

TEACHER EDUCATION PROGRAMMES: LEARNING FROM WORLDWIDE INSPIRING EXPERIENCES

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ABSTRACT

Over the last years, an increasing number of studies and reports showing dissatisfaction with the quality of teacher training programmes have appeared. Now more than ever it is necessary to ask ourselves on the importance of the improvement of the initial training of teachers, so that they can have a real performance in classrooms. For this reason, the authors propose an analysis and reflection about a series of initiatives identified in the literature around the world. The reforms and innovations presented have been classified into five categories of analysis that refer to: the establishment of standards in training institutions, the use of evidence and research on teaching practices, the alternative qualifications, the articulation with educational centers and the external assessment. These categories are illustrated with the cases of the USA and Australia, as well as those of England, the Netherlands, Finland and Sweden. We base ourselves on the supposition that certain national proposals offer inspiring ideas to reconsider the teacher training programmes in supranational scenarios and other educational realities.

Key words: *teacher education, training institutions, initial training, teaching innovation.*

RESUMEN

En los últimos años, un creciente número de estudios e informes muestran una cierta insatisfacción con la calidad de los programas de formación docente actual. Ahora más que nunca, es necesario que nos preguntemos sobre la importancia de la mejora de la formación inicial del profesorado, para que puedan tener un rendimiento real en las aulas. Por esta razón, en este artículo se propone un análisis y reflexión sobre un conjunto de iniciativas identificadas en la literatura de todo el mundo. Las reformas e innovaciones que se presentan han sido clasificados en cinco categorías de análisis que se refieren a: el establecimiento de normas en las instituciones de formación, el uso de la evidencia y la investigación sobre las prácticas de enseñanza, las cualificaciones alternativas, la articulación con los centros educativos y la evaluación externa. Estas categorías se ilustran con los casos de los Estados Unidos y Australia, así como de Inglaterra, Países Bajos, Finlandia y Suecia. Partimos de la convicción de que ciertas propuestas nacionales ofrecen ideas inspiradoras para reconsiderar los programas de formación de docentes en los escenarios supranacionales y otras realidades educativas, lo que corresponde con la conclusión principal del estudio.

Palabras clave: *formación del profesorado, instituciones formadoras, formación inicial, innovaciones en la enseñanza.*

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THEORETICAL AND METHODOLOGICAL APPROACH

Nowadays, at an international level certain dissatisfaction is manifested by the Ministries of Education, the trainee teachers and teacher trainers with regard to the capacity of universities and training institutes to give response to the needs of this profession (Esteve, 2000; Braslavsky, 2002; Darling-Hammond, 2006; Marcelo & Vaillant, 2009). Certain authors (Berliner, 2000) illustrate this criticism concerning the initial training, such as “*all you need is subject matter knowledge; the rest is a waste of time*”, “*any reasonably smart person can teach*”, “*most preservice courses are taught by people who live in ivory towers*”, “*method courses are now and have always been Mickey Mouse courses*” and “*learning to teach is so context specific that it makes no sense to try to teach generalizable principles*”. The author considers that this criticism emerges from a limited vision of the contribution that initial training has on the future development of teachers. It is not initial training that is useless, but the type of presentation and methods proposed to prepare good teachers for an appropriate professional performance.

The increase of studies with regard to initial training, especially on behalf of international organisms (Eurydice, 2002, 2004, 2006; OECD, 2004, 2009, 2011; UNESCO, 2006, 2007), is mainly due to the criticism relative to the bureaucratized organization of training, to the divorce between theory and practice, to the excessive fragmentation of taught knowledge, to the scarce bonds with schools and so on (Feiman-Nemser, 2001). Moreover, it is worth mentioning here that there is increasing evidence which shows that traditionally designed programmes are far from an educational ever changing reality. All in all, we refer to the lack of adaptation of these training programmes to the great complexity of the knowledge society demanding diverse and flexible initiatives and proposals (Darling-Hammond & Bransford, 2005; Snow, Griffin & Burns, 2005).

University and school must hold a dialogue so that initial teacher training can be developed in the best possible practical scenario (Valle & Manso, 2011), but not through practices based on mere transmission, nor by a professional practice committed to the idea that we are all knowledge workers (Snoek, Uzerli & Schratz, 2008). At an international level, the new challenges of inclusion and technological advances have helped to display many policies that aim to improve the quality of the teacher education.

Initial teacher training can contribute to a reproductive system that perpetuates multiple inequalities, or, on the other hand, to encourage reforms based on the right all student have to learn. And in order to fulfill this last aim, we must pose the pressing need to change organizational and curricular structures that govern the initial teacher training (Minsun Kim, Andrews & Carr, 2004). Not acting in this sense involves feeding the deception of believing that universities and teacher training institutes train and that school un-trains (Marcelo & Vaillant, 2009).

