



## School Leaders' Insights Regarding Beginning Teachers' Induction in Belgium, Finland and Portugal

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### ABSTRACT

**Purpose:** Although new teachers' induction is a key issue of principals' work, there's still little research on this. Occurring within the frame of a EU project, the goal of the study was to perceive the main needs of principals to support beginning teachers in Belgium (Flanders), Finland and Portugal.

**Research method:** It built on a questionnaire applied to 1654 principals in three countries. 261 principals replied to the questionnaire. Descriptive statistics and exploratory factor analysis were used, and a comparative test involving the countries under analysis was performed.

**Findings:** The most relevant needs referred to professional/organizational development and pedagogical leadership, comprising implementation of supervisory devices and ICT integration in the classroom. Principals stressed the need to support new teachers to promote differentiated pedagogy, critical reflection and collaborative practices. Moreover, we found significant differences between countries: Belgians presented the highest scores in all dimensions, followed by the Portuguese and the Finish, respectively.

**Conclusions:** There's a consensus on the relevance of principals' action as pedagogical leaders, with a great focus on collaboration as a methodology of work among teachers, and reflection as an opportunity for professional growth and learning. Traditionally, this issue concerned only teachers. Currently, there seems to be a shift towards a commitment of principals to become more directly involved in driving teachers' practices and teaching processes. Nevertheless, this consensus is not total, as they value differently, in breadth and depth, the other dimensions, which must be analyzed in the light of the idiosyncrasies of each educational system.

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## Introduction

Despite there is wide recognition of the relevance of induction programs, only half of the European Union (EU) countries offer comprehensive, system-wide induction support to teachers after entering the profession (European Commission, 2012, p.11). The concept of induction is used here as a process of socialization (Angelle, 2002), through which beginning teachers have to simultaneously teach and learn to teach (Jensen, Sandoval-Hernández, & González, 2012), practicing and developing teaching skills under the umbrella of experienced teachers and principals (Cherian & Daniel, 2008).

Regarding the scientific production on induction of newly qualified teachers (henceforth, NQTs), the literature review carried out by Kutsyuruba, Godden, Covell, Matheson and Walker (2016) (Table 1) states that the highest production of scientific articles was produced in the United States of America (64 of the 113 papers). This mapping of empirical research makes evident a gap between the number of articles made in North America (USA/Canada) and in the United Kingdom vis-à-vis the other parts of the world.

**Table 1**

*Research on Induction*

<i>Countries</i>	<i>Nr papers</i>
USA	64
United Kingdom	15
Canada	12
Europe	8
Australia and New Zealand	6
The Middle East	6
Combined nations (more than one nation examined in one study)	2
Far East	1
Total	113

Source: Kutsyuruba et al. (2016)

Overall, the need to provide teachers with supportive systems seems to be consensual (Fantilli & McDougall, 2009; Marcelo, 2009), and induction is seen as especially relevant to “support new teachers in their transition to full teaching responsibilities before they obtain all the rights and responsibilities of full-time professional teachers” (Schleicher, 2012, p.73). Moreover, it appears to be relevant to prevent NQTs from leaving the profession, in the first three to four years after their initial training (Jones, 2003), due to stress, burnout, depression and other psychological symptoms, as has been highlighted by studies carried out in the UK (Smithers &

Robinson, 2003), Australia (Stoel & Thant, 2002), the USA (Ingersoll & Smith, 2003; Smith & Ingersoll, 2004), and other countries (OECD, 2005) (cf. Avalos, 2016; Kutsyuruba et al., 2016). Definitely, research reveals the importance of having support from the school management and colleagues in view of a positive job satisfaction (Avalos, 2016; Day, Sammons, Stobart, Kington, & Gu, 2007; Kessels, 2010).

