

English for specific purposes for the strengthening of employability in students of technical and professional secondary education in Chile

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ABSTRAC. This research sought the connection between English for Specific Purposes with the future employability of technical-professional high school students, with the idea that English is a useful tool for the world of work and a bridge to promote equality in education in public schools. In this way, an exploratory mixed sequential study with equal Qual/Quan status is undertaken to diagnose the levels of English language for specific purposes in students of technical and professional secondary education. For such purposes, an instrument is validated by means of a non-probabilistic sample consisting of 116 fourth-year students of the technical specialties of administration and accounting, together with a Focus Group carried out post-results to 3 teachers and 2 head teachers, all members of a polyvalent professional technical High School, located in Maipu, Santiago-Chile. The results indicate that students graduate with a low command of English, which is not very useful to understand or produce texts for specific purposes, where the English language in professional technical secondary education turns out to be an undeveloped tool to improve job insertion and the employment opportunities of the graduates.

KEYWORDS. Technical and vocational education; Education and employment; Professional competence; Second Language Teaching; Linguistic Competence.

1. INTRODUCTION

Technical and professional education is an essential instrument for overcoming poverty and is considered an urgent issue to be developed in Chile, due to the rapid extension of information and communications technology, the impact of the global financial crisis and demographic trends. Additionally, the appearance of new resources, tools and programs used to process, manage and share information in various technological supports, and therefore, it becomes a great challenge for the preparation of young people in order to face the technological, economic changes in labor in our society (Unesco, 2017, 2012).

In this regard, the Organization for Economic Cooperation and Development (OECD) in 2010 stated that in order to transform professional technical education into an effective mechanism, equality of opportunities between nations must be promoted, reforming education, connecting different levels and strengthening their general education. Thus, it promotes a new conception for

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professional technical education, away from the image of terminal training, which prepares for a specific job, option of access and permanence in the educational system for more disadvantaged societies.

Since 2014, the Chilean ministerial reforms have sought to make Professional Technical Media Education (PTME) a possibility to continue studies, and also to develop a lifelong learning trajectory (Mineduc, 2014). However, it remains an option for educability for 65% of students belonging to the poorest quintiles; 4 out of 10 students choose a vocational technical school, maintaining enrollment coverage close to 45% for third and fourth year of high school, becoming the main way to prepare for work.

Larrañaga, Cabezas, & Dussaillant (2013) point out that some follow-up studies of secondary school graduates show that the dropout rate among graduates of the PTME is double that of their peers in the scientific-humanist mode. However, Seville (2014) argues that as the EMTP group is inserted into the labor market, the trend observed is that of an early incorporation to paid jobs (when people are 19 years old, more than 40% are working under this condition) and, therefore, all efforts to enhance the PTME, and their occupational fields to bring students to jobs once they graduate. This would also ensure the empowerment of training itineraries possible to be developed over time.

It is important to emphasize that the Chilean system, maintains a current regulation that establishes that, in the absence of qualified teachers in pedagogy, it is possible to teach specific subjects of the Professional Technical Specialties (TPS) to professionals or technicians, which means that only 52% of them have the teaching degree, while 44% have a professional or technical degree at a higher level in a field of education other than pedagogy (Seville, 2012). This supposes a questioning regarding the mastery of the pedagogical competences that the teachers of technical professional specialties have for the challenge that the formation of the students holds (Romero & Faouzi, 2018).

1.1 English for Specific Purposes (ESP)

Anthony (1997), states that speaking English for specific purposes (ESP) refers to two instances: a) English courses designed to meet educational or professional needs of students with different specialties. That is, courses focused on what students need to do with English in an academic or professional context. Therefore, the vocabulary and terminology that students need to learn is what needs to be used in familiar contexts, and b) English used in special communicative situations.

The ESP emerged during the 60's. Widdowson (1998) attributes two causes of expansion to this phenomenon: The first cause associated as a requirement of a world dominated by two forces: technology and commerce. Both forces had an expansion in terms of scientific, technical and economic activity on an international scale, dominated by the English language as an international language, which later became the lingua franca or the international currency of technology and commerce. The second expansion is attributed to the revolution that occurred in the linguistic arena during the 60s and 70s, when many researchers focused on discovering the ways in which language is used in real communication.

Hutchinson & Waters (1987) noted that in the early years of ESP it was compared to English for science and technology (EST), which was the area where ESP started. Later, English for Specific Purposes included several variations: the aforementioned EST, the EAP (English for Academic Purposes) or EOP (English for Occupational Purposes). International organizations such as

UNESCO and the British Council considered ESP as an academic discipline and a support for the whole world. It has become the nucleus of a large number of courses taught in universities and professional institutes. Its development has made of it one of the most important subjects for the teaching of English as a foreign language. However, the disagreements seen in its definition has led some authors to ignore the specific term. In fact, Widdowson (2001) points out that all use of the language is already specific, although other authors separate it into academic and/or professional English.

