Teacher training and professional development in accordance with level of school effectiveness

Formación y desarrollo profesional docente en función del grado de eficacia escolar

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Abstract

This study forms part of a larger research project focusing on school improvement in the Autonomous Community of the Basque Country, which analyses schools with different achievement outcomes in the Diagnostic Assessments in order to identify transferable practices. Here, the focus is on teacher training, since previous research has shown that when they become learning organisations, schools offer positive results not only in terms of student outcomes, but also in relation to teacher training. The methodology comprised three phases: in the first, multilevel regression modelling techniques were used to identify 44 schools with different achievement outcomes; in the second, 39 management teams and 35 school inspectors were interviewed, and 10 discussion groups were held with teachers. Finally, further information was gathered by means of a questionnaire. The results reveal that teacher training and teachers' professional development is an important issue in all schools, and significant investments are made to foster it. Nevertheless, in schools with higher levels of effectiveness, training is seen as something associated with a collective need rather than personal motivation, a perspective that fosters the planning of joint projects with shared aims. The recognition of differing needs in terms of resource allocation and the identification of more vulnerable groups are associated with institutional support and education policies. The study confirms the need for a set of basic conditions (stable team, administrative support, planning and management) to ensure the establishment of dynamics that help schools become learning organisations, enable professional growth and contribute to the optimisation of student outcomes.

Keywords: Teacher training, professional development, school effectiveness, resource allocation, social integration

Resumen

El trabajo se enmarca en la línea de investigación de la Mejora escolar en la Comunidad Autónoma Vasca, centros con resultados diversos en logros que se reflejan en las pruebas de evaluación diagnóstica, son estudiados con el fin de explicar prácticas transferibles. Se ha puesto el foco en la formación docente, tomando en consideración aquellas investigaciones que apuntan a que las escuelas, transformadas en organizaciones que aprenden, ofrecen resultados positivos no solo en los resultados del alumnado, también en la formación de su profesorado. La metodología comprende tres fases definidas: en la primera, con técnicas estadísticas de regresión multinivel se han identificado 44 centros con variación en los logros; en la segunda, se han realizado entrevistas a 39 equipos directivos, 35 responsables de inspección, y se han llevado a cabo 10 grupos de discusión con docentes. Finalmente se ha completado la información con un cuestionario. Los resultados muestran que en todos los centros la formación y desarrollo profesional docente es importante y existe una inversión relevante para su impulso. Sin embargo, cuando la eficacia es más alta, se considera que la formación debe responder a la necesidad colectiva más que a una motivación personal algo que, consecuentemente, revierte en la planificación de un proyecto conjunto con objetivos comunes compartidos. El reconocimiento de la diversidad de necesidades en la dotación de recursos y la identificación de colectivos más vulnerables, se relacionan con el respaldo institucional y las políticas educativas. El trabajo ratifica la necesidad de disponer de unas condiciones básicas (estabilidad del equipo, respaldo administrativo, planificación y gestión) para que las dinámicas que promueven que un centro se transforme en organización que aprende sea una realidad que haga posible el crecimiento profesional y contribuya a la optimización de los resultados del alumnado.

Palabras clave: Formación de profesorado, desarrollo profesional, eficacia del centro de enseñanza, asignación de recursos, integración social

Introduction

This study forms part of the School Effectiveness and Improvement movement, which focuses on researching the conditions, processes and strategies that influence school improvement, understood as 'a series of concurrent, recurring processes through which a school optimises the comprehensive development of each of its students, by increasing the quality of the school itself and its teaching staff' (Murillo & Krichesky, 2015, p.71). This approach views the professional development of teachers as one of the keys to improving teaching quality and student learning and development, placing the locus of change in the school itself in order to generate a true culture of learning. Professional teacher training starts with initial training and continues during both induction (European Commission, 2010) and the rest of the individual's teaching career. This study focuses on in-service teacher training.

During the nineteen-nineties, different methods of assessing improvement plans arose, alongside new professional development proposals, giving rise to new teacher collaboration strategies. From a cultural perspective, emphasis was placed on interactions between innovation and the beliefs and attitudes held by schools and teachers, in accordance with the idea that these attitudes and beliefs play a key role in the configuration of innovation (González-Barbera et al., 2012; Rodríguez-Gómez & Gairín, 2015).

Bolívar (2014) points out that the main characteristics of a learning context are linked to structures that facilitate collective learning focused on student performance, mutual trust, conflict and consensus, and broadening the community to include networks and alliances.