The situation described so far has been detected in very different contexts up to such extent that the appearance of global programmes promoted by international organisms is growing. One of these institutions is the *Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura* (OEI) by means of the “*Metas Educativas 2021*” (OEI, 2010), developed within the Ibero-American context.

This project proposes eleven aims which highlight –society’s need to commit with–. However, it is admitted that it will not be possible to fulfill these purposes if we cannot strengthen, amongst other elements, the teaching profession, in general (8th general aim), and the initial training in particular (20th specific aim).

As in the Ibero-American context, the so-called programme “*Concrete future objectives of Education System*” (European Commission, 2001) was also developed in Europe, as a consequence of the Lisbon Strategy (European Council, 2000). The first of its 16 indicators, aiming to make all European citizens participate in the new knowledge society, was “*Improving Training (pre-service and in-service) for Teachers and Trainers*”.

The development of such project (one more advance, as in the case of the programme “*Concrete future objectives of Education System*” of the European Union, and one about to be started by means of the “*Metas Educativas 2021*” project) states the need to identify initiatives that support reflection and the proposal of improvement of initial teacher training programmes.

The assumption of this article is that certain initial training programme initiatives can be inspiring for new proposals. In this sense, a synthesis of information, thoughts and suggestions is offered, based on a vast study that the authors have carried out based on many initial teachers training experiences at a global level.

The study involved a process of identification and classification of significant experiences, amongst which the issues presented in this article are included. The selection of experiences is marked by the desire to feed the reflection that is being carried out in many Ibero-American countries, to improve the preparation of teachers in their respective national contexts. On the other hand, we have also intended to show the heterogeneity of different situations.

In a first stage of identification of experiences, renowned experts in terms of teacher training were consulted by means of both on-site interviews and through questionnaires on these matters. Then, an exhaustive review of the bibliography was carried out. Finally, the experiences were chosen by means of certain criteria including that the initiatives chosen had to be at least 3 years old and that they had to have duly documented academic reports and assessments.

CLUES TO RECONSIDER INITIAL TRAINING

The study we have carried out and specifically the identification of experiences, has allowed us to distinguish between 2 types of initiatives that have had a positive impact on the initial teacher training in the contexts of origin:

- *Training standards*: the growing autonomy provided in many countries to teacher training institutions, especially at universities, has led over the last decades, as a counterpoint, to the need to establish standards that allow us to ensure certain quality initial teacher training programmes (Papanastasiou, Tatto & Neophytou, 2012).
- *Evidence and research*: Education based on evidence as a basic component of teacher training is another trend that we have observed in the literature review (Bridges, Smeyers & Smith, 2009). And together with evidence-based training, the role that research must play as main axis of the teacher training process also has to be pointed out (Cochran-Smith & Zeichner, 2005).

Both abovementioned categories are the base on which the study that we summarize in this article has been developed. Additionally, we also consider other 3 highly interesting categories to reconsider training programmes, which are the following:

- *Alternative qualification mechanisms:* traditionally, initial teacher training is provided in universities or higher education institutes by means of a rather rigid classroom model, quite distant from schools. However, over the past years, this strategy has been strongly questioned. To such extent, several programmes for the alternative qualification of teachers have appeared. We refer to mechanisms that allow the teacher candidates to incorporate to the profession in a shorter period of time to favor the recruitment of talented candidates (Humphrey, Wechsler & Hough, 2008).
- *Articulation with educational centers:* The trend in many European countries is to grant schools and secondary education centers a predominant role in initial training (Eurydice 2009). The new way of considering training involves an important conceptual change that requires the existence of good mechanisms for the selection of teachers, a fine-tuned competence assessment system, a management model that enables the harmonization of training with the functioning of schools and a framework so that the alliance between schools and universities can work (Knight, Pedersen & Peters, 2004).
- *External assessment:* Over the past years, the European countries have increased the teacher training assessment procedures on behalf of organisms that are not directly involved in the latter (Eurydice, 2006). This external assessment gathers information and evidence regarding the training institutions and the teacher training programmes to establish the degree in which they can fulfill certain quality standards. These processes are usually led by teams of experts or supervisors to build an independent judgment with regards to the training quality offered by each programme.

As we mentioned at the beginning of this section, the study carried out has allowed us to identify a diversity of transformations referred to initial training. Especially eye-catching is the case of the European scope where, as a result of the agreements signed in 1999 in Bologna¹, many participant countries have implemented different reforms to their initial teacher training (Vizek Vidovic & Domovic, 2008). The subsequent agreements between countries have guided the recent transformations of the European higher education, which has caused a significant impact on training institutions and on teacher training programmes (Eurydice 2006; Hudson, Zgaga & Astrand, 2010).