In this regard, Dudley-Evans (1997) noted that at the first Japan Conference dedicated to ESP, clarification was raised regarding the term, giving an expanded definition in terms of absolute and variable characteristics of the concept. From then on, it is said that the absolute characteristics of ESP include: its design to meet the specific needs of students; make use of the underlying methodology and the activities of the disciplines that serve it; ESP is focused on the appropriate language for these activities in terms of grammar, lexicon, register, study techniques, discourse and gender. Within the variable characteristics, ESP can be related or designed for specific disciplines and can be used in teaching situations as a methodology, different from that of General English.

Thus, Hutchinson & Waters (1987, p. 53) establish the differences that exist between ESP and EGP (English for General Purposes), noting that ESP "is likely to be given for adults who have an intermediate or advanced level of English, while that the EGP is more likely to be taught in schools and colleges," reinforcing that the ESP is designed to meet the specific needs of a particular student, unlike the EGP that is taught to improve a general language competence that implies a series of skills such as reading and listening, as well as oral and written production.

The differences established by the authors regarding ESP and EGP, they account for two aspects: the first one is in terms of vocabulary, structures and the second in a particular field or discipline in which the student works for a specific area. So ESP must be designed according to the needs of students and focused on the use of English. In this case, the use that the student gives to the language in a specific discipline, vocations or professions to achieve some specific purposes. On the other hand, EGP focuses on the use of language in general; on everyday situations of the foreign language, on the personal and social levels as well as on casual daily life conversations. The second important difference is that the EGP has a general program of studies of the foreign language that could be very broad, because its acquisition as a second language makes it complex to cover the content of the course within a school year.

Nowadays, ESP is known as a student-centered approach, which aims to meet the needs of students in educational or professional contexts. Dudley-Evans & St. John (1998) point out that ESP is more effective when its methodology is used in students who combine work and family with their studies. This, since it has an approach that adapts to the needs of the students and their interests. ESP teachers are focused on designing specific courses to meet individual needs, so this is an important part of their workload which results in a natural extension of student-centered or learning-centered perspectives of ESP that must be developed.

Under those circumstances, ESP is more likely to be designed for students who have already begun their studies in English, because most ESP courses presume some prior knowledge of the language. For example: adults who have an intermediate or advanced level of English and where the ESP courses emphasize the needs of the students. Therefore, as a first step, it is necessary to make an analysis of the skills that are needed and the activities that the students of an ESP course must develop. That is, carry out a more precise analysis of the genres and languages involved in each of these skills and activities (Dudley-Evans, 1997).

1.2 English language as a requirement for Employability

Campos Ríos (2003) establishes that the concept of employability originates in England and is the result of the union between the term employ and ability. It begins to be used at the beginning of the 20th century, when various authors agree on the idea that it is necessary to create a relationship between employment and unemployment, in other words, the ability to get and keep a job. The same author reports that the first definition of employability appeared after the Great Depression in the United States and Great Britain in the 1920s, and continued until the 1950s. The term considers the person as employable or not, taking into account the following criteria: Age (15 to 64 years); lack of mental or physical problems; lack of family restrictions (for having children in office, grandparents, etc.).

De Grip, Van Loo, & Sanders (1999) state that taking into account that the economy was not stable enough and the term employability was not a well-known concept, the sole purpose of this term was to classify people in the categories mentioned above, leaving out those with disabilities and those who live in poverty, who were the group that had more problems at the time of getting a job. At the end of the 50s, Gazier (2001) points out that some European countries give a new meaning to the term employability, with a more updated view than the previous one, where the term employability is based on the potential that a person has to get a job and to stay in it.

Therefore, this new version of employability includes both the main agents, called workers and also the political, medical and statisticians. All these agents share three fundamental aspects: a) the medical concept that considers doctors and therapists in the different fields of rehabilitation, based on the limitation and disability of individuals; b) the individual measurement that considers the degrees of physical or mental aptitude of an individual in the areas of performance and c) the problems of intervention, that is, agreements to compensate for deficiencies. In this regard, Pérez (2005) points out that during the 70s, many institutions had to face unemployment, evidencing a large number of people with zero chances of rejoining the labor market. This situation led to intervention programs focused on training in order to be selected, because many people did not achieve an effective performance in a job. They did not have developed some of the basic skills, described by Brunner (2001), such as: ability to communicate and interact with the rest; ability to solve particular problems; ability to manage various organizational processes and the ability for team work.

During the 80s and 90s, the original idea of this concept was gathered, which concludes with the importance of having statistical information on employment, using as an indicator agent people who had a job or were trying to get one, the duration of this process and how much their income was (Labor Competences Program, Fundación Chile, 2003). Besides that, for the Chilean case, the concept of employability is based on the approaches described by the Foundation for the Development of the Human Resources Function (FUNDIPE, 2007:2) which defines it as "the aptitude" of a person to have a job meeting his/her professional, economic, promotional and development needs throughout his/her life". However, the meaning of the term employability is oriented towards a person's self-development and it is closely related to the idea of employability. This means that the person must have a proactive attitude and a commitment when facing the world of work, which would guarantee more job opportunities.

Brewer's position (2013:1) is also reflected in the definition given for the International Labor Organization (ILO) noting that "employability implies much more than the ability to obtain a first job. It is the ability to connect and explore within a career, remaining employable throughout life. It requires the ability to ask questions, acquire new skills, identify and evaluate options, un-

derstand rights at work, including the right to a safe and healthy work environment, adapting successfully to changing situations and having the courage to innovate."

