

Educational Innovation from Distributed Leadership: Case Study Spanish Public School

Innovación educativa desde el liderazgo distribuido: Estudio de caso escuela pública Española

Ingrid García

Universidad Autónoma de Madrid, Madrid, España.

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Corresponding author

Email: 5133871@gmail.com

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Summary

The purpose of the communication is to present a case study of distributed leadership practices and the performances of the Principal of a public school in Madrid. Educational leadership can be considered one of the most important elements of the education system to be effective, achieve quality results, develop processes of change and improvement. As a case study, in which the Principal of the public and bilingual school of the Community of Madrid, Spain, cooperated. The qualitative cut methodology was used with a descriptive and interpretative approach, the structured interview in depth was an instrument of data collection. The main objective is to describe, through a case study: How are the practices of DL and actions of the Principal of a public school exercised? The results found are very broad. The dimensions of the DL are four: DL Practices, Shared Decisions, Mission and Vision, Professional Development.

Keywords: Dimensions of distributed leadership; Case study; Distributed leadership; Educational Leadership.

Resumen

El propósito de la comunicación es presentar un estudio de caso de las prácticas de liderazgo distribuido y la actuación de la directora de una escuela pública de Madrid. El liderazgo educativo se puede considerar uno de los elementos más importantes del sistema educativo para ser eficaces, alcanzar resultados de calidad, desarrollar los procesos de cambio y mejora. Como estudio de caso, en el que colaboro la directora de la escuela pública y bilingüe de la Comunidad de Madrid, España, se utilizó la metodología de corte cualitativa, con enfoque descriptivo e interpretativo, teniendo como instrumento de recolección de datos la entrevista estructurada a profundidad. El objetivo principal es describir a través de un estudio de casos: ¿Cómo se ejercen las prácticas de (LD) y actuaciones de la directora de una escuela pública?, Los resultados hallados son muy amplios. Las dimensiones que

integran el (LD) son cuatro: (Prácticas de LD, Decisiones compartidas, Misión, visión y Desarrollo profesional).

Palabras clave: Dimensiones del liderazgo distribuido; Estudio de caso; Liderazgo distribuido; Liderazgo educativo.

Introduction

The 21st century school faces a society, where changes have become a permanent priority, influenced by technology, processes of globalization, changes in programs and *curriculum* to name a few. Educational leadership managed to convene the school community in a common improvement project that all the actors identify with the objective of the students to learn, and manages the alignment of financial and human pedagogical resources in pursuit of that shared objective. Experts as (Leithwood *et al.*, 2006; Harris, 2012) say that leadership in the effectiveness and improvement of schools forms a key component considered as the second most important school ingredient. The development of school leaders according to (Pont *et al.*, 2008) underpins a practical preparation that differentiates the aspiring Principals as the assets in service.

The justification for the research is basically derived from the following arguments. There are new social demands that require a reform in the school environment, these reforms or transformation must be driven from within each school. In this context a strong Direction is essential, whose competences include competencies to perform all the functions, from a vision of the DL. Urges in the Spanish centers a school management that acts as a driver of change committed to the entire educational community and whose project is common. DL of the school is one of the most powerful factors that schools have to be effective and achieve quality results. School leaders are able to influence and shape the conditions under which they occur (Leithwood *et al.*, 2006). Research say that school leadership makes the difference in schools, being one of the most influential factors in the academic achievement of students and explains 25% of all school effects (Leithwood *et al.*, 2006; Leithwood, 2009). This means that if Principals practice DL, they will be able to influence the work of teachers and thus improve conditions in the development of teaching and learning processes.

As the OECD (2016) argues unfortunately: in Spain school management is very weak, there is a model of management very different from the rest of

the European countries, with the exception of Portugal. Both countries have built a management with very different characteristics, full of difficulties and unfortunately in the case of Spain, there is no professionalization or leadership. The characteristics of the system itself become barriers to the exercise of leadership. The new Education Law (from Spain, 2013) further closes the doors to an autonomy of the centers, scarce curricular and pedagogical competences. Spain is one of the countries where Principals play lower leadership shares (OCDE, 2016). This situation should not and cannot continue, Spain has a weak leadership, it must go towards international trends where leadership and effective management are key to school improvement (Bolívar & San Fabián, 2013). To end, this research arises in the first place because of the relevance of the DL phenomenon in improving the effectiveness of primary schools and secondly given the scarcity of related studies in the centers of Madrid.

Theoretical basis.

The DL is based on the development of fundamental theories as they are: Theory of activity (Spillane, 2006); Theory of Leadership Substitutes (Jermier & Kerr, 1997; Gronn, 2002, 2008), Theory on situated and distributed cognition (Brown & Duguid, 1991); Institutional Theory of Organizational Change (Ogawa & Bossert, 1995); Theory of Motivation Miskel and Ogawa (1988). The concept that is most strongly developing among researchers and experts, and which has a very promising future is the concept of DL. According to García (2010) the distribution configuration focuses on how leadership practice is distributed among formal and informal leaders and in the analyzed concept it is a new, moral-based, value-centered leadership that by its nature promotes its own socialization, its distribution in the set. DL is an emerging leadership, relevant to the culture of the education sector (elementary, secondary and higher). It is a distribution model that focuses on interactions, rather than actions, on supervisors and on informal leadership roles.

