

Does pedagogical coordination through the leadership influence Attention Deficit Hyperactivity Disorder (ADHD)?

An international review

(overview essay)

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Abstract: *This article proposes a literature review about the problems faced by the teachers when they have to achieve the inclusion of students who are diagnosed with ADHD. While searching the resources, we have also found that the establishment of collaborative work climate among teachers, the establishment of common goals and shared responsibility, are factors that favor the work with this type of students. In addition, these factors have been found to occur in contexts where shared and distributed leadership prevails.*

Keywords: *Attention Deficit Hyperactivity Disorder (ADHD); distributed leadership; school improvement*

1 Introduction

The aim of the school is the improvement of student's learning. Work on behalf of the student is the emblem on that any teacher must be located (Seashore-Louis, 2007). The current school, far from being a place watertight and homogeneous, must move forward at the same time as society. On this matter, the teachers must recognize the diversity of their students and develop their professional capital (Fullan, 2010). Through the promotion of good practices and the collaborative climate among teachers, the fan will be opened towards the use of other strategies which encourage the inclusion (Hargreaves and Fullan, 2012).

2 Pedagogical Coordination and Leadership in Spain

For a better understanding, we introduce as an example the pedagogical coordination design of the Educational Spanish system. Thus, the Spanish Educational System maintains the same structure of levels and educational stages designed in the Organic Law of General Management of the Educational System (LOGSE, 1990). Although reforms of structure, curriculum, faculty organization and the centers themselves are being attempted, such reforms are still on paper until an education pact between political parties is achieved, which seems very difficult.

In relation to the structure, we can differentiate between *General Education* and *General Regime Teachings*. The first one includes early childhood education, primary education, secondary education (comprising compulsory secondary education, baccalaureate and intermediate vocational training), higher vocational training and university education. It also contemplates the adequacy of these teachings to students with special educational needs, distance education for students who cannot attend regularly to a teaching center and adult education. The second one, for its part, refers to the artistic teachings and the language teaching.

Focusing on the Educational purposes that are established in the educational laws, teachers and the educational community must work cooperatively for training the citizens of a future society, facilitating the inclusion of all. This will promote autonomous learning, critical thinking and the ability to learn throughout life.

To guarantee the proper functioning of schools, the educational law establishes the type of relationships that must exist between the various organs or organizational units of the school. These relationships can take different forms, depending on the organizational model; But in general, in every educational center, a vertical or hierarchical structure and a horizontal or functional structure are appreciated. In practice, there are no vertical or horizontal models, they are usually the result of a mixture of both. But why is pedagogical coordination so important among teachers? The pedagogical coordination provides a cohesive and integrated vision of learning that takes place in the schools. If there was no coordination, each group of students would build a different learning. In addition, teachers would be able to replicate the content taught by others and miss the possibility of achieving comprehensive and comprehensive teaching and learning processes.

To ensure an appropriate pedagogical performance, Spanish schools have the *Teaching Coordination Bodies* (see Table 1). They are coordination groups formed by teachers, whose objective is for students to acquire global and integrated learning. Due to the demands of providing quality teaching to the students and the work they entail, it becomes clear that teachers need to work within the framework of working groups.

Table 1: Spanish teaching Coordination bodies

Teaching Coordination bodies	
Cycle teams*	Didactic Departments**
Commission for pedagogical coordination**	Tutors and teachers' group meetings Cycle teams Composition and operation***

* **Kindergarten** and / or Primary Education.

****departments of** didactic coordination, orientation department and department of complementary and extracurricular activities when they impart Secondary Education.

*** **Kindergarten**, Primary Education, Secondary Education and bachelor's degree.

The relationship which appears between teachers in which bodies must be collaborative and characterized by trust and respect. All the curricular decisions taken are a matter for all teachers, which contributes to teachers being responsible for the teaching and learning processes of all their students, especially those who have special educational needs to achieve their inclusion. When schools staff get it, a distributed leadership exist at schools, that allow the school improvement.

3 Leadership and its implications on students' inclusion

In this regard, a factor that has been studied extensively on a global scale appears: pedagogical leadership (Pont, Nusche and Moornan, 2008; OECD, 2009; Leithwood, 2009; Hargreaves, 2001; Spillane, 2006; Bolívar, 2012; 2014; Bolívar and Ruano, 2013). Recognizing the multiplicity of meanings and variants of this factor in vogue, numerous studies have stated its positive effect on the improvement of the school results (Mulford, 2006; González, 2007; Peacock, 2014; Klar, 2012; Poultney, 2012). This hypothesis is what has led us to consider the research that we raised in this article. If the educational leadership shows better results in the improvement of the students in general, would it also display them in the case of pupils with Special educational needs (hereinafter SNE)? Does the teacher who works with such students supply his/her teaching by leadership, in its distributed form, in his/her professional career? Is there any relationship between leadership and improvement of performance of students with Attention Deficit Hyperactivity Disorder (hereinafter ADHD)?