The consultation of experts and the review of the bibliography that we have carried out, has allowed us to identify, amongst others, interesting transformations in the United Kingdom, the Netherlands, Finland and Sweden. In these countries, certain specific policies for the improvement of the preparation of teachers have been encouraged, including standardization systems, research processes as a training basis, alternative qualification, articulation between schools and universities, and the presence of external assessment.

Also over the past years, and outside the European context, other countries have generated new mechanisms to improve initial teacher training. In our examination of the bibliography and from experience we have revealed the cases of Australia and the USA; these countries have especially insisted on the development of standards to ensure the quality of teacher training programmes. Furthermore, in the case of the USA, measures pertaining to evidence-based training have also been implemented.

¹ The Bologna Declaration is a promise originally signed by 29 European countries to reform the structures of the higher education systems in a convergent manner. The system has been running since 2010 (Eurydice 2010).

The abovementioned initiatives are summarized in *Table 1* according to the country of origin. An analysis in depth is important, since it could favor the academic reflection with regard to the problems raised in many contexts by initial teacher training.

Table 1. Worldwide initiatives to improve initial teacher training

	Category	Type of reform	Country
LEVEL 1 OF INTERVENTION	Accreditation standards	Teacher Development Agency (TDA)	England
		Assessment based on standards in Queensland and self-assessment in the state of Victoria	Australia
		Standardization for the accreditation of training institutions (NCATE) and quality assurance (State of California).	USA
		Evidence and research	USA
LEVEL 2 OF INTERVENTION	Alternative qualification	Teachers for a new age	USA
		Training research and LUMA center	Finland
	Articulation with centers	Alternative certification programmes	United Kingdom
		Flexible training routes	The Netherlands
	External assessments	Teacher training aimed at schools	United Kingdom
		Alliances with universities	Sweden
		Independent agency	The Netherlands
		Basic education inspections	England, Wales and Northern Ireland
	Educational agency	Scotland and Sweden	

Source: compiled by the authors.

MAIN FINDINGS

In the following paragraphs we will present the innovations identified in *Table 1* as potentially inspiring to reconsider initial teacher training in different contexts. These are initiatives that mark a turning point in initial teacher training.

a) *Training standards*

Some studies show the trend to increase the autonomy provided, especially to universities, as centers for the training of teachers (Aghion *et al.*, 2008). This growth has made it necessary to regulate these centers by means of standards.

If we analyze the case of *England*, in the United Kingdom, the development of standards was favored by the creation in 1994 of an institution specialized in the training and development of schools: the *Teacher Development Agency* (TDA). It is a public organism whose main objective is to

encourage the recruitment of good teaching candidates by means of a training offer of excellence. The organism identifies and selects providers for the initial training courses based on criteria and standards specified by the Secretary of State for Education. Then, it is in charge of making sure that these institutions fulfill the criteria and standards established. The institutions that provide teacher training programs are certified according to 4 groups of standards:

- admission requirements for the students in the programmes,
- description of the training categories and their assessment,
- ways of collaboration and alliances between institutions,
- mechanisms to ensure quality at training institutions.

Table 2. Standards for the accreditation of training institutions in England

Dimension	Main evidence sources
Characteristics of the students	<ul style="list-style-type: none"> - Admission examinations to estimate the level that the student will reach on graduation - Minimum grade required in language and mathematics admission tests - Passing of physical and psychological examinations required to be able to practice teaching - At least one personal interview at the moment of admission
Training and assessment	<ul style="list-style-type: none"> - Design and implementation of training programmes that allow future teachers to fulfill <i>Qualified Teacher Status</i> (QTS) standards. - Adaptation of the programmes to the individual needs of students - Preparation of students to teach at least 2 educational levels - Course load of 32 weeks in 4-year degree programmes and 24 weeks in three-year programmes - Internships at least two schools for every student
Collaboration and alliances	<ul style="list-style-type: none"> - Joint work between training institutions and schools, both in the training planning and in the selection of students and their assessment according to <i>Qualified Teacher Status</i> (QTS) standards
Quality	<ul style="list-style-type: none"> - Access of students to books, new technologies and other materials necessary for initial training - Periodical <i>curriculum</i> reviews, with identification of areas of improvement and design of actions to ensure future quality

Source: compiled by the authors, based on www.education.gov.uk/get-into-teaching (last access: 01/02/2013).