Cabrera *et al.*, (2016) state that the theoretical definition from a sample of the main authors is given by: Bennett (2003) DL is a group activity that operates through and in relationships, rather than individual action. To Spillane & Diamond (2007) this is not a model but a conceptual lens or diagnostic tool to investigate and analyze the practice. Gronn (2002) and Spillane (2006) define it as the ways in which leadership activities are deployed across different people and positions within organizations, and the result is greater than the sum of the individual parts, synergy in the actions and positions of the different roles in the organization. Finally, Harris (2012) states that it is the result of interactions between all people who contribute to school life, teachers, principals, classroom assistants, support staff, parents and students. Through the school achievement achieved by all the people that interact in the formative processes.

The antecedents and investigations of the previous studies on DL in the schools emphasize the following (Table 1).

Table 1.

Summary of the main authors and contributed studies of distributed leadership.

Studies of distributed leadership: (Spillane, 2006).

These research focus on five-year-old children, a longitudinal study with mixed methods, which focused on the leadership exercise and management of 15 elementary schools in the Chicago region. Eight school with “high poverty” were those that were taken in the case studies, while the other seven were only interviewed. A wide range of data collection and sampling tools were used in the schools selected for the case study.

Studies related to the development of the Principals: Spillane *et al.*, (2007).

Mixed research developed on the basis of 52 day-to-day work Principals and changes in their practice from the average school-size urban districts in the United States. Data collection was done through records, questionnaires to Principals, personal observation, interviews and student achievement data.

Studies of distributed leadership in middle schools in the area of mathematics. Spillane y Coldren (2011).

A study of mixed methods involving middle schools across four American states that focused on leadership in the context of mathematics. A range of data collection tools were used as social instrument network.

A distributed perspective used to examine the application of data used in the decision making of school systems. Park & Datnow (2009).

Several case studies were used and eight schools of four systems participated, of which two were from district public schools and the other two autonomous management organizations.

A study of twelve departments through two Portuguese schools that focused on the departmental leadership roles and the analysis of social networks that are used to evaluate how the teaching leadership was practiced and distributed. De Lima (2008).

The study on distributed leadership and the capacity for improvement in secondary education centers of the Institutes of Secondary Education.

In a sample of 24 institutes in the province of Granada. A mixed methodology is applied in which are combined scripts of self-observation and semi-structured interviews, we conclude that the current model of leadership in the sample is a model of bureaucratic leadership supported by the figure of a Principal who acts alone. Qualitative and Quantitative Techniques. Moral-Santaella, *et al.*, (2016).

Note: Own elaboration.

Method

This study is framed in a holistic scientific approach, with a mixed methodology of quantitative (first study) and qualitative (second study). Descriptive statistics were used in this study. The approach is mixed, facilitating triangulation and integration between quantitative and qualitative results. In the first study, a quantitative study was designed to identify the factors that allowed visualizing the interaction dynamics between the four dimensions of DL in elementary schools in Madrid, in terms of the four dimensions: DL Practices, Shared Decisions, Mission, vision and shared goals, Professional Development, complexity of the task and incentives. The study corresponds to a field design because primary information sources were used and the instrument was applied to the Principals. The study population is the set of Principals of elementary education centers of the Autonomous Community of Madrid (ACM), corresponding to 244 public elementary schools and 277 private schools, according to the ACM database.

The final sample was made up of 23 Principals of elementary schools of the ACM. In order to select the same, a non-probabilistic sampling was carried out, in such a way that public and concerted centers were incorporated, located in the different geographical areas according to the direction of territorial area of Madrid (central Madrid, north, south and east). This type of

sampling was chosen in order to obtain the information collected depended exclusively on the authorization of the Principals to apply the instrument. The information was collected through a questionnaire, previously validated (validity and high reliability - α Cronbach = 0.933). A *Likert* scale of DL was constructed, consisting of 54 items, 9 referred to context variables, and 45 DL, with five graduated response alternatives. The items were organized by dimension, as specified in Table 2, so that the instrument also gave a total score for each dimension. Validity is related to the fact that the instrument measures what is intended to study. In this case the construct validity was initially worked through the number of elements (45), to guarantee the correspondence between each item and the dimensions of the construct.

Table 2.

Dimensions of Distributed Leadership.

Dimensions	Alpha value of Cronbach	Number of elements
Distributed Leadership Practices	0.759	7
Shared Decisions	0.787	14
Mission, vision and shared goals	0.839	11
Professional Development, complexity of the task and incentives.	0.754	13
Total		45

Note SPSS for an $n = 45$

A validity of content has been applied through expert judgment to ensure that the instrument addresses the widest possible range as part of the DL. In this way the items of the instrument have undergone an exhaustive revision process, both in their formulation (semantic and syntactic) and in the content itself (delimitation of the construct). The validation by experts allowed to evaluate the correspondence of the dimensions included in the scale with its conceptual definition, and with the items. In this way, an attempt was made to ensure that the items on the scale were relevant to the concept of DL. For the validation, six experts. The selection was realized based on his

experience in methodological aspects, educational research and knowledge on the topic of leadership.

The variable to be described is DL, it focuses on the interaction between employees, which recognizes the work of all individuals by contributing in practice to decision-making and delegation of responsibilities and authority, even though they are not formally designated or defined as leaders, and it is fundamental in the configuration of the system and of the organization since the redesign of the organization requires a process of shared decision making (García, 2016). DL is formed by four dimensions

Table 3.