### *School Leaders' Role on Induction*

School leaders' qualities and skills are significant factors regarding the students' success (Cochran-Smith, 2006; Darling-Hammond, 2006; Rivkin, Hanushek, & Kain, 2005). They are responsible for exerting influence over teachers, helping "schools to develop visions that embody the best thinking about teaching and learning" (Leithwood & Rhiel, 2003, p. 5). Research shows that principals are the second most influential factor to students learning, only overtaken by classroom instruction (Leithwood, Louis, Anderson, & Wahlstrom, 2004). This effect happens through an encouragement conduct towards teachers, regarding their commitment and motivation, work conditions, and distribution of power (Leithwood, Day, Sammons, Harris, & Hopkins, 2006), or in the way principals shape school organizational culture (Robinson, Lloyd & Rowe, 2008; Wahlstrom, & Seashore-Louis, 2008).

Induction programs contribute to NQTs' well-being (Helsel DeWert, Babinski, & Jones, 2003; Kessel, 2010; Molner Kelley, 2004), enabling professional socialization and the acquaintance with the school culture (Marcelo, Burgos, Murillo, López, Gallego-Domínguez, Mayor, Herrera, & Jáspez, 2016). In a literature review about research on NQTs' professional learning and development, Avalos (2016) stresses the benefits of having support systems (e.g., mentoring), as the early phase career must be strengthened and NQTs should be supported within a context shaped by a learning culture (Sunde & Ulvike, 2014). In the same vein, Iordandides and Vryoni (2013), in their research with Cypriot primary school leaders, reveal the importance of principals offering NQTs a positive school climate. Notwithstanding the emerging evidence from the studies, schools don't take induction (Wischkaemper, 2005), and inaction regarding NQTs prevails seriously enough.

These issues have been of concern to international bodies. In a book for policymakers, the European Commission (EC) presents "practical information" on how to develop induction support for all NQTs along with "examples of measures to implement or improve such programs" (EC, 2010, p. 5). Among others, the EC agrees that "Efforts should be made to ensure that all NQTs receive sufficient and effective support and guidance during the first few years of their careers." (EC, 2010, p. 5). Similarly, the Organization for Economic Co-operation and Development (OECD) warns that "The stages of initial teacher education, induction and professional development need to be interconnected to create a lifelong learning framework for teachers." (Schleicher, 2012, p.70).

Therefore, new teachers' needs and support should be a key issue of principals' work (OECD, 2005; Rippon & Martin, 2006), as they can favour or inhibit NQTs

professional trajectory. By offering support systems, not only principals enhance speed of personal and professional development of NQTs (Bubb, 2003), but they also influence the sort of professionals these new teachers will become (Bubb, Earley, & Totterdell, 2005). And this is at the heart of the school work because teachers are considered the most powerful predictor of students' success (Barber & Mourshed, 2007).

Three main assumptions followed from the above: first, any efforts to improve students' achievement should focus primarily on teachers; second, leadership is central to improve students learning, and is indirect (Leithwood et. al, 2004), depending on organizational decisions and the ability to guide others toward common goals; third, principals have an important role regarding NQTs, by strengthening their self-confidence and professional development through the implementation of induction programs and supportive systems.

### *Research Problem*

Notwithstanding the importance of principals in NQTs' induction and in their professional development, studies focusing on this subject are still scarce in Europe, and there are too few studies that combine more than one nation concerning induction and school leaders – too, according to Kutsyuruba and colleagues' literature review (2016). This study aims at contributing to the knowledge development about this topic in the European context. The following research question was put forward:

- What needs do school leaders elect as important to respond to beginning teachers' induction in Belgium (Flanders), Finland and Portugal?

Other sub-questions emerged from this main issue: Is it possible to conceptualize different types of needs depending on national contexts? How do they differ in this regard?

## **Method**

### *Research Design*

The study was guided by three dimensions – professional and organizational development, pedagogical leadership and work organization – which are inherent to the activity of principals in their relationship with NQTs, and are related to school administration and management, i.e., the coordination of the teaching work and the professional integration of NQTs. Next, we shall briefly consider each one.

