Pedagogical Supervision and Change: Dynamics of Collaboration and Teacher Development

Maria de Nazaré Coimbra, Ana Vale Pereira, Alcina Manuela de Oliveira Martins, Cristina Maria Baptista

Universidade Lusófona do Porto, (CeiED), Portugal

Universidade Lusófona do Porto, Portugal

Abstract: The present study aims to analyze how pedagogical supervision can contribute to the change and innovation of the dynamics of collaboration and professional development of teachers in an educational community. After a decade of innovation and change in Portuguese schools, with the implementation of new collaborative supervision practices, it was interesting to carry out an analysis of their potentialities and constraints, about teacher professional development, focusing on collaborative work between peers. In the research, carried out in schools in the district of Porto, mixed methodological, qualitative and quantitative procedures were used. As a qualitative strategy, interviews with supervisors were conducted and analyzed, and as a quantitative strategy, surveys were applied and analyzed by teachers, aiming at the triangulation of the information collected. The results prove the potential of supervision, regarding the change in collaborative supervision practices, in peer work, with real construction of learning communities and improvement of school success. Both supervisors, as middle managers, and teachers positively highlight teamwork, especially in sectoral meetings and in the observation of classes between peers, valuing feedback, reflection, action research and the improvement of pedagogical intervention in the classroom. However, despite the recognition of the advantages of peer training supervision, the constraints of supervision still understood as evaluative are confirmed, showing the confusion between supervision and teacher performance evaluation. Indeed, some teachers continue to associate supervision with evaluative and bureaucratic procedures, which affects interpersonal relationships between supervisors and teachers, especially about class observation. Overall, supervisory action, based on democratic management practices and collaborative work, is considered essential for the reinforcement of continuous teacher training and the evolution of the dynamics of schools, as educational communities.

Keywords: Supervision, Pedagogical collaboration, Educational community

1. Introduction

Today's society requires teachers to be able to respond to new educational realities. As such, teachers should respond effectively, based on continuous training, with a deepening of scientific and pedagogical skills, competences and knowledge, essential to the exercise of supervisory functions in schools.

In addition to classroom supervision, the functions of class management, department and disciplinary area coordination and teacher performance evaluation should be emphasised. As mentioned by several authors, it is vital that teachers can foster the quality of the teaching and learning process, in connection with their professional development, in the context of a reflexive and democratic school (Alarcão, 2009; 2003; Martins et al., 2015). In this way, the school is viewed as a community, in which students and teachers interact and collaborate, building paths of knowledge and sharing (Alarcão and Canha, 2013; Alarcão and Roldão, 2010; Sá-Chaves, 2011). Teacher development should be based on a collaborative environment, enabling the teacher to improve practices, from a contextualised process of reflection and experimentation.

In recent years, new educational policies and the reorganisation of schools into clusters have led to significant changes in school life, which have highlighted the importance of supervision and peer work. Recently, the enactment of Decree-
Law No. 55/2018 established the curricular and pedagogical foundations of the Autonomy and Curricular Flexibility Project, to grow in learning communities, reinforcing collaborative work in schools (Senge et al., 2000). In this way, supervision refers to the creation of environments that encourage the development of professional autonomy, in a reflexive atmosphere, favourable to the growth of the teacher, supervisor and student (Alarcão and Roldão, 2010; Cosme, 2018; Glickman et al., 2017). In this understanding, it is imperative to carry out a more in-depth analysis of the new contexts of action, about the dynamics of supervision, collaboration and teacher development in the educational community.

