

# Towards a Comprehensive Model of Educational Coaching?

Inference towards executive competences and leadership

¿Hacia un modelo integral de coaching educativo? : Inferencia hacia competencias ejecutivas y liderazgo



Óscar Díaz Chica  
Alejandra Cortés Pascual  
Álvaro Serra Mercé

Photo By/Foto: Robert Kneschke

**Rip**  
**12<sup>3</sup>**

Volumen 12 #3 sep-dic  
12 Años

Revista Iberoamericana de  
**Psicología**

ISSN-I: 2027-1786 | e-ISSN: 2500-6517  
Publicación Cuatrimestral

ID: 2027-1786.RIP.12311

Title: Towards a Comprehensive Model of Educational Coaching?

Subtitle: Inference towards executive competences and leadership

Título: ¿Hacia un modelo integral de coaching educativo?

Subtítulo: Inferencia hacia competencias ejecutivas y liderazgo

Alt Title / Título alternativo:

[en]: Towards a Comprehensive Model of Educational Coaching?. Inference towards executive competences and leadership

[es]: Towards a Comprehensive Model of Educational Coaching?. Inferencia hacia competencias ejecutivas y liderazgo

Author (s) / Autor (es):

Díaz Chica, Cortés Pascual, & Serra Mercé

Keywords / Palabras Clave:

[en]: Educational Coaching; training; technical competences; transversal competences; managerial function

[es]: Coaching educativo; formación; competencias técnicas; competencias transversales; competencias de gestión

Submitted: 2019-06-28

Accepted: 2019-09-03

Óscar **Díaz Chica**, Pdoc MA Hum

Research ID: [M-8222-2015](#)

ORCID: [0000-0001-6836-6816](#)

BIO:

Doctor en Psicología, Máster en Educación Socioemocional, Graduado en Humanidades, Graduado en Publicidad y Relaciones Públicas

City | Ciudad:

Valladolid [es]

e-mail:

[odiaz@uemc.es](mailto:odiaz@uemc.es)

## Resumen

Este trabajo alude a la investigación resultante del desarrollo del Modelo Integral de Coaching Educativo (MICE) ([www.EducationalPaths.com/MICE](http://www.EducationalPaths.com/MICE)) durante dos cursos educativos realizados a través de la formación, tanto en procesos de coaching individual como grupal, con profesores no universitarios de Aragón (España). Los datos se han recopilado a través de un cuestionario sobre expectativas, un cuestionario sobre competencias técnicas, un cuestionario sobre competencias transversales, un grupo de discusión y un cuestionario abierto enviado en línea para explorar la repercusión de la capacitación. Concluimos con resultados relacionados con las expectativas sobre la capacitación en Coaching Educativo; sus aspectos de mejora, competencias y expectativas desarrolladas; y competencias relacionadas con las funciones de dirección y docentes. Entre los aspectos más destacados de los resultados, el estudio revela que MICE fomenta el entrenamiento en el aula (a través de tutoriales, grupos de trabajo, atención al uso del lenguaje, etc.).

También fomenta, entre otras cosas, el establecimiento de un ambiente de clase apropiado, respeto por los estudiantes, respeto por las iniciativas de los estudiantes, apoyo para la toma de decisiones, empatía y una mejor gestión de la información y las emociones positivas. El estudio proporciona resultados clasificados por género, conexiones con equipos de gestión, nivel educativo y características del centro educativo (administrado de forma privada / financiado con fondos públicos y público)

## Citar como:

Díaz Chica, Ó., Cortés Pascual, A. ., & Serra Mercé, Á. (2019). ¿Hacia un modelo integral de coaching educativo? : Inferencia hacia competencias ejecutivas y liderazgo. *Revista Iberoamericana de Psicología*, 12 (3), 101-112. Obtenido de: <https://reviberopsicologia.ibero.edu.co/article/view/1638>

Alejandra **Cortés Pascual**, Pdoc MA Edu

AutorID: [16048335800](#)

Research ID: [2439014](#)

ORCID: [0000-0002-2839-7041](#)

BIO:

Doctora en Psicopedagogía. Maestra de PT y Licenciada en Psicopedagogía. Máster en Estudios Europeos.

City | Ciudad:

Zaragoza [es]

e-mail:

[alcortes@unizar.es](mailto:alcortes@unizar.es)

## Abstract

This work alludes to the research resulting from the development of the Comprehensive Model of Educational Coaching (MICE) ([www.EducationalPaths.com/MICE](http://www.EducationalPaths.com/MICE)) during two educational courses performed through training, in both individual and team coaching processes, with non-university teachers from Aragón (Spain). Data has been collected through a questionnaire about expectations, a questionnaire about technical competences, a questionnaire about transversal competences, a discussion group and an open questionnaire sent online to explore the repercussion of the training. We conclude with results related to the expectations about Educational Coaching training; its aspects for improvement, developed competences and expectations; and competences related to the managerial and teaching functions. Among highlights of the results, the study reveals that MICE encourages classroom coaching (through tutorials, work groups, attention to language use, etc.). It also fosters, among other things, the establishment of an appropriate classroom environment, respect for the students, regard for student initiatives, decision-making support, empathy and better management of information and positive emotions. The study provides results categorized by gender, connections to management teams, educational level, and characteristics of the education centre (privately administered/ publicly financed and public).

Álvaro **Serra Mercé**

BIO:

Coach, conferenciante, consultor y coordinador en la integración de proyectos innovadores en educación (como el design thinking, el coaching, el multilingüismo, el uso de las TIC y las inteligencias múltiples)

City | Ciudad:

Zaragoza [es]

e-mail:

[a.serra@educationalpaths.com](mailto:a.serra@educationalpaths.com)

# Towards a Comprehensive Model of Educational Coaching?

## Inference towards executive competences and leadership

¿Hacia un modelo integral de coaching educativo? : Inferencia hacia competencias ejecutivas y liderazgo

Óscar **Díaz Chica**  
Alejandra **Cortés Pascual**  
Álvaro **Serra Mercé**

## Introduction

Coaching is an accompaniment process performed by a coach in which one person or a group of persons wants to reach an objective. This method mainly originates from Socratic maieutics and in freedom based on existentialism. In the psycho-pedagogical field, it is also found in approaches such as humanism, socioconstructivism, systemics, positive psychology, development and learning by skills, neuroeducation and socioemotional education. It also complements other perspectives such as neurolinguistics programming and mindfulness. Our opinion is that coaching applied to education provides a method based on dialogue and powerful questions that is drawn from different approaches, such as those mentioned. These approaches have their own proposals and techniques that can also be used to obtain the required objective.