Some authors have shown that leadership is a key factor for organisational learning and the improvement of the system. In this sense, the distributed leadership model seems to be the most conducive to professional learning among teachers (Admiraal et al., 2019). Harris and Jones (2018) also highlight its relationship with teacher leadership, which is characterised by three dimensions: 1) its *influence* on the process of school transformation and educational change, more than a specific role of formal responsibility; 2) as an *action* that goes beyond teachers' formally assigned role in the classroom, prompting them to share practices and bring about change; 3) *excellent pedagogical development*

inside and outside the classroom, in order to influence the practice of others in both the school and the wider system.

Based on evidence of and implications for school and teaching practice provided by the science of learning and development (Cantor et al., 2018; Darling-Hammond et al., 2018; Osher et al., 2018), Darling-Hammond et al. (2020) identify different practices that should be taken into consideration in teacher training, such as mastery-oriented assessment, the acquisition of metacognitive skills, the development of social, emotional and cognitive skills and habits, educative and restorative approaches to behaviour, integrated school support services, extended learning time, and fostering family-school-community partnerships, among others. For its part, with the aim of promoting innovation in education systems, the World Economic Forum (2020) proposes creating networks for increasing collaboration between leaders.

In an analysis of professional teacher development models and programmes in Spain and other countries, Martín (2015) found that learning communities that engage in collaborative activities were scarce in the Spanish education system. This lack, she argues, is a limitation both in terms of teacher training activities and in relation to the overall model of professional teacher development, and what is required is increased investment in the implementation of improvements and a legal framework that regulates the teachers' statute and the training of recently-qualified teachers.

Other studies carried out in Spain highlight the importance of providing reflexive teacher training throughout teachers' entire careers (González Calvo & Barba, 2014), incorporating students' voices (Ceballos-López et al., 2019; Susinos & Haya, 2014) and focusing on teacher engagement in *lesson study*, with results indicating that this fosters reflexive processes among teachers, aimed at transforming and improving teaching practice (Escudero et al., 2018; Peña, 2012; Saiz-Linares et al., 2019; Simón et al., 2018). According to García Bravo and Martín Sánchez (2013), of particular importance also is the idea of enhancing teaching expertise through shared reflexion on praxis. Here, the concept of teacher training encompasses the principles, processes and meanings that underpin teachers' behaviour. Expertise becomes a discourse which explains and questions educational practice through verbal expression. This discourse can be very diverse, pertaining to a specific situation through multiple

different dimensions that are reconstructed throughout a teacher's entire professional career.

■ Teacher training models

Two complementary models have emerged for enhancing teachers' level of professionalism: expert-led lifelong learning and in-school training programmes (Imbernón, 2019). The former is based on formal, official training organised and supported by stakeholders outside the school, while the latter is more informal and systematic, and takes place within the school itself (Escudero, 2017). Nieto and Alfageme-González (2017) propose a classification of different types of lifelong learning based on two main categories: individual technical training (talks, conferences, workshops, online courses, etc.), and collegial professional development (coaching, peer observation, shared teaching, school visits, work groups, cooperative action research, professional communities and professional networks, etc.). These models can be further divided into two main types of training method: elements linked to the training structure-context (format, duration, participation, place, leadership) and elements associated with the process-content of the training (design, consistency, learning case, contents and processes).

In the 2018 TALIS report (Spanish Ministry of Education and Vocational Training, 2019), the different types of lifelong learning for teachers were subdivided into formally structured activities (talks, workshops, formal qualification programmes) and informal activities (networking, collaboration between colleagues, reading academic papers, etc.). According to this report, primary teachers' participation in professional development activities (95%) was slightly higher than their counterparts in secondary (92%). Of the different types of activity, the most common among teachers are face-to-face courses or seminars. Regarding professional development activities that take place inside the school itself, primary teachers participate more than secondary teachers in both tutorials and/or peer observation (as part of formal school programmes), as well as in teaching networks set up specifically to foster teachers' professional development. The professional training area highlighted most often by management teams is that linked to fostering collaborative work among teachers. Both management teams and primary and secondary teachers themselves coincide in underscoring

the following aspects that hamper training: lack of incentives, timetable clashes and family responsibilities.