Therefore, it is possible to point out that the conception of the term employability currently drives the person as an individual agent and not as part of a whole, promoting the need to take into account, not only the characteristics of people and their interests, but also the individual skills and abilities that empower positive attitudes towards people; security and emotional work competence; skills for solving practical problems and knowledge of the environment.

For the particular purpose of this article, English language has a fundamental role in employability because it is considered as the main form communication between diverse cultures. And with the internationalization and globalization of communications, it has become essential to improve the work positions. At the same time, it has been installed as the communicational tool to access the most up-to-date knowledge and information. The Ministry of Education of Chile, considers English as a social and work tool that gives value to the students of the education system if they graduate with a relevant management of the language. This allows them to successfully face any communicative situation when they enter into the world of work. However, in Chile there is no national certification to determine the level of English language that students reach once they graduate from high school.

Currently, there is a public policy installed since 2004 through the English Opens Doors Program whose mission is to improve the level of English from fifth grade in Primary School to fourth grade in High School, through the definition of national standards for the learning of English, a strategy of professional teacher development and support for English teachers in classrooms (Mineduc, 2008). Since 2004, this initiative has enabled the diagnostic of 11,000 elementary and high school students from 299 public institutions in different regions and socioeconomic areas of Chile. The results indicate that only 5% of the students of secondary education reached the level required by the national curriculum when they finish twelfth grade in their secondary education (Educar Chile, 2011). Since 2010 and every two years, a standardized compulsory test called SIM-CE English has been taken by the Chilean students. This is the way in which the Agency for the Quality of Education evaluates the learning outcomes obtained by schools in English language. These results do not mean a certification or accreditation in the language. It has only a census character, although it gives an idea about the level of English of the students (Mineduc, 2014).

The results of the first SIMCE English test were based on an adaptation of the TOEIC Bridge test (Test of English for International Communication) of Educational Testing Service (ETS) given during the last quarter of 2010 to all third-year students of secondary education in the country, approximately 220,000 students (Educar Chile, 2011). Once again, the results confirm that only 11% reach a basic level (B1) of this foreign language. Yilorm & Lizasoain (2012) point out that within the possible causes of this low level of competence, Chile is a country where English cannot be acquired as a second language. On the contrary, English is taught as a foreign language, which considerably limits direct and authentic contact with that language.

In some regions of Chile, there are some initiatives such as the Fun English Program (FEP), which seeks to promote the development of productive and receptive skills in the English language in both primary and secondary State-run schools in Puerto Montt. Since 2013, this initiative promotes the use of methodological strategies that allow learning effectively with the idea that students take an international evaluation such as: the Key English Test (KET), Preliminary English Test (PET) or First Certificate in English (FCE), depending on the level of English they are (Mineduc, 2016). However, these ideas are special initiatives in Chile, since the English lessons

they have are the main and only possibility students have to access the language. In the case they wanted to certify their English level of proficiency or any other language, students have to pay for an international exam.

2. METHODOLOGY

The present study is of an exploratory nature, established from a mixed design of research, with equal status QUAN – QUAL. In this way, a simultaneous view is given to the application without prioritizing one method over the other (Hernández, Fernández and Baptista, 2010). The study is also sequential, given that quantitative work is first addressed to validate an instrument that allows measuring ESP knowledge students have and then the qualitative view to address the opinions collected amongst the administrative staff in the school about the English language and its results.

For the field work a non-probabilistic sample was considered, also called a directed sample (see Table 1). According to Cohen & Manion (2002), the selection is made with prior knowledge of the subject and the researchers decide to reach one or the other, according to their discretion. Thus, the sample was made up of 116 students in the fourth year of the technical specialties of administration and accounting belonging to a polyvalent professional technical school from Maipú, Santiago - Chile. The sample was divided into subgroups according to gender (male and female), age (four groups from 16 to 19 years old), and area of specialty (Administration and Accounting).

Table N° 1 Sample composition.

| Area of Specialty | | N.º of students who answered the questionnair ^e | | | | | | N.º of teachers interviewe ^d |
|----------------------------|------------|--|------------------------------------|----|----|----|----|---|
| | | Ge | Gende ^r Ag ^e | | | | | |
| Administratio ⁿ | Accounting | F | M | 16 | 17 | 18 | 19 | Teachers of English (3) |
| 60 | 56 | 51 | 65 | 3 | 89 | 20 | 4 | Head of UTP (1) |
| | | | | | | | | Labor Practice Coordinator (1) |

Source: Prepared by the authors.

2.1 Instrument used for data collection

According to the objectives of this research and the methodological framework, an instrument to evaluate the students' written communication and the reading comprehension for specific purposes was developed. At the same time, a script of questions was developed for a focus group made up of 5 teachers: three teachers of English, a UTP Head and a labor practice Coordinator. The instrument was organized in two parts: in the first part the variables aimed at diagnosing English for Specific Purposes, reading comprehension, the use of English and the ability to write were contemplated. The instrument was subjected to a construct validation process. For this purpose, the collaboration of four experts evaluating international tests of the PET, KET and FCE type was requested; the suggested modifications were accepted and then the reliability analysis was carried out in a pilot sample of 45 students with similar conditions. The data was processed using the SPSS program (version 23) and the result of the reliability analysis showed a Cronbach's alpha of 0.851.