Although there is currently a growing interest in the theoretical development, more scientific contributions about coaching are required with a greater emphasis on Educational Coaching. In fact, according to the analysis of 131 studies performed by Grant and Cavanagh (2004) it was concluded that there is still little empirical evidence about the effectiveness of coaching, emphasizing the need to deepen the knowledge of the characteristics that qualify a coach and into the elements that make coaching an effective tool for helping in personal development. Nevertheless, we continue in this line of teaching and scientific improvement as Devine, Meyers and Houssemand indicate (2013) 'There is an emerging evidence-base that coaching is a powerful tool to support learning and development for students, teachers, school leaders and their educational establishments'. In fact, Kraft, Blazar, and Hogan (2018) describe 44 articles with scientific rigor about Educational Coaching, and they manifest that coaching above all empowers climate aspects and not academic results.

In relation to Educational Coaching, Jiménez (2012) revised the studies made during teacher training. The author also noted that the research method most widely used has been a quasi-experimental one and that there are influences from 3 sociocultural perspectives: that of Vygotsky (1978a; 1978b), the dialogue of Bakhtin (with ideas such as reflexive conversations, positive feedback, learning construction process and emotional support) and the model of Onion linked to the neurological levels of neurolinguistics programming. He highlights two concepts that are repeated: dialogue and action.

Dialogue characterizes any form of communication and verbal interaction. Personal interrelations in social frameworks are developed through some type of dialogue. Dialogue characterizes communicational interchanges between persons, becoming a form of human activity in specific social situations of communication. Dialogue allows the discovery of the aspects of the action and the significant improvements in teaching (Teemant, Wink, & Tyra, 2011)

The action as a primary coaching articulator emphasizes the contact of the teachers in a professional development context. It arises from the idea that teachers create their own scenarios by means of the actions in which they are involved and by becoming aware of the successes and areas for improvement, although even failures are denominated (Hoekstra & Korthagen, 2011; Tobin & Espinet, 1989) Theoretical framework

## Research on educational coaching

Below, we present a review of the various research studies that support our Comprehensive Model of Educational Coaching (MICE). In this vein, Morales and Morales (2016) found 791 scientific references with the word coaching. With the contribution of these studies and others found in a bibliographic research, we list in this table the most relevant studies (table 1):

Tabla 1. Research about Educational Coaching

Study
<p>Batt (2010)</p> <p>Coaching cognitive.</p> <p>15 teachers belonging to three types of schools: two rural ones and an urban one.</p> <p>Descriptive method (combines quantitative and qualitative methods).</p> <p>SIOP (Sheltered Instruction Observation Protocol) Instrument, questionnaire, and interviews. A three-phase cycle is contemplated: prelesson, observation, and postlesson.</p>
<p>Brujin and Leeman (2011)</p> <p>Instructive coaching.</p> <p>69 school department coordinators participated. Overall, 22 students between 16 and 22 years old (18 years old average), 97% boys and 11 teams of four to seven teachers participated in the study.</p> <p>Descriptive method.</p> <p>Questionnaire, class observations, curriculum analyses and teaching materials, interviews with teachers and students. Guided exploration process, cooperative reflection, and learning. Concise phases are not necessary, a process tightly linked to the support of self-control abilities is seen, in which the teachers help students to develop and maintain self-discipline and motivation.</p> <p>Scales of self-observation of the ad hoc prepared practice itself and reports. Coaching is developed through two types of sessions that are carried out one day a week: a) a mutual observation between couples of the given training and b) a group meeting of critical friends in a 'clinical session' to analyze problems and pedagogical situations.</p>
<p>Fazel (2013)</p> <p>Instructive coaching and review.</p> <p>This includes research published in the Social and Behavioural Sciences magazine highlighting that coaching can be a model for improvement in the educational field. Among the articles, we highlight that of Devine, Meyers and Houssemand (2013) which stated that the continuation of Educational Coaching as a leadership and training model is very important as a collective advance (all the educational community involved and an integrating learning perspective) and that there is a commitment for quality teaching in that regard.</p> <p>Quasi-experimental method (with a control group).</p> <p>Observations in the classroom, a set of questions (coaching guides), coaching journal, video test (classroom sequences), comics (activities answered in writing and contextualized the question for exploring, for example, activities related to the method of explanation in the classroom). The intervention consists of two parts: a) Two days of seminars about adaptive skills in teaching to discuss results of the research related to the four dimensions: knowledge of the matter, diagnosis, teaching methods and classroom management; b) Nine sessions of three hours each in which the coach visits the teacher in his/her classroom that can be organized into: 1. reflection before the class, 2. teaching in teams and 3. reflection after the class.</p>
<p>Hoekstra and Korthagen (2011)</p> <p>Coaching.</p> <p>The first study was of 32 experienced teachers. The second study was of 4 teachers (two women and two men).</p> <p>Descriptive method and study of multiple cases.</p> <p>Questionnaire with three sub-scales: a) learning regulation by the students, b) knowledge construction and c) student collaboration. Class videos, interviews, reports. 7 supervision sessions are described in which methods from reflexive conversations to role play techniques were used to promote the practical transfer of teachers' abilities.</p>

Study
Hunt, C. (2017)
Emotional coaching. The idea with which the author concludes is an interesting result: 'When emotions are recognized as a legitimate way of knowing and understanding, rather than as something to be suppressed or controlled, literacy coaching interactions may be more likely to become a meaningful and transformative site for the co-construction of knowledge and collaborative professional learning'.
Kraft, M.A., Blazar, D., Hogan, D. (2018)
Revision of 44 research studies about Educational Coaching. Overall the results are better when the groups are small, when there is an ongoing monitoring of the proposal and motivated teachers.
Piper, B. and Simmons, S. (2015)
Instructive coaching. This alludes to research conducted with more than 8000 students from Kenya which highlights coaching potentialities and limitations in a socially economic complicated population.
Teemant, Wink and Tyra (2011)
Instructive coaching. Teachers that had followed 7 coaching cycles. 21 teachers (2 men) from two primary schools were selected for the sample, ethnically diverse and between 3 - 20 years of experience in teaching. Descriptive method. Observation through a protocol validated to the effects of the Standards performance continuum (SCP). Two phases of the activity directed by external coaches were defined: a) Phase 1. The teacher is focused during five days (30 h) on the definition of the five indicators of the Model for Efficient Pedagogy proposed by the CREDE (Centre for Research on Education, Diversity, and Excellence), and the activity is centered on the organization of the class and the quality of instructive conversations. The teachers systematically learn regulations, expectations, and procedures for the success of the group collaboration; b) Phase 2. This consists of individual constructive coaching (in 9 months 15 contact hours). Coaching process stages: 1) 30 minutes of joint planning of a class, 2) 45 minutes of class observation in which the coach recompiles information for the later discussion and 3) 30 minutes to compare the design with the conducted class, considering areas for improvement.
Zwart, Wubbels and Bolhuis (2009)
Peer coaching (coaching among colleagues). The sample consists of 28 secondary education teachers. Descriptive method. Combines quantitative and qualitative methodologies. Questionnaire and digital logs. Based on the development of dyads for the coaching process.

