

PANORAMA ISSN: 1909-7433 ISSN: 2145-308X ednorman@poligran.edu.co Politécnico Grancolombiano Colombia

EFFECTS OF SCHOOL LEADERSHIP IN LEARNING

Cifuentes-Medina, Jose Eriberto; Gonzalez-Pulido, Jose Weymar; Gonzalez-Pulido, Alexandra EFFECTS OF SCHOOL LEADERSHIP IN LEARNING PANORAMA, vol. 14, núm. 26, 2020 Politécnico Grancolombiano, Colombia Disponible en: https://www.redalyc.org/articulo.oa?id=343963784022 DOI: https://doi.org/10.15765/pnrm.v14i26.1482



Esta obra está bajo una Licencia Creative Commons Atribución-NoComercial-SinDerivar 4.0 Internacional.





Artículos de investigación científica y tecnológica

EFFECTS OF SCHOOL LEADERSHIP IN LEARNING

Efectos del liderazgo escolar en el aprendizaje

Jose Eriberto Cifuentes-Medina Joseeriberto.cifuentes@uptc.edu.co Universidad Santo Tomas, Colombia Jose Weymar Gonzalez-Pulido Joseweymar.gonzalez@uptc.edu.co Universidad Metropolitana de Educacion, Ciencia y Tecnologia, Colombia Alexandra Gonzalez-Pulido Alexandra.gonzalez@uptc.edu.co Universidad Nacional Abierta y a Distancia, Colombia

PANORAMA, vol. 14, núm. 26, 2020

Politécnico Grancolombiano, Colombia

Recepción: 16 Agosto 2019 Aprobación: 03 Febrero 2020

DOI: https://doi.org/10.15765/ pnrm.v14i26.1482

Redalyc: https://www.redalyc.org/ articulo.oa?id=343963784022 Abstract: In the educational context, leadership is one of the variables with greatest relevance for school results. This theoretical article intends to understand the way in which school or pedagogical leadership has been conceptualized and the causal models that explain its correlation with student learning. The methodology applied is documentary review. It is found that the concept of school leadership has been analyzed for less than a century, it has gone through rigid, bureaucratic and purely administrative models to flexible and distributed models. There is theoretical and empirical evidence of the positive, direct and indirect relationship between leadership and student learning outcomes. It is concluded that the indirect and reciprocal causal relationship between leadership, mediating variables and learning is more common because there is a "spillover effect" in which the dimensions of leadership have a broader influence over the dimensions of mediating and moderating variables, while the latter influence student results.

School leadership; learning; distributed leadership; educational effectiveness; educational quality

https://doi.org/10.15765/pnrm.v14i26.1482

Keywords: School leadership, learning, distributed leadership, educational effectiveness, educational quality.

Resumen: El liderazgo es una de las variables que, en el contexto educativo, tiene mayor relevancia en los resultados escolares. El presente artículo teórico busca entender la forma como el liderazgo escolar o pedagógico se ha conceptualizado y los modelos causales que explican su correlación con los resultados de aprendizaje de los estudiantes. La metodología utilizada es de revisión documental. Se encuentra que el concepto de liderazgo escolar no lleva más de un siglo de ser analizado, pasando de modelos rígidos, burocráticos y netamente administrativos a modelos flexibles y distribuidos. Existe evidencia teórica y empírica de la relación positiva, directa e indirecta, entre liderazgo y resultados de aprendizaje estudiantil. Se concluye que es más común la relación causal indirecta y recíproca entre liderazgo, variables mediadoras y aprendizaje, pues existe un "efecto derrame", en donde las dimensiones de liderazgo influyen de manera más amplia en las dimensiones de variables mediadoras y moderadoras, y estas últimas influyen en el resultado de los estudiantes.

Palabras clave: Liderazgo escolar, aprendizaje, liderazgo distribuido, eficacia educativa, calidad educativa.





