The learning processes of students at risk of exclusion from education

Los procesos de aprendizaje de los estudiantes en riesgo de exclusión educativa

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Abstract

The existing operational problems in Compulsory Secondary Education require in-depth reflection about the different curricular and organisational aspects in place in this stage. This research aims to evaluate students' perceptions of the operation of the Initial Professional Qualification Programmes and compare it with their previous experience in Compulsory Secondary Education. The study was performed as a census; the questionnaire was sent to all students (N = 1045 students) from the 89 groups of students of the Initial Professional Qualification Programmes in Gipuzkoa. The response rate was 73.97%, with 773 students participating in the study. The results show that the students' scores regarding knowledge acquired in the Initial Professional Qualification Programmes are higher than those for their previous experience in Compulsory Secondary Education. Similarly, the students' evaluation of the teaching processes performed by the teachers on the Initial Professional Qualification Programmes is more satisfactory than their experience with Compulsory Secondary Education teachers. Some of the research results are very striking. The teachers on the Initial Professional Qualification Programmes manage to promote enthusiasm and interest in the work among students attending these schools. It seems strange that teachers who, in most cases, come from vocational training and do not have any specific training in educational science, can awaken students' interest in their work and improve their levels of satisfaction in the case of students who have systematically failed in Compulsory Secondary Education.

Keywords: Attention to diversity, educational inclusiveness, school failure, educational and learning processes, basic professional training, secondary education.

Resumen

Los problemas de funcionamiento existentes en la Educación Secundaria Obliga-

Revision accepted: 2016-09-01.
Cite this article as: Aramendi Jauregui, P., Arburua Goienetxe, R., & Bujan Vidales, K. (2017). Los procesos de aprendizaje de los estudiantes en riesgo de exclusión educativa | *The learning proces-ses of students at risk of exclusion from education. Revista Española de Pedagogía, 75* (267), 219-237. doi: https://doi.org/10.22550/REP75-2-2017-03

toria (ESO) exigen una profunda reflexión sobre los diferentes aspectos curriculares y organizativos desarrollados en esta etapa. La investigación pretende evaluar la percepción de los estudiantes sobre el funcionamiento de los Programas de Cualificación Profesional Inicial (PCPI) y compararlo con su anterior experiencia en la ESO. El estudio se plantea como un censo, es decir, el cuestionario es enviado a todos los alumnos y alumnas (N=1045 estudiantes) de los de los 89 grupos de alumnos y alumnas de los Programas de Cualificación Profesional Inicial (PCPI) de Gipuzkoa. La tasa de respuesta se situó en un 73,97%, tomando parte en el estudio 773 estudiantes. Los resultados indican que las puntuaciones de los alumnos y alumnas sobre los conocimientos aprendidos en los Programas de Cualificación Profesional Inicial son superiores a su anterior experiencia en la Educación Secundaria Obligatoria. Igualmente, la valoración que realiza el alumnado en relación con los procesos de enseñanza que desarrolla el docente de los PCPI es más satisfactoria que su experiencia con los docentes de la ESO. Algunos de los resultados de la investigación llaman poderosamente la atención. Los profesionales de los PCPI consiguen fomentar la ilusión y el interés por el trabajo de los estudiantes que asisten a estos centros. Parece curioso que docentes que, mayoritariamente, provienen de la formación profesional, sin una formación específica en ciencias de la educación, logren despertar el interés por el trabajo y la satisfacción de alumnos y alumnas que han fracasado de forma sistemática en la ESO.

Descriptores: Atención a la diversidad, inclusión educativa, fracaso escolar, procesos de enseñanza y aprendizaje, formación profesional básica, educación secundaria.

1. Introduction

The targets for European educational systems set out in the Europe 2020 strategy place great importance on preventing academic failure and on lifelong learning (MECD, 2013). One objective that is meant to be met is the rapid adaptation of the population to new economic and social situations, thus attaining better levels of well-being. Furthermore, the educational systems of the European Union act to promote strategies that encourage an interest in learning and the necessary measures to prevent academic and social exclusion.

In the case of Spain, Organic Act 8/2013, of 9 December, to Improve the Quality of Education, better known as the LOMCE, also refers to academic failure. Specifically, in section 28, it mentions programmes for improving learning and performance that are implemented from the second year of Compulsory Secondary Education (ESO). In section 41 it sets out the characteristics of Basic Professional Training (FPB), formerly known as Initial Professional Qualification Programmes (PCPI). These are intended for students who do not attain a sufficient command of basic competences. In the case of the Basque Country, sections 37 to 44 of Decree 236/2015, of 22 December describe the measures regarding diversity in compulsory education. Educational centres must establish mechanisms for the early detection of students with specific educational support needs.