Much headway has been made recently in this field, in terms of both research and practice (Borko et al., 2010). Rather than focusing on occasional activities, greater importance is now attached to professional development closely linked to teachers' everyday professional practice, supported by the school itself and the school leadership (which is participatory and distributed). Based on the work of Guskey (2002), Escudero (2017, p. 6) identifies the following dimensions of lifelong learning: Political structures regarding teaching staff and lifelong learning: Components of the training; Organisation, support and stakeholders; Impact on teachers and teaching; and Impact on students and their learning. As part of the move to turn schools into learning organisations, Estebaranz (2017) argues that improving implies fostering collaborative practices among teachers. Moreover, the participation of schools themselves in networks has an impact on improvement and innovation (Susinos et al., 2019). According to Azorín and Mujis (2018), the weak culture of collaboration and ineffective governmental mechanisms, which serve to separate professional and social capital, hamper these processes.

■ Teacher training in the Autonomous Community of the Basque Country (ACBC)

The Basque Regional Government's Department of Education prioritises in-school teacher training based on a diagnosis of real needs and situations, accompanied by innovation processes in which reflexion and the exchange of learning and experiences by teachers are seen as the key to improving student learning. The Department also emphasises the importance of assessing training processes, in order to identify their impact on different areas of school life. To this end, it offers schools different types of training programmes. Although some were originally oriented towards individual training, the Prest Gara programme (implemented during the 2014-2015 academic year) today offers a training proposal open to the entire educational community, which focuses on the whole school with the aim of ensuring the acquisition of competencies by students.

It is important to highlight the increase over recent years in the number of programmes which seek to facilitate experience exchange, the analysis of practice and the search for shared solutions focused either on the school itself (training and innovation programmes) or on training centres or participation in school networks. All concentrate their efforts on encouraging teachers to think together about their practice, as a means of changing the way they teach in the classroom. The report published by Mckinsey & Company (2007) highlights the need to prioritise certain interventions in schools in accordance with their level (poor-acceptable, acceptable-good, good-very good, very good-excellent). At the first two levels, greater importance is attached to the need to provide teachers with pedagogical support and help them identify areas for improvement based on an analysis of student outcomes. At the second two levels, the key issue is the professionalisation of teaching staff. The aim is to encourage fidelity to certain teaching styles, and to foster decentralised, school-led training models, using methods such as peer training and inter-school training. Teachers should be offered the opportunity to specialise and develop professionally, and more highly-qualified teachers should be able to dedicate part of their working day to innovation and expert activities (Gobierno Vasco-Basque Government 2015, 2020). The study cited earlier (ISE-IVEI, 2015) warns that, according to the PISA 2012 results, schools in the ACBC are mainly at the second and third level.

There is therefore a need to implement training programmes based on collaborative practices which include reduced working hours, greater recognition, incentives and professional career opportunities for expert teachers, who can help guide their colleagues while at the same time fostering an exchange of expert professionals among schools. These measures should be accompanied by greater financial and pedagogical autonomy for professionals working at the school. Lizasoain et al. (2016) observed that, in the highly-effective schools of the ACBC, teachers were very committed to and involved in their task. Training is systemised, based on a set of clearly identified needs and characterised by being mainly collaborative and carried out in schools themselves.

Within this framework, the general aim of this study is to compare interventions aimed at facilitating the professional development of teachers in schools with high (HE) and low (LE) levels of effectiveness in the ACBC. The specific aims of the study are as follows:

■ To compare teachers' views regarding training and professional development in both types of school.

■ To describe how the management teams, inspectors and teachers working in schools with high and low effectiveness levels perceive the types of training and professional development activities carried out.

Method

The methodology comprised 3 phases. In the first phase, the schools were selected using a statistical method (multilevel regression techniques); in the second, information pertaining to school improvement was gathered by means of a questionnaire designed for and completed by teachers; and in the third phase, the information was triangulated, using qualitative data gathering techniques including interviews with management teams and inspectors and discussion groups with teachers working at the selected schools.

Sample

The study covers the entire population, since all schools with more than one class per year in the ACBC education network were taken into consideration.

The results obtained across 5 Diagnostic Analyses (DAs) were analysed, and schools were divided into groups on the basis of a set of clearly defined criteria. The criteria and statistical models used took the results of the mathematics, reading comprehension in Spanish and reading comprehension in Basque DA tests as the criterion variable (Lizasoain, 2020). Although in the broader study four school effectiveness criteria are defined, in the present study we analyse the information relating to just two of them: increase (or decrease) in residual values, and consistency (high or low) of extreme residuals. This is because the aim of the study was to describe and compare schools with very high and very low residuals. Multilevel regression techniques with linear hierarchical models (Joaristi et al., 2014) were used to statistically identify the scores obtained each year and in each subject by schools with similar characteristics, after first controlling for the effect of contextual variables.