The four dimensions of Distributed Leadership

Mission, vision and shared goals
It is the DL aspect that implies that everyone is committed to the shared goals of the institution with a sense of purpose or long-term vision; the school is considered to have a set of shared values that guide efforts, promote trust and commitment among teachers, Principals, administrative staff and the educational community. There is a firm commitment to the shared goals of the organization as a whole and it shares with all staff the philosophy of the school and a long-term vision of the school; the school is sensitive to the needs of the students, parents and community and generates support in helping, establishing and communicating to the group clearly the course of the institution.
Distributed Leadership Practices
There is delegation of work, and the principal assumes that the sum of actions represents more than the parts, because the participatory work translates into a learning for the organization. The Principal considers that more participative forms of leadership work better and allow access to the collective knowledge of the organization, as well as to manage democratic processes to productively use conflicts, which requires concerting and regularizing informal relationships to improve existing agreements.
Professional Development of teachers, complexity of the task
It is related to reflection and dialogue to delegate, guide, harness and improve the skills and knowledge of all teachers, and create a positive and effective common culture, as well as providing a consistent and coherent school <i>curriculum</i> between subjects and levels, as well as a system of goals and incentives. Leadership actions contribute to the development of people to progress productively in the institution. Direction and leadership are practiced as a reflection of the school culture, ethics and traditions. In addition, it includes planning the professional development of the team, through attendance at seminars, courses, workshops, etc., and it supports the allocation of resources necessary to drive school improvement efforts.
Shared Decisions of the organization
It works on the basis of cooperation rather than competition, to promote productivity within the school, with a "holistic" view of the organization and flexible work practices. The members of the organization discuss and help each other in a spontaneous way in solving any problem, through agreements to modify certain organizational structures, and through parental involvement, to make decisions about the teaching and learning of children in school.

Note: Own elaboration.

The composition of the schools is given by 7 concerted (31%) and 16 public (69%). The female gender 13 Principals (57%) and 23 male (43%). The age of the participants retains proportionality of the Principals' constitution, there is a predominance between 52-58 years old (35%), however the existence of Principals with ages between 32 -51 years old. 17% are between 32-51 years old respectively. 35% correspond to 52 and 58 years old and 13% to 59-64 years old. Within the research the experience of the Principals is relevant. The majority of managers are comprised of 30% whose ages are between 13 and 18 years of experience. 13% are between 19-24 years of experience; 25-30 years correspond to 22%; 31-37 years have 26% and only 9% corresponds to 38-43 years. The majority of managers acceded to the positions by means of the opposition, comprised in 44%. 30% obtained the fees for Management Projects. Finally, 26% did so for the competition. The research question is: How are leadership profiles manifested through the characteristic conditions of a typical set of cases? And to respond to each of these questions was proposed as an objective: Understand the dimensions of the DL and the principal's actions through representative cases of sample schools that illustrate the practices of managers in a broader context. The second study is a mixed source case design. It is a case because it was deepened in the DL of a few Principals, with detailed descriptions of their context and school. It is a mixed source because we used in-depth structured interviews, which were applied to the Principals, and data from institutional documentary sources, generated by the same schools, and by secondary sources related to statistical data of each school, registered by the Spanish Ministry of Education and Science, Educa Madrid (2016). The type of case study that was developed is called instrumental case study because we wanted to get a better understanding, they are distinguished because they are defined in the interest of knowing and understanding a wider problem through the knowledge of a particular case (Stake, 2013). Intentional sampling was performed with four Principals. The following criteria were defined for the selection of case studies: The type of institution. The size of the institution. The recognition of the quality of the school and the DL profile identified.

The selection of schools in particular for this qualitative case study has been based on the four elementary schools that are of a different nature to more easily perceive existing DL practices. Public and concerted schools. The chosen schools have made it possible to see if there is evidence of a history of innovation that has characterized schools as a potential site for DL research. In most schools the principal has had several years in school, which means that leadership processes would be well integrated into the school culture. The school shows a wide range of complexity factors based on contextual characteristics including socioeconomic, educational, cultural and linguistic diversity.

The case studies selected in this research were the following schools in the city of Madrid: Case study 1: O and G (selected school) due to the limitations of the extension of the investigation, the communication will only analyze this school. Case study 2: SP. Case study 3: JV. Case study 4: CR School. In relation to the gender of the Principals in the case studies there are three males and one female in the O and G School. The ages of Principals are 32 years old (Principal of the SP), 40 years old the Principal of O and G, 55 years old the Principal of JV and 60 years old the Principal of CR. Years of experience as Principals in the respective schools were varied. The least experienced is the Principal of the SP with two years in the position. The Principal of O and G and the Principal of CR have 8 years in the position and the one of greater experience is the Principal of JV with 14 years. The composition of the selected schools is 31% (1 school) for schools and 69% (3 schools) for public schools. The composition of cases studies according to the number of elementary school students in 2015 ranges from 200 to 298 students, corresponding to the SP and CR schools. Two schools with 550-689 students: JV with 550 students, and O and G with 689 students.

The data collection techniques and tools for the second study are qualitative techniques, in order to establish the dimensions of the DL and the actions of the principal through representative cases of schools of the sample that illustrate the practices of the managers in a broader context. In the cases,

six visits were required for the data collection, through interviews with the Principal, as well as through observation records. An in-depth interview guide was developed (interview guide). It had access to further deepening in the perceptions of the four cases object study (managers, schools, organization, communities...) than with other methods of information collection. In elaborating the protocol of the interviews, the issues to be considered in the four theoretical dimensions included in the questionnaire have been taken into account. It also investigated aspects related to the demographic variables and, specifically, the school dropout and the economic policies to cut the current Spanish crisis. This gave continuity and coherence to the research. It is to complement the quantitative and qualitative information obtained through both instruments

Regarding the procedure for applying the interview, the interviewees were initially mentioned about what was being investigated, the why and the what, in order to generate a climate of trust and confidence, therefore, a greater grade of sincerity in the answers that were given. They were also informed of the confidentiality of the information, and that the arguments were valued and the points of view were perfectly understood. As a structured interview, all the questions that were asked were previously planned. The questions were coordinated with the script done sequentially and directed, based on the dimensions of the DL. The recording was used to conduct the interviews because this facilitated the mechanism that allowed to obtain objective data in relation to the research. With the recording, the reliability of words and language was ensured. The recordings were transcribed for analysis in Atlas.ti.

