EDICIONES
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Networking in Spanish Schools: Lights and Shadows

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Abstract. Introduction. Networking is a school improvement strategy with high expectations. The rise of collective efficacy, the impact on student outcomes or the possibility to provide more collaborative and equitable scenarios are just some of these. The forms of collaboration and networking adopted in the Spanish education system are analyzed in this article, as well as how policy and practice are providing a framework for the development of networks. Method. A mix of case studies and documentary analysis was used. Six autonomous communities (Catalonia, Murcia, Andalusia, The Basque Country, Madrid and Galicia) were selected to examine their evidences about networking in education. Results. There are alliances formed to implement networked actions within, between and beyond schools as part of research supported by projects, regulations, programs and initiatives of diverse natures. In the cases summarized it can be checked that there is a change of paradigm from isolation to collaboration, and that this alternative way of seeing teaching and learning is growing exponentially. Discussion. There is no doubt that the arrival of collaborative networking in Spain has sparked intense debates about its lights and shadows. The potential of networking and the barriers that this innovative form of understanding education is experiencing in this part of Europe is discussed. Finally, the illustrative examples and advances explored allow enable the reader to get closer to the polyhedral dimension that networking is adopting in this country.
Keywords: networking; collaboration; school improvement; collective efficacy.

Summary. 1. Theoretical lens. 2. Networks in Spanish education policy. 3. Networking practices in Spanish schools. 4. Lights and shadows. 5. Final thoughts. 6. References.

[es] El trabajo en red en las escuelas españolas: Luces y sombras

Resumen. Introducción. El trabajo en red es una estrategia de mejora de la escuela con altas expectativas. El aumento de la eficacia colectiva, el impacto en los resultados de los estudiantes o la posibilidad de proporcionar escenarios más colaborativos y equitativos son solo algunas de ellas. En este artículo se analizan las formas que adopta la colaboración y el trabajo en red en el sistema educativo español, así como la manera en la que la política y la práctica están proporcionando un marco para el desarrollo de las redes. Método. Se ha utilizado una combinación de estudio de casos y análisis documental. Se seleccionaron seis comunidades autónomas (Cataluña, Murcia, Andalucía, País Vasco, Madrid y Galicia) para examinar sus evidencias sobre el trabajo en red en la educación. Resultados. Existen alianzas formadas para llevar a cabo acciones en red dentro, entre y más allá de las escuelas como parte de investigaciones apoyadas por proyectos, regulaciones, programas e iniciativas de diversa índole. En los casos resumidos puede comprobarse que se está produciendo un cambio de paradigma, pasando del aislamiento a la colaboración y que esta forma alternativa de ver la enseñanza y el aprendizaje está creciendo exponencialmente. Discusión. No cabe duda que la llegada de las redes de colaboración a España ha suscitado un intenso debate sobre sus luces y sombras. En esta sección se discute el potencial del trabajo en red y las barreras que a partir de esta forma innovadora de entender la educación se están experimentando en esta parte de Europa. Finalmente, los ejemplos ilustrativos y los avances explorados acercan al lector a la dimensión poliédrica que el trabajo en red adopta en este país.
Keywords: trabajo en red; colaboración; mejora escolar; eficacia colectiva.

Sumario. 1. Marco teórico. 2. Las redes en la política educativa española. 3. Prácticas de trabajo en red en las escuelas españolas. 4. Luces y sombras. 5. Pensamientos finales. 6. Referencias.

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1. Theoretical lens

Collaborative networking among professionals who are involved in education (leaders, educators, scholars, policymakers and other educational and social agents) is essential for survival, and even more so in these new times of uncertainty, in which face-to-face human interactions are fewer due to the crisis caused by COVID-19 (Harris and Jones, 2020). Although the access to technology enables people to be connected more than ever, the social distant imposed is fragmenting the relations and social modes of behavior in the citizens of the current "masked society". Since the pandemic began it has been demonstrated at all levels that 'people miss people' (Beauchamp, Hulme, Clarke, Hamilton and Harvey, 2021) and so that networking is becoming a powerful ally in the fight against COVID-19 (Azorín, 2020a).

It is important to clarify what networking is and what it implies in the field of education. Starting with its conceptualization, Kools and Stoll (2016, 5), summarize networking in education as 'an extended group of people with similar interests or concerns who interact and exchange knowledge for mutual assitance, support and to increase learning'. Robinson, Gallagher, Duffy and McAneney (2020, 183) conclude:

> In education, networking seeks to connect the relational structures of multiple discrete schools into much larger systems or ties. This has the potential advantage of allowing teachers to look beyond the resources and expertise of their own school, to forge new relationships or strengthen existing ones, with peers in other educational settings.

This form of understanding networking in education includes crossing boundaries and building bridges within, between and beyond schools as essential strategies to be applied in education systems globally, where Azorín (2020b, 3) argues that "networking is becoming ever necessary to tackle problems and establish the adjustments demanded by contemporary education". In these changing times, one of the greatest challenges education faces is to build links and bonds that can have a real impact on teaching and learning.

Beyond school limits, Fullan (2016) states that the frontier between the school and the outside world is becoming ever easier cross. When collaboration extends between schools, the benefits include crossing barriers and paving ways for the exchange of knowledge, as well as mobilizing a much wider range of resources than those accesible to a single school (Azorín and Muijs, 2018; Chapman, 2019).