According to Pérez, Poza, and Fernández (2016), the collective of young people in social difficulties is characterised by high levels of educational failure and early school leaving. One educational stage where most effort is needed to prevent this problem is Compulsory Secondary Education. Ferrer, Valiente, and Castel (2010) emphasise the great differences existing between Spain's autonomous regions in the PISA tests. The figures for academic failure that the Spanish educational system generates at this stage are truly worrying (Aramendi & Vega, 2013). Bersani and Chappie (2007) observe that school leaving and academic failure are two factors that mark the transition from adolescence to the adult stage. The results of their research show that academic failure is a turning point for adolescents, with a negative influence on the course of their lives. They believe that it is important to overcome the concept of deficiency in compensatory education and influence the design of curriculum ideas intended for the area of potential development of all students. Inclusive practices must guarantee rights, promote equity, and avoid segregation in the school (Feito, 2010; Arnáiz & Azorín, 2014).

To do this, a more functional curriculum is needed that promotes interdisciplinarity and the integration of knowledge, as is an active methodology that is completely removed from the traditional conceptual academic style used in most secondary school classrooms. The more abstract and theoretical subjects in Compulsory Secondary Education, delivered using teacher centred methodologies, can also create processes of exclusion. Accordingly, in a study carried out in secondary education, Domenech (2012) concludes that teacher centred teaching styles focussing on the transfer of knowledge are predominantly used at this stage. There is still a marked dependence on the teacher, little connection with knowledge relating to real life, and, frequently, school practices are treated as completed formulae. The socalled deductive approach has shaped most of the classes in secondary teaching. This model is based on the textbook and is presented to the students in a highly structured and linear fashion (Renzulli, 2010). Greater momentum must be given to inductive learning and to enquiry in schools as they give students more opportunities to apply and transfer the knowledge they learn (Tabaran, Box, Myers, Pollard, & Bowen, 2007; Vilchez & Bravo, 2015). Furthermore, consideration should be given to the fact that new pedagogical approaches are changing the aims of education. As Barba (2010) notes, knowledge has an expiry date, and memory, the most highly valued capacity at school, is progressively losing its relevance. Schools must reflect on the backlash they create in some students. They cannot fall back on the assumption that the problem of failure and leaving has its origin in the students and their families.

Educational policies and, specifically, the decisions taken by the authorities have a decisive influence on the approach to this problem (Alegre & Benito, 2012). Calero, Wasgraiss and Choi de Mendizabal (2010) have performed a study presenting some of the factors that have an impact on academic failure by students. Their socioeconomic level, the percentage

of immigrant students, budgetary and staff management autonomy in the centres, the distribution and grouping of the students, the centre's resources, and counselling and prevention at a school and community level have a major impact on student failure. Also, as García, Quintanal, and Cuenca (2016) state, it is important not to forget the impact of factors such as bad company and the abuse of legal and illegal drugs.

To reduce rates of educational failure and school leaving, it is necessary to take interdisciplinary decisions. Escudero and Martínez (2012) maintain that this problem must initially be approached through political and social pacts, strengthening public education, and through in-depth review of the school curriculum, and the management of educational centres and teaching staff and their professional development. They emphasise the fundamental role played by members of management, families, the educational community and society as a whole. As Muñoz (2012) and Palomares and López (2012) state, the school's intervention must be coordinated with social support measures by various institutions. Tackling students' problems primarily involves implementing preventative actions among the various administrative bodies, schools, non-profit associations, and basic social services.

2. Interest in learning: a key element for tackling educational failure and school leaving

Developing basic competences in compulsory education requires implementing a change in teaching and learning processes. Arlegui and Ibarra (2010) state that competence-based training requires the use of teaching methods that promote learning through enquiry and cooperation between students. From primary education, onwards it is necessary to encourage inductive learning processes so that students can build their own knowledge through exploration, experimentation, and discussing ideas. The teacher must achieve an appropriate connection between theory and practice, moving from a central role to one that is more peripheral but no less important for that. Andreu, Sanz, and Serrat (2009) state that an appropriate learning context must capture the students' attention and motivate them to analyse various situations from real life. Science is learnt through enquiry, observation, and solving problems.

