

Inclusive education and academic performance in Catalan public schools.

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Abstract

In response to the challenges of the global *Education 2030 Agenda* (i.e. to guarantee inclusive and equitable quality education for all), this study was designed to ascertain to what extent inclusive education policies are applied in public primary schools in Catalonia (Spain). The objective was to identify the level of inclusion (LI) of the schools through an online questionnaire, and to determine the relationship of LI to the students' academic performance in the schools, as measured by the Catalan external evaluation exam in their last year of primary education. Our findings showed advances in applying more inclusive education in the 615 participating schools. On ascertaining the LI we classified the schools according to levels of consolidation of inclusive practices, identifying both the most well-established areas and barriers to inclusion. Hence we obtained a wide spectrum of the application of inclusion in the Catalan education system. The study also showed that there was no relationship between inclusive practices and pupils' academic performance in the schools taking part. The rigor of the procedures used and the breadth of the sample can promote evidence-based practices for the development of policy in the Catalan education system and internationally.

Keywords: inclusive education, level of inclusion, academic performance, primary schools, public education, survey study.

Introduction

Since the Education for All movement began (1990), many countries have made important steps towards ensuring that all pupils can gain access to mainstream schools. However, this has not led to improved quality in education, nor has it raised percentages of students completing primary school (UNESCO 2014). That is why it is essential that education systems guarantee quality learning for all students in lifelong learning, defining quality education as that in which all students can benefit from the right to education in equal conditions and achieve the highest possible levels of development and learning according to their capacities (UNESCO/OREALC 2007).

In this view, educational quality involves a balance between excellence and equity, since, as Cano (2009) remarks, we cannot conceive of a quality education for only a minority of students when there are others that are excluded from the right to learn at levels of excellence, thereby limiting their participation in society. Moreover, exclusion does not refer only to those cases that fall outside the regular education system, but also means the exclusion from learning of those who interrupt their educational careers or finish their schooling without attaining basic competences, due to the low-quality education they have received.

For this reason, the need for education policies to guarantee enhanced quality and equity in lifelong learning for all students is increasingly stressed as a pressing objective in inclusive education, linked to the 2030 Agenda objectives (UNESCO 2015). For UNESCO, the quality of education is a priority, since its influence is decisive for learning outcomes, for attendance levels and therefore for the completion of schooling. Specifically, the aim of protecting educational quality means that schools should guarantee recognised and measurable learning outcomes, particularly in reading, writing, arithmetic and the essential competences. It should also be admitted, however, that this focus implies certain biases, such

as “instrumental reductionism” (UNESCO-OREALC 2007), since it leaves aside learning that is vital for integrated development (social, affective, creative, etc.) and argues for the prioritization of knowledge that guarantees that students, at the end of their schooling, will have work opportunities enabling them to participate more fully in economic, social and cultural life.

The importance of academic performance for educational inclusion

The influence of educational quality on learning outcomes and school completion is widely recognised (UNESCO-OREALC 2007) and it is for this reason that academic performance is acquiring an increasingly important role as an indicator of the level of learning achieved by students and, therefore, as a way of interpreting and monitoring quality in education (Bonal and Verger 2013; González-Ramírez 2000), in addition to being one of the indicators of equity in education systems (Consell Superior d’Avaluació del Sistema Educatiu 2015), since it reflects the differences in students’ achievement levels. Nevertheless, performance in external tests (to give an example) only measures one aspect of quality, that of the results of the school and the system as a whole. Therefore, to assess quality in schools we need to take into account other factors such as: leadership, the school climate, the work of teachers, the processes taking place in the school and its classrooms and students’ overall, integrated development (Murillo 2008).

Achieving excellence in all students’ learning, however, is a major challenge in terms of quality and equity, due to the strong influence that students’ socio-economic and cultural status exerts on their educational outcomes (Bonal 2012; Demeris, Childs, and Jordan 2008; MECD 2013; OCDE 2012; Pedró 2012). Overcoming this handicap has emerged as the greatest challenge for inclusive education systems worldwide.

On the other hand the widely recognised impact of pupils' socio-economic background on their academic performance has been downplayed in various studies that have found that it is not a completely decisive factor, and that there are others which can lead to better educational outcomes even in cases where the socio-economic context is disadvantageous. Amongst these factors are: classroom processes, teachers' commitment, the climate in the school and its classrooms, school autonomy and management, teaching approaches and resources, the preparation and organisation of lessons, time management, attention to diversity, assessment of and feedback to learning, monitoring of progress, and student expectations (Fullan 2011; MECD 2013; Murillo Hernández-Castilla and Martínez-Garrido 2016).