### *Professional and Organizational Development*

Professional development is adopted here as part of a dialectical approach, in which intrinsic and extrinsic dimensions comprise a set of factors that influence the decision-making and action processes of teachers, by affecting all the aspects of their personal and professional life (Almeida, 2014). In the literature, the influence of individual and contextual factors is emphasized since the beginning of professional

socialization (Cohen-Scali, 2003; Flores, 2004; Harland, & Staniforth, 2006). Accordingly, one cannot think of individuals' professional development without bearing in mind it occurs within/is mediated by institutions. Besides, teachers' professional development depends on the contexts in which they carry out their teaching activity (Avalos, 2016). Concurrently, it is not possible to understand organizational development without realizing how those who work there evolve and contribute to institutional change (Cruz, 2006; Day, 2004; Marcelo, 2009; Zabalza, 2004). Therefore, we highlight the existence of a reciprocal influence between professional and organizational development.

### *Pedagogical Leadership*

Despite the different names it takes - instructional leadership (Blase & Blase, 2002), pedagogical leadership (Ärlestig, 2008), learning-centered leadership (Southword, 2005) - by pedagogical leadership we mean "the guidance and direction of instructional improvement" (Elmore, 2000, p.13). To influence teachers' practices inside the classroom, principals shall carry out different activities, such as planning and implementing change and searching for teachers' collaboration (Hopkins, 2003). Blase and Blase (2002) describe three primary elements of instructional leadership: (a) conducting instructional conferences (by making suggestions and offering feedback to teachers, asking them for advice/suggestions), (b) providing staff development (by supporting innovation and collaboration, making available required resources, and developing/promoting coaching relationships, etc.) and (c) favoring teacher reflection (by means of classroom observation and dialogue with teachers). Thus, the principals' closer look on the teaching and learning process facilitates teachers' professional development (Hallinger, 2005; Timperley, 2005), and the processes of induction as well.

### *Work Organization*

Professional development must be systematic and comprise training, practice and feedback (Schleicher, 2012, p.18). To promote teachers' professional development, school leaders are expected to intervene in the organizational culture, and to use organization and culture for changing the didactic and pedagogical dimensions of the school (Leithwood et al., 2006). We follow Hornig and Loeb (2010) to whom "Schools that improve student achievement are more likely to have principals who are strong organizational managers" (p.66). Thus, the Work organization dimension regards the way principals organize school to respond to the individual and collective needs of NQTs.

### *Research Context*

Bearing the distinctiveness of each country in mind, it is essential to stress the uniqueness of the national contexts. Despite most European countries provide the 'induction phase' in addition to the compulsory professional training (teaching diploma), the countries under analysis have different characteristics in the development of induction programs and in how they qualify teachers, and provide support to NQTs (see Table 2).

**Table 2***Newly Qualified Teachers' Support Systems in Belgium, Finland and Portugal*

<i>Features</i>	<i>Belgium (Flanders)</i>	<i>Finland</i>	<i>Portugal</i>
<i>Teacher qualification</i>	-Bachelor's degree (180 ECTS) for pre-school, primary or first-grade secondary school teaching. -Post-graduate teacher education program (60 ECTS*) for teaching in a secondary school.	Master's degree. Takes 5 years.	Master's degree. Takes 4 to 5 years.
<i>Pedagogical studies</i>	30 ECTS pedagogy studies (in post-graduate teacher education programs).	60 ECTS pedagogical studies.	At least 18-21 ECTS pedagogical studies. Between 30-51 ECTS didactics.
<i>Organizing institution of pedagogical studies</i>	Universities.	Universities. Higher education institutions of vocational teacher education.	Universities. Polytechnics (only for primary school teaching degrees).
<i>Teaching practice</i>	30 ECTS (in post-graduate teacher education programs).	Several phases during the program a total of approx. 20 weeks.	Between 42-63 ECTS.
<i>Mentoring for NQTs</i>	-Voluntary for NQTs. -Schools are responsible for organizing the mentoring activities.	-No formal mentoring system. -Schools are responsible for organizing the mentoring activities. -Usually a more experienced teacher from the same or different school than a mentee.	-Mandatory for NQTs according to legislation. -Locally organized according to schools' mentoring programs.
<i>The mentors</i>	-Schools frequently ask mentors to follow mentor training. -Works in the same school as a mentee. -Not paid.	-Can have specific training for mentoring. -Rewards or compensations depend on a school.	-More experienced teacher with specific training for mentoring. -Works in the same school as a mentee. -Not paid.
<i>Participation to mentoring</i>	Mentoring is provided for almost 99% of NQTs.	High variations among schools if mentoring is organized.	The aim is that all NQTs are integrated in a mentoring program. Still some variation may occur in the ways mentoring is actually organized.