Satisfaction with studies is strictly related to the educational attainment. Academic performance is closely linked with the teaching and learning strategies used, the role of the student, and the student's interest (Poy, 2010). Students, when they realise that they continuously fail in their various school tasks, experience a progressive deterioration in their self-esteem. Some enter a cycle of continuous failure that encourages giving up and school leaving. For this reason, the learning environment is vitally important, to ensure that students feel comfortable working in the classroom with their other classmates (Luedthe, Ribitzsch, Trautwein, & Kunter, 2009). Tsai, Ho, Lyang, & Lin (2011) analyse beliefs about the subject of science in secondary school students and their relationship with academic performance in a study. Students who regarding learning science in a

constructive way, prioritising the use of knowledge, achieve better performance levels than those who are doubtful or have high levels of uncertainty about learning science and using it in everyday life.

Tulis and Ainley (2011) analyse the emotional states of the students who pass and fail mathematics in secondary education. They conclude that encouraging a good classroom atmosphere, interaction and mutual assistance (peer tutorials) can have a positive impact on the equal participation by students in learning processes. Pérez and Poveda (2008) believe that through cooperative learning it is possible to achieve an appropriate atmosphere in the classroom, that is to say, one in which all students participate without exclusions in the learning processes and which assumes that they are capable of learning collaboratively, in a creative, interactive, and motivating way. The development of psychosocial and emotional factors is one of the advantages of cooperative learning. Accordingly, Studsrød and Bru (2011) analyse the perceptions of the classmates who act as facilitating agents for the school adjustment of secondary-school students from Norway. Their results showed that the perceptions of the classmates as agents for socialisation have a significant influence on the adolescent's adaptation to the school system.

Bonals (2007) emphasises the importance of the role of the teacher when encouraging interaction and cooperation between students in the classroom. However, in Spanish secondary education, this role has not significantly evolved towards socio-constructivist approaches. Teachers at this level cannot simply be people who transmit knowledge. Aramendi and Vega (2011) state that the teacher profile encouraged in Compulsory Secondary Education is someone who is a specialist in the subject and who lacks the appropriate pedagogical training. Being a teacher in compulsory education requires «*educating*», in other words, responding to the right of all students to achieve a basic training to pursue their studies and integrate themselves into society. In this regard, Solís, Porlán, Rivero, and Martín (2012) state, starting from constructivist postulates, that the teaching method must take into account the diversity of learning styles, the conceptual starting point of the students, and the classroom atmosphere. It seems important to note aspects such as cooperation, participation, self-regulation of learning (Dignath & Buettner, 2008) and the socio-emotional and emotional elements (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

3. Method

This research aims to evaluate students' perceptions of the functioning of the Initial Professional Qualification Programmes (currently called Basic Professional Training) and compare them with their earlier experience of Compulsory Secondary Education. It is intended to analyse different aspects of the curriculum and educational organisation and focus.

The following specific objectives have been set for this research:

— Describing the characteristics of the students who participate in the study.

— Analysing the students' view of the Initial Professional Qualification Programmes with regards to their learning activities (*what they learn*) and comparing them with their earlier experience in Compulsory Secondary Education.

— Discovering how the students on the Initial Professional Qualification Programmes feel and have felt in the classroom and compare their perceptions with their experiences in Compulsory Secondary Education.

— Analysing the students' evaluation of the methodology and teaching processes that the teacher implements (*how the teacher teaches*) on Initial Professional Qualification Programmes and in Compulsory Secondary Education.

— Analysing how the students consulted like to learn and compare the scores obtained by gender.

3.1. Sample

According to the data from the Schools Council of the Basque Country (2014), in the Gipuzkoa area there are 89 Initial Professional Qualification Programme groups with a total of 1045 students. The study is performed as a census and so the questionnaire is sent to all the students of the Initial Professional Qualification Programmes in Gipuzkoa. A total of 773 completed questionnaires were received, a response rate of 73.97%.

The students consulted are aged 16 (37.1%), 17 (40%), 18 (21.4%) and 19 (1.5%). Their mean age is 16.8. Of the students consulted, 70% are male and 30% female. 81.4% speak Spanish at home, 17.1% speak Basque, and 1.5% speak another language. Of the students consulted, 4.3% had previously been late-joining students. That is to say, they joined the centre when the academic year had already started. The centre the students attend is public in 62.9% of cases and private in 37.1%. 31.8% of the students are of immigrant origin and 68.2% were born in the Basque Country. The parents' levels of study are low-intermediate (84.3%) and intermediate-high (15.7%). 30.9% of the students say that their parents are separated and 69.1% say that they live together. The average number of members of friendship groups is 12 people. They are generally large groups. Of these, an average of almost 5.4 friends has repeated a year.

