object of study, from a formative vision, which responds to the broad profile of the student of Computer Engineering, as a demand of society to the teaching-learning process of ESP.

Therefore, it is defined as "formative linguo-info-technological contextualization to the process that governs the integration of communicative skills and info-technological professionals, from the interdependence relationships between the dimensions: educational, instructive, and developmental, inherent to the formative process of the MCD Software Engineering and Management in the teaching-learning of the ESP." (Morgan, 2015, p 69).



The education of the student of Computer Engineering in the teaching of ESP is supported by the instructive character of the development process of the skills object of study in its integration. This approach requires deepening the instructional category, from the relationship between the components of the formative process and the technical-specific elements of the profession.

The processes related to the development and exploitation of a computer system contain the technical elements that must also be executed, from the integration of the communicative skills and the info-technological professionals in the teaching-learning process of ESP courses. Among the techniques to be implemented, the following stand out specific application software, interactive teaching platforms, video development, virtual conferences, and basic telematics services, among others.

The Informatics professional performs his activity in a wide range of institutions. This performance includes the processes of the life cycle of the computer system, the operation of systems, and technological tools. In addition, he/she performs different functions in the development team, as well as knowledge management and training, for which it is necessary to be fluent in English.

During this process the communicative skills of listening comprehension, oral expression, reading comprehension, and written expression in English are intertwined with the info-technological professional skills: to model conceptually a phenomenon of the objective reality, from the information point of view, to design a phenomenon of the objective reality through the global logical model of the data and to elaborate informatics products, to strengthen the potentialities and to eradicate weaknesses favoring the professional performance and self-development of the student.

This self-development of the student, being associated with his field of action, favors the increase of his effectiveness and efficiency in the solution of problems detected in the operation of the institutions. The solution of problems related to the use of infrastructures for storage, processing, and exchange of information facilitates the improvement of skills in English, to satisfy the interests of the country in production and services.

The interaction between skills during the integration process is reciprocal. To the extent that communication skills are strengthened, info-technological professional skills are strengthened, and vice versa. This interaction is at the core of the development that the student achieves in his or her professional modes of action.



Linguo-info-technological communication reveals its essentiality in the integration of the communicative and professional info-technological skills of the computer world. This integration is structured based on the student's communicative needs in English in his interrelation with computer systems, which leads him to use this language in the solution of problems related to his professional profile. (Morgan, 2015)

The referred communicative needs require the practical-conscious acquisition of linguistic knowledge in English in its lexical, syntactic, semantic, morphological, and specialized phonological relations. Consequently, with the language-culture relationship, such needs also require the sociolinguistic, discursive, strategic, and sociocultural knowledge proper to linguo-info-technological communication.

Based on the aforementioned conception, a strategy of didactic nature was elaborated to contribute to the development of linguo-info-technological communication of Computer Engineering students in the teaching-learning process of ESP courses, through the integration of the aforementioned skills.

For the elaboration of the proposed strategy, the criteria exposed by different authors have been taken into account, such as A. Márquez (2000), N. De Armas (2003), S. Sierra (2008), A. Valle Lima (2010), and others. Strategies can be classified into pedagogical, educational, didactic, and methodological.

The strategy comprises the projection of a system of didactic actions that allow the integration of communicative skills and info-technological professionals for the development of linguo-info-technological communication of the Computer Engineering student in the teaching-learning process of ESP courses based on the CEFR. It is based on the resizing of the content with an interdisciplinary ESP - the main comprehensive discipline perspective for the achievement of the proposed objectives in a given time.

The teachers' mastery of the main theoretical aspects of the didactic conception constitutes a condition for the implementation of the didactic strategy since it makes explicit the main relationships established in the teaching-learning process of the ESP courses, with an interdisciplinary vision where the professional needs of the students are taken into account, in correspondence with the Professional Model and the particularities of the Software Engineering and Management. This responds to the demand that society places on the teaching of English in the aforementioned career. Likewise, the necessary training of teachers is guaranteed, to carry out an appropriate conduction of the teaching-learning process.