The levels and variables were, at level 1: student's sex, language model and economic, social and cultural status (ESCS); whether or not they are an immigrant recently incorporated into the education system; whether or not Basque is the family language spoken at home; whether or not they are in the academic year corresponding to their age; and performance during the previous academic year in each competency evaluated by the Diagnostic Assessment.

At level 2 (schools) the variables were: public or semi-private school; size (number of students); average economic, social and cultural status (ESCS) of attending families; proportion of students who are immigrants recently incorporated into the education system; proportion of students for whom Basque is the family language spoken at home; proportion of students who are in the academic year corresponding to their age; and mean performance level obtained during the previous academic year in each competency evaluated by the Diagnostic Assessment (DA).

TABLE I. Schools selected in accordance with the two criteria studied. Participating schools selected in accordance with the two effectiveness criteria studied

N=39	PRIMARY EDU- CATION		COMPULSORY SEC- ONDARY EDUCA- TION		TOTAL	
	HE	LE	HE	LE	HE	LE
EXTREME RESIDUALS (HIGH AND LOW)	3	4	4	2	7	6
INCREASE AND DE- CREASE OF RESIDU- ALS	8	8	6	4	14	12
TOTAL	П	12	10	6	21	18

Semi-structured interviews were held with the management teams of all 39 schools and the 35 education inspectors assigned to them. Teachers from the schools participated in discussion groups (10 teacher groups).

Instruments

The questionnaire

The questionnaire was designed to gather information about the selected schools from the perspective of the teachers working there. In addition to one open-ended question, the instrument comprised 99 items focusing on the characteristics that define informants' teaching activities and aspects that have been found in previous studies to be linked to school effectiveness and school improvement.

The present study analyses the 14 items that were directly related to teacher training.

Interviews and discussion groups

The contents to be discussed were established in accordance with previous information (interview script), and an action protocol was established (informed consent, researcher roles, location maps, etc.). All conversations were recorded, transcribed and analysed.

Procedure

The statistical analyses carried out identified schools with variability in their residuals; in these schools, the results obtained deviate from the expected mean for schools with similar characteristics. The aim was to analyse and compare the type of teacher training provided in the schools in accordance with their effectiveness level (high or low). Next, a questionnaire was developed, tested and modified, and then administered to the selected schools.

The aim of the interviews was to explore aspects linked to school effectiveness and the longitudinal variability identified in some of them. A total of 14 pedagogical dimensions were analysed, divided into 9 categories or units of analysis. In the present study, we focus on those categories that either directly or indirectly provide relevant information about teacher training. All interviews were recorded, transcribed and categorised (N-vivo 10). This was initially done in accordance with the classic units of analysis associated with school improvement. To enable a more in-depth interpretation of the teacher training provided, a second categorisation was carried out in accordance with the results reported by

previous studies offering the technical guarantees necessary to support their findings.

The following is a description of the categorisation of contents linked to teacher training which were included in the dimension 'Training and innovation projects'. Innovation projects are a series of refresher and transformation initiatives carried out in schools in response to the needs emerging from the social environment. They include training plans, which are a varied set of learning and professional development actions implemented with the aim of improving students' educational processes. They encompass the following subunits: 1) Training management processes; 2) Training dissemination (types and tasks); 3) Training assessment and transfer; and 4) Conditions and context (Admiraal et al., 2019).

Finally, the quantitative data were analysed using the SPSS 24.0 software package to obtain the descriptive statistics (means and standard deviations). The *Kolmogorov-Smirnov* test was performed to verify the distribution of the data and the non-parametric *Mann-Whitney U* test for two independent samples was used to compare the data in accordance with effectiveness level (high or low). The *NVIVO 10* software was used to analyse the qualitative data, distributing the information across nodes or categories and analysing and comparing it using matrix coding queries.

Results

- Differences between HE and LE schools in terms of how teachers view training and professional development

As shown in Table II, significant differences were found in terms of how teachers from HE and LE viewed training and professional development. Specifically, teachers from HE schools tended to participate more in *training design* (M (SD) = 6.05 (2.24) vs 5.35 (2.68); Z = -2.330; p = .020), *training in gender equality* (M (SD) = 6.59 (2.91) vs 5.59 (2.76); Z = -4.423; p = .000) and *the management and organisation of the school* (M (SD) =6.98 (2.32) vs 5.79 (2.64); Z = -4.796; p = .000) than their counterparts from LE schools. No significant differences were found in any of the other areas analysed.

