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DEPARTAMENT DE FILOLOGIA ANGLESA I DE GERMANÍSTICA

ESP in the Automotive Field: From Theory to Practice

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Statement of Intellectual Honesty

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Title of Assignment: ESP in the Automotive Field: From Theory to Practice

I declare that this is a totally original piece of work; all secondary sources have been correctly cited. I also understand that plagiarism is an unacceptable practise which will lead to the automatic failing of this assignment.

Signature and date: 31-05-2023



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Abstract

This TFG presents the increasing importance of English for Specific Purposes (ESP) over the past few years due to globalization and how this subject has been applied to the field of the automotive industry. There will be an introduction to the backgrounds of both ESP and the automotive industry which may seem to have nothing in common but, in fact, they share many linguistic features. The practical part of this work will consist on creating a lesson plan in which both students' and teachers' challenges and needs are taken into account in order to achieve the proficient level that they are expected to get from the ESP course, which has been designed for acquiring specific terminology of a certain area of the vast amount of vocabulary within the automotive sector.

The main thesis of this TFG is to demonstrate how important ESP was, and still is, when helping English L2 learners to achieve specific terminology of the automotive engineering field, which is an industry that Germany led during a great part of history and much vocabulary had to be translated from their language.

Keywords: ESP, globalization, automotive industry, linguistic features, lesson plan, terminology.

1. Introduction

1.1. Personal motivation

Since I was a child I grew up surrounded by cars as my father is a big enthusiast of them and I remember watching the F1 (Formula 1), the WRC (World Rally Championship) and many other car races with him. As a result, I "built" such a big interest for this world that in every birthday and Christmas present I wished for cars or games about cars. The fact that I have always liked the motorsports world (specially when cars are involved) combined with the University degree that I chose made me realize that there could be a linguistic link between these two worlds, which may seem to be really different at first sight but, in fact, share many linguistic and historical features.

When taking the ESP (English for Specific Purposes) subject I found out that it was one of the subjects that I liked the most due to the fact that I found really interesting how English became the "driver engine" of globalization in every academic and economic field. This combination between the previous appeal that I had for cars and the interest in the ESP subject made me wonder about how engaging it would be to blend two of the things that I like the most (in the academic field).

As I had previous knowledge about automotive engineering, given the fact that I am a fan of this "world", I knew that it all started in Germany. The fact that triggered my interest to carry out this TFG was knowing how English, due to globalization, became the main language of this former German industry. I wanted to know how ESP was introduced in the automotive field and the best ways to achieve a good lesson plan which could make students get a proficient knowledge on the vocabulary of the field.

1.2. Object of study

The object of the current study will be to observe the linguistic change that the automotive sector underwent due to globalization practices that led to the emergence of English for Specific Purposes (ESP) within this sector. In other words, to find out more information about the study of the use of the English language in specific fields of knowledge aimed to be taught, learned and used in professional environments. In this TFG, I will investigate how this subject focuses on specific vocabulary and terminology from the automotive field and which can be the best practical way to be applied in order for students to get a proficient level of it and enable them to use such knowledge in their careers.

1.3. Assumptions

The relation between ESP and the automotive field is very much noticeable in our current and globalized world, so I assume that many didactic units were developed in order for previous automotive engineers to learn the English language and be able to communicate with other countries which are engaged in this field, specially focusing on the change from German (which was the home country of petrol powered vehicles) to ESP.

1.4. Thesis

The main thesis of this TFG will be to demonstrate how important the linguistic change of the automotive field into ESP was by providing empirical examples of German automotive vocabulary (as it was the universal language for engineering in the first 50 years of the 20th century and its corresponding English translation). Besides, I will take a more practical approach in order to see how ESP applied to the automotive field can be best implemented and taught in the academic and professional world.

1.5. Potential contribution to the field of knowledge

The study of the linguistic evolution that undergone the automotive sector (specially from German) to English is important to demonstrate how useful ESP classes and courses can be in

a globalized world in which English is the "dominant" language used to reach and communicate with as many people as possible in order to make business, apply for a job and, most importantly, being able to communicate in an academic, professional or even intercultural environment.

Therefore, the present study might contribute to the ESP field as I will take a closer look by assuming and analyzing where the translations of the automotive field came from (Germany). Furthermore, after all the theoretical framework a more practical approach will be adopted in order to find out which would be the best lesson plan for students of ESP in this field in order to achieve a proficient level and be able to apply their acquired knowledge properly in their professional and academic contexts.

1.6. TFG structure

The structure of this work will begin with an introduction in which the personal motivation, object of study, assumptions, thesis and importance of the work will come into view. It will follow with the theoretical framework in which the background will introduce the main subject (which is ESP) and from this point forward a more specific vision on the automotive engineering and teaching field will be adopted. The practical part will focus on how this field can be best taught and which tools and materials can be provided for learners in order for them to achieve a proficient level, as well as practical exercises about an specific topic which will demonstrate how important it is to focus on the 4 learning skills (listening, speaking, writing and reading). Furthermore, the practical part will finish by including an interview with the Sales Director of the Mazda group in Sabadell (Mr. Jaume Curtielles). The aim of the interview will be to know the main changes (focusing on the linguistic ones) that the automotive sector underwent from the point of view of a professional who has been working in this industry for many years.

Finally, the TFG will close with a final discussion and conclusions which will include the expectations that I had when starting this work and the reality of it once having finished it, the difficulty that I had finding academic resources and the things that I would have done differently or studied in more depth if I had to do further research. At the very end of the work there will be the references with an appendix in which interesting material which I have decided not to include in the main work will appear.