The essential features of this strategy are:

- Integrative character, because it favors the integration of the components of the conception in the teaching-learning process of English.
- Flexible character, because it can be adapted to be applied in the English teaching-learning process in other careers, as well as to adopt other actions according to the needs, contexts, and objective conditions.
- Interactive character, because it favors dialogue between the subjects involved in the teaching-learning process for the solution of communicative situations.
- Formative character, because it allows increasing the student's cultural heritage, his identification with the future profession, to provide the development of habits, skills, and values, with an adequate professional development performance.
- Motivational character, because the student appreciates the possibility of integrating the contents of English with the skills inherent to the profession, which can be incorporated into their daily actions, research, and production, which stimulates interest in the study of this language.
- Contextualized character, because the actions are planned in correspondence with the professional communicative needs of the students, in close interdisciplinary linkage with the MCD of the career, which responds to the Model of the professional.

The strategy is integrated by four stages containing actions, whose systemic concretion favors the transformation of the current situation, in pursuit of the achievement of the desired objective. These stages are diagnosis, planning, implementation, and evaluation.

Diagnosis

To know and evaluate the level of cognitive and procedural preparation, in the theoretical and didactic-methodological order, the teachers have, to direct the integration of the communicative and professional info-technological skills in the teaching-learning process of the ESP courses in the career of reference.

The techniques and methods to collect information made it possible to conform the individual and group characterization of the teachers of the ESP and MCD, discipline staff, year, and major; so that the proposed improvement was contextualized, based on the real needs and potentialities derived from this diagnosis.



Actions

- Elaborating the diagnostic instruments.
- Applying the instruments developed.
- Identifying weaknesses and strengths for the practical instrumentation of the linguo-info-technological contextualization subsystem.
- Identifying the professional problems from the Model of the Professional of the reference career and the modes of action required to be formed in the students, for which it is necessary to have as a premise the teaching of the language, as a means of communication, based on the professional needs of the students.

Planning

The didactic components of the strategy are designed to contribute to the dynamics of the integration of communicative and professional info-technological skills in the teaching-learning process of ESP courses.

The actions corresponding to this stage are aimed at reaching a level of preparation in the teachers that guarantees solid planning of the integration of the referred skills in the teaching-learning process of ESP and, with it, the achievement of the goals proposed in this process. These actions are aimed at the organization of a cohesive methodological work by the subjects involved in the process and favor the realization of the interdisciplinary ESP - MCD relationship, on whose unity and harmony depend on the development of the student's linguo-info-technological communication.

At this stage, a theoretical-practical improvement should be planned for the subjects involved in the teaching-learning process, according to their didactic-methodological needs to assume this process with a new significance. This improvement can be carried out through workshops, seminars, and instructive and demonstrative methodological classes. For this, the spaces of the career collectives, year, disciplines, subjects, and other activities of methodological preparation that are considered necessary will be used.

Actions

- To determine the system of objectives in the function of achieving linguo-info-technological communication, based on interactive linguo-information technology instruction and linguo-info-technological contextualization.
- To prepare the necessary teaching materials for the practical implementation of the strategy.



- To specify the knowledge system, based on the professional needs for the didactic treatment of the integration of communicative and professional info-technological skills, to achieve a correct textual-communicative articulation that implies adequate technical execution.
- To specify the system of skills to be developed based on the integration of communicative and professional info technological skills, such as modeling; designing, and elaborating computer products. All this is based on a text related to Computer Science.
- To specify the values to be strengthened, derived from the integrated content English - comprehensive discipline and from the professional modes of action of the computer engineer, with an adequate developmental orientation that takes into account the educational and instructional aspects.
- To elaborate a system of exercises and activities according to the procedures and techniques, derived from the communicative approach and the principles of the practical-conscious method to achieve the integration of the referred skills.
- To select the bibliography to be used and specify the sources of information that will be oriented to the students.
- To elaborate the evaluation system that includes: self-evaluation, co-evaluation, and hetero-evaluation, which are complemented with the national standardized exams for the certification of the reached competencies. In addition, extra-class work and research activities that favor the use of English according to their professional needs will be carried out.

Implementation

The objective of this stage is to develop the integration of communicative and professional info-technological skills in the teaching-learning process of ESP courses and to develop the linguo-info-technological communication of Computer Engineering students, from the implementation of the planned actions.

The implementation stage of the didactic strategy for the integration of communicative and professional info technological skills in the teaching-learning process of ESP is aimed at the development of the processes of linguo-informatic articulation, textual-communicative articulation, interaction with

Actions to be developed by the student

- Use study techniques that facilitate self-training in listening and reading comprehension, as well as, oral and written expression, for the interpretation of articles from technical magazines, tool manuals, software, and books in the English language.