We agree with Lofthouse, Leat and Towler (2010) that 'perhaps the most important message is that coaching does not offer a quick fix; instead, it provides a vehicle for change through evolution, not revolution'. From here, we encourage a more profound reading of the subject with different references (Cornett & Knight, 2009; Flückiger, Aas, Nicolaidou, Johnson, & Lovett, 2017; Lofthouse, 2010; Hook, McPhail, & Vaas, 2006; Hattie, 2009) that have the following points in common: a) coaching can help educational inclusion, b) coaching has to be supported by the governing educational institution, c) the figure of a leader (trainer) to motivate in any center the carrying out of educational change projects

can be enhanced with perspectives such as coaching, d) coaching favors the systemic view that all teachers are leaders, e) coaching invites awareness and constant reflection about education, f) coaching can help to establish a greater connectivity among members of the educational community and g) the importance given by coaching to the evidence and the objectives (to advance one has to clearly understand what is expected and how it is shown). We can find different levels of implication in Educational Coaching (table 2) following the training phases of Gordon (1998):

Tabla 2. Training phases of Gordon

Training	Degree of implication	Actuations
Unconsciously incompetent	Scarce.	Null or punctual.
Consciously incompetent	Initial, due to starting to have interest and to participate.	Training and information about Educational Coaching.
Consciously competent	Noteworthy, or can even be outstanding, although not reaching a profound level of commitment.	Implication in projects and initiatives about Educational Coaching.
Unconsciously competent	Transcends and is committed and applies what is learned and implemented.	Implementation of experience in Educational Coaching to personal and professional life.

Rodríguez et al., (2011) indicated that in teacher training, coaching defines a collaborative relation to help teachers have professional training in their workplace, improving their real practices in their classrooms and centers.

Subsequently, similar authors, Rodríguez et al., (2011) conducted a coaching experience between peers in teaching students of the Madrid Autonomous University so that among them they could conduct a critical reflection about different works they implemented. In this sense, they checked that the mentioned perspective is: a) a powerful instrument for professional development, b) a strategy for teacher training as a team, c) an enhancement of the experience with peer contributions, d) a training focused with a cooperative perspective on the treatment of chaos in the school and e) the possibility of knowing the development of teaching in classrooms and cycles other than their own. Lárez (2008) indicated the power of adopting coaching principles for the management of End-of-Degree Projects in the University, becoming the tutor of the University, a coach that invites the learner to constantly reflect with self-determination, proactivity and a belief in himself and in his work. Many current meta-analytic and praxis studies (Bozer & Sarros, 2012; Cortés-Pascual, 2019; Theeboom, Beersma, & van Vianen, 2014); confirm that coaching, as a training and support process, has an impact on 1) personal and educational leadership, 2) intrapersonal and interpersonal well-being, and 3) achievement of objectives.

## Consideration of Educational Coaching

The educational field is beginning to research the possibilities of including coaching processes with teachers through some case studies. During these processes, teachers and coaches can build a positive work relationship that supports the professional growth of the teachers, highlights their daily practice and serves as an effective model of helping teachers to stimulate their ‘talents’ through ongoing professional development (Blackman, 2010). This is about creating an environment that allows teachers to reflect on their current approaches and strategies and helps them to create a greater security in themselves and competence to practice new abilities and come out from their comfort zone (Ben-Peretz, Gottlieb, & Gideon, 2018; Rush & Sheldon, 2006). A key element of such a process is the coach. Far from ‘sentencing’ what is it that the teacher needs to improve his/her daily practice, the coach creates a space for self-reflection for the teacher that will stimulate and define the terms in which he/she expects to conceive his/her praxis and the ways in which the coach can help to redefine it (Rhodes & Benicke, 2002). The consideration that a competent and critical teacher is, at least, a reflexive teacher, and the truly useful—competent—coach is the one who knows how to lead the process, offering understanding and support in a constructive space, free from judgement, promoting reflection on the conceptions, practices, beliefs, and possibilities of the coachee—educator—stimulating the opening of his/her reference frameworks based on the abovementioned approaches.

Different authors consider coaching as a constructive process of knowledge and awareness of oneself, of development of self-leadership abilities and group leadership, and communication abilities between colleagues, consequently increasing confidence in oneself (Bush & Glover, 2005; Van Driel, Beijaard, & Verloop, 2001; Veenman & Denessen, 2001) among others. Likewise, there seems to be unanimity in that coaching should focus on filling the space between the current situation and that which is desired by the professional, as well as creating the necessary climate for the coachee to explore new possibilities and develop plans of action.

From a more quantitative focus, other approaches conceive of coaching processes as methods for encouraging the implementation of new practices, and once these have started to be developed by the teachers, as constructive feedback that prevents the isolation that sometimes occurs after beginning the execution of new strategies and that empower an ongoing practice of these strategies (Graves & Bartholomew, 2010). Two dominant models of coaching are based on that viewpoint suggested by the literature about professional development in the educational field, originally denominated: ‘supervisory coaching’ and ‘side-by-side coaching’. The main difference between these is that in the first case, the coach gives constructive feedback—in all cases without evaluation or judgement—after making observations of the practice of the professional, and in the second case, feedback is given live, even through a direct intervention by the coach (ibidem). Although interesting for certain situations and needs, both perspectives are in a certain way a greater ‘modeling’ or directive form of coaching, with an objective not so much to help those situations in which the coachee—in this case, the professional— can appear to help himself/herself but to directly facilitate possible tools through practice and observation. This pragmatic part provides soundness and realism, because the educational agents demand usefulness in the teaching and educational professional development (Jiménez, 2012; Lárez, 2008; Sánchez & Boronat, 2014). From this practical viewpoint, we find the application of coaching very interesting for the improvement of learning complex mathematical processes (Bengo, 2016). All of these factors have influenced the development of our Comprehensive Model of Educational Coaching, since we have not found an approach that is similar to ours nor one that fulfils our objective of presenting a formal and systematized educational coaching initiative, as will be explained later.