3.2. Instruments

The questionnaire was prepared in the first phase of the study. To this end, a review of the literature related to the topic was performed (Biggs, 1993; Alonso, Gallego, & Honey, 1994 & 2012; Díez, 1999; Gimeno & Gallego, 2007; Martínez, 2007; Huber, 2008; Benarroch & Marín (2011); Aramendi & Vega, 2013). These authors, among others, have analysed the correspondence between the teachers' pedagogical practices and the students' learning styles. Martínez (2007) describes the teaching tasks implemented by the teachers and the students' learning styles. The author identifies four learning styles: active (tendency to activity), reflexive (impact on the depth and coherence of thoughts), theoretical (use of well-structured content), and pragmatic (prioritises practical activities). According

to Domenech (2012), in secondary education, each learning style of the students generally adapts to the teaching behaviours of the teachers.

After reviewing the literature, six exploratory interviews with teachers (three women and three men) from secondary education were performed to establish their views on the topic. To select the categories a mixed (inductive and deductive) process was used. A series of categories based on the literature review and on the researchers' experience (deductive procedure) was initially proposed and, the categories were subsequently adjusted in light of the information collected in the study (inductive procedure).

The pilot test was administered to 4 male students and 4 female students from two centres in Vizcaya that did not participate in this study. Students were selected according to their year and gender. The wording of 15 items was modified and various aspects of the instructions for the test were modified. This was validated by experts from the University of the Basque Country and professionals from the Department of Education who do research on this topic.

The final questionnaire contains 128 items. In them, the level of agreement is stated using a Likert scale (1: disagree completely; 4: agree completely).

The main research variables were grouped into the following areas:

— General details of the sample: age, sex, profession, and their parents' studies, friends, use of videogames, internet... (items 1 to 22).

— Learning in Compulsory Secondary Education and Initial Professional Qualification Programmes: respect for the rules for coexistence, relationship with others, usefulness of the subjects, conflict solving, healthy lifestyle... (items 23 to 40), giving a total of 18 variables (Likert scale), as this was consulted differently for Compulsory Secondary Education and the Initial Professional Qualification Programmes.

— How have you felt in Compulsory Secondary Education and Initial Professional Qualification Programmes: classroom atmosphere, help from the teacher, satisfaction... (item 41 to 56), giving a total of 16 variables (Likert scale), as this was consulted differently for Compulsory Secondary Education and the Initial Professional Qualification Programmes.

— How teachers teach on Compulsory Secondary Education and Initial Professional Qualification Programmes: problem-based learning, practical activities, participation in the classroom, reviews... (items 57 to 88), giving a total of 32 variables (Likert scale), as this was consulted differently for both levels.

— How you like to learn at school: comprising 39 items on a Likert scale, regarding learning in general, resolving situations and problems, managing information, and emotional aspects of learning (items 89-128).

The questionnaire's reliability is 0.886 (Cronbach's alpha). When the data collection was complete, intensive data analysis was undertaken using the following procedure (Lukas & Santiago, 2009):

— Data reduction: selecting the data, identifying the objectives of the analysis, establishing a system of categories, studying the system of categories and codification.

— Organising the compiled information.

— Analysis and interpretation of the results obtained.

The questionnaire was administered between the months of May and November of 2015. The test was administered by a coordinator of the Initial Professional Qualification Programmes teachers, following the guidance of a member of the research team who had been designated for this purpose. Informed consent was obtained from families in advance.

3.3. Procedure

The research design is essentially descriptive and comparative. The study process was carried out in various phases:

— Initial exploration phase: 6 interviews were initially carried out with teachers from the Initial Professional Qualification Programme to adapt the theoretical approaches to the reality of the life of the centres and draw up the questionnaire.

— Extensive phase: information was collected through a questionnaire administered to the students.

— Integrative and propositive phase: the information from the earlier phases was integrated and proposals for improving Professional Qualification Programmes and Compulsory Secondary Education were made.

The data from the quantitative part were processed using the SPSS 22.0 and ITEMAN software packages, carrying out various statistical analyses (averages, standard deviations, percentages, analysis of variance of means —Kruskal-Wallis and the Mann-Whitney U test— and Pearson correlations).

There were some problems in the execution of the study. The coordination between the researchers and the teachers who administered the tests did not function appropriately, mainly when acquiring informed consent from the families. Also, the dates on which the questionnaire was administered were not the most appropriate taking into account the school calendar.