2. Literature Review

2.1 Concept(s) of Supervision

The concept of supervision has evolved over time, in relation to the purposes of educational intervention. In Portugal, supervision emerged in the 1980s, associated to teachers’ initial training. Gradually, following international trends, supervision has taken on new meanings, including continuous teacher training. According to different supervisory scenarios, the joint work of class observation, with supervisor and teacher working together, generally presents cycles of observation – action-reflection that are specific to action-research (Zepeda, 2017). Thus, pedagogical supervision can be defined as the theory and practice of teaching and learning regulation in an educational context, with pedagogy as its object, and aimed at improving educational action and the skills of the teacher in training. Supervision can then be characterised as an articulation between reflective practice and pedagogy for autonomy; reflective analysis of theories and practices in the community; planning, implementing and evaluating teaching and learning projects; creation of conditions and spaces for collaboration between peers; supervision and collaborative evaluation of the processes and results of professional development and continuous training (Alarcão and Tavares, 2010; Pawlas and Oliva, 2008; Vieira, 2009; Vieira and Moreira, 2011).

Currently, the concept of supervision is broader, encompassing two interconnected levels in institutional supervision, focusing on the mediation of the teacher's professional development, as well as on the organisational development of the school (Glickman et al., 2017). So, supervision includes not only the classroom context, but also a reflective school, as a learning community. In this understanding, the school is redefined, in the tradition of Schön (1983) and Zeichner (1981), as a reflective organisation in its mission and structure, in the course of a simultaneously evaluative and formative process of pedagogical and institutional regulation (Alarcão, 2003; Nolan and Hoover, 2011). Thus, the concept of supervision places the improvement of pedagogical practice within an educational community, in a democratic perspective based on collaboration between peers, in the context of a school capable of integrating and applying, individually and collectively, strategies for reflection, autonomy, mediation and leadership. The purpose of supervision lies then in the better quality of teaching and learning, linking the development of students, teachers, supervisors, and the school itself.

2.2. Supervision, Collaboration and Teacher Development

Supervision can be characterised as a reflective, collaborative and contextualised practice, which provides the teacher with didactic and pedagogical improvement, involving values, attitudes, knowledge and skills, in initial or continuous training. This development of human qualities and professional skills is essential to the performance of teaching functions and must be carried out collaboratively (Alarcão and Canha, 2013; Pawlas and Oliva, 2008).

The particularities of supervision, regarding the dynamics of collaboration between teachers, are anchored in the specificities of each school’s culture. Moreover, the professional teaching culture, constituted by the set of beliefs, values and habits of each teacher and the way teachers relate to each other and their work, decisively influences the development of teachers and schools (Fullan and Hargreaves, 2001). Therefore, it is necessary to consider the challenges posed to supervision, regarding the dynamics of collaboration and teacher development, starting with the construction of professional learning cultures, and the support of “critical friends” or “helpful friends” (Nolan and Hoover, 2011).

One of the challenges concerns the process of evaluating teacher performance in Portugal. Many teachers still confuse teacher evaluation - a professional judgment and assessment concerning teachers' work and competence, in which the roles of the evaluator and the evaluatee can never be merged or blended - with teacher supervision – in which partners work together, in a collegial relationship. Roles can be combined and exchanged, to improve professional skills and to maximise student learning. The problem lies mainly in the observation of classes, common to supervision and teacher evaluation. Classroom observation is understood as an intrusion, inspection and control, something which undermines
the implementation of collaborative supervision, grounded in democratic principles of autonomy and freedom (Silva and Dana, 2001; Roldão, 2007; 2006). This problem persists in schools, which means that an effective supervisor must understand the processes of teacher supervision and evaluation separately, as well as understand how the two are related in high-quality teacher supervision and evaluation system (Nolan and Hoover, 2011).

A more recent challenge has emerged with curricular flexibility, due to the promulgation of Decree-Law No. 55/2018, which established the curricular and pedagogical foundations of the Curricular Autonomy and Flexibility Project; it focuses on action strategies that favour the construction of the Domains of Curricular Autonomy and Project Pedagogy, based on teacher cooperation and active methodologies. With students, parents or guardians, teachers, supervisors, coordinators, and directors as interveners, it links the appropriation of curricular heritage to the deepening of training for citizenship, based on education for values (Cosme, 2018; Zepeda, 2017). By involving students and teachers in interdisciplinary projects, classroom doors are opened to supervision and collaboration between teachers from the same or different disciplines, something which is sometimes understood as an invasion of the teacher’s work (Glickman et al., 2017).