## Studies about specific and transversal competences of the teacher and of non-university teaching management

In the scientific literature, competences are classified based on their link with knowledge (learning to know), with the application (learning to do) and with their proximity to more specifically human qualities such as attitudes and values (learning to be and learning to live together) (Tejada, 2009; Tribó, 2008). These latter competences have a more transversal or general character (Cádiz, Villanueva, Astorga, & Echenique, 2012).

Based on this criterion, we indicate the results of some studies that have reviewed both general and specific competences—first, those referring to the teaching field and second, to the non-university teaching management.

A study aimed at evaluating the capacity of teachers to stimulate learning based on research in the classroom indicated that the competences linked to learning to be (integrated in the ‘attitude towards science’ dimension) and some competences related to learning to know and learning to do (capacity for stimulating the learning based on research, pedagogical capacity, knowledge of the subject and capacity to connect the different contents of each subject) were greater in teachers with more experience (Alake-Tuenter, Biemans, Tobi, & Mulder, 2013).

Another study about the disposition towards competent work in the classroom by primary teachers indicated that women and the youngest teachers were more disposed to competent work than were men and older instructors, respectively. Additionally, the greater need

of training, as well as specialized training through competences, favored the application of a competency focus in the classroom. When considering the profile of the teacher, the tutors gave significantly greater values to the importance of instrumental competences (learning to do) compared to specialist teachers, while the latter showed significantly higher points in the relevance granted to transversal competences (learning to be and learning to live together) compared to the tutors (Méndez, Méndez, & Fernández-Río, 2015).

In a work exclusively developed with secondary school teachers, the competences linked with personal questions (learning to be) obtained more evaluation. Competences linked to technical questions or methodologies (learning to do) and the disciplinary or scientific ones (learning to know) were found, in both cases, to be at an intermediate level of development in the teachers. However, the competences associated with social questions (learning to live together) were given a lower level of points, although close to the average evaluation (Ferrández-Berruero & Sánchez-Tarazaga, 2014).

In the case of managers, they are trying to improve the results of schools in more countries through greater autonomy in the design of the curriculum and in the management of resources. These aspects mean that the role of administrators is growing beyond that of an educational administrator (Schleicher, 2012).

A research study with secondary school managers indicated that the competences in which those heads of centers obtained a lower evaluation were their ability to stimulate the development of networks, possibly due to the need of greater resources to invest in digital technologies and their ability to perform an institutional self-evaluation. In contrast, the efficiency of their leadership stood out as one of their most outstanding qualities, possibly due to their capacity for generating consensus, their support of projects that arise among their personnel and their commitment to the task of teaching. In addition, they also received good evaluations in communication abilities, possibly by promoting the relationship of parents with the school (Araiza, Magaña, & Carillo, 2014).

These latter results are harmonious with those reached in a study that revealed that the supervisors who offered more autonomy to teachers are better disposed to achieve their results both in teaching aspects and in management ones (Van Droogenbroeck, Spruyt, & Vanroelen, 2014). The results also agreed with those suggested by another research study with primary and secondary school teachers that revealed that if the school directors offered more support, teacher burnout significantly decreased and their feelings of personal efficiency increased (Fernet, Guay, & Austin, 2012). In this sense, it was shown as strategic for the administrative heads to favor the reduction of emotional exhaustion in teachers because it is associated with the bad behavior of students (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014).

In a research study aimed at offering keys to the development of a program for improvement in a secondary educational center, the directors of educational centers and department heads indicated that human competence was the most important key. In this respect, they declared that the creation of this type of plan depended on the collaboration of all the agents involved and that the most relevant values must be strengthened by the directors and must be involved in the improvement programs. Nevertheless, they also highlighted aspects linked to the technical and management areas such as the commit-

ment to teaching and with the attention and needs of each program, the stimulation of using information technologies and communication, and the need for supporting the integration of students with different deficits (Medina & Gómez, 2014). This latter aspect becomes a strategic element for administrative heads because it involves the students in decision making, strengthening the commitment of students to the school (Mager & Nowak, 2012).

## Method

### Context and objective of the research

The Comprehensive Model of Educational Coaching (MICE) is a framework that is based on the previous discussion and that was in development until 2013, when it was independently started in educational centers, and the Aragon Regional Government, through Teacher Training and Innovation Centres (CIFE), and the Coaching Research and Entrepreneurial Group for Personal and Professional Development began to give it form and resources. MICE holistically offers training and coaching processes to all of the educational community: students, teachers, management teams, administration, families, and other educational agents. Since 2013, CIFE centers are responsible for the training of teachers as well as managing the educational research of all the centers (public, independent and private). In Zaragoza, there are two CIFE centers, and we have developed this project in both. Therefore, after the demand from different centers, we launched the Specialized Training in Educational Coaching (FECED) program, which has been running for two courses, and the Training for Coaching in Teams program, with a course under development. The first is for teachers of all levels of formal education, and the second is for management teams. At the same time, there was an offer for individual and team coaching, although this has been implemented in a minor way due to the economic cost. The content offered in this training and its processes are included on the website: [www.EducationalPaths.com/MICE](http://www.EducationalPaths.com/MICE), which we recommend visiting.

MICE is an integrated model that offers a global view of education as matching to achieve the best version of a person, of a team or of a project based on different classical and current theories, from the absolute belief in personal resources and the offering of different resources for personal development, active methodologies, and collaborative innovations.

So that MICE can have the vital researching support that gives it rigor and validity, which are so necessary in new proposals that have little or no background, we have supported it with the Research Group GICED.

The diffusion of the model has also reached the Innovation Centres of the Autonomous Region of Castille and Leon and other European universities. The idea that Educational Coaching, well validated and scientifically supported, is an excellent complement for education is slowly growing, and therefore, we are offering this research herein.