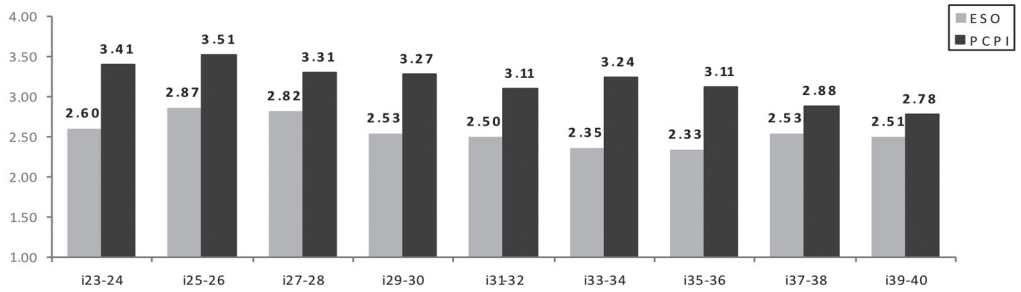
4. Results

The scores given by the students to the different items concerning their educational experience in Compulsory Secondary Education and Initial Professional Qualification Programmes are shown below. As can be seen, the average scores and the differences in means between the items regarding teaching and learning in both stages are listed. The differences between the values for Compulsory Secondary Education and the Initial Professional Qualification Programmes were analysed using the Wilcoxon test, a non-parametric test for related samples. This test was chosen because of the non-compliance with the normality hypothesis.

What have you learnt in Initial Professional Qualification Programmes and Compulsory Secondary Education?

Students state that their learning experience has been very different in Compulsory Secondary Education and Initial Professional Qualification Programmes.

FIGURE 1. Learning in Initial Professional Qualification Programmes and Compulsory Secondary Education.



Source: Own elaboration.

TABLE 1. What have you learnt in Initial Professional Qualification Programmes and Compulsory Secondary Education?

Item	Compulsory Secondary Education average	Initial Professional Qualification Programmes Average	Z	Asymptot. sig. (two tail)
23-24. To respect the centre's rules for coexistence	2.60	3.41	-10.037	0.000
25-26. To respect other classmates and teachers	2.87	3.51	-8.794	0.000
27-28. How to relate to others appropriately	2.82	3.31	-7.904	0.000
29-30. To know my rights and obligations as a citizen	2.53	3.27	-9.291	0.000
31-32. Subjects that are useful for learning how to live	2.50	3.11	-8.605	0.000
33-34. How to feel comfortable with myself	2.35	3.24	-9.659	0.000
35-36. How to resolve conflicts	2.33	3.11	-10.285	0.000
37-38. To respect nature and the environment	2.53	2.88	-5.820	0.000
39-40. To live healthily, to take care of myself	2.51	2.78	-5.007	0.000

Source: Own elaboration.

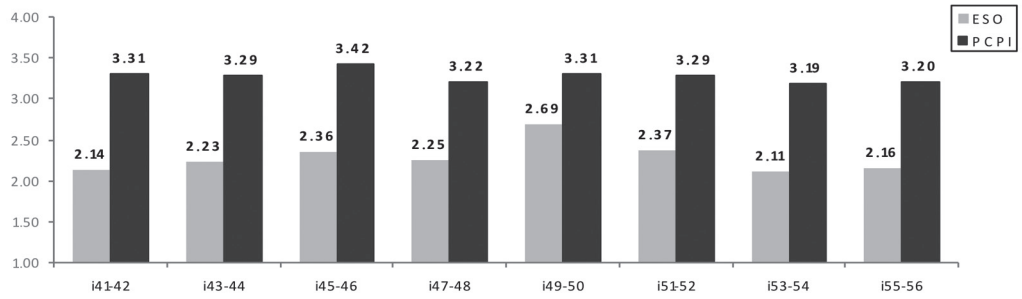
The average scores for the learning processes carried out in Initial Professional Qualification Programmes are higher than those for Compulsory Secondary Education. According to the students, they learn knowledge relating to respecting rules for coexistence, respecting classmates and teachers, relating with others, knowing their rights and obligations as a citizen, resolving conflicts, respecting nature and the environment, and taking care of themselves and healthy living.

They also believe that the subjects studied are useful in life and feel comfortable with themselves. The Wilcoxon test reveals statistically significant differences for all of the items proposed (sig < 0.05) with consistently higher values in the Initial Professional Qualification Programmes.

How do you feel and how did you feel in the Initial Professional Qualification Programmes and Compulsory Secondary Education?

The scores indicate that the students have felt better during their period in Initial Professional Qualification Programmes than in Compulsory Secondary Education.

FIGURE 2. Satisfaction in Initial Professional Qualification Programmes and in Compulsory Secondary Education.



Source: Own elaboration.

TABLE 2. How do you feel and how did you feel in the Initial Professional Qualification Programmes and Compulsory Secondary Education?