TABLE II. Differences between teachers from HE and LE schools

	HE	LE	7	
	M (SD) M (SD		Z	P
My school's training actions are designed in accordance with a previous assessment of real needs	7.26 (1.97)	6.83 (2.43)	-1.368	.171
The training actions are evaluated	6.90 (2.33)	6.65 (2.64)	575	.566
The training received is put into practice	7.00 (1.99)	6.68 (2.51)	702	.482
Teachers have a positive attitude to training actions	7.00 (1.99)	6.68 (2.51)	676	.499
Teachers participate in the design of the training actions	6.05 (2.24)	5.35 (2.67)	-2.330	.020*
Teachers have the opportunity to receive training in those areas in which they most need it	6.84 (2.31)	6.67 (1.62)	182	.855
Teachers participate in gender equality training	(6.59) (2.91)	(5.59) 2.75).	-4.423	.000*
Teachers are evaluated at my school	(5.31) (3.05)	(5.79) (2.98)	-1.632	.103
New teachers are provided with orientation and support in their teaching activities	(7.75) (2.04)	(7.46) (2.56)	509	.611
Teachers participate in the management and organisation of the school	(6.98) (2.32)	(5.79) (2.64)	-4.796	.000*
The management team seeks to foster teachers' leadership skills	(6.51) (2.44)	(6.47) (2.71)	442	.659
The specific training I have received is sufficient to enable me to cope with the challenges of conflict management at my school	(6.48) (2.17)	(6.40) (2.54)	066	.947
The educational community is aware of and agrees with the values that my school aims to promote, and puts them into practice.	(7.61) (2.06)	(7.14) (2.81)	-667	.505
My school collaborates with other groups and associations in its local environment	(7.36) (2.25)	(7.20) (2.60)	-108	.914

Below, we present and analyse the overall qualitative results pertaining to teachers, management teams and inspectors.

- Professional development of teachers in HE and LE schools.
- Schools with a high extreme residual.

In relation to the *management of training and innovation*, these schools claim to start with an assessment of training needs, the results of which are incorporated into their annual plan. These needs are sometimes associated with individual criteria, while in other cases they are proposed by management and ratified by faculty. Next, priorities are established in accordance with the improvement plan.

The planning of training actions is governed by the school's annual plan and, in some cases, by the quality management system, which facilitates organisation and systematisation.

Training actions focus on co-education, multilingualism and language normalisation, cooperative learning, conflict resolution, ICT, active teaching methods, artistic education, environmental education, diversity, exchange programmes such as Comenius and Erasmus+, and specific training in school management.

As regards the *dissemination of training*, courses mainly take the form of lectures, although other methods are also emerging, such as tutored research-action, in-school lifelong learning (i.e., a small group of trained teachers train larger groups) and inter-school training. Participants highlighted the importance attached to educational networks, which they consider to be key sources of support for guiding training actions.

They also underscored the importance of family training and said they had active parent training plans.

In relation to the *assessment and transfer of learning*, participants said they apply the knowledge acquired in the classroom, design material adapted to their specific context and assess training and innovation plans, including those involving students and families.

In connection with *contextual conditions*, participants highlighted the importance of coordination structures and decisive management in order to make it easier for teachers to participate in the different training initiatives on offer. The management teams and inspectors coincided in stressing the importance of a stable core group of teachers with a positive attitude towards and firm commitment to continuous improvement. These teachers help promote different initiatives and give the school its identity.

- Schools with a low extreme residual.

In relation to the *management of training and innovation*, training content in these schools depends on the interest and engagement of individual teachers, or the management team's reaction to the results

of the Diagnostic Assessments; they are also sometimes prompted to organise school-wide training initiatives by the annual or strategic plans.

As regards the *dissemination of training*, expert-led methods are the most common, although participants also highlighted the need for training to involve the entire school. Special mention was made of certain training initiatives, such as inter-school training, the organisation of a best practice day at the end of the academic year, and participation in different calls, such as the Innovative Classrooms programme.

The schools in this group said they make an effort to train new teachers. However, teachers' tendency to stick to their own teaching style hampers internal community learning.