Another challenge lies in the fact that some of the interactions between teachers, considered collaborative, are insignificant and isolated, given the frequency, interactions, the occurrence of conflicts, and influence and manipulation of some elements within the group (Pawlas and Oliva, 2008). Thus, when aiming towards the implementation of a collaborative culture, it is necessary to develop a whole path of dialogue, reflection and work between peers, of leadership and management, without which changing traditional dynamics of individual work, or overcoming partial collaboration, is impossible. In this type of association, which Hargreaves (2004) calls “comfortable collaboration”, teachers choose to perform collaborative tasks that they consider more comfortable in some way, as well as less likely to generate situations of tension or conflict, such as sharing materials and exchanging ideas and advice. These collaborative practices have a practical effect and are carried out for short periods. In this way, as characteristics of supervision anchored in collaborative school culture, the following stand out: availability of teachers to support themselves in the pedagogical work within the classroom; collaboration in the planning, implementation and evaluation of class and school activities and projects; systematic sharing of opinions, work and practices; team teaching in the classroom; observation of classes between peers; dialogue, reflection, constructive criticism and collaboration between supervisor and teacher; regularity of action-research; shared responsibility for professional work; visibility of a collaborative culture in the school’s structural documents; strengthening the school as a learning educational community; democratic and participative leadership in a reflective school (Fullan and Hargreaves, 2001; Alarcão and Canha, 2013).

In Hargreaves’ theory (2004), the existence of learning communities implies what the author calls an “adult profession”, in which teachers act collaboratively as demanding professionals, so that critical positioning is encouraged, and conflict is seen as a learning enhancer. The school must be able to guide its action towards a specific purpose(s), defined collectively in its structuring documents, and to develop the capacity to establish itself as a community, with a culture of professional learning. The construction of a learning and democratic educational community will only be possible in a school that is also a dynamic and reflective organisation (Martins et al., 2015; Silva and Dana, 2001; Zepeda, 2017), in which its members share common goals and the same vision.

### 3. Methodology

Pedagogical supervision, based on collaborative work in schools, is currently one of the priority themes of educational policies, as explained in the literature review. Thus, this study aims to analyse how pedagogical supervision can contribute to change and innovation in the dynamics of collaboration and professional development in the educational community. In the research, of mixed nature, qualitative and quantitative, the opinions of 130 teachers and nine supervisors from six schools in the district of Porto were collected and analysed, regarding the advantages and constraints of exercising collaborative supervision in schools, within the framework of public policies in force. In a single study, we linked sequentially quantitative and qualitative methods and data, using both numbers and words, inductive and deductive thinking, for a better understanding of teachers and supervisors’ viewpoints. In fact, “mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research” since it can offer “more evidence for studying a research problem than either quantitative or qualitative research alone” (Creswell and Clark, 2011, p. 12). So, for understanding and corroboration, using mixed methods research can deepen a way of looking at reality. Initially, the quantitative strategy of the study was implemented through a questionnaire survey applied to 130 teachers from six schools in the district of Porto. This instrument was selected due to the breadth of the sample, also presenting
the advantages of objectivity of quantification, with statistical treatment of results (Punch, 2011). In this article, and given the length of the survey, only a few closed and open questions were considered to triangulate the opinions of teachers and supervisors. In a second step, the qualitative strategy of the study covered the analysis of data from a semi-structured interview survey (Flick, 2009) applied to eight supervisors in order to analyse perceptions and enable a more comprehensive view of supervision and collaborative work in the community. This tool facilitates the subject's expression, in terms of representations, values and social processes, "so meaning can be learned and significance shared. In this way (...) interviews offer a path to discovery and greater understanding" (Mears, 2012, p. 171). The analysis fits into the interpretative paradigm, with thematic codification of the content of the supervisors' discourse, involving researchers in the meanings of categorical analysis (Flick, 2009; Yin, 2011). After transcribing the interviews, data were imported into the qualitative analysis software NVivo version 12 Pro, where after defining the codebook was carried our coding and analysis.

