

The teaching profession with a 21st Century perspective. Models of access to the profession, professional development and interactions

La profesión docente en la perspectiva del siglo XXI. Modelos de acceso a la profesión, desarrollo profesional e interacciones

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Abstract

As never before, the accelerated evolution of the social and economic context has increased the expectations of developed countries regarding their education and training systems. This paper firstly aims to briefly describe the perspective of education in the 21st Century, along with its impact on the generation of challenges facing the teaching profession. The broad international consensus on the importance of teacher-centred policies justifies the second objective of this essay: to carry out a comparative analysis of two types of models of access to the teaching profession, the delegation models and the cooperation models. This conceptualisation is based on the different role attributed to the State in the exercise of its constitutional powers. The first category comprises the current Spanish model and other evolved forms thereof, while the second corresponds to a new model that is inspired by the health system and the procedure of access to the specialised medical profession (Spanish acronym: MIR). The third objective is to highlight the role of professional development - and its articulation through a Career Plan - as the second pillar of policies focused on teachers. The arguments made highlight the comparative advantages of the cooperation model over the delegation model. These advantages are consolidated when, together with the first pillar, the second and the interactions between the two are introduced into

the reasoning. The above arguments point to one of the priority paths for the improvement of the Spanish education system in the next decade.

Keywords: Teaching profession. Access models. Career. Systemic policies. Context analysis.

Resumen

La evolución acelerada del contexto social y económico ha incrementado, como nunca antes, las expectativas de los países desarrollados con respecto a sus sistemas de educación y formación. El presente trabajo se propone, en primer lugar, describir someramente la perspectiva de la educación en el siglo XXI y su impacto sobre la generación de desafíos para la profesión docente. El amplio consenso internacional sobre la importancia de las políticas centradas en el profesorado justifica el segundo objetivo de este ensayo: efectuar un análisis comparado de dos tipos de modelos de acceso a la profesión docente, los modelos por delegación y los modelos por cooperación. Esta conceptualización reposa en el diferente papel que se atribuya al Estado en el ejercicio de sus competencias constitucionales. La primera categoría comprende el modelo español actual y otras formas evolucionadas del mismo, mientras que la segunda corresponde a un modelo de nueva planta que se inspira en el sistema sanitario y en el procedimiento de acceso a la profesión médica especializada (MIR¹). El tercer objetivo estriba en subrayar el papel del desarrollo profesional -y su articulación mediante un *Plan de carrera*- como segundo pilar de las políticas centradas en el profesorado. Las argumentaciones efectuadas destacan las ventajas comparativas del modelo por cooperación frente al modelo por delegación. Estas ventajas se consolidan cuando, junto con el primer pilar, se introducen en los razonamientos el segundo y, además, las interacciones entre ambos. Los argumentos expuestos señalan uno de los caminos prioritarios para la mejora, en la próxima década, del sistema educativo español.

Palabras clave: Profesión docente. Modelos de acceso. Carrera profesional. Políticas sistémicas. Análisis del contexto

Introduction

As never before, the rapid evolution of the social and economic context, experienced particularly over the past three decades, has raised the expectations of countries with regard to their education and training

⁽¹⁾ Acrónimo de Médico Interno Residente

systems. Governments, multilateral organisations, business organisations, foundations and academics in the economic area (UNESCO, 2004; Hanusek and Woessmann, 2007; CERI-OECD, 2007; BIAC, 2016; CEOE, 2017; OECD, 2018 a); Schleicher, 2018; EU, 2019) stressed the critical importance of improving the quality of education and its outcomes for economic development and social progress.

Two powerful vectors of change have contributed to this rapid transformation of the context. On the one hand, modern globalisation with a rapid spread of information and influence between remote environments, and exceptional mobility of people, capital and goods (Pinker, 2018); this has made the world a smaller place, while making it more interdependent. And, on the other, a technological revolution, with a growing degree of integration (Schwab, 2016), which has the digital revolution in its very core.

However, the interaction between these two phenomena, which have been reinforcing each other throughout this century (López Rupérez, 2003), has also substantively contributed, to this large-scale disruptive change that has been characterised as a “mutation of civilization” (López Rupérez, 2001).