Source: Harju &amp; Niemi (2016) (adapted)

### Research Sample

Within the frame of the European research project Outstanding New Teachers Programme (ONTP)<sup>5</sup>, a questionnaire was administered to a total of 1654 school leaders from all over Belgium (Flanders), Finland and Portugal. 261 school leaders replied to it (Table 3).

**Table 3**

#### *Rate of Participation*

	<i>N° of sent questionnaires</i>	<i>N° of respondents</i>	<i>Response rate</i>
Belgium	35	30	85,7%
Finland	906	106	11,7%
Portugal	713	125	17,5%
Total	1654	261	15,7%

The final sample consisted in 261 respondents, of which 47.9% are Portuguese, 40% are from Finland and 11.5% are from Belgium. Most of the respondents were female (56.7%), a tendency that occurs in the global sample and in the Portuguese and Belgian cases, whereas in Finland the male representation was slightly higher (50.9%). Regarding the age group, the majority (67.4%) of the principals were over 50 years of age, a tendency that was observed in all the countries involved.

As for academic qualifications, more than 60% of the principals held a master degree. However, in the Portuguese case, the vast majority had only a bachelor degree, as opposed to the trend observed in the other two countries. It should be noted that a large majority of the subjects (86.2%) had some type of specific training in school administration and management, a tendency that was maintained when each country was analyzed per se. All the principals covered by the study had experience in the field, of which about 75% of them had been teaching for more than 20 years. In addition to the specific training for managerial positions, the vast majority had extensive experience as a teacher. As regards the experience in school management, we found a greater variability. Although almost 50% had more than 10 years of experience, more than a quarter of the respondents (28.4%) had from one to five years of experience only. In the Portuguese case, principals with less experience represented almost 30% of the respondents (29.6%), and in Belgium, they represented 40% of the respondents. Only in the Finnish case have we found a majority of subjects with more than 10 years of experience in management positions (54.7%).

#### *Research Instrument and Procedures*

<sup>5</sup> An Erasmus + KA2 – Cooperation and Innovation for Good Practices (2014-1-BE02-KA201-000474).

The instrument was an opinion questionnaire (Ghiglione & Matalon, 1997), based on a similar instrument already validated in a previous study (Harju & Niemi, 2016)<sup>6</sup> and in the literature review. Peer discussion was used for validation of the instrument's content and suitability to the contexts. It also included a set of open-ended questions that are not analyzed here. Carried out in electronic format, the questionnaire was sent to school principals by each country team. One of the study limitations was the difficulty in determining the exact number of subjects that made up the study population. A second difficulty was the access to their e-mail addresses.

In Portugal and Finland, school principals of public schools in the whole national territory were considered as population, and questionnaires were randomly sent to schools in a number that would guarantee representativeness. In both countries, the questionnaire was applied in a second phase, at random, to increase the response rate. Regarding Belgium, the questionnaire was administered only to schools in the area of influence of the Provinciaal Onderwijs Vlaanderen (POV)<sup>7</sup>, which corresponds to the Flanders region.