The qualitative analysis involved the development of a set of tasks that included the codification, categorization, establishment of relationships and the generation of conceptual networks (which are detailed below). In general, the analysis process was combined, which is related by the researcher's creativity, and is identified in four phases. Firstly, primary contact with the document (organization, classification and initial readings

of the information). Secondly, preparation of the document. Thirdly, analysis (construction, naming and definition of first and second order categories [selection of units of analysis, code assignment, code relationship] and networking). And finally, analytical interpretation (description of findings or theorizing) (Varguillas, 2006).

The use of permitted to develop content analysis, which it is an appropriate technique for the objective, systematic and qualitative description of the manifest or implicit content of a data source such as interviews. This research was configured with the hermeneutic unit called Distributed Leadership. Hermeneutic unit is the file generated by Atlas-ti software. In this investigation we loaded all interviews before debugging (software application) and from these was processed to coding.

The CEIP O and G has been studied through two thematic sections. The centers are presented taking into account the following aspects: Characteristics of the school: geographical configuration, relation with the environment in which it is, its history, its organization and some indicators of academic results. And characterization of the four dimensions of distributed leadership: director biography, mission, vision and shared goals, shared decisions, Distributed Leadership Practices, Professional Development and Improving Education.

Results

CEIP O and G: A direction for school improvement.

In this communication it studies the CEIP O and G, the center is located in the north of Madrid, Barrio de Castillejos, Paseo de la Castellana and Bravo Murillo Street, within the Municipal District of Tetuán. At first sight, it perceives a modern construction of five floors, white color, impeccable and very well maintained. It consists of a single building of rectangular plant, very elongated, that at one end forms an “L”, it occupies the whole block. At the same time, this is located in a space easily accessible, both private (car) and public transport and common (bus, subway and suburban train).

The educational center occupies an important space in the city, surrounded by skyscrapers and financial centers. From the first and subsequent visits it felt that the people who work there, including the teachers, the management team and the non-teaching staff, show a very good disposition, motivation, friendliness and cordiality. It can affirm that the working environment is positive, it verified in the visits made to the Center. The Center is very well used and decorated with works done by the students, with some literary texts, in English as well as Spanish, as well as photographs and informative posters. It is obvious that a certain commitment has been established with visual, playful and participative learning.

Characteristics of the center.

The CEIP O and G was inaugurated on August 13, 1976 by President Adolfo Suarez, the first democratic president of Spain (1976-1981) after the dictatorship of General Francisco Franco. It can affirm that the CEIP O and G was born with democracy, while still Tetuan was in the process of urbanization. The socio-familial context of Tetuán is constantly changing and is very varied, just as the socio-cultural level of the area in which the school is situated is heterogeneous, ranging from a middle class on the one hand to a lower middle class on the other. The birth rate is low, a fact that is being corrected thanks to the considerable increase of immigrant population. During these last courses there is a significant and constant increase in enrollment of students who have recently arrived in Spain with different levels of schooling. When reviewing in history and some antecedents, the district of Tetuán was composed by the old workers' quarters of Cuatro Caminos and Tetuán, peripheral to the Ensanche, becoming the receiver of the new tertiary center of high income population with the extension of the axis representative of the Castellana and the creation of Azca. In relation to the population the district of Tetuán of a population of 149,200 habitants and an extension of 537,31 hectares, distributed in the official quarters: Bellas Vistas, Cuatro Caminos, Castillejos, Almenara, Valdeacederas and Berruguete. When inquiring about the data of distribution of foreign

population in the database of the enumeration it is observed that Tetuán has 34,384 habitants, divided mainly between Ecuadorians, Dominicans, Rumanians and Moroccans.

Regarding the organization of the center, it has: Child education (from 3 to 6 years); Elementary education, Integration and Compensatory Program, Local Plan for Improvement and Extension of Educational Services: study support, snack and games, Services: dining room, first class, AMPA activities and a Sports school: basketball. The demand for student enrollment in general is high, those not admitted are very few. The average annual enrollment is around 550 students. The sociocultural and economic level of the families of these children is of great diversity. Regrettably, the majority of adult household members have some job uncertainty and high unemployment due to the current economic crisis that has increased the number of long-term unemployed in the last six years. In relation to the immigration representation of the child population, in this school, the majority is distributed in the following populations: Ecuadorian, Romanian and Moroccan. Immigrant students represent 44% (268) out of a total of 610 students. 50% of students receive food aid, in some cases of modality C, whose families are perceived as the Minimum Income of Social Insertion. 10% make use of the “First of the school” service and 45% students of the External Compensation Plan. Foreign students approach 45%.

The integration of these students is good, they usually adapt quickly to coexistence with the rest of their classmates and, many of them have studied in the center all their schooling. It should note that foreigners are incorporated throughout the course with different levels of schooling in the countries of origin and that they require a special effort of tutors, teachers and teachers of E. Compensatory. The start-up of the Reception Plan and the updating of the Plan for Attention to Diversity, diligence in collecting information, the permanent effort to adapt curricula to new students of E. Compensatory, the involvement of all teachers, students and other staff help to promote and ensure the adaptation and learning of these students.