To measure the internal validity of the instrument, nine open questions associated with the importance of English and future employability were raised. The evaluators estimated the following

three questions: a) What importance do you give to the English language? Why? b) Do you think that English will be a necessary tool for your future employability? c) What post-secondary studies will you follow and how will you finance them? The answers answered by 116 students were organized using the Atlas Ti scientific tool (version 7) to see the emergence of the units of analysis which were gathered according to the similarities in their answers.

Regarding the Focus Group, a script with questions was given to three teachers of English, a Head of the Technical and Pedagogical Unit and a labor practice Coordinator. The questions were intended to collect their opinions about a) English as a tool in the world of work; b) the level of proficiency in the English language in the formation of the EMTP; and c) the internal mechanisms to guarantee the mastery of the language. The answers were also organized using the Atlas Ti scientific tool (version 7) but without establishing categories, in order to let the units of analysis to emerge and thus gather them by similarities, according to the voices of the participants.

3. RESULTS

In order to respond to the objectives and methods proposed, the results are presented together in order to account for the complementary nature of the data. Regarding the diagnostic instrument, a new reliability analysis was carried out. Then, a factor analysis to each of the items that make up the instrument took place in order to observe how the different variables are combined with both the written communication and the reading comprehension in English. Finally, a comparative analysis was made between the resulting dimensions in the previous analyzes according to age, gender and area of specialty considering the teachers' voices as well as the teaching directors.

3.1 Reliability analysis of the instrument

Once the instrument was applied to 116 students, it can be seen that the Cronbach's alpha increases if one of the items is eliminated, therefore, the 12 questions that made up the instrument wewre eliminated (items I.1, I.2; 1.3; I.5; I.6; II.1; II.3; V.1; V.2; V.3; V.6 and VI.6.) increasing the reliability of the test from 0.851 to 0.876 (See Table No. 3 and No. 4).

Table N° 2. Total Statistics Elements

| | Average of the scale if the element is deleted | Variance of the scale if the element is deleted | Corrected element Total co- rrelation | Cronbach's Alpha if item is eliminated |
|--|---|---|--|--|
| I.4 Use of English: Grammar and Vocabulary | 38,0345 | 30,190 | ,336 | ,875 |
| II.2 Reading | 37,9655 | 29,738 | ,404 | ,873 |
| II.4 Reading | 37,8793 | 29,307 | ,473 | ,871 |
| II.5 Reading | 37,8621 | 29,755 | ,387 | ,873 |
| II.6 Reading | 38,2759 | 31,628 | ,151 | ,877 |
| II.7 Reading | 37,8103 | 29,564 | ,424 | ,872 |
| III.2A English for Specific Purposes | 38,0948 | 29,704 | ,471 | ,871 |
| III.2B English for Specific Purposes | 37,9052 | 29,147 | ,507 | ,870 |
| III.3A English for Specific Purposes | 38,0086 | 29,000 | ,567 | ,868 |
| III.3B English for Specific Purposes | 37,8966 | 28,702 | ,593 | ,867 |
| III.4A English for Specific Purposes | 37,9741 | 28,756 | ,602 | ,867 |

| III.4B English for Specific Purposes | 37,9224 | 29,098 | ,519 | ,869 |
|--------------------------------------|---------|--------|------|------|
| IV.1 English for Specific Purposes | 37,8362 | 29,060 | ,519 | ,869 |
| IV.2 English for Specific Purposes | 37,8448 | 29,750 | ,387 | ,873 |
| IV.3 English for Specific Purposes | 37,7586 | 28,689 | ,602 | ,867 |
| IV.4 English for Specific Purposes | 37,7759 | 29,149 | ,508 | ,870 |
| IV.5 English for Specific Purposes | 37,9224 | 29,394 | ,462 | ,871 |
| IV.6 English for Specific Purposes | 37,8793 | 28,942 | ,544 | ,869 |
| VI.1 English for Specific Purposes | 37,4828 | 30,878 | ,292 | ,875 |
| VI.2 English for Specific Purposes | 37,7845 | 29,805 | ,380 | ,874 |
| VI.3 English for Specific Purposes | 37,5948 | 29,617 | ,490 | ,870 |
| VI.4 English for Specific Purposes | 37,4224 | 31,290 | ,253 | ,876 |
| VI.5 English for Specific Purposes | 37,4828 | 30,461 | ,404 | ,873 |
| VI.7 English for Specific Purposes | 37,4483 | 31,223 | ,236 | ,876 |
| VII Writing | 36,4138 | 31,097 | ,263 | ,876 |

Source: Prepared by the authors on the basis of the data obtained in the study.

Table N° 3 Final Cronbach's Alpha after the elimination of items

| Cronbach's Alpha | Nº of elements |
|------------------|----------------|
| 0,876 | 25 |

Source: Prepared by the authors on the basis of the data obtained in the study.