Despite this, the latest report by the *Consell Superior d'Avaluació* (2015) on external assessment in primary education identified as the two factors having the greatest influence on educational outcomes: the numbers of pupils repeating the year and the school's level of complexity (It is a classification of schools made by the General Subdirection of Education Inspection according to socioeconomic factors, diversity of students, mobility and absences of teachers and students, that make it difficult to manage the schools and obtain good results). Thereby highlighting the fact that achievement is still significantly higher among students at schools with higher socio-economic status.

To this we should add the lower levels of attainment among immigrant students compared to natives (Albaigés and Ferrer 2013; Bonal 2012), another challenge for the Catalan education system, particularly taking into account that at 13.2%, the proportion of foreign students in Catalan classrooms in the 2017-18 academic year was the highest in Spain (MECD 2018, 8).

In this context, our study sets out to determine whether Catalan schools have succeeded in counteracting economic and social differences affecting students' learning

through the application of inclusive practices, achieving significant improvements in the educational outcomes of all their students. This task required an empirical approach to a little-studied situation since, while the impact of inclusive education is a topic that has been widely studied in terms of attitudes and social factors, there are as yet few studies addressing the relationship between inclusive education and academic performance amongst all students (Farrell, Dyson, Polat, Hutcheson, and Gallannaugh 2007).

Previous research which has studied the impact of inclusive education on the academic performance of all students has shown neutral effects in most cases (Farrell et al. 2007; Ruijs, Van der Veen, and Peetsma 2010; Sermier and Bless 2013), although some positive impacts (Hestenes et al. 2008; Kalambouka et al. 2007; Ruijs and Peetsma 2009), and, to a lesser extent, some negative (Dyson et al. 2004), have also been found. Nevertheless, the studies that we reviewed all had one major limitation, in some cases recognised by their authors (Cole, Waldron, and Majd 2004; Cosier, Causton-Theoharis, and Theoharis 2013; Farrell et al. 2007; Ruijs et al. 2010): the limited definition of educational inclusion itself, which is reduced to the placement of students with disabilities or special educational needs (SEN) in regular teaching settings. Schools incorporating a specific number of SEN students are therefore defined as inclusive; while in more rigorous studies, the time such students spend in regular classrooms is also considered. In no studies have other inclusive processes or practices been taken into account.

Our study, on the other hand, encompasses inclusive education in all its complexity, defining it as guaranteed access, participation and achievement of quality learning for all students, such that levels of exclusion from the normal education system are reduced (Ainscow 2003; UNESCO 2009). With this premise we set ourselves the task of analysing the organisation and working of schools and their prevailing classroom practices, (that can be reviewed in greater detail in Sabando, Puigdemívol and Torrado (2019), in order to determine

the presence or otherwise of a correlation between these factors and higher academic achievement. The study, then, had two main objectives: (1) to identify the LI of Catalan public schools; and (2) to ascertain the relationship between school inclusiveness and students' academic performance.

The study had a duration of four years (2012-2016) and was carried out with the collaboration of the Generalitat de Catalunya, its governing institution of the Autonomous Community of Catalonia (Spain), i.e. the devolved regional government, that participated through two institutions: Departament d'Ensenyament de Catalunya (Catalonian Department of Education) it is a state organisation responsible for education policy in the sphere of non-university education and Consell Superior d'Avaluació (Catalan Higher Assessment Council) it is an consultative body of Catalanian Department of Education, that analyzes and evaluates the non-university educational, guiding educational policies.

The collaboration between the University of Barcelona and the Catalan Educational Administration was established through a joint working agreement (Nº 012473/May 28th 2014), spurred by a shared interest in ascertaining the level of application of inclusive practices in schools and its impact on student's performance. An analysis of these factors is extremely relevant to the area of diversity focused on in the 2009 Catalan Education Law, and can afford important insights helping to formulate guidelines for strengthening the application of the recent Decree 150/2017 (Departament d'Ensenyament 2017) regulating education in Catalan schools within the framework of inclusion.

Methodology

The study adopted a quantitative non-experimental methodology of a descriptive and correlational type. It may also be classified as a survey-type study (Torrado, 2014), since an ad hoc questionnaire was used to gather data.