#### *Questionnaire Dimensions*

The questionnaire was based on the dimensions described above: pedagogical leadership (14 items related to the ability to coordinate the educational work and to promote the adoption / deepening of certain practices among NQTs); professional and organizational development (19 items related to the principal's ability to promote practices favorable to professional development according to NQTs development needs); and work organization (9 items aiming to detect needs felt by principals, especially regarding the decisions/actions to be taken to integrate NQTs).

The instruction in the questionnaire was "we ask you to give your opinion about the areas you would like to get support (counselling, training, etc.)". The response scale ranges from 1 - nothing, to 5 - very much, where 1 means 'the need of no support' and 5 means 'high need of support'.

#### *Validity and Reliability*

Table 4 presents descriptive statistics for each dimension, the distribution of the dimensions according to skewness and kurtosis values and the Cronbach alpha of each dimension. As can be seen, the Cronbach's alpha presented values above .94 for all the dimensions, revealing high internal consistency of the instrument.

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<sup>6</sup> The instrument was used in earlier studies, originally in surveys of Finnish student teachers (Niemi, 2012, 2014) and in comparative studies of Finnish and Turkish teacher education (Niemi, Nevgi, & Aksit, 2016).

<sup>7</sup> Pedagogical Guidance Service.



**Table 4**

*Means, Standard Deviations, Skewness and Kurtosis for each dimension of the instrument*

	<i>Portugal</i>				<i>Belgium</i>				<i>Finland</i>				Chronbachs alpha
	<i>M</i>	<i>DP</i>	<i>S</i>	<i>K</i>	<i>M</i>	<i>DP</i>	<i>S</i>	<i>K</i>	<i>M</i>	<i>DP</i>	<i>S</i>	<i>K</i>	
<i>Professional Leadership</i>	3.41	0.81	-0.08	0.71	3.07	0.97	-0.40	-0.59	3.19	0.89	-0.36	-0.41	.94
<i>Work in Organizations</i>	3.86	0.50	0.31	-0.147	3.81	0.78	-0.86	0.60	3.75	0.72	-0.74	0.53	.94
<i>Professional and Organizational Development</i>	2.71	0.67	-0.26	-0.04	2.33	0.67	-0.13	-0.81	2.53	0.67	-0.42	-0.26	.96