Each of these processes of rapid transformation, on the historical time scale, has had an impact on the conception of education. These consequences have been particularly cemented in a definition of the curriculum for the 21st Century, based on the so-called “competence approach”. This is an integrated approach that, according to the vision of the OECD, 2002, and the European Union (D.O.U.E., 2006; 2018), concerns knowledge, skills, attitudes and values (López Rupérez, 2020). The technological revolution has impacted expectations about cognitive and metacognitive knowledge and skills that the school is expected to transmit to new generations of students. While globalisation has stressed the need for the development of attitudes and values of pluralism and tolerance (Sartori, 2001) that “learning to live together” calls for (Delors et al. 1996). With both having reinforced the importance of these competences for personal development that have implications for work life and civic and social life.

As Tedesco (1995) pointed out:

“Modern enterprises appear as a paradigm of functioning based on the full development of the best human capacities. We would be facing an unprecedented historical circumstance, where the capacities

for performance in the productive process would be the same that are required for the role of the citizen and for personal development. (...) In the new production models, there is both the possibility and the need to put into play the same skills that are required at personal and social levels” (pp. 62-63).

In this context, education systems need to increase the degree of success of their policies, that is, their level of effectiveness, efficiency and equity (López Rupérez et al., 2018). It is worth highlighting four characteristic features of effective educational policies from the point of view of their average results and from the equity in their distribution: they should be evidence-based; they should be based on a good definition of priorities; have to benefit from a systemic approach; and have to be massive (López Rupérez, 2001).

Teacher-centred policies are a type of public policy that can and should meet these four requirements for effective educational policies. There is a broad consensus, based on evidence, in the sense that it is the quality of the teaching staff that explains, to a greater extent, the results of the students (Hattie, 2003; OECD, 2005; McKinsey & Co., 2007; States et al., 2012). This robust consistency² is aligned with the Pareto´ principle (Koch, 1998) -or *universal law of priorities*- to make this factor the priority object of a rational choice of educational policies (López Rupérez, 2014).

Furthermore, teacher-centred policies recognise and require a systemic approach so that they can reinforce each other, and produce virtuous circles that shorten the time needed to generate positive results and increase their degree of effectiveness (Darling-Hammond, 2017). Such an approach has been successfully adopted by the world’s most successful education systems (Darling-Hammond and Rothman, 2011; Darling-Hammond, 2017).

Finally, the “massive” character of this type of policy -that is, its scalability- constitutes a characteristic inherent in the central and ubiquitous role of the teacher in the teaching and learning processes, that, within the formal systems, reaches each school, each classroom and each student.

⁽²⁾ See, for example, The Wing Institute’s comprehensive review: <https://www.winginstitute.org/quality-teachers-overview-all-research>

In keeping with this picture, this paper aims to deepen the conceptualisation of two key groups of teacher-centred policies: policies for access to the teaching profession and policies for professional development. In addition, and following a systemic approach, the interactions between these two basic pillars of a modern and robust conception of the profession will be analysed. To this end, some of the contextual features of the teaching profession will be described in the perspective of an education for the 21st Century. Secondly, two different types of access models will be analysed and their advantages and disadvantages identified in comparative terms. Thirdly, this second basic pillar, professional development, will be considered in a broad sense and the *Career Plan* will be used as an effective tool for articulating professional development in education. Fourthly, the potential associated with interactions between and within the two pillars will be analysed, while some of the organisational demands of their implementation will be described. Finally, a section of conclusions will conclude this short essay.

The perspective of education in the 21st Century and the challenges facing the teaching profession

Over the past three decades, the challenges of the teaching profession have progressively increased. In addition to the decline in social respect for the role of teachers and their impact on the climate of discipline in the classroom, there has been a marked increase in multiculturalism in schools, accompanied by a trend towards the universalisation of pre-university education.

To this are added the growing expectations of the economy and society with respect to the results of education, as well as the new demands on the effective use of digital technologies in the classroom, to shape a set of aspects that clearly denotes the complication of teaching as a professional activity.

Along with the above, other contextual factors have accumulated throughout this century to configure teaching as a difficult profession. Some of them will be considered synthetically below.