The reforms encouraged in England for the training, development and certification of teachers have focused, on one hand, on raising the standards for training and the practice of teaching and, on the other, on recruiting and retaining a sufficient amount of teachers. The existence of a public organism that coordinates the training offer has contributed towards the increase of the number of candidates for teachers and the significant improvement of the quality of initial training.

Another interesting case study is *Australia*, where the majority of educational institutions belong to the Government and only very few are private. Australia has approximately 9,000 primary and

secondary schools, out of which 70% are public. The education administration is responsibility of the federal Government, of the states and territories of Australia, which decide upon the educational policies; the last two are in charge of the financing of school education. The initial training of Australian teachers takes place at the universities. Currently, almost 40 different institutions provide training for teachers in Australia. The majority are public universities, although there is a small group of private higher education institutions that also carry out initial teacher training. Despite its dimensions, the country does not have a national organism in charge of the assessment and accreditation of teacher training programs. The States and Provinces are responsible for the accreditation processes, the progresses of which are different depending on the survey carried out a few years ago (Ingvarson *et al.*, 2006). This diversity in the standardization systems has allowed us to identify certain models that could be inspiring for other countries.

In the state of *Queensland*, the regulations on the registry of teachers require that all training programmes may have to be approved by the *Queensland College of Teachers*. The approval process is based on a set of standards structured into 5 important areas: the professional and disciplinary knowledge provided the amount and type of students, the capacity to create an intellectually challenging environment for students, professional relations and ethical practice and learning and reflection levels of students (Queensland College of Teachers, 2009).

Currently, the approval process for training programmes requires that the training institutions may provide the information on how they articulate their courses, the empirical evidence on the teaching-learning process, on how the courses are being taught, the presence of new technologies, the bonds between the learning and assessment experiences, the contribution of training towards the construction of a successful professional profile, the retention of students and their development.

The training institutions must deliver an annual report on the implementation of the courses, including minor modifications, and warn provincial authorities about any substantial changes to the contents, on how the courses are taught or on assessment.

Another Australian example refers to the state of *Victoria*, where since 2004 there has been a process of review and approval of the teacher training programmes that is administered by the *Victorian Institute of Teaching* (VIT). To accredit themselves, the training institutions must provide information to the VIT so that the latter can assess the extent to which the requirements established are fulfilled. The VIT carries out the assessment processes by means of a Committee made up of 25 people, including representatives of the eight universities of the Province that provide initial teacher training, practicing teachers, parents and authorities that employ teachers. The VIT assigns an assessment panel for each training programme that needs accrediting. This panel must review the self-assessment report drawn up by each university (Blake & Gallagher, 2009).

As indicated at the beginning of this section, there are many countries that register high interest experiences with regard to teacher training standards. Apart from the already mentioned cases of England and Australia we would like to point out 2 interesting cases in the *USA*: The *National Council for Accreditation of Teacher Education* (NCATE) and the teacher training quality assurance system, in the state of California.

The NCATE, created in 1954, operates as an independent body in the accreditation process of teacher training standards and is backed by the main professional teacher organizations and

training institutions². The NCATE accredits teacher training institutions with regard to a set of standards that are reviewed every 7 years in accordance with a wide consultation process amongst educators, decision makers and researchers in the educational field. The last one was carried out in 2007. For NCATE, standards measure the efficiency of training institutions to reach high quality training. To achieve the accreditation, an institution must apply formally. Thus, a visit is arranged, and afterwards, the institution must prepare a report describing its situation with regard to the standards in question (NCATE, 2008).

The standards used are based on a specific vision of the teacher training graduates' necessary knowledge and skills if they want to work with students efficiently. In this sense, these standards provide a guide which is structured around 6 axes that are described in *table 3*.

Table 3. Standards for the accreditation of training institutions in the USA

Standard	Description
Knowledge and skills of the candidates	The candidates that graduate from the training programme have and prove knowledge regarding pedagogical practices, contents and environments, and professional requirements to help all students learn. The assessments indicate that the candidates reach the state standards and those that are set by the training institution.
Assessment system	The training institution has an assessment system that gathers and analyzes data regarding the qualifications of the programme candidates, the development of their students and the institutional actions that contribute to improve it.
Field experiences and internships	The training institution and its associated schools design, implement and assess field experiences and internships so that the teaching candidates develop and prove their knowledge, skills and professional suppositions necessary to help all students to learn.
Diversity	The training institution designs, implements and assesses its <i>curriculum</i> and provides experiences so that all its candidates can work with a wide-range of students and in different social and economic contexts.
Qualification and performance of trainers	Teachers are qualified and are professional practice models in the academic, service and teaching field, including the capacity to assess their own efficiency and relate it with the performance of their teacher training students. They also cooperate with colleagues at associated internship schools. The training institution systematically assesses the performance of its programme teachers and makes their professional development easier.
Government and resources	The training institution has the leadership, the authority, the budget, the personnel, the infrastructure and the resources for the preparation of teaching candidates to reach the state and institutional standards.