4. Results and Discussion

4.1 Results of the Quantitative Analysis

The presentation and analysis of the results of the questionnaire survey begin with the characterisation of the subgroup of teachers, with 130 teachers. Most teachers are female (79%), teach different subject areas and have 20 or more years of service. In terms of academic qualifications, a degree (70.8%) prevails, followed by a master's degree and a doctorate. The majority (82.3%) do not hold positions of supervisor or pedagogical coordinator. Then, in the closed questions with propositions, the teachers expressed their degree of agreement, using the Likert scale with five points.

On the question of "what profile the supervisor should have", 67.7% agrees that the supervisor should facilitate dialogue and sharing of experiences, 63.1% that he should have specific training to enable him to do so, and 59.2% that he should have a thorough scientific knowledge of the disciplines he supervises. Regarding the "dynamics of supervision and pedagogical collaboration in community", the majority of teachers (61.5%) highlight the annual, medium and short-term planning and, with 59.2%, the preparation of classes among teachers teaching the same subject and year. Only 39.2% indicate reflection on the effectiveness of strategies, activities and projects. It is worth mentioning that 30.8% of those surveyed showed "I disagree" with regard to the teaching and observation of classes between peers, assistance or exchange of classes. This reveals the difficulty of many teachers in working collaboratively, as some authors point out, exposing a culture of partial collaboration, which still prevails in schools (Hargreaves, 2004; Nolan and Hoover, 2011; Roldão, 2007).

In the next question, "What kind of collaborative culture do you think exists in your school?", although most teachers say they do not agree with the culture of individualism, 27.7% recognize this kind of culture in their school, as some teachers continue to work in isolation. As for the culture of collaboration, and with percentages between 33% and 33.8%, teachers mostly list examples of partial collaboration, visible in meetings and group work in each cycle, year and subject area. As a result of recent educational policies (Decree-Law No. 55/2018), which reinforce supervision and collaboration between peers, interdisciplinary project work is mentioned, involving autonomy and curricular flexibility, innovation and leadership, with increased roles for supervisors and pedagogical coordinators (Cosme, 2018).

On the question of the "importance of collaborative supervision", teachers agree (48.4%) that it fosters reflection on practices and the improvement of teachers' performance, contributing to the implementation of effective and innovative practices. In addition, they indicate that it can provide for learning by doing, if there is a climate of constructive dialogue, humility and frankness, between supervisor and supervised. However, they recognize that collaborative supervision is difficult to achieve (41.5%). Interestingly, some (19.2%) point out that collaborative supervision is "a utopia, because the supervisor and supervised are in different hierarchical actions". This proves the confusion that still persists between supervision and evaluation of teaching performance, which limits the observation of classes and a culture of collaboration, as mentioned in studies mentioned above (Alarcão, 2009; Glickman et al., 2017; Pawlas and Oliva, 2008).

Finally, on the open question of "the influence of supervision in building the school as a learning educational community", globally 72% of teachers (T) explicit the positive influence of collaborative supervision. Thus, and including some teachers' voices, T128 states that "supervision is fundamental to improving the educational process, provided that an assessment is made to improve educational practices". For T127, "it can be a strategy of excellence for student success, because if it really works, and not virtually, it contributes to a true culture of school and collaborative work". In opposition, some respondents are of the opinion that "supervision, in the current parameters, does not influence or have
an impact on the educational community and its practices” (T33), affirming one of the teachers that “I am not aware that supervision has an influence on increasing the quality of teaching” (T99). Thus, and despite some disagreement, a vision of the positive influence of supervision in the educational community prevails, as reiterated in the literature review.

4.2 Results of Qualitative Analysis and Triangulation

The presentation and analysis of the results, relating to the interview survey, begins with the characterization of the supervisors. This is coincident with that of teachers in the predominance of the female gender, in the diversity of curricular groups and in 20 or more years of service, which is relevant for the significant teaching experience in both subgroups. The content of the open questions of the interviews was coded in 5 central categories, defined according to the concepts mobilized in the study, whose results are presented.