All this is thought is grounded in solid theory, which favors the development of networking, as well as in firm empirical evidence, which gives ever greater support to the increase in the number of schools that are signing up to this leading-edge approach (Azorín, Harris and Jones, 2020). The call for collaboration should not, therefore, be put off any longer, and the next sections supports this assumption. This article focuses on the forms collaboration and networking take in the Spanish education system, as well as how policy and practice are providing a framework for the development of networks.

2. Networks in Spanish education policy

Spain's network map has a diverse nature, in which there are pioneer policies and practices of interest for those in the scientific community wishing to learn about the current situation of networks in this part of Europe (Azorín, 2019). The political context of Spanish education is based on a decentralized model consisting of 17 autonomous regions and 2 self-governing cities. The report of the European Commission (2018, 47) informs that:

> In Spain, the central administration supports a number of online communities, which enable teachers to share resources and to communicate. The Web Procomún is one such example. The promotion of such networks is consistent with Spanish education policy, which stresses the importance of teacher cooperation, while recognizing that the national administration has no competencies in schools.

In recent years, efforts have been made to regulate the implementation of collaborative networks between professionals working in different educational environments (Azorín, 2020d). To this end, diverse recent legislation on networks in the different autonomous communities of Spain has emerged. This is the case of *Extremadura*, whose 'Decree 75/2015, dated 21 April, regulates the functioning of Social Support and Educational Innovation Networks in publicly funded non university centers of education in its Autonomous Community'; the *Canary Islands* with the 'Resolution of the Canary Islands Director for Interuniversity Quality and Education Assessment, which issues a call for the selection and renewal of non-university public teaching centers to participate in innovation educational networks in the academic year 2019-2020'; and *Navarra* with 'Resolution 192/2019, dated 11 April, of the Director General of Education, which regulates integration in the various School Networks, including the Network of Health Promoting Schools, the Network of Solidarity Schools and the Network of Sustainable Schools for the non-university education centers of the Community of Navarra as of the academic year 2019/2020' (a recent regulation on networking in education for this community).

These three policies seek to promote collaboration between schools, professionals and their communities, in order to respond more effectively to the requirements of the current society. A reading of these legislations leads to the

deduction that there is a similar organization to put networking in action which includes a coordinating committee, a group of trained facilitators for each network and an evaluation committee. There are also incentives for participating in the network activity and mechanisms for monitoring and evaluation. Indeed, a comparative analysis of the networking policies from Extremadura and the Canary Islands focused on the possibilities offered by this nascent legislation which sets out the conditions for regulating networking in Spanish education (Azorín and Muijs, 2017).

In the case of Navarra, the resolution recognizes in its preamble that networks favor the generation of ideas, horizontal exchange and cooperation, accompaniment and joint work, the development of good practices and the resolution of difficulties, which is why it is stated that networks constitute a valuable instrument in educational training and innovation. Therefore, the schools of this community are invited to present projects to participate in the existing networks (Network of Health Promoting Schools, Network of Solidarity Schools and Network of Sustainable Schools). This regulation responds to an incentivized way of working in a network. After the presentation and approval of the project that the participating schools are required to develop, the institutions finally selected receive the funding to put their proposal into effect.

In short, in Spain legislation is being passed at the local level to regulate the staging of networking in education. This generates inequalities between communities with schools that have access to regulated network collaboration, and schools that, in contrast, are led to voluntary involvement in this type of network without political backing or funding from their communities. Due to the impact and rapid growth that networking is having in education, from the state point of view, the Spanish political authorities should consider a common standard that would establish solid and equitable bases for this innovative practice.

The new education law recently enacted (December 2020), popularly known as LOMLOE, states for the first time in Spain that the Ministry of Education and the educational administrations will promote the dissemination of experiences and the exchange of relevant results of educational research and innovation among networks of schools and universities. Likewise, the law establishes that research and innovation programs will be promoted by fostering collaborative work and professional and school networks for the promotion of training, self-evaluation, and improvement of teaching activity. This is a great step forward in Spanish educational policy, since until now collaborative networks have not had the desired impetus in school legislation. Therefore, it can be said that there are glimpses of progress in this direction, although time will tell the degree of involvement in these networks on the part of schools and the professionals working in them, as well as the support of the state government and the autonomous communities in putting this policy into practice.

In summary, Spain is presented here as an example of a country that is exploring the possibilities offered by networking in terms of educational policy, as explained in this section, but also in school practice, as indicated below.

3. Networking practices in Spanish schools

This article describes an updated corpus of research that supports collaborative networking in Spanish education system. From a methodological point of view, a mix of case studies and documentary analysis was used. Six autonomous communities (Catalonia, Murcia, Andalusia, The Basque Country, Madrid and Galicia) were selected to examine their evidences about networking in education. The search for information to document the case studies was carried out using mainly the specialized literature that appears in Google Scholar, Dialnet and Web of Science under the descriptors in Spanish "school networks" (redes escolares) and "collaborative networking" (trabajo en red colaborativo) in education.

The criteria followed for the selection of the studies and research documenting these cases were as follows: *accessibility of the sample*, publications that are available in the aforementioned databases for consultation and downloading*; research carried out in Spain*; *subject matter associated with networking in the educational field*, including in this classification experiences of university-school collaboration; and *publications that mainly provide empirical data*, thus incorporating a relevant overview of the progress of networking and the findings obtained in different school scenarios.