2. Theoretical framework

In this theoretical framework there will be an introduction to the subject of study, a more specific approach from English to ESP and a description of its main features. Besides, ESP in the automotive sector, its main genres and terminology will be studied, as well as the teaching and learning techniques applied to this field of knowledge.

2.1. Introduction (background)

English for Specific Purposes (ESP) appeared in the academic world in the 1960s as a technique for analyzing texts with the aim of studying the use of language over its form by relating to specific disciplines, using a different methodology from the one used in General English, and aiming at intermediate and advanced adult learners (Dudley-Evans, 2001). The "new" world after the Second World War, organized by commerce, observed the importance of learning English, which was at that time (and still is) the global language for international relations. Besides, non native learners accepted English as the current *lingua franca* that fulfilled their cross-cultural needs. As González (2015) claims, research has spread in the last 20 years due to globalization and the international business context, which can be reinforced by the fact that many journals and a considerable amount of submitted papers have shown the rising importance of ESP. This subject was born with the main purpose of fulfilling the

specific needs that learners had in order to accomplish their professional, educational or vocational demands.

According to Hutchinson and Waters (1987) this subject (ESP) developed as a result of the evolution of the world's economy, involving the technological progress, the financial power of wealthy countries, and the rising number of students overseas learning in English-speaking nations. However, the real "boost" of this area of study came from the analysis of science-based and specialized writing focusing on the importance of technical and sub-technical vocabulary of a certain field or business. The focus was put on the use of language instead of its form, so the communicative uses of discourse were enhanced and the grammatical rules and vocabulary of registers were not given that much importance.

When applying ESP to the field of knowledge under study, which is the automotive engineering field, it has to be said that it experienced a major linguistic shift from German to English from the beginning of the 20th century to its half. Such change can be attributed to the global influence of English-speaking countries in the industry of automobiles, technological progress and historical circumstances. One of the main prompting situations for this linguistic conversion was the spring of British and American automotive manufacturers in the early course of the 20th century, in which big companies like Rolls-Royce, Ford, and General Motors portrayed crucial roles in order to build the business and place English as the central language for automotive engineering managing to spread specific and specialized knowledge in this language.

In addition, the outbreak of World War I and World War II had a significant impact on the language environment of the automotive industry. Throughout the time of these confrontations, German automotive engineers suffered difficulties as a result of their geopolitical conditions, which obstructed their dominance in the business. Simultaneously, British and American automakers obtained *momentum* due to their advantageous geopolitical

condition and solidified their dominant position in the industry, which pushed English further as the lingua franca within the sector. Furthermore, technological progress and scientific advances, especially in the United States and Great Britain, have played an important place in establishing English as the lingua franca of the industry as a lot of groundbreaking research papers, journals and articles have been published in English, guiding to the normalization and development of specific lexicon in this language.

2.2. From General English to ESP

As mentioned before, ESP is the study of the use of the English language in specific fields of knowledge aimed to be taught, learned and used in different environments (Swales, 1990). As stated before in this TFG I will be focusing on specific vocabulary and terminology proper from the automotive engineering field which is necessary for students, translators and readers who are interested in the automotive world. As Hui (2015) states, in order to be a good translator or interpreter, there is a certain amount of knowledge about technology and science required to learn apart from the foreign language. A combination of both knowledge of language and technology is compulsory in order to understand and make others understand your claims. However, students can only manage to fulfill a wide range of vocabulary and knowledge in one or two fields. That is why it is so important that they specialize in the area of expertise that they like the most in order to become proficient and professional students able to use the correct language of automotive engineering in the working world.

The world of automotive engineering is increasing in a rapid way to fulfill the demand of big companies for making business and expanding their enterprises. These companies know that having someone who is specialized in the field (linguistically speaking) working for them grants a good understanding and relation with foreign engineers, companies and even other manufacturers that provide specific parts for the fabrication of vehicles.

When leaving general English aside and focusing on our specific branch it has to be said that there are many sub-branches within it as a vehicle is a mechanical machine made of distinct working units, systems and parts that work simultaneously. The sub-branches can be classified as follows: engine, chassis, steering mechanism, transmission, suspension, electrical system, safety equipment (seatbelt, airbag,...) and entertainment (radio, display, carplay,...). Furthermore, just in the production of the motor of a vehicle, at least five producing procedures take place: forging, pressing, foundry, assembly and painting. Therefore, when acquiring a deeper knowledge of this industry one can realize the width of this field when it comes to specific vocabulary, and the fact that technological devices are constantly being introduced in modern vehicles, which involve new techniques, new materials and new components.

2.3. ESP main features

The first main feature that should be taken into consideration is the fact that ESP is a subject that can shift a lot depending on the students' needs. Besides, it is aimed mainly at adults in specific learning environments, specially professional or advanced students with a specific language as their target and a basic previous knowledge. As Smoak (2003) mentions, ESP is based on the needs of students and oriented towards the tasks that will help them the most in order to achieve a proficient knowledge of the field.

According to different studies (Smoak, 2003 & Amel, 2017) it can be argued that the main characteristics of ESP are the following ones:

- ESP is created to meet the different needs of learners
- ESP uses the already existing methodologies and exercises of the disciplines which are being studied
- ESP focuses on language skills, discursive skills and the genres propper for the activities of the field

- ESP adapts to almost any discipline
- ESP uses different methodologies than General English
- ESP is designed for adult higher education and professional learners
- ESP courses assume a previous linguistic knowledge.

According to Amel (2017) if we take a look at the above characteristics it can be observed there is a common characteristic on the core of ESP which is the focus on needs analysis at the beginning of the creation of the course. Students' needs should be the first issue to take into account before deciding the subject and the content of the course.