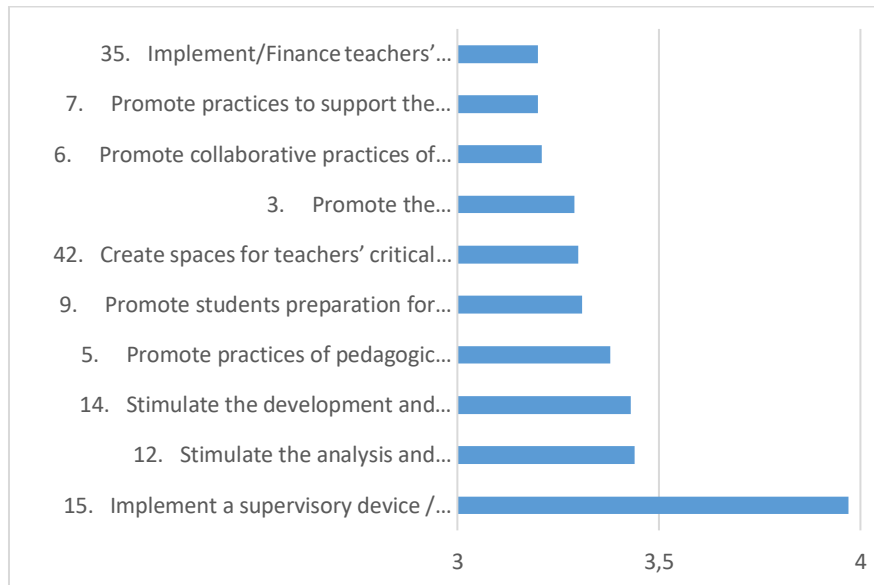
S=Skewness, K=Kurtosis

### *Data Analysis*

Data was analyzed with Statistical Package for Social Sciences (SPSS, version 22). The analyses were performed to respond to the research questions. On the one hand, descriptive statistics were computed to explore the factors that principals consider the most relevant to respond to NQTs' needs. On the other hand, to understand context differences, a statistical test to analyze mean differences between the countries, regarding the dimensions assessed by the instrument, was computed. The distribution of subjects by each group was very unequal (Portugal n=125, Belgium n=30, Finland n=106), and the assumptions to compute parametric tests were not met. Therefore, we proceeded to the analysis of the differences between the groups through a nonparametric test for mean ranks. The significant value was set at  $p < .05$ .

### **Results**

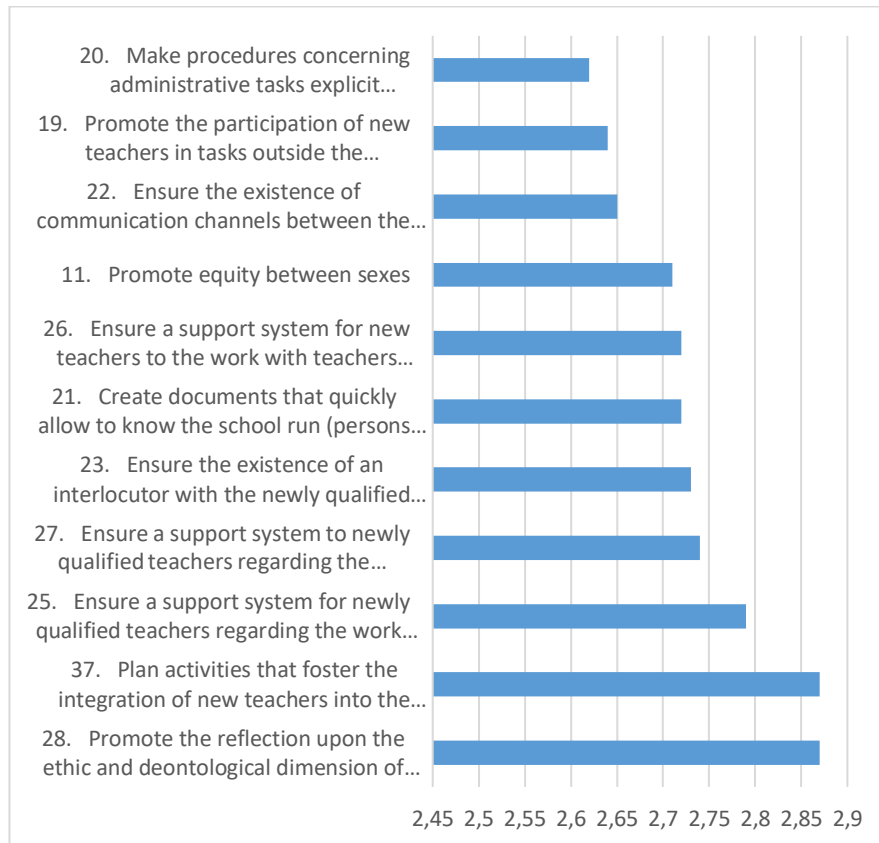
To address the main research question, two procedures were followed. First, descriptive statistics for each item based on the mean responses were used to describe the factors that principals elect as the most and less important to respond to NQTs' needs in the three contexts. Items with mean scores superior to 3.2 were identified as the more salient and items below 2.9 mean scores were identified to be the less salient. Second, an exploratory factor analysis was employed to organize the items in factors sharing the same conceptual framework, allowing a deeper understanding of the factors that principals view as more important to respond to NQTs' needs.