Item	Compulsory Secondary Education average	Initial Professional Qualification Programmes Average	Z	Asymptot. sig. (two tail)
41-42. The teachers make me feel comfortable and motivated	2.14	3.31	-11.570	0.000
43-44. The teachers encourage a good atmosphere in the work	2.23	3.29	-11.458	0.000
45-46. The teacher helps me and gives guidance to prepare for my future	2.36	3.42	-11.094	0.000
47-48. The teachers are dedicated to teaching me things that are useful in life	2.25	3.22	-10.936	0.000
49-50. The teachers know how to teach	2.69	3.31	-8.206	0.000

Item	Compulsory Secondary Education average	Initial Professional Qualification Programmes Average	Z	Asymptot. sig. (two tail)
51-52. The teachers have helped me to learn	2.37	3.29	-10.353	0.000
53-54. I feel comfortable and motivated in class	2.11	3.19	-10.589	0.000
55-56. I feel like part of this centre	2.16	3.20	-10.890	0.000

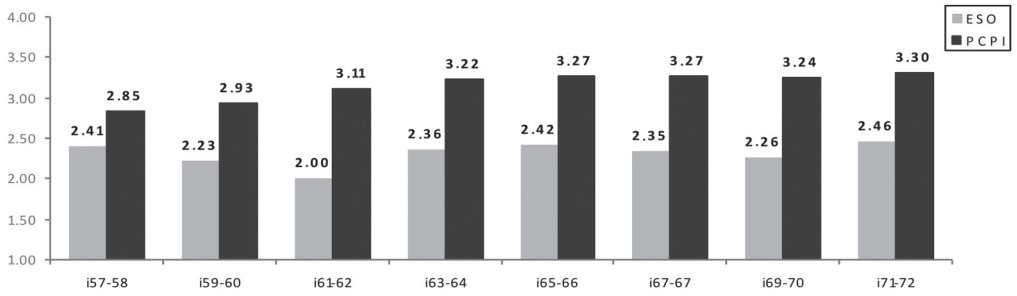
Source: Own elaboration.

The average scores for students on Initial Professional Qualification Programmes are higher than those from students in Compulsory Secondary Education. Initial Professional Qualification Programme students say their teachers make them feel comfortable and motivated. The teachers encourage a good working atmosphere, help, and guide students to prepare for the future, teach knowledge that is useful for life, know how to teach, and encourage learning. Students are also comfortable in class and feel like part of the centre. The Wilcoxon test statistically shows statistically significant differences for all of the items (sig < 0.05), with consistently higher values in the Initial Professional Qualification Programmes.

How do Initial Professional Qualification Programme and Compulsory Secondary Education teachers teach?

The scores for the teaching style of the Initial Professional Qualification Programme teachers are higher for many items than those from Compulsory Secondary Education, according to the students' perceptions.

FIGURE 3. Teaching in Initial Professional Qualification Programmes and Compulsory Secondary Education.



Source: Own elaboration.

TABLE 3. How do Initial Professional Qualification Programmes and Compulsory Secondary Education teachers teach?

Item	Compulsory Secondary Education average	Initial Professional Qualification Programmes Average	Z	Asymptot. sig. (two tail)
57-58. The activities carried out are creative (visits, original tasks...)	2.41	2.85	-6.167	0.000
59-60. We work in teams to create new ideas	2.23	2.93	-8.728	0.000
61-62. We improvise some ways of working, we do things freely	2.00	3.11	-11.619	0.000
63-64. The teacher encourages us to improve our work	2.36	3.22	-11.194	0.000
65-66. We do a lot of practical exercises in class	2.42	3.27	-9.516	0.000
67-68. We work on useful ideas and techniques	2.35	3.27	-10.934	0.000
69-70. What we learn is related to everyday life	2.26	3.24	-11.191	0.000
71-72. The teacher tells us the purpose of what we learn	2.46	3.30	-10.528	0.000
73-74. We correct our exercises to find out if we did them correctly	3.14	3.48	-5.927	0.000
75-76. We plan the task we are going to do in advance	2.53	3.10	-7.981	0.000
77-78. We analyse problems and case studies in detail	2.40	3.11	-8.852	0.000
79-80. The teacher makes us revise what we have learnt	2.64	3.12	-7.118	0.000
81-72. The students are silent in class	2.10	2.28	-1.981	0.048
83-84. The teacher spends a lot of time explaining theoretical content	2.85	2.96	-1.505	0.132
85-86. We spend a lot of time sitting down in class	3.30	2.93	-4.324	0.000
87-88. What we are taught in class is very theoretical	3.13	2.96	-2.727	0.006

Source: Own elaboration.