3.2 Factor analysis

With the number of items resulting from the reliability analysis, the factor analysis of the diagnostic instrument was carried out evaluating the pertinence of the instrument. Then the variance and the matrix of the rotated components were analyzed. Finally, the table corresponding to the items for each dimension and the table containing the Cronbach's Alpha of each of the final dimensions are presented. In Table No. 4 it can be seen that the Kaiser-Meyer-Olkin (KMO) sample adequacy measure is 0.783. Since it is greater than 0.50 it can be established that the correlations between the pairs can be explained by other variables. This shows the association existing between the variables, making it possible to reduce variables to generate factors.

Table Nº 4. KMO and Bartlett's Test

| Kaiser-Meyer-Olkin (KMO) sample adequacy meast | ure | ,783 |
|--|--------------------|----------|
| | Aprox. Chi-saquare | 1422,336 |
| Bartlett's sphericity Test | Gl | 300 |
| | Sig. | ,000 |

Source: Prepared by the authors on the basis of the data obtained in the study.

In the same way, it can be seen that the level of significance of Bartlett's sphericity test is 0.000, and since the significance is less than 0.05, the null hypothesis is rejected and it is accepted that the correlation matrix is not an identity matrix. That is, there are significant correlations between the variables and the factorial model becomes relevant. However, in order to determine the number of factors necessary to represent the data of the diagnostic instrument, the total variance was examined. Table N $^{\circ}$ 5, shows that with the first 5 components it is possible to explain 60.210%

of the variance and therefore it is possible to consider that the value is high enough, to estimate that 5 components of the diagnostic instrument are sufficient, leaving others that should not be considered.

Table N° 5. Total variance explained

| Compo- nent | In | nitial Self-va | lues | | | | Addition of Square saturations of the extraction of the rotation | | |
|----------------|-------|-----------------|--------------------|-------|-----------------|--------------------|--|-----------------|--------------------|
| | Total | % va- riance | % accu- mulated | Total | % va- riance | % accu- mulated | Total | % varian- ce | % accu- mulated |
| 1 | 6,456 | 25,826 | 25,826 | 6,456 | 25,826 | 25,826 | 4,527 | 18,108 | 18,108 |
| 2 | 3,280 | 13,121 | 38,947 | 3,280 | 13,121 | 38,947 | 3,662 | 14,646 | 32,755 |
| 3 | 2,135 | 8,538 | 47,485 | 2,135 | 8,538 | 47,485 | 2,804 | 11,215 | 43,970 |
| 4 | 1,940 | 7,759 | 55,244 | 1,940 | 7,759 | 55,244 | 2,684 | 10,735 | 54,705 |
| 5 | 1,241 | 4,966 | 60,210 | 1,241 | 4,966 | 60,210 | 1,376 | 5,504 | 60,210 |
| 6 | 1,103 | 4,411 | 64,621 | | | | | | |
| 7 | ,985 | 3,938 | 68,559 | | | | | | |
| 8 | ,916 | 3,666 | 72,224 | | | | | | |
| 9 | ,834 | 3,335 | 75,559 | | | | | | |
| 10 | ,773 | 3,093 | 78,652 | | | | | | |
| 11 | ,659 | 2,637 | 81,289 | | | | | | |
| 12 | ,619 | 2,474 | 83,763 | | | | | | |
| 13 | ,529 | 2,114 | 85,877 | | | | | | |
| 14 | ,506 | 2,026 | 87,903 | | | | | | |
| 15 | ,475 | 1,900 | 89,803 | | | | | | |
| 16 | ,417 | 1,667 | 91,470 | | | | | | |
| 17 | ,407 | 1,629 | 93,098 | | | | | | |
| 18 | ,354 | 1,415 | 94,514 | | | | | | |
| 19 | ,302 | 1,208 | 95,722 | | | | | | |
| 20 | ,257 | 1,029 | 96,750 | | | | | | |
| 21 | ,219 | ,877 | 97,628 | | | | | | |
| 22 | ,208 | ,832 | 98,460 | | | | | | |
| 23 | ,174 | ,698 | 99,158 | | | | | | |
| 24 | ,121 | ,483 | 99,641 | | | | | | |
| 25 | ,090 | ,359 | 100,000 | | | | | | |

Extraction Method: Principal Component Analysis.

Source: Prepared by the authors on the basis of the data obtained in the study.

Similarly, in Table N $^{\circ}$ 6, it can be seen that the matrix of rotated components yields 5 factors. This means that 25 items analyzed are grouped into 5 groups. That is, factors 1 includes 7 items, followed by factor 2 which includes 6 items, factor 3 and 4 group 5 items each and, finally, factor 5 includes 2 items.