In relation to the teaching staff the school is on line three, has Integration, E. Compensatory and Hearing and Language, which makes the Cloister is very numerous, the majority are definitive owners. There is also the attention of an Advisor and a PTSC. In general terms, the Faculty of the Center comprises 10 children's teachers in the area of early childhood education. From first to sixth grade, there are 24 classrooms with 12 teachers and six classrooms. Coordinators of bilingual Public, ICT and Children of the first, second and third cycles. There is an educational orientation and psychopedagogical team (EOPT), made up of a psychopedagogue and a technical community service teacher (TCST). The non-teaching staff consists of a physiotherapist, a nurse (DUE), three specialist technicians III, an Administrative Assistant and a Concierge. In addition to the kitchen and dining staff in charge of the company hired for this purpose.

In terms of school spaces and material resources, the school has liaison classrooms for students in the second and third cycle of elementary education (from 8 years of age) who attend school for the first time in the education system of the Community of Madrid, with no knowledge of the Spanish language or with serious lack of basic knowledge as a result of their irregular schooling in the country of origin.

The formal organization of the school has a management team, the school board and the faculty, as required by the Spanish Ministry of Education. The management team is composed of the Principal, Secretary and Head of Study. The school council consists of: The council president will be the director of the center, the secretary of the council will be the secretary of the center, Head of studies, five (5) representatives of the faculty sector, five (5) representatives of the parents sector, one (1) representative of the municipality, one (1) representative of the personal sector of administration and services. (CEIP O and G).

As for the curricular structure, we can say that this center teaches the level from children (3, 4 and 5 years) to 6th grade (6, 7, 8, 9, 10, 11 years). It is also a center of preferential integration of students with motor disabilities, this

does not exclude that it also enrolls students with various sensory or psychic disabilities. The curriculum is the one that sets the ministry. It is a school with a bilingual program implemented at all levels of elementary school. It is worth mentioning the project of a school for students with generalized developmental disorder (GDD) related to hearing and language (GDD), technical I (GDD). The CEIP O and G is considered as an ordinary center with supports for students with special educational needs, with Educational Compensation Program, GDD classroom project and bilingualism project. Due to these characteristics, the attention of the sector's EOPT is a priority for the two professional profiles of Educational Guidance and Community Services (TCST).

The pedagogical and methodological principles used in the institution are based on experiences, globalized activities and play; these are applied in an atmosphere of affection and confidence to promote self-esteem and social integration, which translates into an active methodology, in which students are the subjects of learning, mainly using strategies based on the game, motor of all the teaching-learning process and didactic resource par excellence of all areas of the curriculum, because through it the methodological principles are fulfilled: Globalization. Each work or activity proposal causes all capacities to come into operation. Motivation. Based on known and attractive aspects to achieve a favorable attitude towards new learning and that these are significant. Affectivity. Feelings and emotions, bases of all effective learning. Socialization. Seeking the communication and interrelation among the members of the group to develop attitudes of help, collaboration and empathy. Significant learning. Encouraging children to be the protagonists of their own learning. Prevention and compensation. Proposing actions aimed at the diversity of personal peculiarities, evolutionary moments and learning rhythms. Family-center interrelationship. Adding criteria in education and learning, avoiding situations that may cause insecurity in students and delay their development (CEIP O and G, 2016).

The CEIP O and G work in the project of the Virtual Library, through the application AbiesWeb. This application is used in the management of documentary funds of the school libraries of the different ACM Centers. (Educa Madrid, 2016). There are several challenges one of them is that they develop a physical education project for the introduction of athletics and alternative sports, from the seminar of permanent formation. The music classroom is equipped with a digital whiteboard. The class is acoustically isolated from the other classes. The music room serves, in turn, the choir's rehearsal room and has a small office inside the class. There is a computer project applied to the E. Musical. (6th grade). The application of Information and Communication Technologies to teaching has been one of the challenges that the O and G has imposed for many years. The classroom has 25 computers and is designed for students to work individually. There is a control program for student computers, a projector and an acrylic slate. The school endowed the computer networking classroom, which was innovative at the time. All parents are invited to participate.

In relation to the results indicators, CEIP O and G presents a different circumstance because of its quality of school of diverse population, already it was raised what is the school of Tetuán, with the particularity of being the one that possesses a greater number of immigrants what gives it a multicultural and multiracial environment. When reviewing the tests of general culture, language, mathematics corresponding to the school periods: 2010-2011; 2011-2012; 2012-2013; 2013-2014, 2015-2015, it observes that the internal results of the center have a good level of performance and school quality. The results of the 2012-2013 and 2013-2014 periods of the external EKS tests stand out in this evaluation (Table 4).

Table 4.

Evidence of essential knowledge and skills (EKS) of CEIP O and G (middle score).

EKS	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Center	5.16	5.2	6.25	6.22	4.85
Community of Madrid	6.82	6.81	7.76	6.99	7.02

Below are the average scores obtained by CEIP O and G in languages, mathematics and English. In the first place the language score are presented. They can be considered high during all the studied years, emphasizing the periods 2012-2013; 2013-2014 (Table 5).

Table 5.

Evidence of essential knowledge and skills (in language EKS) of CEIP O and G (middle score).