INTRODUCTION

In human behavior, leadership occurs naturally and instinctively. During primitive times of herd behavior, the emergence of a leader was based on survival, because naturally, humans feel safer when they are near a strong person, someone who can lead the way or inspires others to follow it. It is not very different nowadays; in politics, companies and even in the educational sector, leaders are needed and arise because those instincts are still in our biology: we feel safer alongside a strong person that is capable of showing us were to go and of stimulating them to follow him/her.

Leadership can be found in every aspect of life, consequently, there are as many definitions of leadership as authors who have tried to conceptualize it. Each one, from their own praxis, has given it different meanings. Nevertheless, the definitions converge in a single one: leadership is influence (Maxwell, 2007, p.1), as verified in Bhattacharyya (2019); du Plessis & Marais (2017); Paletta, Alivernini, & Manganelli (2017); Saaduddin, Gistituati, Kiram, Jama, & Khairani (2019); Sharp, Jarvis, & McMillan (2020). Meaning that leadership is not the capacity to achieve a position but to really influence other people, regardless of whether they are under direct command or not. Similarly, pedagogical "leadership" is the capacity to influence other people without exercising power or formal authority. When this influence is aimed at improving, we can talk about pedagogical leadership" (Bolivar, 2010b, p.34).

In school settings, leadership is a strategic aspect of educational efficiency and quality, to the point that it is considered "the second intraschool factor with the most significance" (Leithwood & McKinsey, cited by UNESCO, 2014). According to UNESCO (2014), Latin America has become aware of this significance and has included promotion of administrative school leadership among its educational policies. The relevance of the concept justifies a review, especially from the point of view of the impact leadership has on school contexts and on the institution's efficacy.

The objective of this study is to understand how school or pedagogical leadership has been conceptualized and the causal models that explain its correlation with learning outcomes. The documentary review methodology introduces, firstly, the theoretical grounds of school leadership, emphasizing on the evolution of leadership models and on its impact on student learning; secondly, the results of some empirical research that support the magnitude and type of effect among these variables. Finally, the article introduces relevant conclusions from the documentary review, as exhibited in articles by Bhattacharyya (2019); du Plessis & Marais (2017); Elswick, Cuellar, & Mason (2019); Myende, Ncwane, & Bhengu (2020).

Theoretical Fundamentals of School Leadership

The phenomenon of school leadership has been studied and conceptualized for less than 100 years. The significance of it being



researched lies in the fact that it is one of the main variables that lead to better performance of establishments and the system in general (OECD, 2008).

However, it is important to highlight that school leadership has not always been understood from the educational point of view, in the practice, results indicate that not every "leader" nor each "leadership style" are effective for certain environments. An analysis by Rodriguez (2011) focuses on the importance, functions and characteristics of pedagogical leadership, emphasizing it over administration-focused leadership, as seen in research by Bhattacharyya (2019); Paletta, Alivernini, & Manganelli (2017); Yan-Li & Hassan (2018). The difference is that the first one focuses on the curriculum, teaching and learning, while the second focuses on administrative management systems, documentary management, compliance with national regulation, among other administrative tasks. This is why functional leaders who focus on pedagogy achieve real and effective impact on faculty and students in educational centers (Rodriguez, 2011).

The following is an outline of the models with which school leadership has been studied and characterized, as well as of the theoretical approaches about its influence on student learning results.

Evolution of School Leadership Models

Murillo (2006) characterizes and introduces the changes of school leadership in time, from bureaucratic and centralized models to functional models of shared and decentralized leadership. Figure 1 summarizes the author's ideas regarding the evolution of the approaches. Initially, the study of leadership and direction was tackled from a general standpoint, without emphasizing on the school, deriving in the trait theory, behavior theory or contingency theory. All of which are substantiated in finding the ideal style, behavior, characteristics, and environment in which good leadership can be found.

On the one hand, the trait theory failed to find the exact personality, physical or intellectual characteristics that define a successful leader, finding that in fact, it depends on the context in which the leader develops. From then on, behavioral theories would look for behavior instead of "innate" characteristics, focusing on defining the characteristics of the job and the executives' behaviors. This research setting defined leadership styles such as authoritarian, democratic or *laissez faire*, and characteristics of a leader's effective conduct, such as: encouraging positive relationships, sustaining feelings of loyalty, attaining high performance standards, having technical knowledge and coordinating and planning.