Tabla 3. Training given following the MICE model in 2014-15 and 2015-16 courses

Temporal period	Training or revision	Participants	Data collection techniques
Course 2014-15	Specialized Training in Educational Coaching (FECED)	23 Infant and Primary Education teachers	Questionnaire of expectations, questionnaire of technical competences of the teacher and questionnaire of transversal competences of the teacher. All a priori (December 2014) and a posteriori (June 2015). Final discussion group (June 2016).
	Team Coaching Process (PCE)	1 team	Previous questionnaire of expectations, questionnaire after each session and questionnaire of achievements posteriori.
	Individual Coaching for Teachers Process (PCID)	4 processes	Previous questionnaire of expectations, questionnaire after each session and questionnaire of achievements posteriori.
Course 2015-2016	Specialized Training in Educational Coaching (FECED)	33 Infant and Primary Education teachers	Questionnaire of expectations, questionnaire of technical competences of the teacher and questionnaire of transversal competences of the teacher. All a priori (November 2015) and a posteriori (June 2016). Final discussion group (June 2016).
October 2017	Revision of the impact of Specialized Training in Educational Coaching (FECED)		Open questionnaire for evaluation of the training improvement one course later.

The entire sample is 56 teachers, 20 men and 36 women between 25 and 57 years old.

Based on this framework for this article, we only consider all is that related to the FECED training to identify the nature of their benefits (according to expectations and other aspects of improvement) and their relationship with teaching competences, and from there we propose the following objectives:

1. Describe the initial expectations about Educational Coaching training.
2. Reveal the aspects for improvement of Educational Coaching training.
3. Describe the transversal technical competences of the teacher who performs the Educational Coaching training before and after the training.
4. Relate technical competences and expectations of the management and teaching functions.

think the FECED can offer you personally?, what do you think that the FECED can offer you professionally?, and what are you expectations?); a questionnaire about technical competences of the teacher (based on article 91 of the Organic Law 2/2006 of May 3rd, about Education and Law 7/2007 of April 12th, about the Basic Statue of Public Employees); and a questionnaire about transversal competences according to the Tuning project. Subsequently, we went through similar tests, also on-site (in June 2015 and June 2016), adapting the content of the first so it could be coherent. In the same month, there was also a discussion group with 5 participants from each course, so they could more openly describe their aspects for improvement. Finally, in October 2017, an open questionnaire was sent online to all the participants to explore the repercussion of the training after a long period had passed, with questions about improved competences, application in their personal and professional lives, if people around them have perceived any change and if they would propose any aspect for improvement.

We validated the pertinence of these tests with 3 educational experts before using them, and small changes were made in the original proposal according to their suggestions.

The qualitative data has been analyzed with an exhaustive inter-judge analysis (3 evaluators) who organized the responses into 9 categories (see table 4).

## Procedure and method for recompiling data

Before specifically starting the FECED training, we physically on-site (both in December 2014 and in 2015) went through several tests: a questionnaire about expectations with three questions (what do you

Tabla 4. Categorization of qualitative data

Category	Definition
Leadership	Series of competences that a person must influence over a group of subjects, as well as the capacity for management and being able to carry out a project. We allude to leadership in both the personal life as in the professional one.
Resolution of conflicts	This is a series of knowledge and abilities to understand and intervene in the pacific nonviolent resolution of conflicts. The capacity for mediation is also important.
Mental flexibility	This is the capacity for being able to adapt oneself to different situations, identify and know how to modify personal points of view.
Empathy	This is the capacity of perceiving what the other person can affectively feel. Putting oneself in the shoes of another.
Assertiveness	A competence to understand the ability of knowing how to be situated at an intermediate point between two other conducts: passiveness that consists of allowing third parties decide for oneself, or overlooking one's own ideas, and the aggressiveness that appears when one is not able be objective and respect the ideas of others.
Personal improvement	Capacity to want to and know how to obtain the version of the personal and/or professional through the training, experiences... It is also related to identifying the strong and weak points, hypersensitiveness, learning from mistakes and having self-confidence.
Improvement of the environment in the center	Change that is perceived in the social relationships established in the institution both vertically and horizontally.
Ecology awareness	Competence of thinking about future generations through personal and professional actions.
Reaching objectives	Want to and/or know how to search for what one wants to achieve from a personal and/or professional point of view.



In addition, the content was also categorized referring to if it was something general, of the students, or of the teachers or of the team.

The quantitative results were analyzed in the SPSS program (version 20).

The results are revealed including the qualitative and quantitative data.

## Results

The results are presented according to objectives:

### Describe the initial expectations about Educational Coaching training

Figure 1 shows the average values of the expectations of the content by the 44 participants in the Educational Coaching training at the beginning of the 2014-15 and 2015-16 courses. The data were recompiled by means of two questionnaires with open questions and were later categorized following the concepts indicated in table 4. The following reasoning has been applied in the definition of the typographic size of each category to prepare the graph: 12 (average between 0 and 0.09), 14 (average between 0.1 and 0.19), 16 (average between 0.2 and 0.29), etc.



Figure 1. Expectations of the training for courses in 2014-15 and 2015-16

The data reveal that the participants had a special interest in improvement at a personal level (average value: 1.32) as well as improving their skill to reach objectives (average value: 1.41). Their desire to improve their empathy is situated at a second level of importance (average value: 0.30). Their ability to resolve conflicts, their ecology awareness, their skill to improve the environment in the center and their flexibility are situated a lower level (average values between 0.2 and 0.27). Their assertiveness is positioned posteriori (average value 0.11). Their capaci-

ty for leadership is located at the lowest average points (0.14).

### Reveal the aspects for improvement about Educational Coaching Training

No significant differences appeared in the evolution of the general variables; this is seen only in the variables of the resolution of conflict and personal improvement (<0.05) that drop, and the rest increase, although not in a statistically significant way.

This is complemented by the qualitative comments obtained nearly a year later when participants were asked how they had applied the training they received in the classroom. The majority indicated that they continuously did (85%) and 15% said they did periodically. Aspects of the training were implemented in tutorship, in the preparation of groups, in the care of the language and in such specific events such as the creation of a personal happiness notebook.

### Describe the transversal technical competences of the teacher who performs the Educational Coaching Training

Regarding technical competences, once again, some do increase but not in a significantly statistical way (creating environment in the classroom, respect of the students, caring for the talents of learning society, personalized evaluation considering the initiatives of the students and interest in ongoing training), and in the competence for participation in the academic coordination of the center, there is a significant difference (<0.05) and an involution in the same position because the points decrease. The same occurs with the transversal competences, because only the ability of knowing how to manage information and the capacity of initiative increase significantly. The qualitative part qualifies these results with proposals for improving the relationship with the students: empathy, management of positive emotions and accompaniment for decision taking.