Language middle score	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Center	6.58	6.91	7.39	7.39	6.11
Community of Madrid	8.12	8.12	8.04	7.78	7.73

EducaMadrid (2016)

In relation to the average math scores the results were not so high. Except for the 2013-2014 academic year (Table 6).

Table 6.

Evidence of essential knowledge and skills (in math EKS) of CEIP O and G (middle score).

MATH	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Center	4.75	3.74	4.82	5.36	4.82
Community of Madrid	6.39	5.67	7.02	6.51	7.05

EducaMadrid (2016)

Finally, English tests are presented for the periods 2011-2012, 2012-2013, 2013-2014, 2014-2015 (Table 7)

Table 7.

Evidence of essential knowledge and skills (in English EKS) of CEIP O and G (middle score).

English level	2011-2012	2012-2013	2013-2014	2014-2015
Total center	75.86	98	81.48	100
Total Community of Madrid	88.45	90.39	89.6	89.9

EducaMadrid (2016)

An optimum level of English is observed and the periods 2012-2013 and 2014-2015 have exceeded the average of the schools of Madrid. Since 2010, the school is accredited as a bilingual Spanish-English center by the Community of Madrid.

The Principal.

The Principal tells us:

[...] my professional experience as a teacher in public education began more than seventeen years ago, teaching my work in five schools in the Community of Madrid, located in different social settings, with heterogeneous students and different organizational models. In two of them actively participating as a member of the School Council, coordinator of Cycle six courses, working closely with all the resources of the environment, City Hall of the locality, Health Center, social workers, School of Parents etc. with a high level of satisfaction in the achievement of the proposed objectives. (Principal CEIP O and G).

She has as a goal the leadership at the level of community relations:

Encourage cultural integration by going beyond interaction to achieve the integration of the entire educational community. Linking cultural functions with those of representing and promoting culture, encouraging participation, teamwork processes and conflict intervention. The increase of External Relations common to all the

previous ones, giving specific attention to this area that sometimes is little valued (Principal CEIP O and G).

Characterization of the dimensions of leadership distributed in CEIP O and G

The analysis is based on the representation of the network diagram, which presents the four dimensions of distributed leadership to be studied (Figure 1). Each aspect of the overall network is explained in order to present new findings. We interpret each of the four dimensions of DL and other variables that appeared as a result of the study, as is the specific case of improving education. Next it analyzes the first dimension of distributed leadership, in the analyzed figure is shared decisions, for the director the decisions are summarized:

In the participatory structure, promotion of collaborative work, promotion of productivity and holistic vision (Principal CEIP O and G: Figure 1).

In relation to the shared decisions dimension, the Principal considers that the redesign of the structure promotes participation, collaborative and spontaneous work, adds that:

... we started working on flexible groups in mathematics and languages in the first cycle; that was eight years ago, we now have flexible groupings up to sixth grade, in mathematics and in languages, only in first, because we consider that we have first distributed resources where it is most needed (Principal CEIP O and G: Figure 1).

With respect to the participatory structure, it can be emphasized that the School O and G has an organizational design that allows the different actors of the educational process to be incorporated in the decision making (managers, teachers, students, parents). Principal expresses the following:

And also a way that the parents are in more contact with the center, we also have a staff that is very cooperative and organizes many activities also with parents, some party and the educational community is also part with some weight in the center, although the most important is channeled through the school council and the participation of parents of the school council (Principal CEIP O and G: Figure 1).

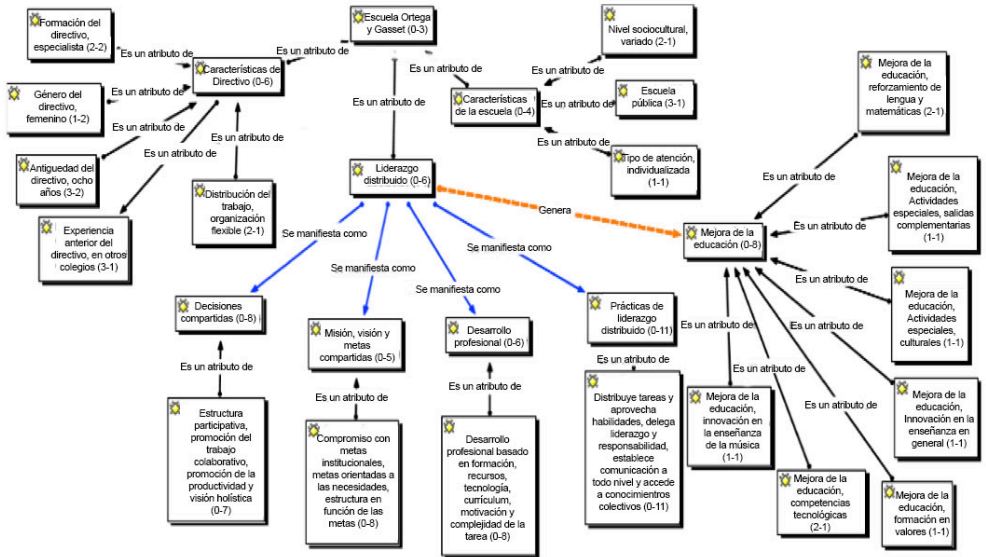


Figure 1. O and G general information network. Highlights Education Improvement.

Regarding the recognition and participation of parents in order to make decisions about teaching, the Principal said:

... recognition of the parents, of the families that I believe we do collect, we collect it in the demand of places that the school has and we also collect it because the parents so manifest and the institutes also communicate to us that the children go mainly with good behavior that is also important to highlight the level of coexistence that there is in the school that is very good, although we are very diverse, they coexist very well and we no longer realize, but it is a

reality. On the other hand because parents are satisfied with the line we have ... (Principal CEIP O and G: Figure 1).