Figure 1.

Source: compiled by the authors based on Murillo (2006).

Nevertheless, those characteristics and styles were not applicable to every environment, the resulting conclusion was that leadership depends on the setting in which it is developed. This condition originates the contingency theory in which an adequate leadership style depends on environmental and relational factors where it is developed. Within these contingency theories, factors that define leadership include: leadermembers relationship, structure of the task and power of position (Fiedler, cited by Murillo, 2006); characteristics of followers and environmental demands (House, cited by Murillo, 2006); and directive style and disposition of followers (maturity) (Hersey & Blanchard, cited by Murillo, 2006).

In the 60's and 70's, after the research turned into school leadership, approaches that classify school leadership styles arise: technical, humanist, educational, symbolic, cultural or focused on interpersonal relationships, student performance, program efficacy and administration.

Another trend in the study of school leadership is the approach of school efficacy to accomplish schools of quality. One of the most important mentioned by Murillo (2006) is instructive leadership, which is more focused on teaching, unlike the traditional, bureaucratic and organization-centered approach. However, it also focuses on describing the "ideal" characteristics of a school that strives for developing learning, instead of on those that needed improvement.

Then, transformational leadership arises, it is placed in the original models of the approaches that intend to improve education. Therefore, "this type of leadership... begins with the contribution of school directors to objectives linked with cultural change and the solution of organizational problems" (Murillo, 2006 p.43). Its application to the school encompasses: "the director's ability to encourage collegiate functioning, development of explicit, shared, moderately challenging and



feasible goals; and creating proximity development area for the director and the staff" (Garcia-Garduño, 2010).

According to Murillo (2006), some approaches have emerged in recent years, adding certain elements:

• Facilitating leadership, which describes the style exercised by power through others and not on them.

• Persuasive leadership, which is based on the leader creating an environment of optimism, respect, trust and intentionality and that are used to suggest and motivate change and attainment of goals.

• Sustainable leadership, which is based on the long-term of learning, leadership of others, justice, as well as the impact on the setting.

Bolivar (2010, p.32) explains that in the midst of the multiple leadership models' proposals "(strategic, sustainable, servant, emotional, ethical, transactional, etc.), the two most "potent" have been instructive or pedagogical leadership, coming from the movement of effective schools, and transformational leadership, related to the movement of school restructuring". Nevertheless, a noteworthy idea that seems to last in time, as per Murillo (2006), is distributed leadership, which goes beyond other approaches and taps into the skills of others in a common cause and focuses on leadership of the whole educational community instead of leadership of the director's top position. Thus, the role of the director shifts from a bureaucratic manager to an agent of change that can take advantage of the competences of community members and lead them to a common mission. This leadership generates an increased capacity in the school's problem solving, demands a more professional role of the faculty by making them assume their own leadership in their respective areas and scopes, and entails taping on knowledge, aptitudes, dexterities, efforts and illusions of the school community.

Theoretical Approach on the Impact of School Leadership over Learning

It is clear that good school leadership has a positive impact on student learning outcomes. What is less clear is the causal ways in which that occurs. Bolivar (2010a) presents the types of causal models that Hallinger & Heck (1998, 2010) have found in their research:

• Direct effect model: student performance depends directly on leadership, even if more variables are included. This model follows the first conceptualizations of leadership, in which the school largely relies on the leader's actions. Direct effects, as per Dhuey & Smith (2014), happen when directors directly interact with students through monitoring, behavior penalties, discipline controls, evaluation and improvement of student education.

• Mediated effects model: the role of leadership in this approach is to create a context. Here, leadership permeates firstly through teaching practices, school culture, professional development, etc., and then proceeds to impact student learning. A phenomenon called "spillover



effect" takes place, in which teacher's capacities and learning overflow towards students.

• Inverse effects model: corresponds to a vision in which school outcomes generate momentum towards leadership development.

• Reciprocal effects model: consists of a mutual relationship between leadership's own variables and not just between leadership and the mediating variables. Students' variables of leadership, capacity to improve and learn are mutually influenced throughout time.