4.2.1 Profile of the Pedagogical Supervisor

According to the interviewees, the pedagogical supervisor should gather a set of personal characteristics, have acquired specific knowledge and skills and play a set of roles. Among the personal characteristics identified are: flexibility and empathy, sensitivity, availability for colleagues, motivation, belief in changing the educational system, experience and demand. With regard to knowledge and skills, academic training and continuing education were mentioned as a guarantee of up-to-date scientific and didactic knowledge and innovative techniques and strategies.

![Figure 1: Map of the Supervisor's roles](image)

Furthermore, a set of observation, dialogue, collaboration, reflexive capacity and critical spirit was developed in addition to theoretical and technical knowledge. Regarding the roles to be played in supervision (Figure 1), the supervisor must be a facilitator, an employee of the supervised, a mentor, motivator for the adoption of innovative practices, a link, a promoter of critical reflection and a mediator of interpersonal relationships - according to one of the interviewees, one of the most problematic roles in supervision “especially when it comes to classroom observation”. But he is also given the roles of an intermediate manager (based on the regulations) and evaluator.

Triangulating the two strands of the study, this profile is similar to that outlined by teachers. It coincides with the literature review, with both subgroups, supervisors and teachers, being more concerned with class observation.
4.2.2 Development of Supervision

When asked about the evolution of supervision in the last five years, the opinions of supervisors were quite different. The range of opinions encompasses both the perennial denial of any evolution, the absence of formed opinion and a mitigated evolution due to the "progressive collage" of the concept with the evaluation of teaching performance, object of some resistance, despite the recognition of a certain evolution, sustained by more technical and scientific knowledge, but variable from school to school. The words of one of the interviewees somehow summarise the opinions: "it's known as something that has to be done" a "path to follow where humanism and rationality prevail". However, it is not yet considered a consolidated practice in most educational communities.

Confronting the opinions of teachers and supervisors, some confusion is evident between supervision and evaluation of teaching performance, which makes supervision among peers difficult, as some authors have pointed out (Nolan and Hoover, 2011; Pawlas and Oliva, 2008).

4.2.3 Collaborative Culture at School

With one exception, all interviewees recognised the existence of a collaborative culture in their schools, evident in their willingness to plan and prepare activities together, to share assessment tools and ways of acting in certain situations, to plan and implement projects and to exchange opinions. The existence of forms of "comfortable collaboration" is confirmed (Hargreaves, 2001), also recognised by the teachers surveyed. Also, a significant proportion of participants admitted that collaborative culture is not widespread, but is restricted to certain departments or groups of teachers, indirectly highlighting the dependence of collaborative culture on individual teachers' attitudes. The individual culture was also identified by some teachers, confirming a traditional view of teaching work (Glickman et al., 2017).

4.2.4 Importance of Collaborative Supervision

Although one interviewee claimed to be unaware of the concept of collaborative supervision and another omitted any evaluative judgment of its importance, he merely confirmed that it is a practice "instituted in schools" in general, and in theirs in particular, most interviewees, like teachers, recognized the importance of collaborative supervision in a generic way. Some of the interviewees were concerned to go further, specifying that the collaborative context is essential to the educational process, enriches and makes teaching more sustained, contributes to the affirmation of identity and promotes professional teaching growth. This last idea, as well as the one mentioned above, of the dependence of the collaborative culture on individual attitudes, is clearly evident in the following interview excerpt:

"an added value if the supervisor has the ability to adapt supervision to the style of the teacher being supervised and if he or she is a peer-recognised teacher whom they trust and feel comfortable asking questions. Collaborative supervision will be more successful if the supervisor is seen as a facilitator and collaborator in the professional development of the supervisor" (S07).

Once again, and as analysed above regarding the profile of the pedagogical supervisor (see Figure 1), the importance of a set of scientific and didactic-pedagogical skills should be highlighted. In particular, supervisors and teachers value dialogue, reflection, collaboration and critical thinking skills, and view the supervisor as a "mediator of interpersonal relationships", due to the demands of the roles to be performed among peers (Nolan and Hoover, 2011; Vieira, 2009; Vieira and Moreira, 2011).