Networks have been implemented for the improvement of education in the international level with pleasing results (Azorín, 2020c). This trend has also exerted a notable influence on the Spanish education system, which is strongly committed to a school network model. Due to the huge interest in networking in Spanish schools, Azorín and Arnaiz (2018) coordinated a special publication on the collaborative networks that are emerging in force in this country. The aforementioned special edition compiled a series of experiences aimed at advancing in the development of this interesting and emerging line of research (see the Spanish journal *Profesorado. Revista de Currículum y Formación del Profesorado*, volume 22 number 2).

This section introduces networking in action in the Spanish context. In particular, it presents evidence of networking in the following autonomous communities: Catalonia, Murcia, Andalusia, The Basque Country, Madrid and Galicia.

Catalonia

This community is at the forefront of pedagogical renewal movements. Influenced by the international context, the first Spanish networking initiatives in education occurred in Catalonia more than a decade ago (Longás, Civís and Riera, 2008), where today there exists a strong network culture. The emergence of networking in Catalonia stems from collaboration between social and educational institutions.

Civís and Longás (2015) presented an analysis of local educational networks in Catalonia, where networks bring together entities and agents in the area around shared socio-educational aims (e.g., the transition from school to work or school success indicators). The experiences described in their publication suppose a practical paradigm for socio-educational services with a strong community approach. Along the same lines, Longás and Riera (2016) monitors a socio-educational network aimed at school success and the empowerment of young people.

Yet another project, CaixaProinfancia, seeks to reduce social and educational gaps. The idea is a response to child poverty through community work and networking (Longás, De Querol, Ciraso, Riera and Úcar, 2018). Within this programme, Longás, Riera and Civís (2016) present the advisory process in which twelve Spanish universities participated, as an example of professional collaboration. Similar findings from this type of collaboration aimed at reducing social and educational gaps were published by Vilar, Longás and De Querol (2017), who summarize a proposal based on collaborative and inter-sectoral work.

Lastly, Duran, Corcelles and Miquel (2020) analyze the activity of the *Basic Competencies Network* promoted by the Department of Education of the Catalan Government, which has twelve networks grouping approximately 700 schools. In these networks there is a large number of teachers tasked with promoting and accompanying transformative processes for the improvement of student learning.

Murcia

This region has championed pioneering research projects with networking as the sign of identity. Azorín and Arnaiz (2016) presented the findings of a network to exchange knowledge and practices aimed at enhancing inclusion. The initiative was funded by the *Spanish Ministry of Economy and Competitiveness* under the research project "Educación Inclusiva y Proyectos de Mejora en Centros de Educación Infantil, Primaria y Secundaria" (EDU2011-26765). The project comprised three stages:

1. A self-evaluation of schools, in which several schools self-assessed their response to student diversity. This served to identify strengths and weaknesses and to specify lines of change (Arnaiz and Azorín, 2014).
2. Following the self-assessment by the schools, next steps were planning, implementing and evaluating how to improve (Arnaiz, Azorín and García-Sanz, 2015).
3. The third stage went into the support networks and collaboration between schools and their communities (Arnaiz, De Haro and Azorín, 2018).

The project comprised leadership teams, teachers, university researchers, community members and other social agents working together for a better use of social capital and a more effective management of the community resources in the local area.

Andalusia

This is another autonomous community that is a reference in networking in Spain. In Seville, Moriña and Melero (2016) carried out a project based on social networks and academic support that highlights the importance of having strong support networks to contribute to educational and social inclusion, and emphasizes the role universities are expected to play in this.

Interinstitutional collaborative networks have also been developed in Seville, Cadiz and Huelva by Cotrina, Gallego and García (2017), who worked on the exchange of knowledge and the prevention of absenteeism among adolescents. Another recent example led by these authors presents professional teams working on the construction of local networks that address the processes of school disengagement, creating a network of support between schools and social organizations (Gallego, Cotrina and García, 2019).

Hernández and Navarro (2018) analyze the contributions of a school network of nine Andalusian schools which collaborate to improve the transition from primary to secondary education. In this experience, advisors, leadership teams and teaching staff work together sharing strategies, reflections and activities related to the transition process from one educational stage to another. In their work, Hernández and Navarro (2018, 29) concluded that "working in education networks promotes the creation of an inter-school organizational structure, responsibility sharing, collaborative learning, consensus-building between schools, and an increase in a work philosophy based on equity, learning for all, and school improvement".

An important initiative in Seville was the political model implemented by the local government with the 'Redes Educativas de Centros Escolares' (educational networks). According to Suárez and Muñoz (2017), working via networks and the cooperation that underlies this responds to the idea of acting from a wider and more global vision of the current society for school improvement purposes.

There are more studies in this area, such as Hernández, Navarro, López and Ordoñez (2013), a study of school networks which analyses the evaluation of teacher center's advisors; López, Navarro and Hernández (2016), who explore the impact of educational networks of schools from the perspective of collaborative work between teachers and

schools; Navarro and Hernández (2017), a case study on collaborative learning designed for education processes in a specific working environment– autism– to support the exchange of academic experiences through networks; Navarro, Hernández, Ordoñez and López (2013), where networks are presented as platforms for educational improvement, and Navarro, López and Hernández (2017), who reported findings by research that prevented professional isolation of teachers by using networks, concluding that collaborative networking drives teachers' professional development. A further contribution is the proposal developed by López-Yañez, Perera, Bejarano, Del Pozo and Budia (2014), who analyze the social network emerging from teachers' relationships in six Andalusian primary schools.