The Principal has a holistic view of the organization and states it as follows:

... I believe that the offer of the school is very, very wide, we also have the dining service, obviously, and we not only pay attention to *curriculum* attention, but also to all training, in all aspects, in all schedules and giving solutions to parents. There are some extracurricular activities that are free, others that have a low cost and I think we have a response to all the diversity of families we have in the center (Principal CEIP O and G: Figure 1).

The second dimension is the mission dimension, vision and goals shared in the CEIP O and G, the interviewee stated that the same are summarized:

In all those commitments with the institutional goals, goals oriented to the needs of students, families and the structure (Principal CEIP O and G, Figure 1).

In relation to staff development and incentives, the Principal believes that institutional goals are fundamentally oriented towards meeting the needs of the environment:

The organization is made to meet the needs with the resources that are scarce, in the best possible way (Principal CEIP O and G, Figure 1).

In accordance with the dimension mission vision and shared goals, the Principal perceives and believes that it is based on a consistent school curriculum:

... we are a bilingual center, we have the project of the community of implementation of bilingualism, we are going through four courses, we are now specifying the dates for the second and third exams of the external tests of the language, as that is a project in development and

which is going well and which benefits the whole school. (Principal CEIP O and G: Figure 1).

In relation to the mission, vision, shared goals and if she is open to modify certain organizational structures, the Principal expresses the importance of teamwork and she highlights:

... it is important to highlight in the new technologies, this year we have decided to work without a book language in sixth, is to start the road to work writing the book on paper and working through digital platforms, we buy a license with an editorial that serves as a support and serves us to have resources and then the teachers prepare about this material (Principal CEIP O and G: Figure 1).

The Principal affirms that she believes in a mission, vision and shared goals based on the creation of a common positive and effective culture:

... that helps to encourage, also to feel that you are part of a whole and that you have to be within your work and also that contributes that to the formation of a lot of four, five years and that fundamentally the formation is made in the center, where the majority of teachers participate (Principal CEIP O and G: Figure 1).

The interviewee thinks that the mission, vision, shared goals, goal motivation that she considers attractive and challenging, the Principal thinks:

... I think we have shared a line with the management team for a long time, they have changed the head of studies, but we keep the same line, I believe that we are at a point where we have achieved very concrete and very clear goals, that we are at a good time in school, that we must always improve and we have a road to do and that is where we are, in fact we have plans for improvement, which we transmit through the cycles of the AFP and new proposals for improvement and communicating of course, getting the ideas, but with a clear line and a clear directive, in other words, the line is quite marked and then from another part ... (Principal CEIP O and G: Figure 1).

The third dimension analyzed is practices of LD in this respect the interviewee stated that the same are summarized in:

... the distribution of tasks, the use of skills, delegation of leadership, responsibility, communication at all levels and access to collective knowledge (Principal CEIP O and G: Figure 1).

The Principal perceives it as:

... a strategy to gain access to the collective knowledge of the organization and the more participatory forms of leadership work better. (Principal CEIP O and G: Figure 1).

The manager delegates work and works by consensus:

But I think we have a long line with the management team that has changed the head of studies, but we have the same line. I believe that we are at a point where we have achieved very concrete and very clear goals, that we are in a good moment in school, that we must always improve and we have a way to do and that is what we are, in fact we have plans for improvement, which we transmit through the cycles of the AFP and new proposals for improvement and communicating of course, getting the ideas, but with a clear line and a clear directive (Principal CEIP O and G: Figure 1).

Regarding DL practices, as a strategy to access the collective knowledge of the organization, the Principal says:

It agrees and debates, it works through all the coordinating bodies, cycle, the pedagogical coordination commission, the cloister (Principal CEIP O and G: Figure 1).

In the fourth dimension professional development of the School O and G, the interviewee stated that it is based on training, resources, technology, curriculum, motivation and complexity of the task (Figure 1). In this respect the Principal said:

We are working with students with special subject needs, we had three teachers of therapeutic pedagogy and an N, we put a gym in the reading plan, all the students in the center have once a week in the library, with the appropriate resources, with the teacher who gives them language and most of the cases with a teacher who gives them support in that hour, where we made the reader loan, which is also one of the bets we have in the center and with a good development, also working all literary genres and with a program that has already implemented in the center several years and we also try to keep the teams that work (Principal CEIP O and G: Figure 1).

Towards an effective education improvement.

The Principal points, in relation to the improvement of education, to the reinforcement of language and mathematics:

... we have flexible groupings until sixth of primary, in mathematics and in languages only in first, because we consider that first we have distributed the resources where it is most needed and second because we consider that in the language it is better that all students are in a group. Because it enriches, because when you limit the groups in curricular competition, the lower groups slightly impoverish the language and we saw that it was not optimal. We only maintain it in first because it is when they are learning the writing and yes there is a very substantial difference (Principal CEIP O and G: Figure 1).

The Principal explains in relation to the literary area:

The library team has three teachers and a coordinator but there are three, since the same three professionals have been attending this program for several years (Principal CEIP O and G: Figure 1).

Discussion

The present discussion aims to look critically at the results obtained in the research, specifically the case study compared with the results pointed out by other researches in the area. In order to obtain positive answers, it has been investigated in what affirms the literature reviewed in relation to DL. The use of such work as a criterion for comparing results is justified because it is the same topic and because most of the procedures used are identical. In making a case study, it is not intended that the results of the research be conclusive (Stake, 2013).