### Relate expectations, technical and transversal competences with the management and teaching functions

We see statistically significant differences before and after the training (table 5) only among those who form part of a management team and those who do not, in variables such as handling students with respect and aimed at results, which are higher in the second group, and personal improvement, which is greater among those forming the management team.

Tabla 5. Significant results in the relation between expectations, technical and transversal competences with the management and teaching functions

Variable	Average participants not forming part of a management team	Average participants forming part of a management team
Personal improvement	0.71	0.73
Handling students with respect	4.81	4.17
Aimed at results	3.38	3.33

In addition to these results, we want to show some others that we think can complete a more extensive view. Women obtained significantly higher points than did men in the use of diverse teaching models (3.86 and 3.17, respectively) and in the participation in ongoing training activities to favor personal development (4.38 and 3.33, respectively), and by age, there are differences in the average position. Teachers in the Infant and Primary education levels obtained significantly more points in leadership, flexibility, empathy, performing cooperative work activities and organizing didactic activities so the students perform practice tasks, than did the Secondary education teachers after the training. By type of center, we found that the improvement of results was considered better by the teachers from Private Schools than those from the Public Centres, 50 over 3.58.

In this sense, this practice confirms the efficiency of the training, aimed at success in group collaboration (Teemant, Wink, & Tyra, 2011) It also strengthens the theory that this type of actuation favors the creation of a climate for exploring new possibilities (Blackman, 2010), an aspect we consider linked to the care for language that the teachers show one year after finalizing the coaching training program.

In addition, the consolidation of favorable results is also seen in that the participants declared being more empathetic, meaning they have a greater aptitude to stimulate a connectivity between the members of the educational community (Hook, McPhail, & Vaas, 2006). Another outstanding result is that they have a greater capacity for managing positive emotions, something associated with a greater skill in providing emotional support (Jiménez, 2012) and in using their emotions as a source for learning (Hunt, 2017) On the other hand, the participants also saw their skill for accompanying the taking of decisions strengthened, this capacity that is stimulated through tutorship in the managing of jobs (Lárez, 2008) as well as in the aptitude of the teachers to stimulate the opening of referential frameworks (Rhodes & Benicke, 2002) and generally in the professional development of their students (Gordon, 1998) Here, we should indicate that the promotion of this ability in the students strengthens their commitment to the school (Mager & Nowak, 2012).

Regarding roles, the quantitative results indicated the search for personal improvement in the managers that we associate with their desire to be more autonomous (Schleicher, 2012) and to their communication abilities (Araiza, Magaña, & Carillo, 2014). On the other hand, the teachers have grown primarily in their ability to handle the students with respect. We consider that this latter point is associated with the promotion of support in some centers (Fernet, Guay, & Austin, 2012) as well as the promotion of human competence (Medina & Gómez, 2014).

Gender has also qualified the results, indicating that women have granted more relevance to the use of diverse teaching models. We understand that this point has certain symphony with that offered by another research study that indicated that women have a greater disposition for competence work than do men (Méndez, Méndez, & Fernández-Río, 2015).

This research has great potential in the sense of providing research for Educational Coaching and its practice. We highlight that we have data for over two years, monitoring, teachers at different educational levels, and the use of quantitative and qualitative instruments. The primary limitation is the lack of group control, which we have tried to replace by considering the impact perception of the training after some time. Although we would have liked to have more teachers, we think that they gave the necessary viewpoint to advance the science of the subject concerning us. Along this line, in the future we want to continue with this focus adding more teachers and centers, as well as creating a portfolio of the teacher that indicates his/her training and positions in practices with evidence. We also want to recompile the voices of the students and family if they perceive changes in the students through the teachers, and we are aiming towards some research work that links

## Discussion and conclusions

The results of this research indicate that the teachers showed significant regression in two aspects in which they had high expectations thanks to the coaching training: their personal improvement to develop themselves both personally and professionally and their capacity to reach objectives in any field of life. We understand that, paradoxically, these evaluations can show significant progress during training because of the overestimation effect due to an initial lack of knowledge of the competence. In this way, the participants make a sincere initial self-evaluation, although estimated in relation to their competences for resolving problems and personal improvement that would reduce the value when reaching the knowledge status of the competence according to the training model. We base this hypothesis on the training phases proposed by Gordon (1998)

Contemplating the indicated considerations, we understand that the results back-up the coaching capacity to favor orientation to results in the field of education (Fazel, 2013) through a constant reflection about education (Lofthouse, 2010) that improves the practice of the teacher in the classroom (Rodríguez, y otros, 2011) In addition, this type of training stimulates professional improvement in the participants (Devine, Meyers, & Houssemand, 2013)

With the results about the capacity to motivate the participants in the coordination bodies of their centers, we have made the same reading as with the previous variables. This way, we understand that the actuation has improved the capacity of the teachers to act in their centers (Rodríguez, y otros, 2011), therefore predisposing the teachers to perform projects for educational change in their institutions (Hattie, 2009).

The study also indicated that sometime after the teachers had finalized their training about coaching, they applied it in group training.

Educational Coaching with the Design Thinking methodology. That will mean that one can step-by-step talk more frankly about Educational Coaching and not only of coaching applied to education. We aim our Comprehensive Model of Educational Coaching in this direction and towards further development of the areas of improvement presented in this article (Bozer & Sarros, 2012; Cortés-Pascual, 2019; Theeboom, Beersma, & van Vianen, 2014; Freedman, 2018).