On the other hand, individual differences (IDs) should also be taken into account since there is an immense variability in degrees of success in ESP courses even though the learning environments are similar for all learners. If research were able to find out in which way an individual would acquire this vocabulary as fast and as well as possible teachers would be able to advise them and identify those learners that need certain or specific kinds of instruction. However, this is not the case in our teaching context since it is very difficult to find out students' needs at first sight and from the very beginning without getting to know them. As Dörney (2005) states in his study about the psychology of the language learner, specially focusing on individual differences in second language acquisition, identities are enduring personal traits that are assumed that can be applied to everybody and on which individuals vary by degree. However, things have changed into a more individual based type of teaching assuming that not all learners can be classified into different and global groups and that every student is a group on its own which is totally different from others. Students are now classified in more relative terms which show the pattern of abilities and predispositions that influence their learning. Therefore, ESP courses must take into account the fact that all learners should be respected as people and teachers must enhance their self esteem and motivation by recognising the affective as well as the cognitive nature of the

learning experience. Besides, students' knowledge and independence should be respected as well as their process of language learning and correction from the authority, which has to be based on the sense of praise instead of undermining their cognitive capacities when they do not perform as they were supposed to. (Pladevall, 2023)

2.4. ESP in Engineering: automotive sector

English for Specific Purposes in the automotive sector is a specialization in English language instruction aimed to develop the needed language skills in order to fulfill the needs of people interested in the automotive field. This subject includes specific vocabulary about the industry, terminology and a structured teaching guideline in order for students to achieve the skills needed to develop in a proficient way in their field. The key features of ESP in the automotive industry are: specific vocabulary, which will depend on the geographical location of students and their needs. It contains terminology that relies on automotive engineering, manufacturing processes, vehicle parts, diagnostics and processes for maintaining vehicles in good conditions. Besides, learners are introduced to this terminology through practice in order to improve their proficiency and knowledge in the field; technical content, which includes research into automotive systems, electric and mechanical devices, new technologies, safety procedures, designing methods, etc. Content has to be chosen carefully to meet, once again, the needs of students who wish to become experts of the subject matter; by acquiring practical communication skills that are key in the automotive sector. In this sense, ESP students are taught in oral and written skills on automotive topics, which will be of a great use for them in specific situations within their professional career. For example, conducting vehicle examinations, explaining specific and technical characteristics to clients, writing accurate descriptions, reports and reviews, attending meetings, and communicating with other experts of that same field; genuine materials, which give students real examples of language use and an extended perception of industry debates. In fact, ESP courses are

designed to use real materials such as specialized manuals, academic publications of the industry, technological reviews and real-world scenarios as interviews and speeches that introduce students to language and conversations applied to professional contexts. Furthermore, these courses follow task-based approaches, meaning that these courses are based on the practice of learners who will have to work through practical, industry-specific tasks in order to improve their language skills. Some of these tasks may include diagnosing and finding automotive problems, reading, evaluating and investigating technical reports and academic sources, writing their own reports, practicing the interaction with customers, etc. By applying these activities to the course students will be 'obliged' to use the skills that they are learning in real situations related to the field. Cultural awareness is crucial as it consists on considering cultural perceptions as an important factor when it comes to teaching this course.

As the field of automotive engineering is globally networked, experts interact with people from different cultures and settings, that is why ESP courses provide students with cross-cultural communicative skills in order to help them understand and manage different backgrounds and social variations, traditions, and commerce strategies in the field; and training on the professional development of students, which can include attending to seminars and training on new technologies, talking to consolidated sales directors of known brands, and a large excetera apart from the previous automotive skills required in the industry. The main aim is, therefore, to provide ESP learners with the suitable knowledge about language and the technical skills required to be successful in the automotive sector.

Before introducing the concept of genres within the automotive engineering field there should be an introduction to its historical background and an explanation of why German language was the first and founding father of the industry. Germany's reputation as the country with the best vehicles and automotive engineers was built over the years and it all started with the first petrol-powered propulsive car, which was invented in 1864 by the German engineer Siegfired Marcus. However, the true culmination of the industry arrived with the first successful automobile to go into full production by the Benz Patent-Motorwagen company, designed in 1885 by Karl Benz (the automotive company Mercedes Benz was named after him). By the beginning of the 19th century the market grew and the German industry was producing about 900 cars per year which standed out American companies such as General Motors that wanted to buy German companies such as Opel (which they ended up buying in 1929). The automobile environment kept growing and the rivalry of Benz would increase with the entrance of a former airline engine producer which switched to the car manufacturing sector in 1928 and whose name was Bayerische Motoren Werke, what we all know today as BMW. It all changed with the collapse of the global economy during the Great Depression in the 1930s which created a huge crisis in Germany's automotive industry. As a matter of fact in 1920 Germany had around 86 auto companies and by the end of the Great Depression only 12 remained. However, the scenario twisted when the Nazi Party was elected to power in 1933 and implemented a policy known as *Motorisierung* ("motorization") which consisted on an Adolf Hitler's attempt to raise the people's standard of living and he developed and extended German highways. As a result, another famous car brand emerged, Volkswagen which the literal translation into English is "the people's car", and which created the famous Beetle which was a robust but inexpensive car aimed to be sold to the German middle classes. However, Volkswagen's production switched to a military one in 1940 due to the Second World War, which caused the destruction and damage of many German factories plus the fact that it caused a huge economic debt to pay. Germany was in a poor and depressive situation but the "London Agreement on German External Debts" in 1953 supposed an enormous incentive for companies to import German goods, which had a huge beneficial impact on the automotive industry. As a consequence by 1955 Volkswagen had made one million Beetles,

and by 1965 had produced 10 million as it was a vehicle which gained popularity in other countries.