In Cordoba, the work of Mérida, González and Olivares (2012) collected information and evaluated an innovative experience based on school-university learning networks, and a final significant example is Malaga, where Ruiz-Román, Molina and Alcaide (2019) presents practice-based evidence of a network support program that works with vulnerable children in a disadvantaged area called *Los Asperones*. As Alcaide, Ruiz-Román and Molina (2017) state, the residents of this particular context are at risk of exclusion and focused on survival. Ruiz-Román, Molina and Alcaide (2018) explained the specific actions taken to create educational opportunities for children who live in these challenging conditions. These actions include various agents (educational, cultural and social) who are collaborating to increase equity and to fight exclusion through networking.

The Basque Country

The Basque Country has also been a pioneer in educational innovation and experiences related to networking. In this part of Spain, educational authorities have been financing the development of collaborative networking. There are three clearly differentiated projects supported by the Department of Education, Universities and Research (Departamento de Educación, Universidades e Investigación, 2012):

- *Amara Berri System*, a project based on cooperation between schools that learn from each other.
- *Learning Communities*, which is based on the collaboration of all the agents that form part of the educational community of different schools.
- *Kalitatea Hezkuntzan,* a school network with good practices that seeks the improvement of student learning and enables the exchange of experiences and models of pedagogical intervention.

Research has been published in this field too, as is borne out by the work led by Martínez, Alonso, Martínez and Alonso (2018), which advocates collaboration actions and socio-educational networks to favor the inclusion of vulnerable children. Elsewhere, Sales, Moliner, Amiana and Lozano (2018) led a project in the Autonomous Communities of Valencia, the Basque Country and Murcia, where inter-sectorial collaboration was put into practice with non-government organizations, universities, associations, teacher training centers and other institutions of education, volunteers and participants involved in networking exchanges.

Madrid

In Madrid, Serrano and De la Herrán (2018) analyzed the creation of a social and educational network under circumstances of social vulnerability. The main goal of this research was to describe the creation process of the network inside a socially excluding environment, which may be useful for those communities wishing to incorporate a socio-educational network approach. In the same line of argument, Márquez, Graña, Moreno-Medina and Villena (2017) explore the support relationships among schools from Madrid that are located in a challenging socioeconomic context. They study the links and bonds between schools, considering the type of relation among educational actors and features such as duration, purpose and existing form of support between each other. As can be seen, both studies describe experiences in underprivileged environments and count on networking as a sign of identity, as a strategy for school improvement, and as a common tool available to overcome the difficulties that professionals involved face.

Although few publications focus their attention on this part of Spain, the case of Madrid has been included as an autonomous community that is also beginning to take important steps to embrace this vanguard. Briefly, in this area it is worth highlighting the commitment to private initiatives that are being led by the management and teaching teams of the different schools that are committed to the fight against inequalities and the promotion of equity in education under the banner of networking.

Galicia

Galicia is another place where collaborative networking in education is operating. Parrilla, Muñoz-Cadavid and Sierra (2013), who have set up collaboration projects between schools in the north of Spain, defend the commitment of education at the service of the community and they focus on networks as levers of social change. These authors have led experiences in this territory based on the contributions of local development and community work in the

educational field. One innovative proposal in this regard is the project "A Estrada Inclusiva", in which collaborative processes were promoted through a network created to respond to shared educational needs among nearby schools. Parrilla, Raposo-Rivas and Martínez-Figueira (2016) describe education networks based on this initiative, with a special emphasis on the importance of mobilization and the joint construction of knowledge through shared research work. At the end of the project Parrilla, Sierra and Fiuza (2018) summarize essential features about inter-school networking and collaboration that come from the lessons learned in this part of the country: the change requires a group project; the change is slow but steady; collaborative networking follows flexible, cyclical, not linear, processes; the network can operate at different levels of participation in its various activities; the inter-schools network provides a common point for joint thinking and joint action; network learning processes are mediated by school cultures; institutional work has a practical and innovative orientation; it is a revitalizing core for democratic participation and research; the network mobilizes the social capacities of the participant schools; and it is a strategy to link and open up the school to the community.

Certainly in this territory there are experiences that are beginning to provide results on the application of networking in education. However, much remains to be done for proposals of this type to become generalized practice. The arrival of collaboration networks in Spain has sparked intense debates about its lights and shadows. The term "lights" refers to the possibilities and strengths that come from working in networked schools, while the concept of "shadows" has to do with the barriers and weaknesses derived from putting networking in action. The next section addresses the power of networks and the benefits/difficulties to be gleaned from their use in socio-educational environments.

4. Lights and shadows

The initiatives and projects described in the cases selected are providing an alternative way of seeing education and affording illustrative examples and advances in this field of knowledge. Some of the "lights" that networks can bring to school life are commented below.