Sample

The Educational Administration of Catalonia invited all public primary schools to participate in the study. Before the questionnaire was sent, school heads were informed of the importance of the study, its objectives, and the voluntary, anonymous nature of their participation. The sample comprised 615 public schools in the urban areas of Catalonia, representing 54.6% of the total population (N=1.126), with a sample error of 2.7%. The distribution of the sample according to levels of complexity¹ is presented in Table 1.

Table 1. Distribution of the sample according to levels of complexity.

Instrument

The LI of the school was enquired into using an ad hoc online questionnaire titled *Questionnaire on inclusive profile in Catalan primary schools*. Since there is no database of information on the application of inclusive education in Catalan schools, and at the same time there is a lack of instruments for quantitative measurement of inclusive education in schools, we developed this instrument jointly with Education Department specialists, school heads and teachers in Catalan public schools. In addition to this the Catalan education regulations were analysed and existing instruments and materials on inclusion in schools reviewed (Black-Hawkins 2010; Booth and Ainscow 2011; FEAPS 2009; Cushing et al. 2009; Denham n.d.;

Duran, Giné, and Marchesi 2010; Education Review Office 2012; Loreman 2013; New Jersey Coalition for Inclusive Education [NJCIE] 2010; Valls n.d.). We also took into account the contributions of various analysts (Ainscow 2003; Casanova 2011; Dyson 2001; Puigdemívol 2005; Stainback and Stainback 2004) who have described inclusive schools and their essential characteristics. The definitive version of the questionnaire was organised into 43 questions with different types of responses (alternatives, scale-based and multiple choice), divided into 27 key questions ascertaining the LI of the school and 16 other questions yielding a description of the school's LI. The questions were grouped into 6 dimensions: school organisation; inclusive school climate; classroom organisation; educational support; community involvement; and lifelong learning. The distribution of the dimensions, sub-dimensions, descriptors and items in the questionnaire is shown in Table 2.

Table 2. Dimensions and subdimensions of the questionnaire.

The instrument was designed to be answered by any member of the school management team in a maximum of 15 minutes. We worked jointly with the Education Department specialists in the organisation of the planning and application of the instrument in order to ensure the widest possible range of responses and to reduce any biases that might have compromised the quality of the information obtained.

Despite LI score obtained by the questionnaire places schools according to their inclusiveness, our interest is the positioning and descriptive analysis of this LI in the different dimensions addressed in the questionnaire and, in no case, our objective is to classify the schools to establish a ranking among them. This aspect was stipulated in the agreement signed with the Department of Education, in order to avoid a misuse of the results obtained.

Procedure

Data were collected by combining different sources of information commonly used in social research (Corbetta 2003). Firstly, the Catalan Government database, which provided information on the first two variables:

(a) *School characteristics*: total number of students enrolled, number of students diagnosed with SEN, level of complexity.

(b) *Academic performance*: results obtained by schools (calculated from the average of the scores obtained by the students) in the external assessment by the Departament d'Ensenyament de Catalunya of the last primary education course (2011 to 2013) an exam in line with the PISA tests, both in methodology and purpose, whose aim is to verify the acquisition of the basic knowledge and competences in Catalan language, Spanish language and mathematics needed for transition to secondary education. This assessment excludes the following students: foreign pupils with less than two years in the Catalan education system and without sufficient mastery of the language of the test; SEN students with a serious educational deficiency stemming from disability; and pupils unable to attend due to a serious illness (Departament d'Ensenyament 2016). Adaptations in format and time are made for those students that needed them.

(c) *LI of the school*: the consolidation and systematization reached by schools in their inclusive practices on an overall level and by dimensions. Three levels of inclusion were obtained: (1) high LI: with prevailing and systematically carried out inclusive practices; (2) medium LI: with evidence of both inclusive practices (not the majority) and less inclusive or segregating practices; and (3) low LI: with predominance of non-inclusive practices and

tendencies towards segregation. Data on this variable were gathered by means of the instrument discussed below.

Ethical aspects considered are based on the University of Barcelona's Code of Conduct for Research Integrity², and were set out in the agreement between University of Barcelona and the Generalitat de Catalunya.

Validation of the instrument

Given the qualitative nature of the variables used in the questionnaire, as a result of the diversity of answer options for each question, instead use an exploratory factor analysis, we selected a procedure for guaranteeing the validity, reliability and objectivity of the questionnaire (Hernández, Fernández, and Baptista 2010) that, at the same time, it would allow us to maintain the wealth of information collected in each of the questions. The procedures applied were:

(a) *Validation by expert assessment, in which* six external specialists in inclusive education analysed the relevance and content of the questions to the objectives, checked the scores assigned to each item, evaluating the intervals proposed for the total score assigned to the high, medium and low levels of inclusion. The level of agreement among the experts was over 70% for most of questions.