According to Bolivar (2010a), studies found related to the first model (direct effects) are insufficient, while there is larger evidence related to the second model (mediated effects). The third model (inverse effects) lacks empirical evidence but researchers acknowledge it, whereas the fourth model (reciprocal effects) is one of the most extensive.

An example of the latter is the conceptualization of variables that influence student learning by Day et al. (2009), it explains that the influence of school leadership (independent variable) on student learning (dependent variable) is conditioned by moderating and mediating variables, which are also mutually influenced (see Figure 2). Independent variables consist of teacher and students' characteristics that condition leadership's effect, while dependent variables include the school's characteristics over which leadership can have a direct effect.



Figure 2.

Variables that intervene in student learning. Source: by Bolivar (2010a) based on Hallinger & Heck (1998, 2010).

Bolivar (2010) agrees with this propositions that identify the school as the place in which the director is not at the top of the pyramid but mediating a network of relationships (see Figure 3). In this network of relationships, leadership indirectly contributes to increased student learning through its influence on the faculty or in other aspects of the organization (Bolivar, 2010b). This last relationship may be quantitatively evidenced in Figure 4, in which Bolivar (2010b) indicates the level of influence existing in the variables' causal relationship.





In this case, the director may largely influence working conditions, however, these have little influence on the change of practices and school performance; moreover, the director's influence on teachers' capacities is low, although the influence of the latter on school performance is high.



Figure 3. School as organization for learning Source: Bolivar (2010b).

For its part, Leithwood (2011) conceptualizes the influence of leadership on student learning as largely indirect. This indirect influence happens in four routes: rational (teaching quality, teacher retention, own and collective efficacy, curriculum, academic pressure, among others); emotional (teaching efficiency, commitment, stress, trust, mood); organizational (pedagogical time, complexity of the teaching workload, professional networks, structures to support collaboration); and familial (parents' expectations, parental models, connections with adults, space and time at home for school-related work).





METHOD

The research herein is based on literature review, therefore it pertains the review of some documents that indicate the phenomenon's trend.

Empirical Research on the Effects of School Leadership

There is an abundance of studies (with different methodologies) that have measured the effect of leadership on student learning in school settings. Most of the early studies are in English, and in recent years they have been implemented in Latin America. The issue has been so extensively developed that there are studies of documentary review that conduct meta-analysis to obtain conclusions.

For instance, Sun & Leithwood (2014), following a documentary review of 24 studies that evaluated direct effects of Transformational School Leadership (Kvashnina & Martynko, 2016) on student accomplishments, found a small yet significant connection in terms of direct positive effect (with an average correlation coefficient of 0.09). The authors also found that some Transformational School Leadership practices such as "building collaboration structures" and "providing individual consideration" accounted for larger contributions over student accomplishments (r=0.17 and r=0.15, respectively) than other practices, which ranged between r=0.03 and r=0.05. "The use of leadership methods by teachers with positive answers, inspirational speeches and accolades may drive results and interaction with peers, while teaching behavior sets a moral style to generate a feeling of accomplishment" (Lan, Chang, Ma, Zhang, & Chuang, 2019, p.53).

In terms of indirect effects through moderating and mediating variables, Sun & Leithwood (2014) found mixed results, research such as that by Solomon (2007) reported an elevated correlation (r=0.79) between Transformational School Leadership, faculty commitment, collective efficacy, SES and student performance; while studies such as that by Nicholson (2003) failed to find a significant association between Transformational School Leadership and the faculty's collective efficacy; and Sun (2010), in a more thorough analysis, found that the effects of Transformational School Leadership on student accomplishment are not moderated by school level (primary, middle, high school).

Transformational leadership had a "small" positive influence on student results in the documentary review conducted by Robinson, Lloyd, & Rowe (2014), who used a measure of the magnitude of the standard deviation effect and found that instructive leadership (ES=0.42) has an impact three or four times higher than transformational leadership (ES=0.11) and other types of leadership (ES=0.30). This result is due to the fact that transformational leadership focuses more on the relationship between leaders and teachers and in the quality of their relationships than on the relationship with students.