In parallel, there are various studies that confirm the global prevalence of ADHD estimating that it is the same everywhere – 5.29% (Spencer, Biederman and Mick, 2007), with increased frequency among men than among women, in a proportion of 3 to 1 (Valdizán, Mercado and Mercado-Undanivia, 2007). It is estimated to affect between 2 and 5 per cent of the child population in Spain (Molina-Carballo, Naranjo-Gómez, Uberos, Justicia-Martínez, Ruiz-Ramos, Cubero-Millán,... and Muñoz-Hoyos, 2013) and can be defined as a persistent pattern of symptoms of inattention and/or hyperactivity-impulsivity that is more frequent and more serious

than the usually observed in people with a degree of similar development. These difficulties are started in early childhood and are associated with a deficit in the conduct governed by rules and a certain pattern of performance (Barkley and Russell, 1990). The disorder persists during adolescence in the 50–80% of the diagnosed cases throughout childhood and in 30–50% of cases diagnosed during the adult stage (Barkley and Russell, 1990).

These difficulties reflect a lack of the will of the individual or his inability to self-control its own conduct during a space of time, and to keep in mind the goals and implications for the future. ADHD is associated with a developmental disorder, since it involves evolutionary patterns different in affected people. The symptoms could also vary in every affected person. This disorder has biological origin with manifestations in the expression of psychosocial elements, affecting the family, school, work and socio-economic of individuals who are diagnosed. This is recognized by the scientific community on a global scale. The main symptoms of the individual with ADHD are the lack of attention, hyperactivity and impulsivity excessive according to age. In the same way, it is a chronic disorder because once the symptoms are manifested, they tend to be maintained throughout the life of the individual while modifying their resenation feature depending upon the different evolutionary moments.

The diagnostic process can be performed by the medical specialist or by the clinical psychologist with specialization in ADHD. In this regard, the Official Bulletin of the Cortes Generales of 12 December 2012, collects: “It is very important to solve problem of the current infra diagnosis, since not every active child suffers from ADHD; therefore, it is necessary to delve into the manifested symptoms [...] that can affect the learning and the relationship with other children” (p. 53). To do this, the diagnosis must be substantiated through a specialized consultation based on the collection of all the information about the individual. Numerous studies affirm that an inappropriate treatment of individuals with ADHD have negative consequences such as series of risks that threaten the mental and physical integrity (De La Peña, Palacio and Barragán, 2010).

At the age at which students begin to be diagnosed with ADHD, educational background turns to be as important as family background. In addition to the growing demand in the academic aspects, belonging to a peer group becomes a pressing priority. Students with ADHD usually have learning difficulties in curricular content, and also difficulties to achieve their integration in the group (Rabiner and Coie, 2000). In our case, the updated information, participation and leadership of teachers are necessary to carry out the diagnosis of ADHD as well as for the development of interventions of educational therapeutics (Vile Junod, DuPaul, Jitendra, Volpe and Cleary, 2006), otherwise the ADHD would increase to a large extent and the possibilities of developing school failure, problems of self-esteem and self-perception would be more likely to happen (Rodríguez and Caño, 2012).

The importance of the school context and the teaching team is obvious, since the students spend a lot of time at schools. In fact, the symptoms are being detected clearly due to these circumstances. We consider that it is common to associate low academic improvement, non-conclusion of a task started or distraction, to the profile of a child with ADHD, but this profile is observed in a high percentage of students of compulsory secondary education who do not suffer from ADHD. Another clear example is when teachers constantly command order and silence among their students; in that case they only want pupils who do not speak or move in their class. On the other hand, sometimes the teacher is excessively permissive to the continuing disruption of the child, associating it with temporary condition or lack of maturity (Gadow and Sprafkin, 1995). These are just some examples of the casuistry we can find at schools. All of them prove a demand of evaluation of ADHD (Félix, 2006).

Academically, students with ADHD are more likely to have worse qualifications and low scores in standardized tests (Loe and Feldman, 2007). They are also more likely to have a higher rate of absenteeism, and three times more likely to repeat school years during the period of the primary school. They are at a greater risk of dropping out of high school than their peers who don't suffer from ADHD (Barbarese, Katusic, Colligan, Weaver and Jacobsen, 2007). It is evident that the improvement of the academic success of students in general and, especially students with ADHD, is related with the schools that offer their teachers the possibility to get trained about the aspects of students with special needs.

Quality, achievement and qualifications take precedence in the current society and at schools. The results that students achieve are important, but we must keep in mind that not all students or groups are offered the same opportunities. This fact can have negative affect on ADHD students' school careers assuming, in many cases, a loss of educational, personal and social opportunities. In this sense, the distributed leadership provides a development of the capacities and strengths of the pupil, giving teachers a "feedback" in relation to their own effort. According to Bolívar (2010: 92) "leadership distributed [...] it is part of an organization, it is understood as an organization that learns or, more recently, as professional learning community".