(b) *Questionnaire reliability study.* The split-half method was used to analyse the stability of each of the key questions. Since it was impossible to administer the questionnaire again to the same pilot sample, the samples were divided and Stability and Chi-squared tests were performed, verifying stability for all the questions ($p > 0.05$).

Data analysis

The data were processed using the IBM®SPSS 22.0 program, by means of the following statistical analyses: parametric assumptions test (Kolmogórov-Smirnov), basic descriptive statistics (analysis of means $[\bar{X}]$, standard deviation [SD], crossed tabulation, contrast test, chi-squared $[X^2]$, correlations and Spearman's test $[r_s]$).

The answers to the key survey questions were standardised into three levels of inclusion: high, medium and low, determined by the extent to which inclusive practices were applied. The total LI score ranged from a minimum of 0 points to a maximum of 81, with higher scores indicating greater LI and vice versa.

Academic performance was calculated in two ways: by absolute values on the basis of a three-year average in Catalan language, Spanish language and mathematics competences, and by the four levels of achievement (low, medium-low, medium-high, and high) used by the *Consell Superior d'Avaluació de Catalunya* in its external test. With these we established intervals, using as an average position the scores corresponding to the quartiles (see Table 3), and this enabled us to check the results of our study against reports published by the *Consell Superior d'Avaluació de Catalunya* (2015).

Table 3. Level intervals for achievement of competences of the participating schools (2011-13)

Results

The results were organised into two main subsections corresponding to the objectives set at the beginning of the study:

Levels of inclusion (LI) in Catalan public schools

On an overall level, it was found that Catalan schools fell into two of the three categories identified for LI. Of the 615 schools, the majority (63.74%) had medium LI, applying a series of well-established inclusive practices while also evidencing some exclusive practices favouring segregation, and 36.26% had high LI, applying a more consistent model of inclusive education. There were no schools with low LI, in which exclusive factors prevailed over inclusive. These findings are shown in Figure 1.

Figure 1. Overall levels of inclusion yielded by the questionnaire.

Analysis by dimensions showed that the *school organisation*, *inclusive school climate* and *classroom organisation* obtained the highest prevalence of systematically developed inclusive practices in more than half the schools. The *school support* dimension yielded a medium level of application, while the dimensions of *community participation* and *lifelong learning* were the least consolidated, with a prevalence of exclusionary practices and barriers to inclusion in some schools. This distribution is shown in Table 4.

Table 4. Overall results by dimensions.

Relationships between LI in Catalan public schools and students' academic performance

The study of the relationships between LI and *academic performance* was performed through a two-fold analysis of the two variables, firstly on a quantitative level and secondly through category grouping of their values, in order to statistically triangulate the results. First, we obtained the Spearman correlation coefficients (r_s) between the two variables, and subsequently a chi-squared test was used to analyse levels of achievement in competences (academic performance) and their relationships with the three levels of inclusion.

The relationship between overall LI and academic performance, calculated with Spearman's correlation coefficient (r_s), indicated a relationship of independence between the two ($r_s=0,018$ sig= 0,662); also the analysis segmented by levels of complexity found that there was no significant correlation. Thus it was demonstrated that average academic performance is not affected by overall LI, both across the total public schools taking part (n=615) and in the analysis by levels of school complexity (see Figures 2 and 3).

Figure 2. Correlation between overall LI and average school performance.

Figure 3. Correlation between overall LI and school academic performance according to levels of complexity.

Finally, the test results for the relationship organised by competences also confirmed this conclusion: Catalan languages ($r_s = -0,013$ sig=0,348), Spanish languages ($r_s = 0,015$ sig=0,708) and maths ($r_s = 0,051$ sig= 0,204).

Table 5 summarises the results of the Spearman correlation test, with which school averages in competences (overall performance scores) and their relationships to LI dimensions were analysed; while Table 6 shows the significances yielded by the Chi-squared test, which analysed the scores grouped according to intervals in levels of achievement in competences.

Table 5. Coefficients of significant correlations between LI and average competences (+) organised by levels of complexity yielded by the Spearman test.

Table 6. Significant correlations between LI and levels of competence achievement by complexity of the schools yielded by the Chi-Squared test.