The proliferation of VUCA contexts

One of the characteristics of modern societies in the 21st Century is the progressive increase in their level of complexity, which means more than mere complication. According to Edgar Morin (1990): “(...) complexity does not only include the quantity of units and interactions that challenge our possibilities of calculation; it also involves uncertainties, indeterminations, random phenomena” (p.48). This *complexity*, in which causality closes, time opens and a new dialogue is established between the whole and the parts (López Rupérez, 2001), is accompanied by *volatility*, or speed of change; *uncertainty*, or unpredictability and openness to the unexpected; and of *ambiguity* or a diffuse situation that allows different interpretations or that produces, before the same actions, different results.

A reality of this nature has given rise to the notion of “VUCA”, which is the acronym defined by the initials of these four attributes that characterise it. Although this concept was introduced into the US military at the end of the Cold War (Shambach, 2004), it is currently applicable in the fields of strategic thinking and leadership in organisations, in order to prepare its decision makers to adapt to these new contextual conditions (Bennet and Lemoine, 2014) which are a by-product of the complexity itself.

Education, as a social subsystem, is directly or indirectly affected by this complex scenario (López Rupérez, 1997; OECD, 2016), so the relevance of the VUCA approach has been invoked by foundations, non-profit organisations and international organisations (Fadel et al., 2015; OECD 2018a; Berkowitz and Miller, 2018) as part of the vision to be shared by the main educational actors.

The competences-based approach to the curriculum

The competence-based curriculum approach is considered, according to international consensus, as required by an education for the 21st Century (López Rupérez, 2020). This new approach, which emerges decisively with the beginning of this century, complicates teaching for many reasons. First, by formally introducing metacognitive skills, that is, the skills to handle knowledge as experts do. Among them, “learning to learn” has become part of almost all international reference frameworks.

Consequently, expectations about the level of intellectual demand for curriculum content have increased, due not only to its own cognitive hierarchy, but also as a side effect of its explicit formulation and the interest in assessing its level of achievement.

Second, other competences in the civic and social spheres, which have traditionally been part of the aims of the school, have been identified as constructs and, after a major analytical effort, its characterisation has been sought in order to facilitate its evaluation in school settings (Lamb et al., 2017). As we have noticed elsewhere (López Rupérez, 2020):

“This change is substantive because, considering such competences and skills as objects of evaluation, it is as if the responsibility for their achievement were subtly transferred to the school alone. Neither the families, nor the churches, nor the media, nor any other agents operating in the social space will be subjected to an objective evaluation of their results in terms of socialisation” (p.83).

Third, emotional competence has made its way into the school curriculum, supported by advances in cognitive sciences on the role of emotions in rationality (Damàsio, 2011) so that, as Haidt (2019) has summarised, it is considered that “The head cannot even do its things without the heart” (p. 65). But, in addition, important empirical evidence has been accumulated, on the one hand, on the impact of emotional skills or abilities on multiple aspects of individuals’ lives, which affect their levels of prosperity, health and even happiness (OECD, 2015; 2018 c; Chernyshenko et al., 2018); and, on the other, on how the development of emotional competences can facilitate advances in the field of cognitive competences and vice versa (Cunha and Heckman, 2007; Cunha et al. 2010). In the face of such evidence, teachers’ concern for this type of competence becomes a requirement of their professional ethics.

The competence profile of teachers and a robust conception of the teaching profession

In keeping with an international movement that has been paying special attention to teacher-centred policies as a tool for improving education systems (López Rupérez, 2014; Prats, 2016; Egidio Gálvez, 2020), the European Commission, in its document *Common European Principles for Teacher Competences and Qualifications* (European Commission, 2005),

has identified a broad collection of key competences of 21st Century teachers and articulated it around three strategic axes: Working with others, Working with information, knowledge and technologies, Working with and in society. When the enumeration of these required skills, in which each of these three axes is deployed, is reviewed in detail, one notices the level of professional requirement that, as a whole, they entail and that appeals, in a tacit way, to the need to form a robust profession.

Perhaps the definition of profession adopted by the Australian Council of Professions, 2004, provides the most comprehensive concept of a robust profession:

“A profession is a disciplined group of individuals who adhere to ethical standards and who hold themselves out, and are accepted by the public, as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others” (p.1).