In relation to the *assessment and transfer of learning*, participants said that, in some cases, the assessment mechanisms were those required by their quality management systems, and were used to identify training needs.

In terms of *contextual conditions*, many schools in this group said they had implemented a quality system inspired by the process-based management model, which fostered more distributed leadership and greater systematisation of tasks and functions. The scarcity of financial resources made collegial training difficult, and meant that it was not always possible to provide substitute teachers for those on training courses. As a result, teachers sometimes had to engage in training activities outside working hours. They considered it of vital importance to have engaged teachers organised into stable groups for working on projects.

- Schools whose residuals increased.

In relation to the *management of training and innovation*, training and innovation projects were present in most schools in this group, and most also said they organise training activities both inside and outside working hours, at the start and during the course of the academic year. Participants stated that training areas were defined on the basis of real needs, and that training contents and timetables were planned in accordance with those needs. Some schools linked training and innovation to improvement plans and the results of the Diagnostic Assessments.

The innovation projects in which they participate include language initiatives, Agenda 21, language normalisation and Hauspoa (improvement of the internal organisation of public schools working in compulsory secondary education).

It is worth noting that half of these schools are engaged in coeducation and prevention of gender violence plans, in some cases through programmes run by Emakunde-the Basque Equality Institute (Nahiko) and in others on their own initiative.

The contents of teacher training actions are very diverse: oral language, peer reading, reading-writing, graphomotor skills and comprehension reading; cooperative learning; scientific education; languages within the trilingual programme; co-education and gender equality; ICT within the Sare Hezkuntza programme; pedagogy of trust; refreshing attitudes; values education (grief, emotional competence); Golden 5; prevention of bullying; quality; Bikaintasunerantz (Towards Excellence); Bidelaguna (afternoon extracurricular and educational support); ACEX and Lagunbusa (supervised independent walking to school).

In some cases, they also mentioned the training of management teams through monthly seminars targeted specifically at new head teachers. Training contents include: ICT, conflict resolution and student rights.

Half of the schools in this group have a new teacher orientation and mentoring protocol, in which the internal working of the school is clearly defined (meetings, material, substitutions, agenda, notes, code of conduct).

Another practice worth highlighting is that of providing teachers with feedback on the classroom observations carried out by inspectors:

This intervention is more difficult, but it is very useful in terms of improvement. I go into their classroom but I give them immediate feedback on what I see, pointing out weaknesses and but also strengths they should try to maintain. From 2012-2013 I wrote feedback reports. I went, I spent a lot of time in different classrooms and I engaged in many observations, in the playground too. (Inspector 25080)

As regards the *dissemination of the training*, participants from public schools said that the organisation mainly responsible for disseminating training activities is Berritzegune, while those from semi-private schools highlighted the networks to which they belong. Schools had a positive view of the training and materials provided by their networks.

Some training sessions are targeted at all teaching staff, whereas on other occasions a few selected teachers are trained, and are then responsible for training their colleagues in turn. Occasionally, training is provided to both teaching and non-teaching staff. One school highlighted network-based dissemination:

In secondary education, no teacher teaches alone, there is never just one teacher at any given level; everyone always has at least one colleague. And everyone's timetable includes a period of weekly coordination. All teachers need to share with other teachers. So, a network is set up. If one of them attends a seminar, they share what they have learned with the others. (Management Team 36586)

Other schools have ongoing internal training schemes or organise an annual pedagogic conference which is open to the local community also, and which features different educational stakeholders (teachers, students, families and inspectors). Participants rated these conferences very highly.

In relation to the *assessment and transfer of training*, participants highlighted the importance of applying the knowledge gained to their practice in the classroom. Nevertheless, they also said that training projects are not generally subject to specific assessment, although there are assessment mechanisms for families and students regarding the general dimensions of the school.

In terms of *contextual conditions*, in relation to leadership, participants claimed to have a good internal organisation with well-defined, systematised functioning. They also said that all functions were performed with a high degree of professionalism. In the majority of the schools in this group, the management team exercises strong leadership, encouraging the participation of the entire educational community (teachers, students and non-teaching staff) in decision-making, and striving always to reach a consensus:

Everyone kind of participates in making the decisions. (Management Team 28644)

Schools that are set up as Learning Communities are characterised by a participatory and cooperative working philosophy; organisational management is the responsibility of committees and all members feel like they are part of a large community.