The 80s and 90s were a period of huge growth for the German automotive industry, which led to a process of major acquisitions and international expansions across the world. In order to keep expanding the industry they had to change their language to English as it was the only way to globalize the business. Nowadays, Germany stands with the US, China and Japan as one of the four biggest automotive industries in the world, with six of the best known brands under their 'monopoly' which are: Audi, Porsche, BMW, Mercedes-Benz, Lamborghini and Bugatti among others.

2.5. Genres in automotive engineering

Before entering on the insights of genres applied to the automotive field a brief definition of what genre is should be provided: As Hymes (2007) claims: "genres are used for grouping texts together, representing how writers typically use language to respond to recurring situations".

A genre is a division or a grouping of works of art, literature or other works which share the common characteristics such as styles, features, topic or agreements. Genres are a way of putting together similar works of the same field by content, form and subject and each one usually has its proper approved accords, similes, expectations of audience and from the audience which make it easier for authors and readers to recognize and work with the style and type of text that fit their requirements best.

Thus, automotive writing genres are significant as they are an important tool to inform, educate, and entertain readers and learners who are interested in cars, trucks, motorcycles and any vehicles in this field. The main types of automotive writing genres are news, reviews, features about specific vehicles and technical articles. Each genre serves a different purpose and provides different types of information.

These different types of automotive writing genres are important because they provide readers and learners with information and knowledge about the industry. This information can also be used by consumers and vehicle owners to make informed decisions about buying and maintaining their vehicles and how and when they should do it. Besides, automotive writing can serve as an inspiration for readers and can even help to promote a community of enthusiasts who share a common passion for cars and other petrol powered vehicles. It can be said that automotive writing genres are a very important part of the automotive industry as it serves a valuable role in educating and informing all kinds of readers.

- **2.5.1 News**: In the automotive industry they provide up-to-date information on new vehicle launches, product recalls, innovative technologies and any other important news which are relevant for the development of the industry.
- **2.5.2 Reviews**: They consist of driving and then reviewing and giving an honest opinion about a certain vehicle, this is what famous TV shows like *TopGear* and *Carwow* perform on their recordings. Reviews can also include comparisons about different vehicles and highlight their weaknesses and strengths in order for the reader to have empirical data in order to decide which vehicle fulfills their needs. Furthermore, reviews can also deal with more than just the features and technical specifications of vehicles, but comment on the driving experience and handling of it in different environmental conditions.

As a matter of fact, reviews should be provided from an objective point of view trying to avoid personal opinion and letting readers and learners draw their own conclusions.

2.5.3 Features: They focus on a particular aspect of the automotive industry, such as the history of a particular brand or the latest trends in automotive design. The writer should be aware of the latest tendencies and technologies and present them in an interesting, engaging and informative way for the readers. This genre is usually

consumed by people interested in the motorsport world who read for fun, so the language has to be engaging and interesting but, at the same time, include technical data and specific information that would astonish the aimed readership.

- **2.5.4 Technical articles**: several subgenres or branches can be introduced in this genre and each of them focus on different aspects of the configuration, production and administration of vehicles. A brief introduction to these subgenres will help readership understand the different and width dimensions that can be included within technical articles.
 - Vehicle dynamics: It includes the research on the movement of vehicles and its
 responses to adverse forces and road dissimilarities. Besides, analyses and
 optimizations for the performance of the vehicle are studied, as well as
 handling and stability which includes features, such as the suspension system,
 tires and control systems such as the traction one.
 - 2. Driving technology: It includes the study and improvement of the propulsion systems of automobiles. This subgenre includes research into engines with an internal combustion system, hybrid and electric powertrains. It also takes into account the transmission systems which are the ones responsible for transporting the power from the engine into the wheels.
 - 3. Chassis technology: It deals with the creation and improvement of the chassis of the vehicle which supplies and protects the different components of the vehicle which are more fragile. This area of study includes the design of the chassis, a selection of materials, accident safety and frame strength, and an overall attempt to reduce the weight of the vehicle.
 - 4. Safety technology: It ensures the safety of drivers, passengers and pedestrians by performing specific situations that would be similar to real life ones and

investigating on the behavior of the accident, analyzing the impact, restraint systems (which are the components that work together in order to keep passengers and driver safe in an accident, such as airbags and seatbelts), active safety systems such as the antilock braking system (ABS) and electronic stability control (ECS).

- 5. Ergonomics and Human Factors: The focus here is on the design of vehicles that fulfill the occupant's comfort and usability expectations. This includes the study of driver's comfort, interior design, technologies design, and human-machine interactions to improve the main experience of drivers and reduce their fatigue.
- 6. Materials and manufacturing: it has to do with choosing the suitable materials and processes of manufacture for vehicle parts and systems. This includes research in techniques for manufacturing (welding, casting, etc.), study on the science of materials and their composition and finally a control of their quality
- 7. Vehicle electronics and entertainment: it involves the introduction of electronic devices into the vehicle including subjects such as the management of the motor, the connectivity of the vehicle, the systems for advanced driver assistance and the technology which involves autonomous driving.

2.6 Engineering terminology

2.6.1 Automotive terminology

Automotive terminology is a key system in a communicative, cultural and historical sense and it has its own specific conceptual structure. Thus, a car term consists of experience in this same industry, which has been obtained since the production of the first car prototype. As Sadovnikova (2016) assumes, the terminological system of the automotive industry embodies

a professional worldview, that is to say that some words are created to be widely understood or have a highly descriptive aim in order to be better acquired, taught and widespread.