This conception - which should, in the author’s opinion, be a source of inspiration when designing and implementing policies focused on teachers - underlies the ideas that, on access to the profession, professional development and the enhancement of their interactions will be defended below.

Models of access to the teaching profession

The teaching profession forms part of the so-called “regulated professions” in Spain. According to González Cueto (2007):

“(…) regulated professions are those in respect of which a rule regulates their professional competence, that is to say, *ex lege* there is a set of functions which can only be carried out exclusively by a professional who is guaranteed either by an academic qualification, the passing of requirements and an aptitude test involving the granting or administrative authorisation of access to a profession” (p. 2).

These guarantees established for this type of profession derive from the fact that their exercise affects fundamental rights, or constitutionally relevant assets, and, for that reason, it is the State alone that is competent to grant such authorisation and to establish its conditions by legal means.

The teaching profession, particularly in schools, is legally included in the category of regulated professions, as has been established, inter alia, by Royal Decree 1665/1991 of 25 October. Education is part of the set of fundamental rights especially protected in the Spanish Constitution of 1978. The fact that its regulation is located within Title I -in Article 27, Section 1, of the Second Chapter-, confers on it a high legal status; or, using the terminology of García de Enterrías and Fernández Rodríguez (1981), places it in the “supreme constitutional rank”.

The well-known link between the quality of education and the quality of teachers affects the exercise of the right to education enshrined in the aforementioned article 27 of the Spanish Constitution. This obvious circumstance has led the Constitutional Court itself (2013) to establish doctrine regarding the role of the State in relation to the selection of teachers, postulating “a common and uniform treatment regarding the conditions of access in an aspect of such importance for the educational system such as the selection of teachers” (p.21). This positioning, by its very content and nature, is transposable to the procedures for access to the teaching profession that we will analyse below.

With this perspective in mind, the models of access to the teaching profession can be classified into two types: the *models by delegation* and the *models by cooperation*, depending on the role adopted by the State, the university, or both.

Models by delegation

We understand by models of access to the teaching profession by delegation those in which the State, through a specific regulation, delegates to other institutions that exclusive competence. This is the current case in Spain, where for access to the teaching profession - by the way of both Teacher, and Teacher of Secondary Education - the State has laid down the conditions under which the curricula of those official university degrees which enable the profession to be exercised, in its various forms, must be adapted; and has delegated its implementation to the university institution. To this end, it has used different enabling formulas, depending on the educational stage: in the case of Early Childhood Education and Primary Education, through the simple attainment of the title of Teacher (BOE, 2007 a and b); and, in the case of

Secondary Education, by means of the corresponding academic title and, in addition, the Secondary Master's degree (BOE, 2007 c).

Different critical analyses on the development of this model - carried out most of the time from the university itself (Manso Ayuso, 2012; Conferencia de Decanos/as de Educación, 2017a) - have led the Conference of Deans of Education to propose a comprehensive set of actions which substantially improve the model in aspects relating to its implementation (Conferencia de Decanos/as de Educación, 2017b) and, to some extent, its conception, but they do not change its essential core, that is, the delegation of the constitutional powers of the State to the university institution, in terms of access to the teaching profession.

This configuration of the model reminds us of the thesis of the evolution of scientific theories within a research program, according to the review of Popperian falsifiability carried out by Imre Lakatos. According to Lakatos (1983), these theories, in their process of adaptation to the demands of reality, share a firm core that is accompanied by a protective belt, or set of auxiliary hypotheses that can be modified, removed or replaced in order to prevent the possibility of the firm core being proven false. However, the model of the Conference of Deans of Education exhibits empirical weaknesses serious enough to be able to preserve intact the validity of its firm core.

First, there is no guarantee that the root causes that led to the degradation of the previous model - some of which are recognised in the first document (Conferencia de Decanos/as de Educación, 2017a) - will cease to operate under the new model, they derive from university autonomy itself. This is a constitutional prerogative which, by its very nature, does not allow the delegation of responsibilities by the State, in terms of access to the teaching profession, to be reconciled, with the processes of correcting errors associated with accountability mechanisms, as proven by experience and admitted by the university world: once powers are delegated to a constitutionally autonomous entity, a straightforward rectification is unlikely.