4.2.5 Influence of Supervision in the School as a Learning Educational Community

With regard to the influence of supervision in the school, as a learning educational community, the interviewees recognized that supervision is, among other things, the "main foundation of school construction"; it promotes the improvement of scholastic and social results: "better and greater concretisation of the principles and values of the PE", "improvement of the quality of the students' learning", "fundamental for obtaining results"; it regulates and accompanies the educational and formative activity of the teachers: "reflection and self-regulation of one's own work"; "critical stance toward educational postures" and, finally, promotes reflective practices, which, in the words of two of those interviewed, favor the "assumption of the school as a community capable of generating learning", "more human and democratic".

Triangulating the opinions of supervisors and teachers, a positive opinion predominates about the influence of supervision on school construction as a learning educational community. As Senge et al. (2000) state, it is necessary to transform
each school into a learning community, in which teachers can learn together, valuing the knowledge and experiences of all, in order to build a collaborative and democratic culture.

5. Conclusion

The study concludes that new dynamics of peer supervision, based on collaborative practices, reflection, curricular flexibility, autonomy and innovation are changing teachers and schools. Indeed, after crossing quantitative and qualitative data collection and analysis, similar opinions of teachers and supervisors are confirmed, regarding the profile of the pedagogical supervisor, the importance of a collaborative culture and the influence of collaborative supervision in the construction of a reflexive and democratic school, as a learning educational community. Assuming that collaborative supervision promotes professional growth, using a variety of processes and skills such as sensitivity, empathy, experience and demand, and encourages teachers to reflect upon and inquire their practices, so as to improve student and educational community learning. Despite a mostly positive view of collaborative supervision, three factors contribute to the mistrust of some teachers, which is echoed in the difficulties faced by supervisors and pedagogical coordinators in the face of the new educational policy guidelines.

Firstly, individual culture persists in the lonely work of some teachers, according to a traditional view of teaching. The result is the coexistence of a plurality of cultures in schools, from individual culture to partial or full collaborative culture. Secondly, teacher performance evaluation continues to overshadow pedagogical supervision, by the confusion between supervision and evaluation and between peer and hierarchical relationships. In addition, therefore, there is an urgent need for more continuous training for supervisors and positive reinforcement of interpersonal relations in the community. Thirdly, peer observation is still considered by some teachers as an intrusion into the classroom, conditioning curricular flexibility, reflection, constructive criticism, research-action and the sharing of good practice.

Therefore, and in order to analyze the recent implementation of the new guidelines in schools regarding autonomy and flexibility, based on supervision and collaborative work, this study could be a starting point for a later evaluation study on the evolution of the dynamics of supervision and collaboration.

In summary, we conclude that working collaboratively and sharing pedagogical engagement is currently emerging in new contexts of action, as one of the major challenges of being and teaching know-how. In this understanding, collaborative supervision has gradually enhanced the educational quality and professional development of teachers in the learning community.