Table N° 6. Matrix of rotated components

| | | 89 | | | | |
|--|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | |
| III.4B English for Specific Purposes | ,889 | | | | | |
| III.3A English for Specific Purposes | ,879 | | | | | |
| III.4A English for Specific Purposes | ,866 | | | | | |
| III.3B English for Specific Purposes | ,850 | | | | | |
| III.2A English for Specific Purposes | ,757 | | | | | |
| III.2B English for Specific Purposes | ,736 | | | | | |
| I.4 Use of English: Grammar and Vocabulary | ,357 | | | | | |
| IV.1 English for Specific Purposes | | ,821 | | | | |
| IV.5 English for Specific Purposes | | ,805 | | | | |
| IV.3 English for Specific Purposes | | ,778 | | | | |
| IV.4 English for Specific Purposes | | ,747 | | | | |
| IV.6 English for Specific Purposes | | ,736 | | | | |
| IV.2 English for Specific Purposes | | ,595 | | | | |
| II.2 Reading | | | ,815 | | | |
| II.4 Reading | | | ,807 | | | |
| II.7 Reading | | | ,712 | | | |
| II.5 Reading | | | ,711 | | | |
| II.6 Reading | | | ,310 | | | |
| VI.3 English for Specific Purposes | | | | ,758 | | |
| VI.1 English for Specific Purposes | | | | ,713 | | |
| VI.2 English for Specific Purposes | | | | ,681 | | |
| VI.5 English for Specific Purposes | | | | ,628 | | |
| VI.4 English for Specific Purposes | | | | ,552 | | |
| VI.7 English for Specific Purposes | | | | | ,759 | |
| VII Writing | | | | | ,558 | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax rotation (with Kaiser). The rotation has converged in 6 iterations.

Source: Prepared by the authors on the basis of the data obtained in the study.

3.3 Variable distribution in the study

In order to identify the normality of the study variables, a normality test was used in order to identify the type of distribution of each of the dimensions and thus establish the appropriate type of test. Table No. 7 shows the normality test (Kolmogorov-Smirnov and Shapiro-Wilk). As the sample collected in the present investigation is of 116 cases, the Kolmogorov-Smirnov test will be interpreted for its relevance, since it requires more than 51 cases for its use. In the same table, the significance of the dimensions is less than 0.050. Therefore, the null hypothesis is rejected in favor of the alternative and it is assumed that the dimensions do not have a normal distribution. As a result, nonparametric tests are applied to these variables.

Table N°7. Normality tests

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistics | gl | Sig. | Statistics | gl | Sig. |
| Dimension 1 | ,251 | 116 | ,000 | ,823 | 116 | ,000 |
| Dimension 2 | ,182 | 116 | ,000 | ,856 | 116 | ,000 |
| Dimension 3 | ,214 | 116 | ,000 | ,860 | 116 | ,000 |
| Dimension 4 | ,277 | 116 | ,000 | ,781 | 116 | ,000 |
| Dimension 5 | ,502 | 116 | ,000 | ,406 | 116 | ,000 |

Correction of the significance (Lilliefors)

Source: Prepared by the authors on the basis of the data obtained in the study.

3.4 Comparison between dimensions according to age and gender

The statistical procedure used allowed us to apply the Kruskal-Wallis nonparametric test for independent samples with the objective of comparing the 5 dimensions, according to the age of the study subjects. Subsequently, a nonparametric Mann-Whitney U test was applied for independent samples and compare the dimensions according to gender of the students who were part of the sample. The statistically significant differences found in the analysis are shown in the through bar graphs.

Table N° 8. Contrast statistics a,b

| | Dimension 1 | Dimension 2 | Dimension 3 | Dimension 4 | Dimension 5 |
|------------------|-------------|-------------|-------------|-------------|-------------|
| Chi-squared test | 10,349 | 3,080 | ,490 | 3,908 | 8,112 |
| gl | 3 | 3 | 3 | 3 | 3 |
| Sig. asintót. | ,016 | ,379 | ,921 | ,272 | ,044 |

Kruskal-Wallis' Test

b. Variable: Age

Source: Prepared by the authors on the basis of the data obtained in the study.

Thus, Table No. 8 shows the results of the Kruskal-Wallis nonparametric test for independent samples. It shows only dimensions 1 and 5 which present statistically significant differences according to age of 0.016 and 0.044, respectively. Therefore, the null hypothesis in favor of the alternative with a confidence level of 0.05 and with the data that is available, it is possible to state that students according to age have different distributions in dimension 1 and 5. That is, differences were found according to in the levels of the aforementioned dimensions.

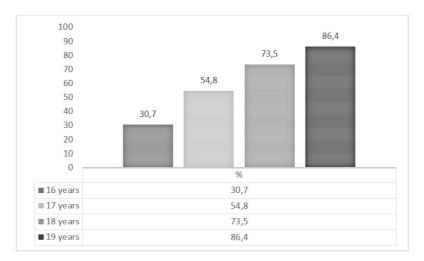


Figure 1. "Comparison in dimension 1 according to age" Source: Prepared by the authors on the basis of the data obtained in the study.

As it is evident in figure 1, the statistically significant differences shown in dimension 1 related to age, reveal that 16-year-old students differ significantly in the levels of dimension 1 with the rest of the age groups of students, the latter presenting higher levels in this dimension.

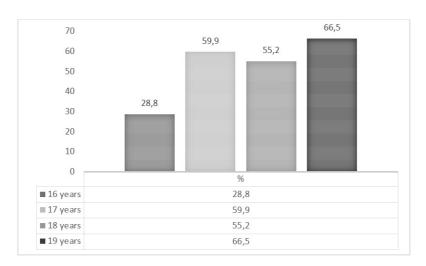


Figure 2. "Comparison in dimension 1 according to age" Source: Prepared by the authors on the basis of the data obtained in the study.