## References

- Alake-Tuenter, E., Biemans, H., Tobi, H., & Mulder, M. (2013). Inquiry-based science teaching competence of primary school teachers: a Delphi study. *Teaching and Teacher Education*(35), 13-24. doi:[10.1016/j.tate.2013.04.013](https://doi.org/10.1016/j.tate.2013.04.013)
- Aloe, A. M., Shisler, S. M., Norris, B. D., Nickerson, A. B., & Rinker, T. W. (2014). A multivariate meta-analysis of student misbehavior and teacher burnout. *Educational Research Review*, 12, 30-44. doi:[10.1016/j.edurev.2014.05.003](https://doi.org/10.1016/j.edurev.2014.05.003)
- Araiza, S., Magaña, R., & Carillo, L. (2014). Evaluación por estándares de la gestión directiva en secundaria. *Revista Iberoamericana de educación*, 64, 99-113. doi:[doi.org/10.35362/rie640408](https://doi.org/10.35362/rie640408)
- Batt, E. G. (2010). Cognitive coaching: A critical phase in professional development to implement sheltered instruction. *Teaching and Teacher education*, 26(4), 997-1005. doi:[10.1016/j.tate.2009.10.042](https://doi.org/10.1016/j.tate.2009.10.042)
- Bengo, P. (2016). Secondary mathematics coaching: The components of effective mathematics coaching and implications. *Teaching and Teacher Education*, 60, 88-96. doi:<https://doi.org/10.1016/j.tate.2016.07.027>
- Ben-Peretz, M., Gottlieb, E., & Gideon, I. (2018). Coaching between experts—opportunities for teachers’ professional development. *International journal of teachers’ professional development*, 22(3), 303-313. doi:[10.1080/13664530.2018.1438310](https://doi.org/10.1080/13664530.2018.1438310)
- Blackman, A. (2010). Coaching as a leadership development tool for teachers. *Professional Development in Education*, 36, 421-441. doi:[10.1080/19415250903208940](https://doi.org/10.1080/19415250903208940)
- Bozer, G., & Sarros, J. C. (2012). Examining the effectiveness of executive coaching on coachees’ performance in the Israeli context. *International Journal of Evidence Based Coaching and Mentoring*, 10(1), 14-32.
- Brujin, E., & Leeman, Y. (2011). Authentic and self-directed learning in vocational education: Challenges to vocational educators. *Teaching and Teacher Education*, 27(4), 694–702. doi:[10.1016/j.tate.2010.11.007](https://doi.org/10.1016/j.tate.2010.11.007)
- Bush, T., & Glover, D. (2005). Leadership development for early headship: The New Visions experience. *School Leadership and Management*, 25(3), 217–239. doi:<https://doi.org/10.1080/13634230500116314>
- Cádiz, J., Villanueva, O., Astorga, M. L., & Echenique, M. J. (2012). ¿Profesores competentes o humanizadores? *Educación y Educadores*, 15(3), 535-546. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=5687364>
- Cornett, J., & Knight, J. (2009). Research on Coaching. In (. T. En (Ed.), & J. Knight (Ed.), *Coaching: Approaches and perspectives* (pp. 192-216). United States Of America: Corwin Press.
- Cortés-Pascual, A. (2019). Coaching de equipos aplicado a la transformación del campo educativo y social. ¡Importamos, Aportamos!. Madrid: Síntesis.
- Devine, M., Meyers, R., & Houssemand, C. (2013). How can coaching make a positive impact within educational settings? *Procedia- Social and Behavioral Sciences*, 93, 1382–1389. doi:[10.1016/j.sbspro.2013.10.048](https://doi.org/10.1016/j.sbspro.2013.10.048)
- Fazel, P. (2013). Teacher-coach-student coaching model: A vehicle to improve efficiency of adult institution. *Procedia- Social and Behavioral Sciences*, 97, 384–391.
- Fernet, C., Guay, F. S., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education*, 28(4), 514-525. doi:[doi.org/10.1016/j.tate.2011.11.013](https://doi.org/10.1016/j.tate.2011.11.013)
- Ferrández-Berruero, M., & Sánchez-Tarazaga, L. (2014). Competencias docentes en secundaria. Análisis de perfiles de profesorado. *Relieve: Revista Electrónica de Investigación y Evaluación Educativa*, 20(1). doi:<https://doi.org/10.7203/relieve.20.1.3786>
- Flückiger, B., Aas, M., Nicolaidou, M., Johnson, G., & Lovett, S. (2017). The potential of group coaching for leadership learning. *Professional Development in Education*, 43(4), 30-45. doi:[10.1080/19415257.2016.1223736](https://doi.org/10.1080/19415257.2016.1223736)
- Freedman, A. M. (2018). Coaching corporate nomads: Cross-cultural relocation and reentry. *Consulting Psychology Journal: Practice and Research*, 70(4), 269-296. doi:<https://doi.org/10.1037/cpb0000120>
- Gordon, R. (1998). Balancing real-world problems with real-world results. (R. Heller, Ed.) *Phi Delta Kappan*, 78(5), 390-393.
- Grant, A. M., & Cavanagh, M. J. (2004). Toward a profession of coaching: Sixty-five years of progress and challenges for the future. (U. K. University, Ed.) *International Journal of Evidence Based Coaching and Mentoring*, 2(1), 1-16.
- Graves, A., & Bartholomew, C. (2010). Using Coaching to improve the Fidelity of Evidence-Based Practices: A Review of Studies. *Teacher Education and Special Education*, 33, 279-299. doi:[doi.org/10.1177/0888406410371643](https://doi.org/10.1177/0888406410371643)
- Hattie, J. (2009). Visible learning: a synthesis of more than 800 meta-analysis related to achievement. Routledge, Abingdon: springer. doi:[10.1007/s11159-011-9198-8](https://doi.org/10.1007/s11159-011-9198-8)
- Hoekstra, A., & Korthagen, F. (2011). Teacher learning in a context of educational change: Informal learning versus systematically supported learning. *Journal of Teacher Education*, 62(1), 76-92. doi:[10.1177/0022487110382917](https://doi.org/10.1177/0022487110382917)
- Hook, P., McPhail, I., & Vaas, A. (2006). Coaching and Reflecting. Alresford: Teachers ‘Pocketbooks. Retrieved from <https://trove.nla.gov.au/work/27565599?q&versionId=33245343>
- Hunt, C. (2017). Getting to the heart of the matter: Discursive negotiations of emotions within literacy coaching interactions. *Teaching and Teacher Education*, 60, 331-342. doi:[10.1016/j.tate.2016.09.004](https://doi.org/10.1016/j.tate.2016.09.004)
- Jiménez, R. (2012). La investigación sobre coaching en formación del profesorado: una revisión de estudios que impactan en la conciencia sobre la práctica docente. *Profesorado. Revista de Currículum y Formación del Profesorado*, 16(1), 238-252. Retrieved from <https://www.redalyc.org/pdf/567/56724377014.pdf>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teaching coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588. doi:[10.3102/0034654318759268](https://doi.org/10.3102/0034654318759268)
- Lárez, J. H. (2008). El coaching educativo como estrategia para potenciar el éxito durante la etapa de desarrollo y culminación del trabajo especial de grado. *Revista Universitaria de Investigación*, 9(2), 219-234. Retrieved from [www.redalyc.org/pdf/410/41011837013.pdf](https://www.redalyc.org/pdf/410/41011837013.pdf)
- Lofthouse, R. L. (2010). Coaching for teaching and learning: a practical guide for schools. UK: Newcastle University. Retrieved from [https://eprints.ncl.ac.uk/file\\_store/production/157251/413164CA-AE18-47D7-AB09-9BA2DF13C1E8.pdf](https://eprints.ncl.ac.uk/file_store/production/157251/413164CA-AE18-47D7-AB09-9BA2DF13C1E8.pdf)
- Mager, U., & Nowak, P. (2012). Effects of student participation in decision making at school. A systematic review and synthesis of empirical research. *Educational Research Review*, 7(1), 38-61. doi:[doi.org/10.1016/j.edurev.2011.11.001](https://doi.org/10.1016/j.edurev.2011.11.001)
- Medina, A., & Gómez, R. (2014). El liderazgo pedagógico: Competencias necesarias para desarrollar un programa de mejora en un centro de educación Secundaria. *Perspectiva Educativa*, 53(1), 91-113. doi:[10.4151/07189729](https://doi.org/10.4151/07189729)