This revision also zoomed in on the Colombian context and on development in Latin America with the intention of identifying a new



generation of business leaders, entrepreneurs and innovators that support productive transformation and create new companies for sustainable development of the country and of its less productive areas (which nowadays have the potential to become development driving forces) that offer added value to the community (Arias-Velandia et al., 2018).

Similarly, Horn (2013) finds that school leadership has a bigger effect on teacher results than on student results, leadership accounts for 7% of the variance between student performance in language and 8% of the variance in mathematics, while these effects are greater than those found between school leadership and teacher performance (which account for 11% - 28%).

Another study by Freire & Miranda (2014) measures the direct effects between leadership and learning in school. Based on data from the School Survey in the framework of the Young Lives study, which takes place in four developing countries: Ethiopia, India, Peru and Vietnam, they found that correlation between pedagogical leadership and student academic performance is positive and meaningful, for reading comprehension it was of r=0.25 and in mathematics it was of r=0.14. Nevertheless, the authors understand the conditioning of mediating and moderating variables because they have determined that the director's leadership may have better impact on student performance if the school's conditions and pedagogical practices are suitable, meaning, the level of preparation and knowledge on how to teach content have a key role as previous conditions for said leadership to have effects on teaching efficiency. Finally, the study concludes that, on a greater scale, pedagogical leadership positively affects students with low and average performance, who are often found in rural schools and low socioeconomical contexts.

Other studies have evaluated the outcome of leadership not just from the perspective of school learning. Ruiz (2011) learned that the correlation of transformational and transactional leadership styles was of r=0.57 and r=0.56, respectively. In this given case, the institution's efficacy did not just take into account learning accomplishment but analyzed teacher capacities, curricular level, fulfillment of the Institutional Education Project, teacher commitment and attainment in teaching groups.

The leadership model with the greatest acceptance in recent years is distributed leadership, Lopez & Gallegos (2017) confirm that it has a statistically significant incidence on learning results within the mathematics SIMCE test in the study's educational institutions. The study by Hallinger & Heck en Harris (2009) came to similar conclusions, they confirm that after summarizing the results of several studies, distributed leadership displays a major coeffect of school improvement processes.

Bolivar (2010a) reworks results obtained by Leithwood, Harris, & Hopkins (2008) regarding the outcome of distributed leadership in faculty and students. As seen in Figure 5, the degree of correlation differs from the conceptual framework proposed by Bolivar (2010b) in Figure 4. In this case, the greatest influence of leadership on mediating (indirect)



variables takes place in teacher working conditions (r=0.55), however, the intermediate variable has the least impact on academic achievement and results (r=0.08); while the variable "motivation and commitment" shows the lowest correlation (r=0.25) but has the largest effect on academic accomplishment (r=0.65). The total effect of leadership on academic accomplishment may lead to state that the correlation related to working conditions is of r= 0.044 (0.55*0.08), related to motivation and commitment is of r= 0.1625 and related to capacity is of r= 0.1748. The greatest impact of distributed impact on student academic achievement is sustained by improving teacher capacity. Finally, the overall sum of this study's three effects allows to conclude that distributed school leadership impacts student academic achievement with a correlation index of 0.3813.



Figure 5.

Effects of distributed leadership on teachers and students. Source: Bolivar (2010a), adapted from Leithwood et al. (2008).

It is important to highlight that these results by Leithwood et al., (2008) also acknowledge mutual effects between mediating variables (of r=0.40 and r=0.34), which concurs with the fourth model of reciprocal causal relationships by Hallinger & Heck (1998, 2010).

Finally, one of the most complete studies (also placed in the reciprocal effects model) was conducted by por Day et al. (2009), they intended to create a model (see Figure 6) that engaged the key dimensions of leadership (red and light red colors), dimensions of the distributed leadership practice (orange), dimensions that act as mediating factors (blue) and dimensions of intermediate outcomes (green) that have direct or indirect effects on changes in academic results (Wills, 2016) of students (yellow) over three years. From left to right, correlations are evinced between the leadership dimensions and mediating dimensions, among them, and between the latter and academic results.