These organizational and structural changes that are possible thanks to distributed leadership, influence directly on the training needs of the teachers, providing them with better resources, possibilities and exploitation of the spaces depending on the students' needs. Inter professional relations are the cross shaft in order to ensure an improvement in the inclusion of students with ADHD. Thus, "the teacher has to manage the organizational structure of their students, adapting resources (human and material) to their needs (own space, available time, curriculum adapted, etc.)" according to Fernandez and Hernandez, (2013: 98).

So, to work with students with ADHD, because of lack of social conscience and teachers' practical knowledge, it is necessary to create guides. We can make cards or

posters that remind the teacher what is each thing used for, and when it has to be used. It is advised to use a clock at your table and divide the working time, so that it splits up the tasks into stages when working with children with severe hyperactivity.

The teacher must deal with the child using a motivating voice tone, he/she must learn behavior modification techniques and try to standardize the problem as much as he/she can (DuPaul, Gormley, and Laracy, 2014). In this regard, the needs of the students are those establishing the preferences and the objectives to be achieved. At the time that the educational needs of students become more specific, teachers' vocation emerges to help their peers and learners to handle these situations. It is necessary that the teaching staff is committed to innovation and change towards the common goal. In this way, the cooperative working climate will encourage making decisions that have a positive influence on the entire student body and, more specifically, students diagnosed with ADHD. Then, teachers who are part of the same ship will be able to give coordinated common answers. Under this educational leadership, understood within the terms of the distributed leadership, we assume the existence of a close collaboration in teaching that will be rewarded by the feedback among teachers as a propulsion engine of creative and motivating initiatives that arouse the curiosity of the students with ADHD. "The probability that the teachers to exert leadership roles also increases when they have access to professional development oriented to develop the skills and knowledge needed to assume these roles effectively" according to Leithwood (2009: 99). Hence the importance of professional development in regard to the acquisition of skills particularly as the innovation, creativity, communication, group work or research must be stressed (Harris and Lambert, 2003).

In the arduous search for techniques and methodologies that promote meaningful learning for the student, we can glimpse that the distributed leadership implies a specific importance on the reduction of the negative effects on social and family environment; it exerts positively on the group in general (Knapp, 1995), even on students with ADHD. Innovations are more relevant within the classroom because the students have a greater tendency to learn when their teachers use a variety of resources, techniques and contextualized tasks (Bauermeister, 2014).

In the Burns and Mason (2002) study, concluded with their results obtained among the students of homogenous and heterogeneous classes, students reach the best results in heterogeneous classes. They similarly found strong evidence that managers deliberately attached students who presented deficit of attention to the multi-grade classes, thus being able to establish a clear link between the actions of managers, the composition of the class and school performance. The study also stands out as the most effective strategy that involves supportive behaviors that are based on the motivation and the active strategies of teaching/learning. This helps students with ADHD to focus their attention and keep their involvement and interest in the tasks (Bartlett, Rowe, and Shattell, 2010).

Those students with ADHD experience many difficulties in their everyday life because of the executive and motivational deficits. In particular, the influence on academic outcomes is very negative. Schools and special education services are facing serious challenges when they have to respond to the needs of the growing number of students with ADHD (Berenguer, Roselló, Miranda, Baixuli, Palomero, 2016). People who must pay proper attention and support to them are their parents and teachers.

Synthesizing, students with ADHD need the motivational support of their closest adults and teachers who should use active teaching strategies. In this context, it is essential that the educational professional leadership advice parents about the best way to help ADHD students to obtain academic success.

4 Conclusion

Taking into account that students with ADHD find greater allies in parents and teachers, the transformation of schools into professional learning communities can be a solution to strengthen the bond between the family and the school. In this regard, it has been strongly emphasized in the international literature that one of the facilitators of such a transformation is once again the implementation of horizontally-based leadership in schools. On top of that and focusing on students with NEAE, it would be a matter of paying attention to the students as a whole. Speaking of students in general, including the previous one in the same group and recognizing that they have specific and / or special needs at any given time, is one of the many challenges that the 21st century school has to face.

In addition, inclusion requires more qualified professionals to respond to heterogeneous group of students. The development of professional teaching capacity is a branch of research on which great emphasis is being placed today. Among its possibilities of development, we recognize the implementation of leadership as a way of collaboration and the teacher's professional growth. Cooperative work, exchange of good practices, feedback among teachers, the search for joint solutions and the shared responsibility for the learning of all students, including students with ADHD, will guarantee success, as we have found in the resources that we have revised for the elaboration of this work.

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