Woessmann et al. (2009), analysing on an empirical basis the balance between the benefits and risks of school autonomy as a mechanism for improvement, point out that broad autonomy without accountability can prevail, within educational institutions, "opportunistic" behaviours that turns its back on improvement processes. In this same sense, the

autonomy-accountability binomial has been established as a necessary condition for quality university governance (Hénard and Mitterle, 2008).

This certain risk suggests decoupling university autonomy from a frank delegation of responsibilities in terms of access to the teaching profession. This does not in any way compromise the autonomy of both parties to carry out their respective functions, within the legal framework established, but rather aims at cooperation between them, but within a new architecture of the model, as we will develop later.

Secondly, one of the empirically-based perverse effects of the current model, which would hardly be corrected by its evolved version, is the proliferation of different variants of the same basic model, of very different quality levels, according to the university that develops it (Manso Ayuso, 2012). This situation undermines the guarantee of equality in the right to education, which the State must ensure and which, in relation to the selection of teachers, has been invoked in the aforementioned Constitutional Court ruling (Tribunal Constitucional, 2013).

In the light of the above, and as we have pointed out elsewhere (López Rupérez, 2018a), the preservation of the model by delegation would presuppose the existence in Spain, without the citizens having known, of a sort of «constitutional mutation» understood here, following Jellinek, as produced by the non-exercise of rights and powers conferred on the State by the Constitution (Jellinek, 1991).

Models by cooperation

In this work, we understand by models of access to the teaching profession by cooperation those in which the State, through its central Government and without prejudice to the exercise of its powers recognised by the Constitution, cooperates with the university institution and with the educational administrations of the regions for the best achievement of the exercise of the right to education under conditions of equality.

As can be inferred from this conceptualisation, unlike the previous model, the cooperation that is invoked affects, in this case, its essential core and not only the relatively peripheral aspects that are questioned by the models by delegation.

The proposal to take as reference, for the rearrangement of access to the teaching profession, the model of doctors starts from 2010 when in

the monograph “The reform of school education” (López Rupérez, 2010) its author invoked inspiration from the health model for the improvement of teacher selection processes. This inspiration, which would later be described as “educational MIR³”, accepts, as the core of the model, the basic competence of the State in organising the process, without prejudice to loyal cooperation with the education administrations of the autonomous communities and with the university institution itself (López Rupérez, 2014). The health MIR also corresponds to a model for cooperation, understood in the terms described above, which, according to the corresponding regulations, allows a «common and coordinated treatment guaranteeing the principle of equality in access to the specialist qualification, whatever the teaching unit, of the multiple accredited for training» (BOE, 2008).

In previous publications, different substantive characteristics of the MIR model, that should be transposed to the teaching field, have been described (López Rupérez, 2014; 2015; 2018b). However, at this point it is worth highlighting the areas of inter-institutional cooperation of said reference model, which are, among others, the setting of the number of places assigned to each MIR call - by specialties -, in accordance with the real needs of the National Health System, defined with the support of its Human Resources Commission in the one that the health administrations of the autonomous communities are represented; and the university nature of the hospitals where the so-called “Teaching Units” are housed, which constitute the complex health environments where specialised health training is carried out in a highly organised manner and in accordance with high quality standards, through a so-called ‘residency system’.

In any case, and as has been underlined from an expert evaluation of the internationally recognised Singapore model (Reimers and O’Donell, 2016), it should be noted that:

“Selection into the teaching profession is key. Admission into teacher preparation programs is highly competitive. Being highly selective appears to be one of the elements that has made teaching such a valued profession, and, according to the educators we met, one of the factors that explains the recent success of the education system in Singapore” (p. 50).

³ MIR is the Spanish acronym for Resident Internal Physician which is a complete postgraduate system for access to the specialised medical profession.