In the end and as per this model, there are three variables that influence student academic performance: personal (r=0,2), learning and teaching (r=0,11) and change in student behavior (r=0,14). This complex grid of relationships demonstrate the difficulty of setting an unequivocal direct direction between leadership and student learning outcome.





Figure 6.

Modelling of structural equations based on the perception of the main leadership practices and the change of student outcomes over three years (2003-2005). Source: Day et al. (2009).

DISCUSSION

School leadership constitutes one of the variables with the largest influence on educational institutions' efficiency. The way in which it has been understood was not always as flexible and detailed because the concept has evolved from rigid, bureaucratic and administrative ideas to models that are more transformational, distributed and pedagogical.

In turn, theoretical approaches have characterized the effects of leadership on learning using models that differentiate between direct, indirect, inverse and reciprocal influences of dependent, independent, mediating and moderating variables.

Moreover, there is ample empirical evidence to prove that there is a positive (direct and indirect) impact of school leadership on learning. Nevertheless, the direct effects have low or null correlation. Yet, the "spillover effect" is responsible for leadership influencing mediating variables first and then permeating learning results. This can be verified in the fact that there are correlation indexes that are much higher between leadership dimensions and intermediate variables, such as motivation and teacher capacities, than between leadership dimensions and student performance.

It is necessary for further studies intended to study the impact of school leadership on student academic outcome to be clear on the theoretical approach and methodological tools, since as observed, direct and indirect variables influencing student learning are diverse. These points are critical for future research in the region, where topics such as this one have been scant.



References

- Bhattacharyya, E. (2019). Leadership competencies and leadership style in aspiring cluster schools of excellence. Pertanika Journal of Social Sciences and Humanities, 27(2), 1111–1129. Recuperado de: https://www.scopus.com/inward/record.uri?eid=2s2.0-85069161478&partnerID=40&md5=739763111cd3151ff9f56b46af94b5b7
- Bolívar, A. (2010a). ¿Cómo un liderazgo pedagógico y distribuido mejora los logros académicos? Revisión de la investigación y propuesta. Revista Internacional de Investigación en Educación, 3(5), 79-106.
- Bolívar, A. (2010b). Liderazgo para el aprendizaje. Organización y Gestión Educativa, (1), 15-20.
- Day, C., Sammons, P., Hopkins, D., Harris, A., Leithwood, K., Gu, Q., ... Kington, A. (2009). The Impact of School Leadership on Pupil Outcomes: Final Report (Investigación No. DCSF-RR108). University of Nottingham.
- du Plessis, E., & Marais, P. (2017). A Grounded Theory Perspective on Leadership in Multicultural Schools. Journal of Asian and African Studies, 52(5), 722–737. https://doi.org/10.1177/0021909615612122
- Freire, S., & Miranda, A. (2014). El rol del director en la escuela: el liderazgo pedagógico y su incidencia sobre el rendimiento académico. Avances de investigación, 17, 1-64.
- Escuelas primarias públicas de México. Los primeros años en el puesto. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 8(4), 27– 35. https://doi.org/10.1104/pp.110.164053
- Elswick, S., Cuellar, M., & Mason, S. (2019). Leadership and School Social Work in the USA: A Qualitative Assessment. School Mental Health, 11(3), 535–548. https://doi.org/10.1007/s12310-018-9298-8
- Hallinger, P., & Heck, R. (1998). Exploring the principal contribution to school effectiveness: 1980- 1995. School Effectiveness and School Improvement, 9(2), 157-191.
- Hallinger, P., & Heck, R. (2010). Collaborative leadership and school improvement: understanding the impact on school capacity and student learning. School Leadership & Management, 30(2), 95-110.
- Kvashnina, O., & Martynko, E. (2016). Analyzing the potential of flipped classroom in ESL teaching. International Journal of Emerging Technologies in Learning, 11(3), 71–73. https://doi.org/10.3991/ ijet.v11i03.5309
- Harris, A. (Ed.). (2009). Distributed Leadership: Different Perspectives. London: Springer Science & Business Media.
- Horn, A. (2013). Liderazgo escolar en Chile y su influencia en los resultados de aprendizaje (Tesis Doctoral). Universidad Autónoma de Madrid.
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. School Leadership and Management, 28(1), 27-42.
- López, P., & Gallegos, V. (2017). Liderazgo distribuido y aprendizaje de la matemática en escuelas primarias: el caso de Chile. Perfiles educativos, 39(158), 112-129.