Source: compilation based on NCATE (2008).

The abovementioned standards are used to accredit training institutions, regardless of the programmes offered. For this reason, NCATE has also developed specific standards for the accreditation of teacher training programmes, which are based on the experts' reviews. Currently, NCATE (2008) certifies teacher training programmes in fields as different as "*initial education*",

² Including American Association of Colleges for Teacher Education (AACTE), National Association of State Directors of Teacher Education and Certification (NASDTEC), National Education Association (NEA), Council of Chief State School Officers (CCSSO) and National School Boards Association (NSBA).

“technological education”, “environmental education”, “teaching of foreign languages”, “basic science” or “social science and physical education”.

The case of *California* also provides us with interesting clues. In this state there are different teacher training categories but quality control and assurance are present by means of an information system that permanently monitors and assesses the teaching candidates.

The system gathers information on the strengths and weaknesses of the teaching candidates at 4 key moments: admission, the period during which the courses are carried out, the internships and the assessment of the teaching performance at the end of the training process. During the first admission stage the teaching candidates are assessed according to their knowledge regarding the area or subject which they want to teach, and their attitudes regarding the teaching task. To assess knowledge, the standardized measures used in the American university system (*Grade Point Average* - GPA) are used, as well as 2 tests (*California Basic Educational Skills Test* – CBEST and the *California Subject Examinations for Teachers* - CSET) that determine the level of aptitude of the candidate in the specific subject that he/she wants to teach. The tests constitute a first important filter for the candidate’s acceptance in teacher training.

Another dimension assessed at the admission stage is the candidates’ attitude towards the teaching task. During the admission interviews, the candidates’ proactive capacity is usually valued as well as their communicative competences and their teaching commitment. However, the results obtained in the study carried out by Wechsler *et al.* (2007) indicate that this dimension is not always systematically assessed.

The second stage is related to the training programme the candidates must complete. They are assessed in this programme by means of mechanisms which establish the degree at which the students have the knowledge and skills that the state of California, through the *Teaching Performance Expectations* (TPEs), requires for each graduate if they wish to obtain the provisional certification. These assessments constitute a fundamental analytical tool for programmes because they offer the opportunity to measure their students’ progress towards clear, precise aims, and they especially help to identify strengths and weaknesses regarding different competences necessary for teaching.

The third stage of the quality assurance system of teacher training in the state of California consists in the assessment of the internships that are carried out under the supervision of a “*master teacher*” and a university supervisor. The figure of the “*master teacher*” guarantees that whoever monitors the internships is immersed in the school and is fully involved in classroom work. The presence of university supervisors ensures the presence of standardized criteria for the assessment of the training programmes. University supervisors do not usually know much about school life, but they are perfectly aware of assessment mechanisms. On the other hand, “*master teachers*” are knowledgeable about classroom life but are not usually very familiar with the assessment criteria of the programmes. Complementing both roles ensures the good functioning of the system.

The last stage of the quality assurance system of the state of California refers to the assessment of the performance at the moment of graduation from the teacher training programme. From the academic year 2008-2009 to date, all teacher candidates must pass a *Teaching Performance Assessment* (TPA), designed to measure the degree in which the graduates comply with the standards established. There are at least 2 mechanisms (*California TPA* – CalTPA and *Performance Assessment*

for *California Teachers -PACTI*)³ designed to assess a wide range of skills and competences in teaching practice. During these tests, the student must carry out a series of tasks referring to the specific pedagogy of the subject to be taught, to the design of the instruction, to the assessment of learning and the culmination of the teaching experience. The universities in charge of the teacher training programmes are responsible for the implementation of the tests. To be able to carry out the assessment, these universities make use of their teachers, supervisors and tutors, who are in charge of the process. The state of California ensures the qualification of the university teams so that the latter can carry out their task by means of the Commission on Teacher Credentialing in charge of supervising and ensuring the quality of the mechanisms of assessment to be accepted in the teaching profession.

To end the analysis of interesting experiences with regard to teacher training standards, it is worth mentioning the case of *Scotland*. In the year 2000, this country established the *Standard for Initial Teacher Education* (General Teaching Council Scotland, 2006), which operates as a quality assurance mechanism for the training of teachers, working as the central instrument for the approval of training programmes. The standards were generated by the Advisory Committee on teacher training quality and establish parameters for the graduation of new teachers. These standards establish a series of knowledge requirements and skills that the teaching candidates must have when they complete their training and specify the requirements that the programmes must fulfill in terms of contents and work methodology.