This is also one of the keys recognised in Spain for the proven success of the health MIR

The model of access to the teaching profession that is advocated involves the creation of a national network of *Institutos Superiores de Formación del Profesorado* (ISFP) (Higher Institutes of Teacher Training) (Nasarre and López Rupérez, 2011) that would constitute key institutions of the new model. In addition to the training functions for candidates for teaching in schools, these vocational postgraduate training centres would be responsible for (1) accrediting schools, where the induction activities are to be carried out; (2) the accreditation of the relevant training tutors, responsible for the accompaniment of the candidates, and the periodic evaluation of their training practice; (3) the integration and coordination of the different components the training system for access to the teaching profession. Although tributaries of the predecessors to the current *Instituts Nationaux Supérieurs du Professorat et de l'Éducation* (INSPE) (Alonso-Sainz, T. and Thoilliez, B., 2019), the ISFP differ from their French counterparts, among other features, by the wider integration of inter-institutional collaboration that they entail.

It is necessary to underline here the cooperation component of this essential part of the model, which would benefit from a formula of tripartite agreement between the Ministry of Education, the Education Administrations of the Autonomous Communities and the Universities, in accordance with an equivalent scheme and content throughout the national territory. According to this model for cooperation, the necessary theoretical and research component of the training of candidates for teachers or secondary teachers, whose effects on the performance of educational institutions are recognised (Brown and Zhang, 2017), concerns, of course, the university institution. In the same way the component linked to expert professional knowledge corresponds to teachers experienced and with demonstrated capacity for conceptualisation. And necessarily implies the competent education administrations which are largely responsible for these key human resources. The same applies in this case to schools accredited for the development of the induction phase.

This integrated model of multi-stakeholder cooperation, in addition to being scrupulously respectful of each area of competence, would guarantee the quality of the training model through management systems, rigorous procedures for the selection of teachers and continuous

mechanisms for quality control and accountability of the Higher Institutes of Teacher Training (ISFP) themselves. These conditions would be formally established in this collaboration agreement. This modification in the model architecture would avoid the unintended degradation effects associated with the current model by delegation, and facilitate its optimal integration.

Another feature highlighted by the expert evaluation conducted on the Singapore system (Reimers and O Donell, 2016), which relates to the model by cooperation, is the following:

“One gets the impression that in Singapore, the institutions of education are a veritable system of interlocking components, where the various elements of the system are synchronised with each other. This is greatly facilitated by the clear and concise nature of the goals that guide the system, and by the effective communication strategies which are deployed to ensure that all key stakeholders understand in what way their practice should align with those goals” (p.113).

In the same vein, but referring to the specific case of the Teachers' *Practicum*, the need to achieve greater coordination between the teacher training institutions and the tutors of the practice in schools has been invoked in Spain on empirical bases, by Egido Gálvez and López Martín (2016), in agreement with some other authors who have come to precisely identify the disconnection between what is taught in universities and the experience of practices as the true “Achilles heel” of initial teacher training.

Career development and access models

Professional development, understood as a process of continuous improvement of knowledge and teaching skills, has a certain influence on the results of students and is favoured by an articulation of their stages, of its component elements and its determinants factors, in a flexible professional career but organised through a *Career Plan*. As we have described elsewhere (López Rupérez, 1994), the Career Plan is, in essence, a personalised forecast of professional development in which training, incentives, evaluation, and promotion are integrated, from a systemic approach, into a coherent whole.

According to comparative analyses carried out by different international experts, one of the aspects that are shared by high-performance education systems is the importance they attach to the professional development of their teachers (Darling-Hammond and Rothman, 2011). In particular, Singapore (National Institute of Education, 2009; Darling-Hammond and Rothman, 2011; Reimers and O'Donell, 2016; Jensen et al., 2016; Darling-Hammond, 2017) had in the previous decade, already launched the conception of the Career Plan similar to the one previously proposed in Spain in the preceding decade⁴ (López Rupérez, 1994), which served as the basis, at the beginning of this century, in the unfinished works carried out in the framework of the *Sectorial Conference of Education*⁵, and oriented to normatively articulate a professional teaching career.

Darling-Hammond and Rothman (2011), referring to the case of Singapore, summarise the following:

“Depending on their own abilities and career goals, teachers can remain in the classroom and become lead and master teachers; they can take on specialist roles, such as curriculum specialist or guidance counsellor; or they can take the leadership route and become administrators. The Ministry of Education is constantly looking for ways to recognise and promote teacher leadership, both for individuals who have demonstrated various talents and for teachers as a whole” (p. 7).