- Murillo, J. (2006). Una dirección escolar para el cambio: del liderazgo transformacional al liderazgo distribuido. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 4(4e), 11-24.
- Myende, P., Ncwane, S., & Bhengu, T. (2020). Leadership for learning at district level: Lessons from circuit managers working in deprived school contexts. Educational Management Administration and Leadership. https://doi.org/10.1177/1741143220933905
- Nicholson, J. (2003). An exploration of the ability to predict student achievement from leadership behaviors, teacher job satisfaction, and socioeconomic status. Abstracts International, 64(03).
- Arias-Velandia, N., Rincón-Báez, W., Becerra-Plaza, G., Mejía-Rodríguez, A., Salas-Díaz, R. (2018). Retos a los programas de administración, una mirada al saber. Resultados de la evaluación externa (2012-2016). Bogotá: Institución Universitaria Politécnico Grancolombiano.
- OCDE. (2008). Education and training policy. Improving school leadership: Policy and practice. OCDE.
- Paletta, A., Alivernini, F., & Manganelli, S. (2017). Leadership for learning: The relationships between school context, principal leadership and mediating variables. International Journal of Educational Management, 31(2), 98– 117. https://doi.org/10.1108/IJEM-11-2015-0152
- Robinson, V., Lloyd, C., & Rowe, K. (2014). El impacto del liderazgo en los resultados de los estudiantes. Un análisis de los efectos diferenciales de los tipos de liderazgo. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 12(4), 13-40.
- Rodríguez, G. (2011). Funciones y rasgos del liderazgo pedagógico en los centros de enseñanza. Educación y educadores, 253-267.
- Ruiz, G. (2011). Influencia del estilo de liderazgo del director en la eficacia de las instituciones educativas del consorcio «Santo Domingo de Guzmán» de Lima Norte (Tesis de maestría). Universidad Nacional Mayor de San Marcos, Lima.
- Saaduddin, S., Gistituati, N., Kiram, P., Jama, J., & effects Khairani, Υ. (2019).The of principal leadership effective school management. International Journal on of Innovation, Creativity and Change, 5(6), 359-367. Recuperado de: https://www.scopus.com/inward/record.uri?eid=2s2.0-85084479515&partnerID=40&md5=a942aad510a1ea42fdaf75d9f5769522
- Sharp, K., Jarvis, J., & McMillan, J. (2020). Leadership for differentiated instruction: teachers' engagement with on-site professional learning at an Australian secondary school. International Journal of Inclusive Education, 24(8), 901–920. https:// doi.org/10.1080/13603116.2018.1492639
- Solomon, C. (2007). The relationships among middle level leadership, teacher commitment, teacher collective efficacy and student achievement (Tesis Doctoral).
- Sun, J. (2010). A review of transformational leadership research: A metaanalytic approach (Tesis doctoral inédita). University of Toronto, Toronto
- Sun, J., & Leithwood, K. (2014). Efectos del liderazgo escolar transformacional en el rendimiento de los estudiantes. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 12(4), 41-70.



- UNESCO. (2014). El liderazgo escolar en América Latina y el Caribe: un estado del arte con base en ocho sistemas escolares de la región. Imbunche Ediciones Ltda.
- Yan-Li, S., & Hassan, D. (2018). Leadership behaviour on job satisfaction in Malaysian national secondary schools: Motivation and hygiene satisfaction. Malaysian Online Journal of Educational Management, 6(3), 48–67. https://doi.org/10.22452/mojem.vol6no3.3
- Wills, G. (2016). Principal leadership changes and their consequences for school performance in South Africa. International Journal of Educational Development, 51, 108–124. https://doi.org/10.1016/ j.ijedudev.2016.08.005