Open up to the community and extended education

Educational organizations and professionals have to make efforts to open up to the community and foster support links among the various groups, services and institutions which are in one way or another involved in school life. Fullan and Boyle (2014) recommend taking advantage of this wave of collaboration and understand that the community has to be the leading player in educational change. Examples of this new educational philosophy can be seen specially in the cases of Catalonia, Murcia, Andalusia and Galicia.

The extended education paradigm is widely discussed by Muijs, Ainscow, Chapman and West (2011), who conclude that there is a need for more joint collaboration between the different agencies and professionals working with children. Martínez and Fernández (2018), who collect educational projects that have their seeds in the Spanish school system, present initiatives that cross borders and connect environments, contexts, and scenarios (school, work, social and community). This corresponds to what is known as "extended education", which is inspired by learning ecologies and takes place in multiple contexts. Among the cases covered in this article, *Los Asperones* represents a clear example of extended education where the support of socio-educational agents is vital.

Equitable access to resources and greater inclusion

Another positive aspect promoted by networking coalition is more effective management of the resources available to schools and educators in the community. There are networks that make available a bank of resources (either in digital or printed format) to the schools involved with cards, plans, projects, protocols and programs that contain information of interest to those within the alliance. From the point of view of equity, this resource bank reduces gaps and makes it easier for all participants to have access to different materials and proposals. When there is a predisposition to collaborate and share, knowledge ceases to be a private plot and becomes an open field, which increases the resources available to everyone.

In the experiences described in The Basque Country, Madrid, Andalusia and Catalonia (among others) with students at risk of exclusion, the management and teaching teams have seen in networking and in shared resources an opportunity to overcome inequalities and to make more resources available to all students, regardless of their origins and starting point. Networked collaboration fosters the generation of spaces, times and commitments so that different educational and social communities can enrich themselves by sharing materials, experiences and information (Azorín, 2017). Indeed, Rauch (2016) corroborates the power of networks as bridges and communication channels for the direct exchange of practice and knowledge. In this respect, networks provide the option to discuss current issues of education research with other colleagues, and to manage information on innovation projects undertaken in neighboring schools.

In an attempt to look at collaboration as a strategy for promoting quality and equity in education, Ainscow (2016) advocates "moving knowledge around" and the best way to do this is through strengthening collaboration within schools, between schools and beyond schools. In Spanish education, the studies presented above in Murcia, Catalonia, The Basque Country, Galicia and Andalusia support education networks and their direct link to inclusion and collaboration, where evidences are providing insights into how schools can overcome barriers and become more inclusive by using a networking approach.

Looking through the shadows, some of the barriers related to the cases explored in this article are described below.

Network structure

There is no common pattern as to the type of network organization being developed in each autonomous community. Nevertheless, one important element in understanding the functioning of networks is their structural organization, the skeleton on which network work is based. There are as many structures as there are networks in the educational landscape. The approach to this issue is complicated by the diversity of proposals found in current policy, theory, research and practice. There are networks that are trying to move away from the traditional pyramidal structure, they depend less and less on formal procedures and rules and they appeal to horizontal communication (López-Yañez, Perera, Bejarano, Del Pozo and Budia, 2014). With networking, organizational logic shifts from structures to processes, from precise demarcations to permeable boundaries, from hierarchy and control to relationships, collaboration and inter-organizational (Hartley, 2010).

Isolation versus collaboration

Not only for students, but also for teachers and leadership teams involved in the teaching and learning process, it is difficult to collaborate and use a cooperative team approach when individual and competitive environments are part of the school culture and professional life (Azorín, 2018). This is the reality of many Spanish classrooms, with teachers not wishing to remain isolated in a bubble, and who therefore try to get involved in networks with the aim of improving their practice, enhancing their knowledge and sharing experiences. The inter-sector approach followed by Catalonia and Andalusia seeks to put an end to the traditional isolation that has existed between the different educational and social agents involved in education. Isolation is one of the main barriers networking faces. Yet collaboration and networking are in the class of another colleague, in the next school close to our geographical environment, in the agents who work in the community, in the social, cultural, recreational and sports institutions that we have within our reach in the neighborhood, in the research that comes from academia, in the policy makers and advisors who manage educational policies, in the workers of associations and volunteer platforms, in local entities, in families, in the professional and human network in which we are involved on a daily basis.

The impact of networking in student outcomes

Another underlying question that has yet to be studied in sufficient depth is the evaluation of networks and the incorporation of mechanisms/tools to measure and check their effectiveness in terms of student outcomes. Azorín (2020c, 108) recognizes that "collaborative networks are now a clear focus of enquiry for educational research, but the empirical evidence about their impact, especially upon students, remains thin". Together with the expansion of the networking model, it is important that those who are involved in this type of experiences pay attention to the impact that their practices are having from the view of school improvement and student success.

5. Final thoughts

Networking in education is a topical issue of general interest. It has been shown that engage in professional learning opportunities and join networks of schools is a productive approach to learning (Darling-Hammond, Schachner and Edgerton, 2020). This article includes a perspective of the debate and confrontation of the current state of networking that had not been collected so far in the Spanish educational context, which makes it useful and affords knowledge. In this sense, a broad vision is developed on the different forms that networking is adopting in the territories analyzed, while some of the potentialities and difficulties experienced by those who embrace this other way of doing school and understanding teaching are unraveled.