The study of Sadovnikova consisted on analyzing the English and German corpora of car terms and then grouping them according to their conceptual features which are mechanical systems, driving force which take into account the systems that provide movement and control to the car (engine, steering wheel), driving assist systems which are the equipments responsible for the correct movement of the car (ABS, power steering), machine elements that can be constructed separately from other parts of the car or a certain mechanism and that can only work jointly with the rest of parts (screws, bolts, cables), interior equipment, exterior equipment. Besides, this author included other groups of concepts of the automotive industry such as entertainment units, safety systems and the types of cars (compact, SUV, hatchback, sedan, convertible, coupe, minivan, crossover, sports car)

2.7 ESP teaching and learning applied to automotion

As previously stated in this work, the automotive industry is becoming diverse as an outcome of globalization. Thus, engineering professionals, technicians and teachers are facing new challenges when it comes to global communication, which enhances, once again, the fact that success in today's market is not just about engineering knowledge but it also depends on the development of foreign communications. Learning English for Specific Purposes within Automotion is pivotal to improve both the relations between markets and the existing technologies in this field, but to learn the main skills of the field, the students' needs and the teachers' challenges must be taken into account.

2.7.1 Main skills

The main skills of language acquisition can be divided into receptive and productive. The former ones are listening and reading while the latter ones are responsible for speaking and writing. It is important to bear them in mind as a teacher because they are the ones

responsible for selecting a good balance of the skills, which is crucial for acquiring a proficient level of the language in question.

2.7.2 Students' needs

The teaching experience is much more effective if learners' needs are taken into account since it will be easier to know which language is the one that will suit them the most and how to use it. Therefore, teachers should carry out an initial analysis of the students' needs which consists of knowing what learners need the language for, where are they starting from (taking into account their level and initial "problems" with language), what they would like to learn and how they would like to learn it.

It is important to perform the needs analysis in all areas of language teaching, but when we refer to ESP it is even more important since learners are joining the course for the specific vocabulary of the academic field that they are interested in.

2.7.3 Teachers' challenges

The main challenges of a teacher are providing a balanced mixture of theory and practical exercises which also include a good amount of speaking and communication in English. As said before, students' needs should be taken into account and the teacher should adapt activities to students' interest and level which will make them enjoy the course and eventually be motivated. Learners should not feel pressured but comfortable and having fun, however they must be exhausted while receiving information, feedback and encouragement from the teacher. In brief, students need to feel that they are making progress. Besides, teachers should bear in mind that they educate with every gesture they do and words they say, so they need to watch out carefully their movements and the things they say, their posture, tone and speed of voice. Thus, verbal and non-verbal communication is key here.

Another great challenge is to provide suitable tasks for students of automotive engineering since within the same field of knowledge hundreds of ESP courses could be designed taking

into account its width. Therefore, before creating a specific course the teacher should aim at the specific vocabulary that students wish and need to learn and adapt the activities accordingly.

3. Practical part

3.1 Students' main challenges

This area of ESP (automotive engineering) is aimed to be taught to students with a previous knowledge of the language and to those who are able to maintain a fluid conversation with other speakers. Besides, it is taken for granted that learners participating in this course have a good level and understanding of automotive engineering in their L1, which will help them understand and match concepts and different words.

Most of the time, students with a lower English level are the ones who drop out or feel unmotivated, that is why the minimum linguistic level expected should be part of the requirements for joining this ESP course in Automotion. However, within a group with similar levels of proficiency it should be taken into account that some students learn faster than others. That is why the slower ones have to be supported by the teacher and classmates in order to encourage them and make the most of their learning experience. Different developing ways of implementing motivational conditions for the group, and specially for those who are slower learners, are creating a supportive and pleasant atmosphere, introducing group norms in order to create a good cohesion among learners, and appropriating teachers' behaviors towards a more "soft way" of correcting and providing feedback in order not to "damage" students' motivation. As Adnan (2011) mentions in his study, ESP teachers have to be able to observe the objectives of their students so that they can have different ideas for teaching a course that satisfy the learners needs and expectations. (p. 4)

In an ESP course the hardest vocabulary is the one which consists of very specific parts of the academic field being studied, that is why in order to make it easier for students to learn the course should start from a more general point of view and then introduce more specific vocabulary as the course advances. Besides, the main genres of automotive engineering must be assessed when it comes to the students' learning objectives. For example students taking an ESP course on mechanical engineering will only be taught vocabulary surrounding that field of knowledge and the genres corresponding to it, which would be materials and manufacturing, and driving technology. The following courses which Mercedes-Benz provides in their website show the different and vast fields that the automotive engineering industry has, that is why selecting the specific vocabulary and genres that students are aiming to acquire is a crucial gap that teachers should be capable of fulfilling.

Technical courses. If you are interested in technology and cars, this is the right place for you. The dual study programme at Mercedes-Benz offers you the opportunity to put your knowledge and enthusiasm for technology and the most desirable cars into practice from the very first semester - at a globally operating technology leader with career opportunities for all your talents. Overview of the technical courses and fields of study: Electrical Engineering/Automation Electrical Engineering/Vehicle Electronics Embedded Systems/Automotive Engineering Information Technology/Computational Data Science Information technology/Information Engineering Information Technology/IT Automotive Information Technology/IT Security Mechanical Engineering/Production Technology Mechanical Engineering/Vehicle Systems Engineering

Mechatronics/Vehicle Systems Engineering and Electromobility

The sub-genres that I mentioned previously in the theoretical framework can serve as a clear and solid guideline for the organization and creation of different ESP courses. For example, with the climate change issue electric vehicles are expanding and being more present in our daily lives and, as a result, many businesses who saw the profit and already had a previous

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¹Figure 1. Mercedes Benz training courses (2023). https://group.mercedes-benz.com/careers/pupils/dual-study/technical-courses/

knowledge of it wanted to communicate to as many people as possible and that is way they may ask their employees to take ESP courses applied to electric mobility. Therefore, taking into account the genres mentioned in the section 2.5 of this work we could say that the ESP course applied to electric vehicles and specially for business that aim at selling them should take into account the following genres which are the ones that can state the technical differences and benefits of electric vehicles over the traditional petrol-powered ones.