- Méndez, D., Méndez, A., & Fernández-Río, F. (2015). Análisis y valoración del proceso de incorporación de las Competencias Básicas en Educación Primaria. *Revista de Investigación Educativa*, 33(1), 233-246. doi:[10.6018/rie.33.1.183841](https://doi.org/10.6018/rie.33.1.183841).
- Morales, J. C., & Morales, F. M. (2016). Revisión de publicaciones sobre coaching educativo y profesional. In M. C. Pérez-Fuentes, J. J. Gázquez, M. M. Molero, A. Martos, M. M. Simón, & A. B. Barragán, *Variables Psicológicas y Educativas para la intervención en el ámbito escolar: Vol (pp. 149-156)*. Madrid: Asunivep. Retrieved from <https://formacionasunivep.com/files/publicaciones/variables-psicologicas-educativas-intervencion-ambito-escolar-vol2.pdf#page=150>
- Piper, B., & Simmons, S. (2015). Teacher coaching in Kenya: Examining instructional support in public and nonformal schools. *Teaching and Teacher Education*, 47, 173-183. doi:[10.1016/j.tate.2015.01.001](https://doi.org/10.1016/j.tate.2015.01.001)
- Rhodes, C., & Benicke, S. (2002). Coaching, mentoring, and peer networking: Challenges for the management of teacher professional development in schools. *Journal of Science Education*, 28(2), 297-309. doi:[10.1080/13674580200200184](https://doi.org/10.1080/13674580200200184)
- Rodríguez, A., Esteban, R. M., Aranda, R., Blanchard, M., Domínguez, C., González, P., . . . Messina, C. (2011). Coaching reflexivo entre iguales en el Practicum de la formación de maestros. *Revista de Educación*, 355-379. Retrieved from [www.revistaeducacion.mec.es/re355/re355\\_15.pdf](http://www.revistaeducacion.mec.es/re355/re355_15.pdf)
- Rush, D., & Sheldon, M. (2006). Coaching practices rating scale for assessment adherence to evidence-based early childhood intervention practices. *Case Tools*, 2(2), 1-7.
- Sánchez, B., & Boronat, J. (2014). Coaching educativo: modelo para el desarrollo de competencias intra e interpersonales. *Educación XXI*, 17(1), 219-242. doi:<https://doi.org/10.5944/educxx1.17.1.10712>
- Schleicher, A. (2012). *Preparing Teachers and Developing School Leaders for the 21st Century*. Paris: Lessons from around the World. Retrieved from <https://www.oecd.org/site/eduistp2012/49850576.pdf>
- Teemant, A., Wink, J., & Tyra, S. (2011). Effects of coaching on teacher use of sociocultural instructional practices. *Teaching and Teacher Education*, 27(4), 683-693. doi:[10.1016/j.tate.2010.11.006](https://doi.org/10.1016/j.tate.2010.11.006)
- Tejada, J. (2009). Competencias docentes. *Profesorado: Revista de currículum y formación del profesorado.*, 13(1), 1-15. Retrieved from <https://recyt.fecyt.es/index.php/profesorado/article/view/42339>
- Theeboom, T., Beersma, B., & van Vianen, A. (2014). Does coaching work? A meta-analysis of the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1-18. doi:[10.1080/17439760.2013.837499](https://doi.org/10.1080/17439760.2013.837499)
- Tobin, K., & Espinet, M. (1989). Impediments to change: Applications of coaching in high-school science teaching. (I. John Wiley & Sons, Ed.) *Journal of Research in Science Teaching*, 26(2), 105-120. doi:[10.1002/tea.3660260203](https://doi.org/10.1002/tea.3660260203)
- Tribó, G. (2008). El nuevo perfil profesional de los profesores de secundaria. *Educación XXI: Revista de la Facultad de Educación*, 11, 183-209. Retrieved from <http://revistas.uned.es/index.php/educacionXXI/article/view/314/270>
- Van Driel, J. H., Beijaard, D., & Verloop, N. (2001). Professional development and reform in science education: The role of teachers' practical knowledge. *Journal of Research in Science Teaching*, 38(2), 137-158. doi:[doi.org/10.1002/1098-2736\(200102\)38:2<137::AID-TEA1001>3.0.CO;2-U](https://doi.org/10.1002/1098-2736(200102)38:2<137::AID-TEA1001>3.0.CO;2-U)
- Van Droogenbroeck, F., Spruyt, B., & Vanroelen, C. (2014). Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. *Teaching and Teacher Education*, 43, 99-109. doi:[doi.org/10.1016/j.tate.2014.07.005](https://doi.org/10.1016/j.tate.2014.07.005)
- Veenman, S., & Denessen, E. (2001). The coaching of teachers: Results of five training studies. *Educational Research and Evaluation*, 7(4), 385-417. doi:<https://doi.org/10.1076/edre.7.4.385.8936>
- Vygotsky, L. S. (1978a). *Mind in Society*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1978b). *Pensamiento y lenguaje*. Madrid: Paidós.
- Zwart, R. C., Wubbels, T., & Bolhuis, S. (2009). Which characteristics of a reciprocal peer coaching context affect teacher learning as perceived by teachers and their students? *Journal of Teacher Education*, 60(3), 243-257. doi:[10.1177/0022487109336968](https://doi.org/10.1177/0022487109336968).