Spain has already begun to implement the networking model in education. At present, the country has autonomous legislation in several communities that are providing the political support to make the reform possible. Additionally, under the political umbrella of the new legislation on education, which has just come into force for the whole country, it seems that Spanish policymakers are beginning to move in the direction proposed by research in recent years and are advocating more firmly the creation of networks aimed at developing processes of innovation, school

improvement and professional learning. This is an important support for networking, while opening the door to that collaboration which is so necessary both inside and outside the classroom, and even more so during these pandemic times.

There are numerous programs, such as CaixaProinfancia, that are also making connections, for this way of working in schools and outside them to expand throughout the country. Likewise, there are a large number of academics, researchers and teachers who are obtaining funding to set up research projects aimed at developing networking experiences in education. These situations reflect the reality of an educational system that is open to change.

In sum, the cases described show that not only collaboration between schools, but also the increased connection between professionals and communities is a powerful strategy for school development. However, it is important to recognize that certain tensions arise when schools with different values, student populations and approaches to practice come together to network (Grafton, Abernethy and Lillis, 2011). Spain is getting involved in a metamorphosis towards the transformation of more collaborative policies and practices in education. In their attempt to move network research forward, many schools are in a period of transition from the traditional school to the connected school; from individualist education to collaborative enrichment; from organizations and isolated persons to professional learning networks.

Definitely, it is the time now in Spain to take the next steps for collaborative networking in education. This implies admitting that there are winds of change in contemporary education research and they are bringing with them networking as a reality that is advancing towards innovative forms of participation and social change in Spanish education arena.

6. References

Ainscow, M. (2016). Collaboration as a strategy for promoting equity in education: possibilities and barriers. *Journal of Professional Capital and Community, 1*(2), 159-175. https://doi.org/10.1108/JPCC-12-2015-0013

Alcaide, R., Ruiz-Román, C. and Molina, L. (2017). Asperones Avanza: Una experiencia de trabajo en red para la promoción educativa de adolescentes y jóvenes de los Asperones. *Revista de Educación Social, 24*, 1-6.

Arnaiz, P. and Azorín, C. (2014). Autoevaluación docente para la mejora de los procesos educativos en escuelas que caminan hacia la inclusión. *Revista Colombiana de Educación, 67,* 227-245.

Arnaiz, P., Azorín, C. and García-Sanz, M.P. (2015). Evaluación de planes de mejora en centros educativos de orientación inclusiva. *Profesorado. Revista de currículum y formación del profesorado, 19*(3), 326-346.

Arnaiz, P., De Haro, R. and Azorín, C. (2018). Redes de apoyo y colaboración para la mejora de la educación inclusiva. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 29-49. http://doi.org/10.30827/profesorado.v22i2.7713

Azorín, C. (2017). Redes de colaboración entre escuelas inglesas para la mejora de la inclusión socioeducativa. *Profesorado. Revista de currículum y formación del profesorado, Número Extraordinario,* 29-48.

Azorín, C. (2018). El método de aprendizaje cooperativo y su aplicación en las aulas. *Perfiles Educativos, XL*(161), 181-194. http://doi.org/10.22201/iisue.24486167e.2018.161.58622

Azorín, C. (2019). The emergence of professional learning networks in Spain. *Journal of Professional Capital and Community, 4*(1), 36-51. http://doi.org/10.1108/JPCC-03-2018-0012

Azorín, C. (2020a). Beyond COVID-19 supernova. Is another education coming? *Journal of Professional Capital and Community. 5*(3/4), 381-390. https://doi.org/10.1108/JPCC-05-2020-0019 10.1108/JPCC-05-2020-0019

Azorín, C. (2020b). Lead the Change Series Q&A with Cecilia Azorín. *AERA Educational Change Special Interest Group, 112,* 1-9.

Azorín, C. (2020c). Leading networks. *School Leadership & Management, 40*(2-3), 105-110. https://doi.org/10.1080/13632434.2020.1745396

Azorín, C. (2020d). System Transformation in Spanish Education Agenda: Inclusion and Networking as Policy Priorities? In M. Jones and A. Harris (Eds.), Leading and Transforming Education Systems. Evidence, Insights, Critique and Reflections (165-178). Singapore: Springer.

Azorín, C. and Arnaiz, P. (2016). *Mejorando la inclusión a través de una red virtual para la colaboración intercentros*. IV Congreso Internacional de Investigación e Innovación en Educación Infantil y Primaria. Murcia (Spain). 9 to 11 May.

Azorín, C. and Arnaiz, P. (2018). Editorial: Redes de colaboración en educación. Nuevas formas de participación y transformación social. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 1-6. https://doi.org/10.30827/profesorado.v22i2.7846

Azorín, C. and Muijs, D. (2017). Networks and collaboration in Spanish education policy. *Educational Research, 59*(3), 273-296. https://doi.org/10.1080/00131881.2017.1341817

Azorín, C. and Muijs, D. (2018). Redes de colaboración en educación. Evidencias recogidas en escuelas de Southampton. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 7-27. https://doi.org/10.30827/profesorado.v22i2.7845

Azorín, C., Harris, A., and Jones, M. (2020). Taking a distributed perspective on leading professional learning networks. *School Leadership & Management*, 40(2-3), 1-17. https://doi.org/10.1080/13632434.2019.1647418

Beauchamp, G., Hulme, M., Clarke, L., Hamilton, L. and Harvey, J.A. (2021). 'People miss people': A study of school leadership and management in the four nations of the United Kingdom in the early stage of the COVID-19 pandemic. *Educational Management Administration & Leadership 49*(3), 375-392. https://doi.org/10.1177/1741143220987841

Chapman, C. (2019). School-to-School Collaboration: Building Collective Capacity through Collaborative Enquiry. In M. Connolly, D.H. Eddy-Spicer, C. James, and S.D. Kruse (Eds.), *The SAGE Handbook of School Organization* (pp. 540-561). London: SAGE.