Models by cooperation and professional development

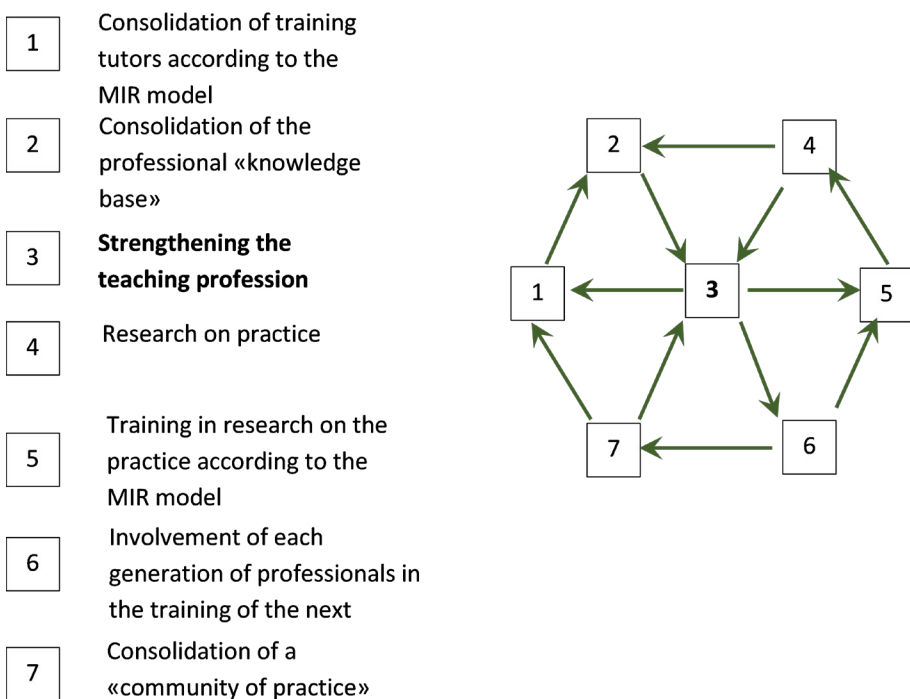
One of the key elements present in the health MIR - reference of the models by cooperation for the access to the teaching profession - is what it has of mechanism of transfer of professional knowledge from one generation to the next. But one of the frequent problems in the field of education is the absence of a well-founded and well-organised expert knowledge base, which provides similar solutions to common problems and has basic protocols of action for similar situations. In other words, it is not transferable.

⁴ See Figure 5, p. 19 in Jensen et al., 2016 and compare Figure 9, p.137 in López Rupérez, 1994

⁵ Executive body composed of the Ministry of Education and the educational administrations of the Autonomous Communities

Professional knowledge has, in any case, a knowledge component based on experience that will be all the more diffuse as the less evolved the corresponding profession is. This type of expert knowledge is often tacit. But this tacit knowledge can be organised and made explicit if competent professionals are faced with the obligation to teach it.

FIGURE I. A model of interactions between the professional strengthening and a MIR type access system to the teaching profession



Source: Author.

Accordingly, the progressive consolidation of the so-called “educational MIR”, as a tool for the professional preparation of new generations of teachers, necessarily requires a stable and predictable structure for professional development, so that the organisation and foundation of

such professional knowledge can be promoted. Even in less elaborate models of access to the teaching profession, such as the one postulated by the Conference of Deans of Education (*Conferencia de Decanos/as de Educación*, 2017b), the configuration of a professional knowledge base - which is essential particularly in the induction phase - should be supported by a robust conception of professional development that provides for continuous and intentional preparation for that function.