- Systematize the use of vocabulary that responds to their professional profile in English, in academic, work, and research activities, to enhance communicative competence in English.
- Exchange ideas on scientific topics and make oral presentations in different forms of teaching and scientific events with the use of the English language.
- Use different learning strategies to develop communicative and professional skills in the development of practices and linguistic-info-technological situations in English.
- Correctly execute the management of information technology about the mastery of technical language in English, related to the subject Database.
- Produce dialogues in English based on real or modeled situations related to the profession.
- Interact cooperatively using the English language during professional info-technological practices, as well as in work practices and research work.
- Create glossaries of terms related to MCD subjects in English.
- Decode and encode information in the English language contained in a linguo-info-technological communicative situation.

Evaluation

Its main objective is to verify the practical results of its application in the teaching-learning process of English. The actions performed by the teacher are verified and evaluated.

The evaluation of learning, as a dynamic and complex process, cannot be conceived "In the improvement only as a moment in the training, but integrating the different types of evaluation." (Ronda, 2016, p. 12). According to its purpose, evaluation may be summative, formative, diagnostic, placement, progress, and competence/achievement.

This stage allows teachers and students to assess from self-evaluation, co-evaluation, and hetero-evaluation the practical implementation of the strategy. In this way, the teacher and the student carry out regulatory actions, in correspondence with the results of the evaluation and self-evaluation that they execute during the process of integration of communicative and professional info-technological skills.

These types of evaluation in the English language training process are completed with the national standardized tests for the certification of competencies, which should be characterized by being valid, reliable, practical tests, adapted as much as possible to the needs and characteristics of the context. At the same time, they should achieve the greatest possible



authenticity by reflecting real communicative situations and be conceived from the specifications for the tests elaborated according to the defined objectives.

Conclusions

The study carried out reveals the main didactic referents of the integration of info-technological communicative and professional skills in the teaching-learning process of ESP courses in the Informatics Engineering career to enhance the development of linguo-info-technological communicative competence.

The didactic orientation actions derived from the elaborated strategy became essential resources, from the treatment of students as protagonists and main actors of the process-oriented to make them understand the value of the language, motivate them to study it, and systematize the practice and use of it in a conscious, intentional and systematic way through the self-management of learning, as a way to promote cognitive independence and autonomous learning.

References

De Armas Ramírez, N. et al (2003) *Caracterización y diseño de los resultados científicos como aportes de la investigación educativa*. Universidad Pedagógica "Félix Varela".

Harsch, C., et al. (2020). *Interpretation of the CEFR Companion Volume for developing rating scales in Cuban higher education*.

https://rc.upr.edu.cu/jspui/bitstream/DICT/3650/1/CEFR_Journal_Research_and_Practice_Volume.pdf

Márquez, A. (1990). *Algunas consideraciones metodológicas para el tratamiento de las habilidades*. Instituto Superior Pedagógico "Frank País"

MES. (2019). *Orientaciones generales para la implementación de la Política de perfeccionamiento del proceso de formación en idioma inglés de los estudiantes de la educación superior cubana*.

Editorial Universitaria del Ministerio de Educación Superior.

Morgan, S. M. (2015). *La integración de las habilidades comunicativas y profesionales en el proceso de enseñanza-aprendizaje del IFE* [Tesis doctoral, Universidad de Guantánamo]. Cuba.

Ronda, J. C. (2016). *Concepción teórico-metodológica para el proceso de evaluación de la expresión oral en la Práctica Integral de la Lengua Inglesa V* [Tesis doctoral, Instituto Superior Pedagógico Enrique José Varona].



Sierra, R. (2008). *La estrategia pedagógica, su diseño e implementación*. Pueblo y Educación.

Valle Lima, A. (2010). *La Investigación Pedagógica. Otra Mirada*. Material digital. ICCP.

Conflict of interests

The authors declare that they have no conflict of interest.

Author Contribution

Silvia Miriam Morgan Scott (principal author): Conceptualization, Methodology, Writing- Original draft preparation, Writing- Reviewing and Editing.

Wilfredo Carbonell Limonta: Methodology, Writing- Original draft preparation, Writing- Reviewing and Editing.

Adys María Nassiff Samón: Methodology, Writing- Original draft preparation, Writing- Reviewing and Editing