In this research has been deepened in social changes and economic crisis, interrelation and above all the inclusion of students, values of communication. The investigated school is considered as an open organization to the community, these characteristics have brought valuable traits for a new and emerging leadership exercise in the education sector. This school is distinguished by real improvements in education (Figure 1). The school presents proven academic results (Educa Madrid, 2016), in elementary, essential requirement to be in this study. In relation to the indicators of results, CEIP O and G presents a different circumstance because of its quality of school of diverse population, already it raised that it is the school of Tetuán, with the peculiarity of being the one that possesses a greater number of immigrants what gives a multicultural and multiracial environment. It observes that the Principal has stated to promote equity and social justice, Ross & Berger (2009) propose strategies associated with four domains, so that school leaders can use these strategies and thus increase equity in schools.

The Principal manifests in the discourse and action a social, ethical and political commitment to public education, which she considers to be valuable for its role of leveling the inequalities present in society and, therefore, transformative. The Principal considers that what is important is to enrich and distribute the commitment to the education of students through the tools available to the school. It observes a DL, high levels of student participation,

and commitment, in other words, everything that refers to collaboration and leads to a more inclusive approach to diversity. On the ethical, social and political commitment with the public education as leveling of the social inequalities, common idea manifested by managers, we can contrast it with the moral imperative or purpose. This concept is referred to in school improvement reports (Fullan, 2002; Hargreaves & Fink, 2000), whose authors believe that educational leaders must be able to act in a changing culture, which involves dealing with complex and uncertain circumstances with cognitive and affective tools to understand the educational process as an eminently relational process.

It is also evident the Principal's commitment to the solutions, of an inclusive nature, for those who live in difficult situations due to the Spanish economic crisis, foreign and Spanish students from various backgrounds, especially Latin America and Central Europe; students with special educational needs, transitory and permanent; and, students psychologically affected by family situations of abandonment or violence. It explained how the center, led by the Principal and the management team, have organized resources and through the curricular structure. It is a center of preferential integration of students with motor disabilities, this does not exclude that it also enrolls students with various sensory or psychic disabilities. We are according to Murillo (2006, p.162) in which we must promote a collaborative and distributed leadership that is based on the participation understood "in its sense of greater involvement and commitment, in other words, community participation in decision-making regarding organizational, resource management and pedagogical issues."

The center works with pedagogical and methodological principles which translates into an active methodology, in which students are the subjects of learning, mainly using strategies based on the game, engine of the entire teaching-learning process and didactic resource par excellence of all areas of the curriculum. In this regard authors like Gómez (2014) argues that active methodology has among the fundamental pillars the called "methodological

renewal". With this renovation is intended to avoid the risk of making an exclusively formal change, forgetting what happens in the reality of the classroom. It is necessary to take into account the pedagogical renewal developed in Spain, studied through some of the most emblematic schools of the pedagogical panorama, allowing to have a valuable information that clarifies its evolution, shows the different pedagogical ideals of each experience and generates a necessary vision between the past and the present.

In the analysis of the networks (Figure 1) it was found that management has strong characteristics that approximate it to the institutional leader. Focused on mission, vision and shared goals. The Principal has clear and timely answers to the problems that throughout the development of her professional career in the center have been raised. In the same way we can contrast our results with some conclusions of international work on school management. For example, one of the statements we can check is Louis et al., (2010) the leadership of the principal after the work of teachers in the classroom is the aspect that most influences student learning.

It shows an innovative attitude, the improvement of education in the school studied is oriented towards the strengthening of languages and mathematics, an ecological project and cultural activities that integrate parents. A computer project applied to the E. Musical. (6th grade). The Principal believes that technological competencies today are a priority in the tools in teaching. CEIP O and G works in Virtual Library project, through the application AbiesWeb. (Educa Madrid, 2016). Leithwood et al. (2006), on the indirect influence of the manager, show that the leadership of the Principal positively influences student learning through its influence on the organizational conditions of the school and in the coordination of processes of teaching learning.

The management project is important, so that the Principal is chosen, is an instrument presented in front of a commission of parents, teachers and representatives of the administration. It contains in writing a proposal of educational plan that includes the vision of the center; in addition to values,

principles and modes of action. Although the project is planned for the first four years, the Principal has been re-elected, has continued the work based on it. The Principal has shown interactions with all internal and external school community members. With this attitude, it has promoted not only the distribution of leadership, but also the social distribution of influence in the group (for example, the AMPA, dining room scholarships). It favors joint decision-making (Harris, 2012; Gronn, 2002; and Timperley, 2005).

The synthesis of the Principal's perception of the four dimensions of O and G distributed leadership is: Shared decisions are the participatory structure, promotion of collaborative work, promotion of productivity and holistic vision. Mission, vision and shared goals are all those commitments to institutional goals, goals geared to the needs of students, families and the structure. DL Practices refers to the distribution of tasks, leveraging skills, delegating leadership, responsibility, establishing communication at all levels and accessing collective knowledge and finally Professional development is based on training, resources, technology, curriculum, motivation and complexity of the task. In this study, several aspects are presented according to the following authors who have demonstrated that the school's leadership is related to the teachers, their commitment to the organization (Leithwood, 2009) and motivation to work (Miskel & Ogawa, 1988; Ogawa & Bossert 1995). Also in this case study, research has shown that the behavior and attitude of the person who assumes the functions of management in the school are a key element that determines the existence, quality and success of processes of change in the institution (Lashway, 2003; Fullan, 2002; Murillo, 2006).

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