Both analyses showed that there was no relationship between LI and pupils' academic performance. *School organisation* was the only dimension having a higher correlation with *academic performance*, while in the other dimensions we found a few isolated significant correlations which did not allow for the generalisation of a constant relationship between the variables, since they were distributed in different ways when performance was divided into averages or levels of achievement or when distinguishing between levels of school complexity.

Discussion and Conclusions

The results of this study afford a detailed analysis of the status of inclusive education in the Catalan education system. Regarding the LI of schools, the successful endeavours of public

schools to shift to more inclusive practices were evidenced by overall LI, especially in the dimensions of *school organisation*, *inclusive school climate* and *classroom organisation*, thus demonstrating a wide and well-established range of inclusive practices in line with international theory and local regulations on diversity. However, the dimensions of *educational support*, *community participation* and *lifelong learning* showed some significant, enduring barriers limiting students' presence, participation and attainment (Ainscow 2016; UNESCO 2009).

Thus the evidence we obtained regarding the relationship of inclusion to academic performance coincides with the findings of previous studies showing the neutral effects of inclusion on the academic performance of students as a whole (Demeris et al. 2008; Dessementet and Blessa 2013; Farrell et al. 2007; Ruijs and Peetsma 2009; Ruijs et al. 2010). However, in the reviewed studies, the inclusive education variable was defined reducing it to the number of students with SEN placed in regular classrooms or the time they spent in the mainstream classroom. Our research, by contrast, defined inclusive education from the complexity of the term, approaching it as a set of interrelated dimensions, which favored a greater richness in the analysis of the obtained results, representing an added value for our research.

On the other hand, although the results of the correlation are neutral, it is important to underline that these do not negatively affect performance, thereby refuting the belief that the inclusion of SEN pupils in mainstream classrooms has negative impacts on their classmates' educational outcomes (Black-Hawkins 2010; Cole et al. 2004; Kalambouka et al. 2007).

While the objective of this study was not to offer a causal explanation of the neutral relationship between inclusion and academic outcomes, we feel that the limits of the instrument (discussed below) may have had some effect. What we were able to ascertain was the different distribution of academic performance according to levels of school complexity:

the more complex the school, the lower the performance, and vice versa. This means that the factors encompassed by this variable (socio-economic factors, student diversity, mobility and absences among teachers and pupils) have a strong relationship to academic performance, as has traditionally been argued (Bonal 2012; Consell Superior d'Avaluació del Sistema Educatiu 2015, Demeris et al. 2008; MECD 2013; OECD 2012; Pedró 2012); while up to now more inclusive education has not yet managed to reduce these differences or to ensure educational quality and equity.

In the light of these findings, our general suggestion to schools and educational administration would be strengthen accompaniment programs and updating of the schools in the deep meaning of what inclusive education is, and on specific topics related to this. Aiming towards a more unified version of educational inclusion and the policies and practices it involves, and starting by reinforcing and applying the collaborative paradigm on which inclusive education is based (Ainscow et al. 2016; Arnaiz, De Haro, and Azorin 2018; Deppeler and Ainscow 2016; Letiecq and Anderson 2017; Puigdemívol et al. 2017; Siles et al. 2015).

Furthermore, a systematic review of agreement between education policies and regulations (Loreman 2013) should be undertaken in order to guarantee all pupils' access to regular education, promote the participation of members of the community in schools, and ensure coherence between theoretical principles and government approaches.

All of this is essential to achieving the shift towards a more inclusive model of school, and it requires training for staff, families and the education community as a whole (Díez-Palomar, Gatt, and Racionero 2011; Flecha 2012; Garcia and Ríos, 2014; Requejo 2003; UNESCO 2009) with the aim of ensuring greater involvement in decision-making, application and assessment of schools' new educational projects.

As limitations of this study we would highlight the application of only one instrument of a quantitative type, responded to by only one member of the school management team without the process of reflection recommended for school self-assessment (Azorín and Ainscow 2018, Booth and Ainscow 2011). This involves the risk of yielding a superficial and biased view of the highly complex, multidimensional and context-dependent process of inclusive education.

Also, the variable of LI did not include factors relating to values or attitudes, since in our view the importance and complexity of these factors required more in-depth analysis in a future study. Furthermore, defining academic performance by the result of external exams results in limitations stemming from this type of measurement: factors related to the functioning of the school are excluded, pupils' performance record is not reflected, SEN students with a serious educational deficiency stemming from disability; and pupils unable to attend due to a serious illness are not taken into account. Thus we lack any information on the acquisition of minimum competences among vulnerable groups of students (Schuelka 2013). Undoubtedly, we are in favor of complementing this type of research with qualitative studies that would allow us to deepen the progress in the individual students' academic performance, especially those who are excluded from external evaluations, which could reflect possible effects of inclusive education, overcoming the limitations of larger studies and aligned with international recommendations for strengthening inclusive quality education for all pupils.