**Figure 1.** Items with the Highest Mean Scores

The results show that the need to implement supervisory devices was the item with the highest mean scores ( $M=3.97$ ) (Figure 1). Also, the remaining items with the highest mean scores are related with the need to support pedagogical practices at classroom level, such as stimulate the analyses and improvement of the students' learning environments (item 12), stimulate the use of ICT as pedagogical resources (item 14), and promote practices of pedagogic differentiation (item 5). The importance of creating spaces for critical reflection (item 42), and promoting other collaborative practices (items 3 and 6) highlight the importance attached to these issues, which simultaneously contribute to the professional and organizational development. Only one of the items related to the work organization dimension arises in this first approach to principals' main needs: the financing of the continuous training (item 35).

In Figure 2, the items with the lowest mean scores were presented, reflecting the factors that principals perceive as less prominent to support NQTs. Giving support to teachers in administrative tasks outside the classroom was the item with the lower mean scores ( $M=2.62$ ). Besides, the remaining items perceived as corresponding to the support measures NQTs need the least, were related to organizational dynamics. To further explore the factors that principals consider important to support NQT' needs, an exploratory factor analysis was conducted and the factors were retained based on eigenvalues superior to 1, on the variance explained by the factors and on the scree plot. Based on these features, five factors were found, explaining 72.25% of the variance and presenting eigenvalues ranged between 22.52 and 1.3.



**Figure 2.** Items with the Lowest Mean Scores

In the structure found, the items were regrouped into five factors, i.e.: factor 1, that we called “Professional development centered in the context of the school” (aggregates items from the ‘Professional and organizational development’ dimension); factor 2, called ‘Pedagogical leadership: personal and social dimension’ (mainly constituted by items from the ‘Pedagogical leadership’ dimension); factor 3, identified as “Pedagogical leadership: instructional leadership dimension” (comprising items from the ‘Pedagogical Leadership’ dimension); factor 4, called “Work organization” (including items from the dimension with the same designation); and factor 5, specified as “Professional development centered on research and reflection on practice” (whose items belong to the ‘PD dimension’).

Table 5 presents the obtained factors, the correspondent descriptive statistics and internal consistency values. The factor with the highest mean level was ‘Pedagogical leadership: instructional leadership dimension’ ( $M=3.22$ ) and reflects issues related to pedagogical competencies and classroom practices. The factor ‘Pedagogical Leadership: personal and social dimension’ was the second with the highest mean scores ( $M=3.12$ ) and is associated with pedagogical practices in conflict resolution and

with ethical and deontological practices. The factor 'Professional development centered on research and reflection on practice' was the third in the rank of importance, and with a mean level of 3.07, thus showing a need to support beginning teachers to reflect upon their practices. The factor 'Professional development centered in the school context' is associated with teachers' school-centered support and communication networks, and showed mean scores of 2.95. The 'Work organization' factor has the lowest mean scores and is related to administrative tasks. The reliability of the factors was found to be good to excellent, with Cronbach's alpha values ranging between .87 and .96.

**Table 5***Descriptive Statistics for Each Factor*

	<i>M</i>	<i>SD</i>
Factor 1	2,95	0,966
33. Ensure the implementation of a continuing teacher education plan for the school	3,03	1,164
32. Implement a system of teachers' training needs identification and analysis	2,91	1,179
34. Create opportunities for professional development	2,97	1,22
36. Develop school-based teacher education	3,16	1,172
37. Plan activities that foster the integration of new teachers into the school culture	2,87	1,123
29. Promote knowledge and reflection about school guidance documents (e.g. educational project, regulations, etc.)	2,92	1,188
38. Include in the school activity plan activities leading to good relationships within the school community (teachers, personnel, parents, etc.)	2,94	1,186
22. Ensure the existence of communication channels between the newly qualified teachers and the school head	2,65	1,208
26. Ensure a support system for new teachers to the work with teachers and other school staff	2,72	1,153
31. Involve the newly qualified teachers in the monitoring and self-evaluation of the school	3,04	1,143
35. Implement/Finance teachers' continuing education	3,2	1,201
30. Promote the commitment to the school's mission and aims	3,19	1,161
27. Ensure a support system to newly qualified teachers regarding the articulated work with educational technicians (psychologists, social services, animators...)	2,74	1,034
Factor 2	3,12	0,830
13. Raise awareness of and promote media education	3,1	0,987
11. Promote equity between sexes	2,71	1,122
9. Promote students preparation for the future society	3,31	1,043
10. Promote intercultural education practices	3,04	1,034
14. Stimulate the development and use of ICT applications as a pedagogical resource	3,43	1,111
17. Inform of the procedures to follow in conflict situations (e.g. <i>bullying</i> ; <i>mobbing</i> )	3,02	1,058
8. Foster effective practices for acting in conflict situations (e.g. <i>bullying</i> ; <i>mobbing</i> )	3,16	1,081
12. Stimulate the analysis and improvement of the students' learning environments	3,44	1,054
28. Promote the reflection upon the ethic and deontological dimension of the profession	2,87	1,214