In the same way, figure 2, shows that 16-year-old students are the ones that differ from the rest of the groups, presenting lower levels than the others.

Now, in order to evaluate the gender differences, the non-parametric Mann-Whitney U test was used for independent samples. In Table No. 9, all the significant aspects for dimension 1 to 5 remain. Therefore, the null hypothesis is maintained with a confidence level of 0.05 and it is assumed that men and women have the same distribution in all dimensions. That is, there are no differences according to sex in the levels of the dimensions mentioned above.

| Table No 9. "Contrast statisticsa | Table N | Jo 9 | "Contrast | statisticsa" |
|-----------------------------------|---------|------|-----------|--------------|
|-----------------------------------|---------|------|-----------|--------------|

| | Dimension 1 | Dimension 2 | Dimension 3 | Dimension 4 | Dimension 5 |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Mann-Whitney U | 1561,500 | 1407,000 | 1610,500 | 1353,000 | 1638,000 |
| W from Wilcoxon | 2786,500 | 2632,000 | 2835,500 | 2578,000 | 2863,000 |
| Z | -,459 | -1,339 | -,179 | -1,729 | -,033 |
| Sig. asintót. (bilateral) | ,646 | ,181 | ,858 | ,084 | ,974 |

a. Variable: Sex (Gender)

Source: Prepared by the authors on the basis of the data obtained in the study.

3.5 In relation to the Administration specialty

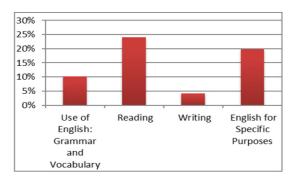


Figure 3. "English Language Domain in Administration field" Source: Prepared by the authors on the basis of the data obtained in the study.

The results of the 60 students of the administration specialty, when responding to the instrument, did not exceed 54% of the instrument's achievements, presenting an evident decrease in all levels. Thinking of the levels of higher correct response, the greatest domain presented is in the reading skill with 22% percent. In contrast, the writing skill did not exceed 3%. With respect to the linguistic competence of the use of English, students did not exceed 8% of the English language competence for specific purposes that show a result close to 21%. As a result, on a scale of grades from 1 to 7, with a 60% requirement for the minimum grade 4.0, the Administration specialty students marked 3.8.

3.6 In relation to the Accounting specialty

The results of the 56 students of the accounting specialty demonstrated a greater achievement than the administration group, with 62% of the instrument's achievements. However, the level of proficiency is minimum at all levels. The highest correct response levels are presented in the reading skill with 25%. In contrast, the writing ability does not exceed 5%. Regarding the linguistic competence of the use of English, students do not exceed 12% of the English language competence for specific purposes that show a result close to 20%. That is to say, on a scale of grades from 1 to 7, with a 62% requirement for the minimum grade of 4.0, the students of the Administration specialty obtained 4.2.

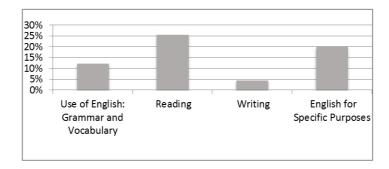


Figure 4. "English Language Domain in the area of Accounting" Source: Prepared by the authors on the basis of the data obtained in the study.

3.7 Qualitative analysis of instrument data

Since the instrument included three open questions to the students, the results show the following:

A) The importance given to English language. Figure 5 shows a semantic network representing the value for the mastery of the English language and the social importance given to it.

B) English as a tool for employability

Figure 6 shows a semantic network that demonstrates the social and educational value of the English language. Students consider this domain as an important requirement to get a job. If they lack this ability, they feel it as a discrimination to opt for a better paid job.

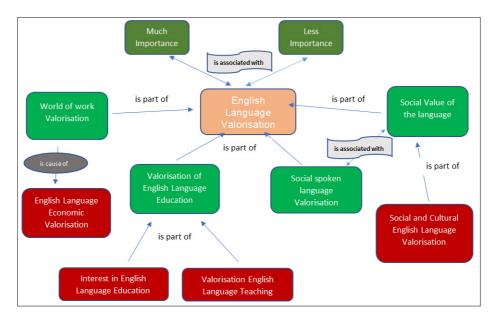


Figure 5. How important is the English language to you? Why? Source: Prepared by the authors on the basis of the data obtained in the study.

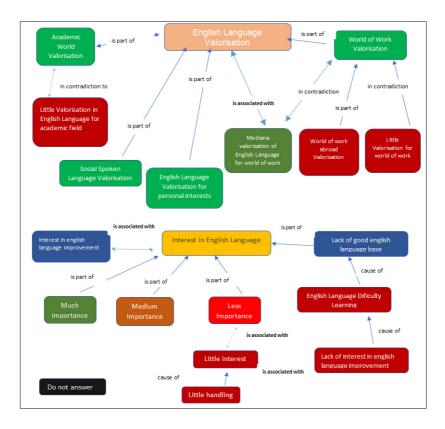


Figure 6. Do you think English is a useful tool for a future job? Source: Prepared by the authors on the basis of the data obtained in the study.