Civís, M. and Longás, J. (2015). La colaboración interinstitucional como respuesta al desafío de la inclusión socioeducativa. Análisis de 4 experiencias de trabajo en red a nivel local en Cataluña. *Educación XX1, 18*(1), 213-236. https://doi.org/10.5944/educxx1.18.1.12318

Cotrina, M., Gallego, C. and García, M. (2017). Redes de colaboración interinstitucional en la búsqueda de alternativas inclusivas al desenganche y abandono escolar. In A. Rodríguez-Martín (Ed.), *Prácticas innovadoras inclusivas: retos y oportunidades* (pp. 2403-2411). Oviedo: Universidad de Oviedo.

Darling-Hammond, L., Schachner, A., and Edgerton, A. K. (with Badrinarayan, A., Cardichon, J., Cookson, P. W., Jr., Griffith, M., Klevan, S., Maier, A., Martinez, M., Melnick, H., Truong, N., Wojcikiewicz, S.). (2020). *Restarting and reinventing school: Learning in the time of COVID and beyond.* Palo Alto, CA: Learning Policy Institute.

Departamento de Educación, Universidades e Investigación (2012). *Redes Educativas*. País Vasco: Gobierno Vasco.

Duran, D., Corcelles, M. and Miquel, E. (2020). La observación entre iguales como mecanismo de desarrollo profesional docente. La percepción de los participantes de la Xarxa de Competéncies Bàsiques. *ÀÁF Àmbits, noviembre,* 49-61. https://doi.org/10.32093/ambits.vi53.2636

European Commission (2018). *Networks for learning and development across school education.* Brussels: European Commission.

Fullan, M. (2016). *La dirección escolar. Tres claves para maximizar su impacto*. Madrid: Ediciones Morata.

Fullan, M. and Boyle, A. (2014). *Big-city school reforms.* New York: Teachers College Press.

Gallego, C., Cotrina, M.J. and García, M. (2019). Trabajo en red: desarrollo de proyectos innovadores inclusivos ante el desenganche y el abandono escolar. *Publicaciones, 49*(3), 149-172 https://doi.org/10.30827/publicaciones.v49i3.11407

Grafton, J., Abernethy, M.A. and Lillis, A.M. (2011). Organisational design choices in response to public sector reforms: A case study of mandated hospital networks. *Management Accounting Research, 22*(4), 242-268. https://doi.org/10.1016/j.mar.2011.06.001

Harris, A. and Jones, M. (2020). COVID 19 – school leadership in disruptive times. *School Leadership & Management, 40*(4), 243-247. https://doi.org/10.1080/13632434.2020.1811479

Hartley, D. (2010). The management of education and the social theory of the firm: from distributed leadership to collaborative community. *Journal of Educational Administration and History, 42*(4), 345-361. https://doi.org/10.1080/00220620.2010.492958

Hernández, E. and Navarro, M.J. (2018). La participación en redes escolares locales para promover la mejora educativa, un estudio de caso. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 71-90. https://doi.org/10.30827/profesorado.v22i2.7715

Hernández, M.E., Navarro, M.J., López, A. and Ordoñez, R. (2013). Study of school education networks in Andalusia (Spain): keys to analysis from the evaluation of teacher centers' advisors. *Journal for Educators, Teachers and Trainers, 5*(2), 88-100.

Kools, M., and L. Stoll. (2016). *What Makes a School a Learning Organisation?* Paris: OECD.

Longás, J. and Riera, J. (2016). Resultados del observatorio transición escuela-trabajo y monitoreo de la red socioeducativa de Sant Vicenc dels Horts para el éxito escolar y el empoderamiento de los jóvenes. *Bordón, 68*(4), 103-120. https://doi.org/10.13042/Bordon.2016.48837

Longás, J., Civís, M. and Riera, J. (2008). Asesoramiento al desarrollo de redes socioeducativas locales: funciones y metodología. *Cultura y Educación, 20*(3), 303-321. https://doi.org/10.1174/113564008785826330

Longás, J., De Querol, R., Ciraso, A., Riera, J. and Úcar, X. (2018). Redes de acción socioeducativa contra la pobreza infantil. Evaluación de la percepción del impacto CaixaProinfancia. *Revista de Estudios y Experiencias en Educación, 2*, 109-126. https://doi.org/10.21703/rexe.Especial2_20181111286

Longás, J., Riera, J. and Civís, M. (2016). Asesoramiento al Programa Caixainfancia; evaluación del cambio hacia un modelo de acción socioeducativa. *Pedagogía Social, 28*, 85-98. https://doi.org/10. SE7179/PSRI_2016.28.07

López-Yañez, J., Perera, V.H., Bejarano, E., Del Pozo, M. and Budia, C. (2014). La trama social de liderazgo. Un estudio sobre las redes de colaboración docente en escuelas primarias. *Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 12*(5), 99-107.