An analysis of interactions

Along with the professional growth of the teacher, the professional development mechanisms also aim at strengthening the profession, strengthening which rests in particular on two decisive supports: the consolidation of an expert knowledge base and the consolidation of a community of practice or human group whose members share an activity or set of activities of their own that links them to each other and to the group (Hargreaves, 2000). Figure I outlines the set of interactions that link the access model and professional development and strengthening (López Rupérez, 2015). Thus, the consolidation of the training tutors according to the MIR model (1), through the incorporation of this function into the career plan, will contribute, through the mechanisms described above, to a consolidation of the professional knowledge base (2), which will contribute to the strengthening of the profession (3), which in turn will strengthen the preparation of training tutors. On the other hand, the involvement of each generation of professionals in the training of the next (6) will allow, on the one hand, the transfer of research competences on the practice (5) and, on the other, the consolidation of the community of practice (7); and this consolidation will strengthen the teaching profession (3) and enhance professional development, while consolidating the training system for access to the profession (1). On the other hand, the training on practice research, which the MIR model envisages (5), will facilitate research on practice in the professional practice (4), which in turn will contribute to the consolidation of the professional knowledge base (2) and the strengthening of the profession (3), which will reinforce the training model, and will continue on a cyclical basis.

There is thus a complex network of interactions that defines a set of virtuous circles that, by operating in an integrated manner, will accelerate

the processes of change by making the consolidation of the training model for access to the profession possible in less time.

The organisational demands of a complex model

The modelling carried out in figure I points to an organised coupling between the MIR system of access to the teaching profession and the professional development model that is designed, among other things, to achieve maximum operability and consistency of the access system. This points to the need for an integrated organisational system in which the responsible institutions share the same overall project and vision. The design of a model for the professional development of teachers in the public sector, through the instrument of the Career Plan, for example, concerns, in terms of its basic conception, the Ministry of Education, consulted the Sectoral Conference on Education, since the teaching bodies in Spain have a State character; while its implementation is the responsibility of the educational administrations of the autonomous communities.

Therefore, these are related areas that affect the solidity and effectiveness of the access model and in which however the university institution lacks competences. For this reason, the model by delegation would be separated from a pillar on which its degree of success and long-term sustainability depends to a large extent.

On the basis of the above, another of the comparative advantages of cooperation models compared to delegation models is only estimated. This coupling between access models and professional development models, as well as those of the corresponding responsible institutions, makes the set more robust and, particularly, provides greater solidity to the model of access to the teaching profession inspired by the health MIR in comparative terms.

Conclusions

The changing context of education in the 21st Century poses serious challenges for teachers, which can only be addressed with some

guarantees of success, by developing new teacher-centred policies aimed at strengthening the teaching profession

With regard to the two types of models of access to the profession that have been described in this paper - models by delegation and models by cooperation - when they are analysed comparatively, the advantages of the latter compared to those of the former stand out, in order to consolidate a system of rigorous, consistent and sustainable access over time, which operates on the causes of the errors of the previous model and involves all the institutions concerned - central government, educational administrations and universities - in a framework of solid, loyal and respectful collaboration at the competence level.

But, moreover, when, together with access to the teaching profession, as a pillar of teacher-centered policies, the key piece of professional development is introduced into the analyses as a second basic pillar, through the Career Plan, and the reinforcing interactions between them are underlined, the relevance of the model by cooperation is clearly consolidated, by integrating into the same framework of inter-institutional cooperation all the relevant stakeholders which, otherwise, they would appear scattered in their specific responsibilities.

Another development scheme of the educational MIR - Resident Internal Teacher (Spanish acronym: DIR) - has been described in the literature (Valle and Manso, 2018). It is a model, furthermore, that revalues schools as main actors in professional training. However, by not altering the core of the current model, it sets aside the question of broad, frank and regulated inter-institutional cooperation between the State, the education administrations of the regions and the university institution. For this reason, it suffers from a systemic deficiency or a lack of integration of the main policies focused on teachers, thus dispensing with their recognised benefits.

In his defence of the systemic approach, Darling-Hammond (2017), based on an international comparative analysis of high-performance educational systems, notes the following:

«In every case, these systems include multiple, coherent and complementary components associated with recruiting, developing, and retaining talented individuals to support the overall goal of ensuring that each school is populated by effective teachers» (p.294).

The coupling between the different parts, within a systemic scheme, makes the whole more robust and therefore makes significant

strengthening of the teaching profession viable in the medium term. In accordance with the results of the evaluation of different experts on high-performing countries, this is possible; which points the way to the improvement of the Spanish education system and guides the establishment of its unavoidable priorities for education policy in the following decade.

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