The standard draws up a triangle of skills and competences for the graduates, made up of professional knowledge, professional skills and professional values and personal commitment. Based on this triangle, the standard points out what teachers should know and what they should be capable of doing in each dimension.

b) *Evidence and research-based training*

Apart from establishing standards to ensure minimum quality during the initial training period, it is also necessary to develop initiatives pertaining to the characteristics of the programme itself. The conducted study points out those teacher training proposals that revolve around evidence and research-based education.

An interesting example of this type of training is the *Teachers for a New Era* (TNE) project, which has been implemented since 2001 by the *Carnegie Corporation of New York* and that intends to improve the efficiency of teacher professional development by means of initial training. This initiative is based on 3 main assumptions (Kirby et al., 2006):

- initial teacher training can improve teaching quality
- the improvement of teaching quality requires external assistance (both financial and technical aid),
- the success of the programmes can have a multiplying effect on similar institutions.

In the first place, a group of universities are invited to submit an innovative proposal for their teacher training programme. The selection of the universities participating in the project is carried out on the basis of the quality of the submitted proposal, and on criteria pertaining to representativeness, size, educational research background and type of students. The programme

³Recently, the Fresno Assessment of Student Teachers (FAST) has come into force. It is also used as a TPA model, but to a lesser extent.

gives a 5 million dollar grant to support each university⁴ for a 5 year period and the funds are provided in compliance with certain basic principles, including the criterion of *evidence-based decision making*. This involves that the transformation of the programmes is carried out on the basis of information resulting from continuous research, focused on the measurement of achievements and the students' progress.

Another important criterion refers to a committed, integrated team and to the acknowledgement of teaching as an academic profession that involves "clinic" or internship experiences, which results in the development of long standing alliances between universities and schools so that teacher training students can know and experience the reality of classrooms, during their training years and the beginning of their teaching career (Kirby *et al.*, 2006).

The transformation proposals submitted by universities are quite diverse. However, recent assessments have allowed us to verify that they usually include very similar activities. Certain indicators, described in *table 4*, have been developed to identify them:

Table 4. Teacher for a New Era Indicators and Principles

Basic principles	Activity indicators
Evidence-based decisions	<ul style="list-style-type: none"> - The information necessary to make decisions is determined - A system for information collection and processing is established - The students' results are measured - The students are monitored through time, identifying retention, labor location, insertion - The teaching team commits itself to information collection, analysis and decision making based on this
Committed and integrated teaching team	<ul style="list-style-type: none"> - Teacher trainers provide advice regarding their subject contents - Teacher trainers construct the new teachers' knowledge and skill standards - Teacher trainers create and review the curricular structure of the programmes
Importance of internships	<ul style="list-style-type: none"> - School teaching teams are actively involved in the design, functioning and decision making - Stable alliances between the programmes and school internships are created - Standards that reflect what should be expected from internship experiences are developed - The internships are assessed, and actions are carried out to face the challenges that result from assessment

Source: compilation based on Kirby *et al.*, 2006.

⁴ Bank Street College of Education - New York City; California State University, Northridge (CSUN); Michigan State University (MSU); University of Virginia (UVa); Boston College (BC); Florida A&M University (FAMU); Stanford University; University of Connecticut (UConn); University of Texas at El Paso (UTEP); University of Washington (UW) and the University of Wisconsin-Milwaukee (UWM).

One of the main added values of the *Teacher for a New Era* project was the emphasis put on the fact that the transformation decisions should be made on the basis of empirical evidence. The assessments available indicate that all the participant organizations acknowledge that project participation has increased the interest and the concern about a decision process based on empirical evidence. In particular, the project seems to have been efficient when it generated jointly constructed, valid and trustworthy information that allows the assessment of training programmes, including the progress made in the learning of the teacher candidates. On the other hand, the assessments indicate that the information is used efficiently to make decisions, despite the fact that the data construction is a complex, lengthy task. In turn, it has been possible to identify a cultural change in universities that affects teacher training programmes and a large amount of academic departments and units (Kirby *et al.*, 2006).

Research as a fundamental component in teacher training is another trend that we have observed in the literature review. And in this sense, *Finland* stands out as an example. In this country, teacher training has focused on research since the late 70's. Initial training programmes ranging from the level of graduate degrees to master's degrees devote approximately 20% of their *curriculum* to research. Furthermore, for the achievement of the teacher degree, the candidates must be in possession of at least a master's degree.