- Driving technology→ it is the major difference between traditional and electric cars.
 Vocabulary about the type of electric engine, power of batteries and autonomy, among others, should be introduced in an ESP course on the matter of electric vehicles.
- 2. Safety technology→ electric cars are computers with wheels and as a result the safety of drivers, passengers and pedestrians is enhanced thanks to the AI of the vehicle which can interpret real life situations and for example break automatically if a child is crossing the street. Vocabulary about active safety systems, such as the antilock braking system (ABS) or passive ones such as airbags and seatbelts should be implemented in the course.
- 3. Vehicle electronics and entertainment→ as mentioned just above electric cars are like computers. Therefore a lot of electronic devices are included into the vehicle which makes a huge difference when comparing them to traditional vehicles. Vocabulary about the connectivity of the vehicle, autonomous driving, and the technology regarding the download of apps should be part of the course.

3.2 Lesson plan about electric vehicles.

The following part of this work will consist of a proposal of a teaching lesson on ESP applied to the field of electric vehicles. The main aim will be to acquire the four skills of this relatively new field of knowledge and apply a methodology that includes reading, writing,

listening and speaking exercises. When referring to the four skills it should be mentioned that reading will not only consist on students being taught to just read texts but also to look for the key elements of the different texts which are typical from the genres, as well as tiny nuances present in written language such as the author's point of view, key elements and practices, among others; writing will be carried out to master all the different formats present in automotive engineering and to be able to apply new terminology that has been previously been taught, a part from distinguishing what kind of language and register they should apply depending on the context.

Listening is usually a matter of interest for students since they can listen (and see in the case of Ted Talks) the proper register, words, and intonation that they should try to apply in their professional careers, a part from observing situations that they will face once they enter in the automotive world in English. On the other hand, **speaking** has the function of getting students used to speak in front of an audience using the right speed and voice tone in order to fulfill their professional expectations.

3.3 Set of exercises

Therefore, a set of exercises that I would implement in one of my teaching lessons would be the following ones:

1. Vocabulary excerpt:

First, I would make students read a technical article about the parts of an electric vehicle in which they could implicitly extract the meaning of the words. Then, the main activity would be to match the following definitions with the corresponding terms regarding the parts and related terms to electric vehicles. They would be allowed to come back to the reading in order to check their answers.

a. kW1. Used to transfer the mechanicalpower from the motor to the wheels.

- b. Charge Port
 2. Unit for measuring the power produced by the electric motor.
 c. Controller
 d. Thermal system
 2. Unit for measuring the power produced by the electric motor.
 3. Used to maintain an operating temperature of the main components
 4. Used to connect the electric
- d. Thermal system

 4. Used to connect the electric vehicle to an external supply.
- e. Transmission 5. Regulates the electric energy from the batteries to the electric motors.

Answers \rightarrow 1- e/ 2- a/ 3- d/ 4- b/ 5- c.

2. Fill in the gaps after reading:

Secondly, I would introduce them an interesting reading about Tesla cars, which are the leading ones in the global market, in which interesting features about their top sales vehicle, the Model S, are specified. However, in order to complete the exercise they will have to fill in the blanks with the words that I will provide them.

driver- 100 kph- and- working- the- extra- even- battery- rotor- out- hundreds- and- is- the- a- upgrade- get- came- internal- in.

A new, upgraded version of an electric car from Tesla Motors						
(1)	capable of goin	g from 0 to ⁽²⁾	in			
just 2.8 seconds. The original 691 horsepower Tesla Model						
S P85D was already incredibly fast. It (3) had a						
function called Insane Mode, which meant the car could						
from 0-100kph in 3.2 seconds. The upgrade is						
called Ludicro	ous Mode (5)	will take the				
horsepower up to 762, thus providing the (6)						
power to get t	o 100kph ⁽⁷⁾	less than th	ree			
seconds. This is close to the acceleration of a Porsche 911						
Turbo S supercar. That kind of horsepower means						

(6)	car can acce	elerate at 🐃	force of				
1.1G. This me	eans the acce	leration will mal	ce the				
(10)	feel that he	or she is going	faster than the				
speed of fallin	ıg ⁽¹¹⁾	of an airplar	ne.				
			_				
Tesla CEO Elon Musk explained that the new improvement							
in acceleration	n ⁽¹²⁾	from researc	ch into an				
advanced bat	tery. Enginee	rs were (13)	on a new				
power train for its cars. A power train is the system that							
delivers the power from the engine to (14) wheels.							
The engineers managed to increase the (15)							
power by ten	per cent, resu	ulting in the extra	a acceleration.				
Tesla said: "Unlike a gasoline (16) combustion							
engine with (17	")	of moving parts	Tesla electric				
motors have o	only one movi	ng piece: the (18)	. As a				
result, Model S acceleration is instantaneous, silent							
(19)	smooth." Th	e Tesla S P85D	car is priced at				
\$87,500 as a basic model; the "ludicrous" (20) will							
he an extra \$13 000							

3. Listening and writing an opinion essay:

The following activity will consist of watching a Ted Talk Youtube video and paying attention to the way in which this Japanese man talks. The rhythm and tone of voice together with the vocabulary he uses will be the main aspects to focus on, apart from the main message. After watching the video twice, students will be asked to write an essay of around 300 words in which they give their personal opinion about the message that this man provides, in which he states that in the near future electric cars will be fully automatized and will not need drivers.