The scores for Initial Professional Qualification Programmes are higher than those for Compulsory Secondary Education for all items except one: «*We spend a lot of time sitting down in class*». Students state that in Initial Professional Qualification Programmes the activities they carry out in the classroom are more creative, they work more in teams, they do activities with freedom, the teacher encourages them to improve their tasks, they do a lot of practical exercises in class, they

work on useful techniques and activities, what they learn relates to everyday life, the teacher tells them the purpose of what they have learnt, they correct the exercises so that they know whether they have been done correctly, they plan the task to be done in advance, they analyse problems and case studies in detail, they revise what they have learnt, the students are in silence in class and the teacher spends a lot of time explaining theoretical content. The Wilcoxon test shows statistically significant differences for all items (sig < 0.05) except for «*The teacher spends a lot of time explaining theoretical content*».

How do you like to learn in class?

In this section students' scores for learning strategies will be analysed and compared by gender. To analyse the differences between the different items we will use non-parametric tests owing to the non-compliance with the normality hypothesis. The Mann-Whitney U test is used as it is a binary variable. There are statistically significant differences for various items. *Boys* score higher on items 92 (*I like to use technological machines and devices to learn*), 103 (*I like to analyse a news story and think about how to solve it*), and 119 (*I like to present work orally*). *Girls* score higher on items 110 (*I like reading books*), 111 (*I like to write texts on a computer*), 112 (*I like to underline what is important in a text*), 115 (*I like it when they ask my opinion in class*) and 118 (*I like to present written work*).

TABLE 4. How do you like to learn in class?

Item	Average Boy	Average girl	Mann-Whitney U	Z	Asymptot. sig. (two tail)
89. I like to move around in class while I work, being free to move in class	3.26	3.18	9702	-1.711	0.087
90. I like to work on real things, from real life	3.51	3.62	10718	-0.735	0.463
91. I like to talk to my classmates while I work and communicate with them	3.47	3.42	10780	-0.628	0.530
92. I like to use technological machines and devices (computers, appliances...) to learn	3.42	3.16	9026	-2.827	0.005
93. There are students who get almost everything wrong and so you have to help them and encourage them more than the others	3.16	3.10	10526	-0.359	0.720

Item	Average Boy	Average girl	Mann-Whitney U	Z	Asymptot. sig. (two tail)
94. To learn better, we should know about things that happen in real life	3.44	3.50	10504	-1.030	0.303
95. I like to know about problems that happen in the outside world	3.18	3.31	10140	-1.175	0.240
96. I like watching documentaries where they analyse things that happen in the world	2.96	2.98	10900	-0.272	0.785
97. I like working in a team more than on my own	3.21	3.06	10472	-1.008	0.314
98. When you work in a team, you have more freedom to speak, move around... than when you work alone	3.28	3.26	10820	-0.399	0.690
99. I prefer working too quickly to working too slowly	2.66	2.48	9816	-1.610	0.107
100. I like helping classmates who do not understand something in class	3.26	3.34	10948	-0.215	0.830
101. I like to know about the news in the media	2.49	2.61	9948	-1.021	0.307
102. The more you know in school, the more you know in life	2.65	2.82	9886	-1.224	0.221
103. I like to analyse a news story and think about how to solve it	2.65	2.40	9518	-2.256	0.024
104. I like to analyse why things happen	2.84	2.74	10390	-0.968	0.333
105. I like to work out what might happen when I have a problem in the street, at home, with my friends	2.98	2.94	10944	-0.212	0.832
106. I like doing summaries and outlines (in writing) of what I read	2.06	2.22	9934	-1.699	0.089
107. I like to classify my text files on the computer	2.22	2.10	10212	-0.915	0.360
108. I like looking for information online	3.01	2.98	10848	-0.477	0.634
109. I like reading comics, magazines	2.27	2.26	11184	-0.021	0.983