References

- Alarcão, I. (2009). Formação e Supervisão de Professores. Uma nova abrangência. Sisifo. Revista de Ciências da Educação, 8, 119-128. Retrieved 15 March 2020 from http://sisifo.ie.ulisboa.pt/index.php/sisifo/article/viewFile/140/236
- Alarcão, I. (2003). Professores reflexivos em uma Escola reflexiva (2ª ed.). São Paulo: Cortez Editora.
- Alarcão, I. and Canha, B. (2013). Supervisão e Colaboração. Uma relação para o desenvolvimento. Porto: Porto Editora.
- Alarcão, I. and Roldão, M. (2010). Supervisão. Um contexto de desenvolvimento profissional dos professores (2.ª ed.). Manguade: Pedago.
- Alarcão, I. and Tavares, J. (2010). Supervisão da Prática Pedagógica. Uma perspectiva de desenvolvimento e aprendizagem (2.ª ed.). Coimbra: Almedina.
- Cosme, A. (2018). Autonomia e Flexibilidade Curricular. Propostas e Estratégias de Ação. Porto: Porto Editora.
- Creswell, J. and Clark, V. (2011), Designing and conducting Mixed Methods Research (2.ª ed.). Thousand Oaks, California: SAGE Publications.
- Decreto-Lei n.º 55/2018 de 6 de julho. Autonomia e Flexibilidade Curricular. Lisboa: Ministério da Educação. Retrieved 15 March 2020 from https://dre.pt/home/-dre/115652962/details/maximized
- Flick, U. (2009). An Introduction to qualitative research (4.ª ed.). London: Sage.
- Fullan, M., and Hargreaves, A. (2001). Por que é que vale a pena lutar? O trabalho de equipa na escola (reimpressão) Porto: Porto Editora.
- Glickman, C., Gordon, S., and Ross-Gordon, J. (2017). Supervision and Instructional Leadership. A Developmental Approach (10ª ed.). Boston: Pearson, Allyn and Bacon.
Hargreaves, A. (2004). *O Ensino na Sociedade do Conhecimento: A educação na era da inseguurança*. Porto: Porto Editora.

Martins, A. O., Coimbra, M. N., Pinto, I. P., and Serradas, R. (2015). How Teachers Experience Practical Reflectivity in Schools: A Case Study. *American Journal of Educational Research*, 3 (7), 918-922. Retrieved 15 March 2020 from http://pubs.sciepub.com/education/3/7/16 DOI: 10.12691/education-3-7-16. Crossref

Mears, L. (2012). *In-depth interviews*. In J. Arthur, M. Waring, R. Coe and L. Hedges (Eds.), *Research Methods and Methodologies in Education* (pp. 170-176). London: SAGE.

Nolan, J., and Hoover, L. (2011). *Teacher Supervision and Evaluation. Theory into Practice* (3rd ed.). Hoboken: W. Jossey-Bass.

Pawlas, G., and Oliva, P. (2008). *Supervision for Today’s Schools* (8th ed.). Indianapolis: Wiley and Jossey-Bass Education.

Punch, K. (2011). *Research Methods in Education* (reprinted). London: Sage.

Roldão, M. C. (2007). Colaborar é preciso – Questões de qualidade e eficácia no trabalho dos professores, *Noesis*, 71, 24-29. Lisboa: Ministério da Educação – DGIDC.

Roldão, M. C. (2006). Trabalho colaborativo. O que fazemos e o que não fazemos nas escolas? *Noesis*, 66, 22-23.

Sá-Chaves, I. (2011). Formação, conhecimento e supervisão: contributos nas áreas da formação de professores e de outros profissionais (3a ed.) Aveiro: Univ. de Aveiro.

Schön, D. (1983). *The reflective practitioner*. Nova York: Basic Books.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., and Kleiner, A. (2000). *Schools That Learn: A Fifth Discipline Resource*. New York, NY: Doubleday Dell Publishing Group, Inc.

Silva, D. Y., and Dana N. F. (2001). Collaborative supervision in the professional development school. *Journal of Curriculum and Supervision*, 16 (4), 305-321.

Vieira, F. (2009). Para uma visão transformadora da supervisão pedagógica. *Educação and Sociedade*, 30 (106), 197-217. Retrieved 14 March 2020 from http://www.scielo.br/pdf/es/v30n106/v30n106a10.pdf

Vieira, F., and Moreira, M. (2011). Supervisão e Avaliação do Desempenho Docente. Para uma abordagem de orientação transformadora. Lisboa: Ministério da Ed. – Cadernos CCAP. Retrieved 15 March 2020 from http://www.ccap.min-edu.pt/docs/Caderno_CCAP_1-Supervisao.pdf. Crossref

Yin, R. (2011). *Qualitative research from start to finish*. New York: Guilford Press.

Zeichner, K. (1981). Reflective teaching and field-based experience in teacher education. *Interchange*, 12, 1-22. Crossref

Zepeda, S. (2017). *Instructional Supervision. Applying Tools and Concepts* (4th ed.). New York: Routledge.