Ted Talk: https://www.youtube.com/watch?v=NX0Plqw73K0

4. In-class debate:

The last activity will be about opening a debate in class about the opinion that the man of the Ted Talk, Freeman H., has. The class will be divided in two groups and they will have to defend the two opposite ideas regarding the future of electric cars, the one

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² Exercise extracted from https://breakingnewsenglish.com/1507/150721-electric-car-drag_gap.html

in which automatized electric vehicles without the need of a driver is thought to be the future, and the other one in which electric vehicles will never be capable of getting to such an autonomous point and will always need a driver. Learners will be asked to work in groups respecting everyones' right to speak and to be heard, and they will need to have prepared all the previous vocabulary about electric cars in order to defend their arguments.

4. Interview with the national manager of the R Motion group.

4.1. Introduction

In order to observe the linguistic influence of English in the automotive industry I decided to ask for an interview with someone with a lot of experience on it and with a good knowledge of English and who used it in the field being studied. Mr. Jaume Curtiellas was the profile that I was looking for so I wrote him an email and he kindly accepted the interview. He is the manager of the R Motion group at a National scale and this group includes the brands Nissan, Mazda, Ford and Suzuki with different franchises around Spain.

I prepared 12 questions aimed to know who he is, what did he study and how English and ESP courses helped him to achieve what he has achieved and get to the highest national position starting from scratch. All the questions that I proposed to him were divided into three sections which are 'Profile and experience', 'Company, strategies and business function', and 'Linguistic Questions'. I also introduced another section called 'Others' in which I ask for his opinion about AI. All questions together with the respective answers will be included in the appendix and the most relevant ones for the subject of study of this TFG will be summarized down below.

4.2. Relevant Questions

4.2.1. Profile and Experience

1. Which were your principal motivations for entering the industry?

Mr. Curtiellas had two options in mind once he finished his degree which were the textile and the automotive industries. However, he did not want to follow the path of his father who was the owner of a textile business, that is why he chose the automotive sector.

2. What did you study?

Mr. Jaume Curtiellas studied a business management and accounting degree. Besides, he took extracurricular English classes until he achieved an advanced level. Apart from English he took German classes for four years.

- 3. Why did you take extracurricular English classes? Was it for personal or working aims? Surprisingly, It was for none of these reasons. As he clearly stated: "To be honest I started English classes because my father obliged me to. He said that it would be the future language for all businesses."
- 4. Which were the biggest difficulties that you found when joining the automotive industry? What helped him to join the industry was the degree that he studied and it was not that difficult he says. Besides, when he started being promoted in the Company his English skills helped him to get to the top.

4.2.2. Company's background and market research

8. Which is the condition of the Company after the pandemic?

It made the digitalization of the industry grow exponentially. Before the pandemic people liked to go to the shop in person and speak with the seller to get information about cars, however now people generally look for this information on their website in which they can see all the cars with their stats. Although the Company has suffered this process of

digitalization, the final process is the traditional one in which people go to the shop and buy the cars because it creates them a much bigger sense of reliability.

4.2.3. English and ESP in the industry

9. Do you think that English has given you any advantages in your role as manager in the Company?

English is what let him get to one of the highest positions in the Company and it has been crucial for maintaining that position he says. He added that in the R Motion group there are around 430 people and that only an 8% of them speak English as the language is not a requirement for people entering the company but if they want to "grow" as professionals they definitely need it.

10. Mazda is a Japanese Brand, do you notice any aspects of it in the Company or has it been globalized to the point in which it seems to be from an English origin?

Mr. Curtiellas says that the only noticeable Japanese feature would be in the manufacture of the vehicles which are known for being reliable and meticulous, they take into account every detail and they want everything to be perfect.

When he mentioned the company in general he said that Mazda is an international company with the headquarters in Germany and when they hold business meetings they always speak in English.

11. Have you taken any ESP course regarding the specific vocabulary of the automotive industry?

He did not take any ESP course for the automotive industry, but he did for English business in 2012. He took it in Madrid and their German bosses, who also were his teachers, taught this course for people with a minimum advanced level.

He also mentioned that the Company made all workers join courses in which vocabulary about new technologies was introduced in order for sellers to be able to inform customers about the latest features of the vehicles. The main curiosity is that these courses were taught in Catalan or Spanish, however all the terminology was written in English. Learners were introduced to the names of new specific parts or technologies which were written in English, however they were only taught what this vocabulary was and not what it meant in English. As Jaume said: "They know what ACC does, it constantly maintains the speed that you want the car to maintain, but they do not know what Autonomous Cruise Control (ACC) means."

5. Discussions and conclusions

When I started browsing and looking for information I did not know the width field I was trying to study. As my research went on I found out that it is very important to focus on the specific vocabulary that learners want to approach as the field of automotive engineering is so vast that many ESP courses could be created in order to fulfill the different areas of knowledge within this field. Besides, I found out that most of the courses and research dealt with the most globalized areas of the automotive industry and were too general for someone with a deep understanding of the subject matter. Most of my references and information that I found out are related to ESP as a subject in general and to the industry of cars, but also in very general terms. So my main conclusion was that given to the complexity of the field, a lot of knowledge is required to create good and complete ESP courses when it comes to specific areas. A good course would ideally be created by a professional linguist and an automotive engineer specialized in the field that is aimed to be taught.

This lack of specific ESP courses and available research was a challenge for me when it came to the creation of a lesson regarding the specific field of electric vehicles. As I did not have much information, I decided to start by positioning myself as a student of this field who wants to learn English vocabulary. It made me realize that the needs analysis should be the starting point of every ESP course as depending on the students the academic knowledge that

they demand can vary a lot. As a result, I believe that ESP courses in order to be effective should be designed taking many variables into account such as students' needs, specific vocabulary of the specific area within automotive engineering, the personality of students in order to maintain them engaged, the methodology that will be used, and the genres and skills that we want students to be most proficient. Besides, the more specific knowledge of the teacher, the greater the amount of vocabulary, phraseology, practical activities and specific genres that could be offered in the ESP course.