In relation to resources and administrative support, for these schools, good time management is a priority and they attach a great deal of importance to training and coordination, always striving to make the best possible use of the time available. Thanks to their good pedagogical management and the coordination work carried out by the management

team, they are able to dedicate a large part of their individual work to internal coordination (parallel, vertical, management team).

In relation to climate, most participants from these schools coincided in highlighting the feeling of belonging to the school, and the engagement and commitment of the teaching staff. They make a concerted effort to have a common project and to maintain a sense of cohesion among the teaching staff. Participants also said that teachers' own reflexions on student outcomes have generated a desire to improve and a willingness to innovate.

Teachers generally have a positive attitude towards training and are willing to participate, particularly when they see that the theoretical and practical contents are useful for their work in the classroom.

- Schools whose residuals decreased.

In relation to the *management of training and innovation*, participants in this group said that training processes are oriented towards both teachers and the management team, and even sometimes families also. The innovation projects in which they are involved include Agenda 21, the language normalisation project and specific language initiatives.

The contents addressed during training sessions are based on the specific needs of each school and include: cooperative learning; ICT (Aukera project, Eskola 2.0); psychomotor skills; language acquisition; conflict resolution; pedagogy of trust; emotional education; co-education and teaching from the gender perspective; the Bikaintasunerantz (Towards Excellence) programme, Silver Q (EFQM) and extracurricular activities.

As regards the *dissemination of training*, most of the training participants in this group receive is provided by the specific network of schools to which they belong (Kristau Eskola, Ikastola network).

Some schools mentioned that they had improved their training dissemination system.

Before, the training plan pivoted on a single person, who was responsible for running the session. But now, we have set up a team and everyone focuses on a specific topic and we take it in turns to run sessions. (Management Team 32120)

In relation to the *assessment and transfer of learning*, although in general teacher training is not assessed, or no feedback is provided, in some cases it is evaluated in terms of goal achievement:

Some training actions are assessed in terms of goal achievement. If the goal of the action is to enable a project...I mean, if teachers are being training for a specific project, then if the project is carried out, the action is assessed positively. (Management Team 27038)

As regards the transfer of learning, participants stressed that theory is all well and good, but the situations they face in their classrooms are so complex that they are rarely able to apply the knowledge acquired, and the training received does not often result in changes in their everyday practice.

In terms of contextual conditions, and specifically leadership, half of the schools in this group claimed to have a directive leadership style and the other half a shared leadership style. Management difficulties mentioned by the management teams from schools whose residuals had decreased are: 1) difficulty developing a management model that really works and goes beyond mere coordination; 2) difficulty moving from one to two classes per year group, without this having a detrimental effect on relations among teachers; 3) difficulty switching from a content-based model to a competence-based one, and changing methodologies and assessment systems; 4) students have also changed, for example, constant screen use makes it harder for them to remain focused; 5) difficulty managing emotional conflicts (with teachers, families, students, the local council); dealing with families is particularly difficult in this sense; 6) excessive working hours with no financial recompense for teachers; an effort is made to thank them and reward their efforts in other ways, but it is still sometimes a problem; and 7) difficulty implementing action plans; often they try to do many new things, but are not sure what works and what does not.

In relation to resources (functional, material and personal) and administrative support, participants stated that, in their schools, financial management has been affected by cutbacks, which they see as having contributed to the poor results obtained in the DAs. Moreover, in the case some public schools, participants mentioned the high percentage of immigrant students and the high level of teacher turnover. Participants from other schools highlighted other aspects that are not assessed, such as values and methodological changes that are being implemented gradually and which require a great deal of time and effort.

Some participants also mentioned work overload, referring specifically to long working hours and the difficulties, tensions and conflicts anyone assuming a leadership role must face:

No one wants to be the head, the coordinator, or anything at all. (Management Team 27038)

In relation to climate, participants from some schools pointed out that many changes have taken place over recent years (shift from a content-based to a competence-based model, incorporation of ICT, changes in methodology and assessment system). This is hard, because everyone is trained in and is used to a certain way of working, and change often generates fear and resistance. Teachers feel judged and some families demand a way of working that does not coincide with the new pedagogical approaches currently being implemented.

In schools whose residuals follow a downwards trend, participants convey a more negative view of their experiences, not only in relation to new learning (new technologies or new programmes), but also in connection with learning that has already been acquired (for example, the Basque language).

Moreover, participants from some schools claimed that some members of the teaching staff are pessimistic about these changes and unsure of their effectiveness.