However, beyond these limitations, the contributions of the instrument created have great relevance, not only because it allows the classification of schools using an LI indicator (which should not, in no case, be understood as the establishment of a ranking), but because of the wealth of information it provides, in relation to the inclusive practices' level of consolidation that occurs in each of the evaluated dimensions, information that represents a wide sample of schools and that, therefore, make up an important database, which allows its

generalization to the universe of Catalan public schools, promoting a better understanding of inclusive education within the Catalan educational system, while making it a pioneering study in the Catalan and Spanish context.

In our view our findings represent an important precondition to formulating contextualised guidelines and creating policies aimed at preventing and eliminating obstacles to progress towards a more inclusive and equitable quality education, thus contributing to the improvement of public education in Catalonia, this is highly relevant, especially in the framework of the recent Decree 150/2017, which aims to transform the Catalan educational system into a more inclusive one. That is why, the feedback about results obtained was included in the agreement, addressed to the different entities of the educational administration and to the participating schools as well, in order to provide them, evidences for the modification or readjustment of the educational policies and practices generated in the Catalan educational context, providing information on all the research and, specifically with regard to the academic performance tests applied by this Administration.

Moving beyond the local implications of this study, both its methodological rigor and the breadth of the sample validate our findings as a relevant and important contribution whose methodology may serve to guide both national and international education systems interested in ascertaining whether inclusion policies are being applied in schools on a wider level, while bearing in mind the contextual factors that we have stressed in this article.

Notes

¹ Classification for the year 2012.

² More information: <https://www.ub.edu/web/portal/en/research/research-at-the-ub/ethics-and-integrity/>

Tables

Table 1. Distribution of the final sample according to complexity levels.

Complexity level	Population	Sample	Percentage of participation	Distribution of population respect to total population	Distribution of the sample respect to total sample
High	258	150	58.14%	22.91%	24.39%
Medium	799	431	53.94%	70.96%	70.08%
Low	69	34	49.27%	6.13%	5.53%
Total/Schools	1126	615	54.62%	100%	100%

Table 2. Dimensions and subdimensions of the questionnaire.

Dimension	Sub-dimensions	Descriptors	N° items
School Organization	Organizational and operating characteristics of the school.	N° of students/ n° of lines/ student distribution criteria/ level of school inclusion assessment/ barriers for inclusion in the school (infrastructure, human and material resources, training, commitment and teaching work, leadership, climate and coexistence, curriculum and evaluation, community networks, characteristics and family commitment, student attitude)	5 items
Inclusive school climate	Organizational and welcome policies of the school, student representation, measures to resolve conflicts. Inclusive character of the school.	Welcome plan for the students/ planning of the rights and duties of the students and the rules of good coexistence/ measures to reduce absenteeism, conflicts and bullying/ plan of welcome actions for new professionals in the school/ dissemination of the school's inclusive nature/ assessment of the inclusive Inclusive school climate of the school.	10 items
Classroom Organization	Student distribution characteristics and adult participation into the classroom.	Predominant distribution of students within the classroom/grouping criteria/distribution of students with behavioral problems and learning difficulties/identification of adults within the classroom/work frequency of two adults in the classroom	6 items
Educational Support	Educational support description.	Participation in the decision to give support/ agents that provide support/ time and place of support/ support outside the classroom/ peer support/ use of written protocols to follow up students with more difficulties.	7 items
	Role of special education teachers.	Documents that specify the work of the SET ^a / intervention time within mainstream classroom/ frequency of its functions within mainstream classroom.	3 items
	Individualized plan IP.	Member participation level in the IP.	1 item

Table 6. Significant correlations between LI and levels of competence achievement by complexity of the schools yielded by the Chi-squared test.

LI Dimensions	Catalan language level of achievement			Spanish language level of achievement			Mathematics level of achievement			Overall level of achievement		
	Complexity Level			Complexity Level			Complexity Level			Complexity Level		
	High	Medium	Low	High	Medium	Low	High	Medium	Low	High	Medium	Low
Total LI of the school								+	+			
School organization		+	+									
Inclusive school climate												
Classroom Organization												
Educational Support												+
Community involvement												
Lifelong learning	+									+		

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Disclosure statement

No potential conflict of interest was reported by the authors.

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