Item	Average Boy	Average girl	Mann-Whitney U	Z	Asymptot. sig. (two tail)
110. I like reading books	2.07	2.56	8270	-3.807	0.000
111. I like to write texts on a computer	2.09	2.46	9088	-2.823	0.005
112. I like to underline what is important in a text	2.43	2.76	9432	-2.348	0.019
113. I like to decide what I should do in class	2.71	2.68	10874	-0.309	0.757
114. I like to debate a topic in class	2.89	3.02	10326	-1.052	0.293
115. I like it when they ask my opinion in class	2.75	3.00	9252	-2.113	0.035
116. I like it when the teacher asks me questions	2.47	2.37	10260	-0.840	0.401
117. I like it when the teacher listens to me	3.25	3.26	10714	-0.405	0.686
118. I like to present written work	2.67	3.02	9078	-2.488	0.013
119. I like to present work orally	2.34	1.86	8378	-3.453	0.001
120. I like to get good marks in class	3.59	3.54	10612	-0.895	0.371
121. I would like to be one of the best students in class	3.18	3.14	10684	-0.711	0.477
122. You learn more when there is more of a bond between teacher and student	3.25	3.42	10070	-1.467	0.143
123. You learn more and better when the teachers are warm, caring	3.14	3.38	9962	-1.592	0.111
124. I like revising things	2.60	2.62	10962	-0.186	0.852
125. I like to evaluate myself and don't like being evaluated by others	2.73	2.56	10136	.1.296	0.195
126. I like to be congratulated when I do things well	3.25	3.39	10312	-0.818	0.413
127. Humour is necessary for learning comfortably	3.47	3.50	10784	-0.463	0.643
128. Evaluation helps you to improve, the more you are evaluated the more you improve	3.16	3.32	10470	-0.880	0.379

Source: Own elaboration.

5. Conclusions and discussion

In summary, the principal conclusions are collected below in accordance with the objectives raised in the research.

— Regarding the study's first objective (*Describe the characteristics of the students participating in the study*), students participating in the research have an average age of 16.8 years, most of them are boys, one third are of immigrant origin, and their parents have intermediate and basic level education.

— Regarding the second objective (*Analyse the students' perception of the Initial Professional Qualification Programmes regarding their learning activities – what they learn – and compare it with their previous experience in Compulsory Secondary Education*), students state that their experience in Compulsory Secondary Education and Initial Professional Qualification Programmes was very different. The average scores for what they have learnt on the Initial Professional Qualification Programmes are somewhat higher than for Compulsory Secondary Education. There are statistically significant differences for all of the items, with consistently higher values for the Initial Professional Qualification Programmes.

— Regarding the third objective (*Finding out how the students on the Initial Professional Qualification Programmes feel and have felt in the classroom and compare their perceptions with their experiences of Compulsory Secondary Education*), the students feel better in the Initial Professional Qualification Programmes than in Compulsory Secondary Education and, also, feel comfortable with and motivated by the teachers. The Wilcoxon test displays statistically significant differences for all of the items, with consistently higher values in the Initial Professional Qualification Programmes.

— Regarding the fourth objective (*Analyse the students' evaluation of the teaching methodology and processes that the teacher uses – how the teacher teaches –on the Initial Professional Qualification Programmes and in Compulsory Secondary Education*), the students' evaluation of the teaching processes used by the Initial Professional Qualification Programmes teachers is more satisfactory than their experience with the Compulsory Secondary Education teachers.

— Regarding the fifth objective (*Analyse how the consulted students like to learn and compare the scores by sex*), statistically significant differences are detected in various items. Girls value reading, writing and the emotional aspects of learning more highly and boys solving case studies and problems and using technology to learn.

Some of the results of the research strongly attract our attention. The Initial Professional Qualification Programmes professionals manage to encourage enthusiasm and interest in work from the students who attend these centres. It seems strange that teachers who, mainly come from professional training, without having specific training in educational sciences, manage to awaken the interest in work and the satisfaction of students who have continuously failed in Compulsory Secondary Education. The importance of

dedication, personal support, and the encouragement of the affective and emotional aspects in the teaching and learning processes are of great relevance for students (Reschly, Huebner, Appleton, & Antaramian, 2008; Greenberg, et. al., 2010).

Evidently, the affective and emotional component in education must be accompanied by an appropriate design of the teaching and learning processes (Suazo, 2013). Students consulted in this study state that the teachers of the Initial Professional Qualification Programmes opt for developing teaching strategies that encourage team work, approaching case studies and solving practical problems related to situations from everyday life. When students can see the purpose, usefulness and practical validity of the knowledge they learn in class, their motivation and interest in learning increase considerably (Lee, Johanson, & Tsai, 2008).

The evaluation by the students taking part in the research require an in-depth reflection on the teaching and learning processes developed in Compulsory Secondary Education, especially, with regards to teacher training, the role of the teacher and the student's participation in the classroom (Santos Rego & Lorenzo, 2015). The limited impact of the master's degree in secondary education on the skills of the teachers in this stage is also worrying (Benarroch & Marín, 2011). It is quite surprising that the Initial Professional Qualification Programme teachers, are apparently, with limited pedagogical training, rather more highly rated by students than their counterparts in Compulsory Secondary Education. The causes of this phenomenon should be analysed in future studies.

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