Conclusions

Through an exhaustive analysis of the opinions expressed by key informants (management teams, inspectors and teachers), this study provides a detailed overview of teacher training and professional development in schools located in the ACBC, in accordance with their level of school effectiveness, analysing aspects related to both the structure-context and process-content of the training provided (Nieto & Alfageme-González, 2017).

The results indicate that school effectiveness is supported by teacher training when teachers' participation is significant throughout the entire training sequence designed to promote their professional development. Both the quantitative and the qualitative information gathered and analysed confirm the importance of a shared identification of training

needs and a training plan that is linked to an overall vision of the group and enjoys a certain degree of stability in terms of both duration and organisational structure. It seems that if, when teachers detect a specific training need, that need is then shared with the group, accepted and approved by the school, included in a concrete plan, allocated the necessary resources and provided in a favourable climate, then what is learned by those receiving the training is then applied and implemented. Specifically, the results reveal that teachers from more effective schools participate more than their counterparts from less effective ones in the design of the training actions, particularly in relation to gender equality training and school management and organisation.

The different training types and models described by informants indicate that, in general, the most common are training courses (Ministerio de Educación y Formación Profesional-Spanish Ministry of Education and Vocational Training, 2019), although other more participatory and reflexive models are also emerging (research-action, internal ongoing inschool training, educational networks, etc.). This is consistent with what the education authorities in the ACBC are trying to promote (Gobierno Vasco-Basque Regional Government, 2015, 2020), as well as with that reported by other studies (Saiz-Linares et al., 2019; Simón et al., 2018), although it is also true that these models are more common in schools with high effectiveness levels than in their less effective counterparts. Highlyeffective schools strive to include the entire educational community in the training actions and their assessment (Lizasoain et al., 2016), something which involves distributed, participatory leadership. As stated by the 2018 TALIS report (Ministerio de Educación y Formación Profesional-Spanish Ministry of Education and Vocational Training, 2019), this may explain why the professional training area most often highlighted by management teams is that linked to fostering collaborative work among teachers.

Teachers working in highly-effective schools have more opportunities to apply the training received in the classroom, whereas those working schools whose residuals follow a downwards trend allude to contextual difficulties, as well as difficulties linked to management and resources (functional, material and personal) that often prevent them from transferring what they have learned to their practice in the classroom.

The results obtained in this study regarding contextual conditions are consistent with those reported previously (Admiraal et al., 2019)

in relation to the influence of school context on teachers' professional learning, and highlight aspects such as time scheduled for professional learning, support from colleagues and their availability, quality of the supervision of learning processes, resource accessibility, monitoring and assessment of teachers' professional learning, administrative support and educational leadership. Decentralisation, manifested here institutional and teacher autonomy, is a prerequisite for talking about how organisations learn and improve (Rodríguez-Gómez & Gairín, 2015). Highly-effective schools recognise the main dimensions of schools as learning organisations more clearly than their less effective counterparts (Stoll & Kools, 2017). These dimensions are: 1) Developing and sharing a vision centred on learning; 2) Creating and supporting continuous learning opportunities for all staff; 3) Promoting team learning and collaboration among staff; 4) Establishing a culture of inquiry, innovation and exploration; 5) Establishing embedded systems for collecting and exchanging knowledge and learning; 6) Learning with and from the external environment; and 7) Modelling and growing learning leadership.

Schools with poorer results are obliged to respond to more basic immediate demands, which prevent the establishment of the conditions required to activate mechanisms enabling them to become learning organisations. Responses tend to be linked to individual concerns, outside common projects, the climate is more prone to tension, and there is an overriding feeling of having insufficient resources, coupled with a lack of group cohesion and high teacher turnover.

One of the limitations of this study is that less information was gathered from inspectors and teachers than from management teams. Moreover, the teachers from some schools did not participate, meaning that discussion groups were not held at all schools. It is also important to point out that criteria for selecting the schools were based on the results obtained in the basic instrumental competencies measured by the DAs. This is inevitably a partial approach, since the educational activity of any school goes well beyond mere instructional aspects.

In addition to the factors and processes analysed here, future research may also wish to explore to what extent (within teacher training and professional development initiatives) participation in training actions focused on gender equality are associated with school improvement and effectiveness. It is striking that schools with extreme residuals mentioned nothing about this, whereas those with increasing and decreasing residuals did. Finally, given that teacher training and professional development interventions linked to school effectiveness levels are mediated by leadership style, future research may wish to explore these aspects in more detail.

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