Teacher training programmes include courses and modules that refer to research methods and their different variants (experimentation, surveys and historical analyses). The courses include seminars about the use of evidence throughout the practice of the profession. Teachers receive preparation solid training in the research of child and teenage behavior. Furthermore, research is central in the guided internship that - future teachers carry out at schools, where they have the opportunity to analyze the performance and behavior of students, the school atmosphere - and the relationship with - families. The trainees must think, draw conclusions and propose specific lines of action.

Table 5. Research and internship in teacher training in Finland

Years	Presence of research in teacher training
4-5	<ul style="list-style-type: none">- Research mainly at municipal schools- Different research categories- Connection with the project and master's degree thesis
2-3	<ul style="list-style-type: none">- Research at teacher training universities- Start of research focused on specific subjects- Incorporation of approaches focused on students
1	<ul style="list-style-type: none">- Practical training related to theoretical contents

Source: compilation based on Niemi (2008).

The teachers and supervisors of teacher training programmes are in charge of guiding their students in specific research works throughout the entire degree. The idea is that future teachers learn to read and understand research projects, search for and gather information, analyze the data gathered and draw conclusions based on the evidence collected.

Not only does the experience in Finland reflect progress in the incorporation of research to initial training, but it is also a pioneer in service training and the professional development of teachers.

An interesting example can be found at the LUMA Center (The University of Helsinki), an initiative that connects research and everyday work of science teachers and the innovation poles of the country in companies and industries. The center not only disseminates research findings that may be useful to support the teachers' work, but it also offers scientific updates in several teaching fields. Furthermore, it organizes exchange events such as conferences and seminars, and promotes the development of research projects carried out by teachers.

c) Alternative qualification mechanisms

Countries, in which *Part-time and Distance Training Programs* are encouraged and are based on the use of information and communication technologies, are becoming more and more usual.

Amongst others, we can point out the case of the *United Kingdom* which has developed part-time teacher training models that complement the already existing classic training offer (Eurydice, 2002; European Parliament, 2008). The *Graduate Teacher Programme* (GTP) and the *Registered Teacher Programme* (RTP) are part-time initiatives to train graduates from different fields, which are carried out at schools. The abovementioned programmes prepare for teaching practice people with tertiary degrees that work in teaching. Roughly, they are 1 year long, although the candidates with a longer teaching experience can complete these programmes in less time.

Apart from the example of the *United Kingdom*, we can also mention the case of the *Netherlands*, where university programmes started and currently are obliged to incorporate flexible routes for initial training. Therefore, general tertiary studies can be combined with specific teacher training. Future teachers can take the last 2 years of a university graduate degree with an additional year of specific teacher training. From the year 2000, alternative certification programmes have proliferated, intending to identify and recruit new teaching candidates. These programmes include graduate teachers who have left the teaching practice but want to go back to teaching, and also professionals from other fields that wish to join the teaching sector. The aim of taking less time to incorporate the competences and knowledge necessary to teach seems to have been fulfilled since the studies available reflect the good results obtained by teachers qualifies by means of alternative routes (Brouwer, 2007).

d) Articulation with schools

As in the previous section, there are also many countries that have encouraged schools, in alliance with universities, to become institutions that provide teacher training (Walkington, 2007).

In the *United Kingdom*, higher education institutions willing to offer initial teacher training programmes must be associated to schools to be able to organize a training programme. On the other hand, schools have the possibility to become teacher training institutions on their own by means of the *School Initial Teacher Training*. Collaborating schools and their teachers are selected with quality criteria and become part of a consortium in which the university graduates who are interested can apply, who in turn, are selected to participate in this programme. The commitment of the school toward the participants usually lasts 1 year. Through these courses, the participants obtain their qualified teacher status, and in most cases, also their postgraduate certification in education. The agreement by means of which schools are accepted as collaborators of the initial training process is coordinated through the agency that regulates teacher training in the country.

Sweden has also created a system that rewards training institutions which obtain good alliances with schools in their initial training programmes. It is a system of alliances between initial training

institutions and basic education centers to promote a greater involvement of the latter in teacher training (Ministry of Education and Science of Sweden, 2003). The most significant characteristic of these proposals is the emphasis on the student's immersion in training in coordinated work teams, constituted by university and school teachers. This emphasis favors the construction of agreements and common frameworks between the academic university scope and the practical school development, which increases the quality significantly, especially during the initial training of future teachers.

e) *External assessment*

For many European countries, external assessment is a formal requirement for teaching training systems and is implemented by an assessment agency, committee or independent body which acts on behalf of the public authorities.