If I have had to keep studying on this framework I would have liked to go further in the issue of categories and fields within automotive engineering. As stated above, it is such a large field that many categories of vocabulary are to be taken into account. An interesting subject of study would be to analyze all these categories and try to put them into ESP courses depending on their similarities and connections to vehicles. By doing so, ESP students and teachers would be able to select what they really wish to learn/teach skipping the process of the needs analysis which may be a "waste" of time and by choosing the specific field teachers would not need to spend one or two sessions trying to know which specific vocabulary are students trying to learn.

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APPENDIX

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Interview with Jaume Curtiellas, manager of the R Motion group at a National scale. This group includes different brands like Nissan, Mazda, Ford and Suzuki which have different franchises around Spain. The questions that I proposed and the answers will be included in the appendix and the most interesting and relevant ones for the study of this TFG will be included in the framework after the proposal of a practical lesson.

PROFILE AND EXPERIENCE

- 1. Which were your principal motivations for entering the industry?
 - He had two options in mind which were the textile and the automotive industries, however he did not want to follow the path of his father who was the owner of a textile business, that is why he chose the automotive sector. He did not have any particular passion for cars.

2. What did you study?

- He studied business management and accounting degree. Besides, he took extracurricular English classes until he achieved an advanced level, and also studied German for four years.
- 3. Why did you take extracurricular English classes? Was it for personal or working aims?
 - "To be honest I started English classes because my father obliged me to, he said that it would be the future language for all businesses"

- 4. Which were the biggest difficulties that you found when joining the automotive world?
 - What helped him to get his first job was the degree that he studied, that is why he did not get much difficulties. Besides, when he started raising in the company his English skills helped him to get to the top, but luckily he did not find any big difficulty during his years working on this industry.

COMPANY, STRATEGIES AND BUSINESS FUNCTION

- 5. Which is your function in the company?
 - He is the sales manager of the R Motion group at a national scale
- 6. Which are the potential customers of the company? (We focused on Mazda to be more specific, and because it is their top sells brand)
 - Mazda's customers are from a middle-high social class, mainly from Catalonia and with very few foreign customers. However due to its quality-price relation it is a brand which is also aimed at a class called 'aspirational' which come from lower brands.
 - Most of the customers are middle age, however the number of young people buying
 Mazda vehicles is rising due to the latest models which have a more sporty line.
- 7. Which Companies represent the biggest competition in the sector?
 - "Due to the similar prices and quality our biggest competitors are Volkswagen,
 Toyota, Volvo and Cupra."
- 8. Which is the condition of the Company after the pandemic?
 - It made the digitalization of the industry grow exponentially, before the pandemic people liked to go to the business in person and speak with sellers to get information about cars. Now it has all changed and people generally look for this information on their website in which they can see all the cars with their stats. However, the final process is the traditional one in which people go to the shop and buy the car because it creates them a much bigger sense of reliability, As Jaume says: "people do not like

- to spend huge amounts of money on our website, they prefer to come to the store, which is totally comprehensible".
- Besides, new generations do not like to buy the cars, they usually get the cars through renting or subscribing methods, which are much more flexible for people who do not have economic stability.

LINGUISTIC QUESTIONS

- 9. Do you think that English has given you any advantages in your role as manager in the Company?
 - English (with his degree) let him get to one of the highest positions in the Company and it has been crucial for maintaining that position. He does not use English in Catalonia, however when he has a meeting with other brands or higher positions of the company he goes to Madrid and most of the time he speaks in English with them.
 - He added that in the R Motion group there are around 430 people and that only an 8% of them speak English, and probably the percentage would be even lower if we took for granted that English level is an advanced one. English is not a requirement for people entering the company but if they want to grow as professionals they definitely need it.
- 10. Mazda is a Japanese brand, do you notice any aspects of it in the company or it has been globalized to the point in which it seems to be from an English origin?
 - The only noticeable Japanese feature would be in the manufacture of vehicles which are known for being really reliable and meticulous, they take into account every detail and they want everything to be perfect.
 - When it comes to an internal company level he says that at a national level it looks
 like a Spanish company. However their headquarters are in Germany and when they
 hold business meetings they always speak in English.
- 11. Have you taken any ESP course regarding the specific vocabulary of the automotive industry?

- He did not take any ESP course for the automotive industry, but he did for English business in 2012. He took it in Madrid and their German bosses, who also were his teachers, taught this course for people with a minimum advanced level.
- He mentioned that the Company made all workers join courses in which vocabulary about new technologies was introduced in order for all sellers to be able to inform customers about all the features of the vehicles. All these courses were taken online and in Catalan or Spanish and the thing that interested me the most was the fact that the terminology was all in English. Learners were introduced to the names of new specific parts or technologies which were in English, however they were only taught what this vocabulary was and not what it meant in English. As Jaume said: "They know what ACC does, it constantly maintains the speed that you want the car to maintain, but they do not know what Autonomous Cruise Control means."

OTHERS

- 12. Which is your personal opinion about the AI in the industry?
 - He first mentioned that he is not an expert on the field and does not know much about it, however his opinion was strongly based on the idea that machines could substitute humans in the manufacturing process and even avoid 'human eros' but when it came to the selling process any machine could substitute the human brain and cognitive abilities for interpreting situations. As Curtiellas says: "Selling a car most of the time is: the moment. The moment in which sellers make a certain movement to convince customers, and machines are not able to interpret those situations yet."