López, A., Navarro, M.J. and Hernández, E. (2016). Compromiso y colaboración en educación a través de las redes educativas en centros escolares. *Profesorado. Revista de currículum y formación del profesorado, 20*(3), 751-778.

Martínez, B., Alonso, I., Martínez, I. and Alonso, M.J. (2018). Colaboración y redes socioeducativas para la inclusión de la infancia vulnerable. *Educatio Siglo XXI, 36*(2), 21-42. https://doi.org/10.6018/j/332991

Martínez, J.B. and Fernández, E. (2018). *Educación expandida. Ecologías de aprendizaje en contextos múltiples.* Madrid: Ediciones Morata.

Márquez, C., Graña, R., Moreno-Medina, I. and Villena, A. (2017). Relaciones de Apoyo entre Escuelas Situadas en Entornos Socio-Económicamente Desafiantes. En *Avances en Liderazgo y Mejora de la Educación* (Coord. F.J. Murillo), pp. 432-435. Madrid: RILME

Mérida, R., González, E. and Olivares, M.A. (2012). Redes de aprendizaje escuelas infantiles-universidad. Evaluación de una experiencia de innovación. *Cultura y Educación, 24*(1), 95-110. https://doi.org/10.1174/113564012799740849

Moriña, A. and Melero, N. (2016). Redes de apoyo sociales y académicas de estudiantes con discapacidad que contribuyen a su inclusión en la enseñanza superior. *Prisma Social. Revista de Ciencias Sociales, 16*, 32-59.

Muijs, D., Ainscow, M., Chapman, C. and West, M. (2011). *Collaboration and Networking in Education.* London: Springer.

Navarro, M.J. and Hernández, E. (2017). La colaboración en red entre profesorado de aulas específicas de autismo para promover el intercambio profesional para la inclusión educativa. *Perfiles Educativos, 39*(156), 58-71.

Navarro, M.J., Hernández, E., Ordoñez, R. and López, A. (2013). Las redes educativas de centros escolares: plataformas para la mejora educativa. *International Journal of Development and Educational Psychology, 2*(1), 681-688.

Navarro, M.J., López, A. and Hernández, M.E. (2017). El trabajo colaborativo en red impulsor del desarrollo profesional del profesorado. *Revista Brasileira de Educação, 22*(70), 651-667. http://dx.doi.org/10.1590/S1413-24782017227033

Parrilla, A., Muñoz-Cadavid, M.A. and Sierra, S. (2013). Proyectos educativos con vocación comunitaria. *Revista de Investigación en Educación, 11*(3), 15-31.

Parrilla, M.A., Raposo-Rivas, M. and Martínez-Figueira, M.E. (2016). Procesos de movilización y comunicación del conocimiento en la investigación participativa. *Opción, 32*(12), 2066-2087.

Parrilla, M.A., Sierra, S. and Fiuza, M. (2018). Lecciones esenciales sobre el trabajo en red inter-escolar. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 51-69. https://doi.org/10.30827/profesorado.v22i2.7714

Rauch, F. (2016). Networking for Education for Sustainable Development in Austria: The Austrian ECOLOG-Schools Programme. *Educational Action Research, 24*(1), 34-45. 10.1080/09650792.2015.1132000

Robinson, G., Gallagher, T., Duffy, G. and McAneney, H. (2020). At the boundaries: school networks in divided societies. *Journal of Professional Capital and Community, 5*(2), 183-197. https://doi.org/10.1108/JPCC-11-2019-0033

Ruiz-Román, C., Molina, L. and Alcaide, R. (2018). Trabajo en red y acompañamiento socioeducativa con estudiantes de secundaria en desventaja social. *Profesorado. Revista de currículum y formación del profesorado, 22*(2), 453-474. https://doi.org/10.30827/profesorado.v22i3.8011

Ruiz-Román, C., Molina, L. and Alcaide, R. (2019). 'We Have a Common Goal': Support Networks for the Educational and Social Development of Children in Disadvantaged Areas. *British Journal of Social Work, 0*, 1-19. https://doi.org/10.1093/bjsw/bcz063

Sales, A., Moliner, O., Amiana, J.F. and Lozano, J. (2018). Escuela incluida: Recursos y estrategias para la participación ciudadana. *Revista Mexicana de Investigación Educativa, 23*(77), 433-458.

Serrano, B. and De la Herrán, A. (2018). Creación de una red socioeducativa en espacios de exclusión social: una experiencia en el Distrito de Tetuán (Madrid). *Revista Electrónica Interuniversitaria de Formación del Profesorado, 21*(1), 1-16. https://doi.org/10.6018/reifop.21.1.263111

Suárez, C. and Muñoz, J.L. (2017). El trabajo en red y la cooperación como elementos para la mejora escolar. *Propósitos y Representaciones, 5*(1), 340-402. http://dx.doi.org/10.20511/pyr2017.v5n1.150

Vilar, J., Longás, J. and De Querol, R. (2017). Acción comunitaria y trabajo en red: presentación de un modelo de éxito. *Revista Lugares de Educação, 7*(15), 42-60. https://doi.org/10.22478/ufpb.2237-1451.2017v7n15.34358