C) Higher education and its financing

Preferences for further studies are related to areas such as commercial engineering, computer science, accountancy, business administration and human resources. However, some students also prefer options related to the Armed Forces or as flight attendants in airlines, hotels, and tourism. This is because these careers have access to financing or are financed by their parents. All students consider English as an important work tool and recognize their weakness or they just don not like it.

3.8 Results: Focus Group Teachers and Directors

The opinions expressed by the three secondary teachers who taught the English course in the school show the importance of the English language as "a plus" to improve employment options and opt for better paid jobs. They consider it important to add specific content courses to EMTP connected with the specialty. However, they point out differences between the hours assigned to the specialty for deepening the contents. In the same way, they consider that students should be able to read, write and express themselves in English when they graduate. Although, there is no consensus among them with regards to this opinion. They say they do not have instruments for assessing the level of English either to diagnose at the beginning or at the moment of graduation. The school is aware of this situation. Finally, they point out that they do not have clear knowledge about what a technology transfer means and the role that it plays in the learning of English.

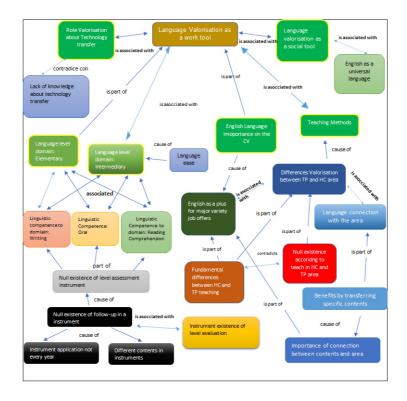


Figure 7. Voices of the teaching executives (Directors)
Source: Prepared by the authors on the basis of the data obtained in the study.

Figure 7 shows the opinion of the two school teaching directors. One of them is in charge of the curricular implementation of the academic program and the second one is in charge of the insertion of the students in their labor practice. These teaching directors recognize that English is now considered by young people as a social tool. They agree and value it as a tool in the world of work and make it clear that it is important for the school. There is no consensus regarding the level of proficiency students must have when they graduate and they attribute the deficits to the content differences between the Humanistic-Scientific and the Technical-Professional modality. Finally, they make it clear that they are aware of the importance of the language in the workplace and they point out that the linguistic skills students will most use will be written and oral expression. However, they do not have evaluation instruments to evaluate the language level and they feel also confused about what it really means to apply a language level assessment tool and its follow-up process.

4. CONCLUSIONS

Based on the diagnostic assessment of English for Specific Purposes applied to 116 students of EMTP, it can be noted that senior students have a basic level of proficiency in language skills associated with the reading area and others that are seriously weak in the area of writing. There are no statistically significant differences in terms of gender or between the areas of specialty (Administration and Accounting) even when they obtain a basic achievement level in academic results. Regarding the age of students, there are statistically significant differences that account for the fact that 16-year-old students or younger have a greater deficit in subjects associated with the use of English dimension: Grammar and vocabulary.

All the above leads us to conclude that the students who were disgnosed graduate with an elementary command of the English language and this is not useful to understand or produce texts for specific purposes. Therefore, the English language in this school, turns out to be an undeveloped tool to improve labor insertion and the employment opportunities of the graduates.

In addition, the results of the open questions given to the students, teachers and teaching managers (director) are unanimous in pointing out that English language is considered as a social tool, an essential linguistic competence to face the world of work and improve the labor insertion. At the same time, students expressed a frustration (discarding) feeling as they realize that they do not master the language, which becomes an important and exclusive tool for employment. However, few students show interest in the difficulties that their learning implies. Besides, the course teachers and part of the administrative staff in the school consider that the level of proficiency of the students should be basic (some of them are not certain) when they leave secondary school.

Consequently, it is possible to demonstrate a disconnection between the English language and employability, within the framework of technical training. There is also a lack of knowledge about the importance of technology transfer to acquire new knowledge, ideas, innovations or processes from other people and other countries, where English helps as a universal language. When the team of teachers face the results of the language diagnostic, they acknowledge the results and consider the willingness to collaborate, proposing changes so that the language is really a useful tool at the time of graduation. Some improvements are proposed: a) the addition new English contents for specific purposes in connection with the different areas of specialty taught (Administration and Accounting); b) also add more hours per week, to deal with these contents, and c) apply a diagnostic test, which can be compared in the time to make decisions longitudinally.

Due to the above, it is essential that the EMTP schools improve the way in which they help technicians in the strengthening of the competences for the employability of the students. Specially, if their formative trajectory involves total or partial financing to continue university studies or to enter the labor world. In this case, it is required to add differentiated contents in the English curriculum related to the technical-professional specialties, together with monitoring the improvement continuously up to the certification of the proficiency level by the Chilean government. This is also a relevant issue for universities that train English teachers.

With regards to the research framework, it is important to point out the limitations of the research and its predictive scope of implementing a diagnostic assessment of the English language at the national level in the EMTP schools in Chile. This is because the research study only measured the degrees of proficiency in certain linguistic competences of the language. However, it opens the question regarding the language level that an EMTP student must handle at his or her graduation.

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