This is the case with the *Netherlands*, except for the fact that it carries out a combined process, since the external evaluation is carried out by an assessment committee and an independent organism which carry out the outer valuation procedures jointly. We also have to mention the *United Kingdom* (England, Wales and Northern Ireland), where initial teacher training does not respond to the procedures usually used in the European Union either, but in this case the external assessment is carried out by means of basic education inspections. Finally, especially significant are the cases of *Scotland* and *Sweden*. These are the only countries which have chosen an educational agency to carry out the external assessment (Eurydice, 2006).

Taking submitted initiatives into account, we consider it necessary to offer 2 main reflections about the external assessment processes with regard- to initial teacher training programmes.

We would start off by indicating that external assessment has a variable scope and generally refers to the curricular content of the training programmes, to the teaching methods or to the teachers' assessment practices. It also may consider the time spent on disciplinary contents and on specific pedagogical contents, the management methods and the characteristics of the training institutions, their potential alliances with schools, and the human resources used. Other important aspects that can be assessed are the students' performance, their attitudes and motivations, their opinions about the training they are receiving and the general infrastructure of the training institutions (including libraries, access to new technologies...).

And on the other hand, the implementation of external assessment processes must be accompanied by certain discussions referred, amongst other aspects, to the assessment procedures themselves since the external appreciation of the training processes involves having a not always available information base. Furthermore, external assessment requires a reference framework which includes a good teacher's capacities and competences, but this framework does not usually exist in an explicit manner. In this same line, another controversial issue that should be taken into account is the use of external assessments findings in decision processes which provide guidelines for the institution accreditation or re-accreditation.

DISCUSSION

Teachers are important and have a great influence on students' learning processes and on the improvement of education quality. And since teachers are so important, we need our educational

system to be capable of attracting the best candidates and turn them into teachers. We need good policies so that the initial training of those teachers ensures the acquisition of the competences they will need throughout their extensive professional careers. And society needs good teachers whose professional practice ensures quality professional standards and guarantees students' rights to learn.

In this article, we have tried to prove that nowadays there are experiences at an international level which fulfill the requirements established by Fullan more than a decade ago (1998) when he indicated that for the reconstruction of teacher training it would be necessary to generate a greater knowledge base for teaching and for attracting capable and varied students, committed to their profession. To reach these objectives, the author suggested redesigning the training programmes to strengthen the bonds between art and science, between theory and practice; reforming the school working conditions; developing and monitoring external standards for the programmes and carrying out rigorous and dynamic teaching focused research.

The classification of experiences carried out in our study has been illustrated by a series of examples which show that it is possible to transform initial teacher training. The aforementioned cases of Australia, the USA, Finland, the Netherlands, United Kingdom and Sweden adopt different paths which include the establishment of standards that allow to feedback training proposals. These, in turn, must be based on explicit evidence on learning and teaching and on research. Furthermore, the articulation with schools, alternative qualifications and external assessment are established as important elements.

A more accurate analysis of these initiatives allows us to identify more specific characteristics on which we can focus this reflection. In the first place, the experiences analyzed seem to refer to topics that, in one way or another, respond to educational needs which are inherent to the transformations undergone by contemporary societies. Nowadays, the world has changed and teacher training must observe trends such as the overabundance of information or the globalization of communications.

Furthermore, the experiences analyzed highlight the centrality of schools and students as a critical condition for the efficiency of any undertaken initiatives. The school is the backdrop of training and the articulating axis around which the different training activities are constructed for an appropriate development of future teachers.

Another important aspect to be pointed out is that the experiences studied promote independent teacher development, moving away from what Gautier considers a "*paternalistic view of teacher training and qualification*" (2005: 16). And this has to do with another trend we have identified, which is related to collaborative work and to the development of team working capacities. The shared view and the articulation between different agents involved in the training experiences seem to be an element favoring the implementation of processes which encourage a better development of future teachers.

Finally, we want to add the importance of considering innovation as a constituent value of the training experiences analyzed. These initiatives include innovate elements in the design and implementation process in the training process.

This article has pointed out the technical characteristics of a series of experiences related to initial teacher training based on the assumption that the latter can be inspiring for other contexts. Future studies should carry out thorough analyses to find out whether a total or partial implementation of these innovations is possible in other contexts.

It is not only about the political, social, economic, historical or cultural feasibility of the experiences studied in this article but also about considering matters inherent to the specific implementation of changes and their possible transferability to other contexts. The idea is that, above these new features and for the success of initial training, long-standing systemic policies which consider the multiplicity of factors intervening in the complex task of learning and teaching are necessary. Good intentions, declarations and mere words are just not enough. Educational systems must transform themselves at the same speed as the changes taking place in socio-economic systems; these systems must become more inclusive and give response to all children's and teenagers' right to learn.

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