Table 5 Continue...

	<i>M</i>	<i>SD</i>
Factor 3	3,22	0,976
5. Promote practices of pedagogic differentiation	3,38	1,227
2. Promote knowledge and reflection on managing the interactions in the classroom	3,19	1,194
15. Implement a supervisory device / observation of the	3,97	0,99
6. Promote collaborative practices of planning teaching and learning among teachers	3,21	1,084
1. Promote the sharing of teaching methods	3,05	1,111
3. Promote the establishment/reflection on students assessment and classification systems	3,29	1,172
4. Coordinate the management of the curriculum	3,02	1,304
7. Promote practices to support the individual student growth	3,2	1,117
Factor 4	2,83	0,969
20. Make procedures concerning administrative tasks explicit (newsletters, reports, students' transfers to other groups or schools, working agendas)	2,62	1,155
21. Create documents that quickly allow to know the school run (persons in charge, facilities, services, basic procedures ...)	2,72	1,238
19. Promote the participation of new teachers in tasks outside the classroom (taking care of the students during the break, school parties, trips, meetings, etc.)	2,64	1,206
24. Ensure a support system for newly qualified teachers regarding the work to be developed with representatives of working life	2,93	1,073
23. Ensure the existence of an interlocutor with the newly qualified teachers	2,73	1,248
18. Make allocation of teachers' work based on pedagogical criteria (level of learning, special needs, ...)	3,03	1,151
16. Create schedules that allow joint work among teachers	3,12	1,239
Factor 5	3,07	0,868
41. Encourage the development of practice-based research processes	3,05	1,11
39. Promote the involvement in collaborative processes of action-research	3,06	1,111
42. Create spaces for teachers' critical reflection on their own work	3,3	1,173
25. Ensure a support system for newly qualified teachers regarding the work to be developed with representatives of the cultural life	2,79	1,031
40. Implement a support/monitoring system to newly qualified teachers (mentors/supervisors, etc.)	2,96	1,147

To answer the second research question, on whether principals perceive their NQTs' needs differently, and given the differences in the dimension of the groups, a Kruskal Wallis test was conducted to test the differences between the three participating countries in the factors obtained from the exploratory factor analysis.

The results showed significant differences between countries in all the dimensions considered in this test ( $\chi^2_{KW}(2)=52.34, p<.001$  'Professional development centered in the school context',  $\chi^2_{KW}(2)=40.45, p<.001$  'Pedagogical leadership: professional and social dimension',  $\chi^2_{KW}(2)=94.72, p<.001$  'Pedagogical leadership: instructional leadership dimension',  $\chi^2_{KW}(2)=64.65, p<.001$  'Work organization',  $\chi^2_{KW}(2)=52.13, p<.001$  'Professional development centered on research and reflection on practice'. The mean

ranks of the factors obtained for each country show that principals from Belgium present the higher scores in all dimensions, followed by Portuguese principals and the Finnish (Figure 3). The groups differ in almost all Factors, with the exception of the Belgium and Portugal comparisons in Factors 3 and 5, where no differences were found between these groups, considering  $p=.05$ . All the groups were statistically different considering  $p=0.05$ .

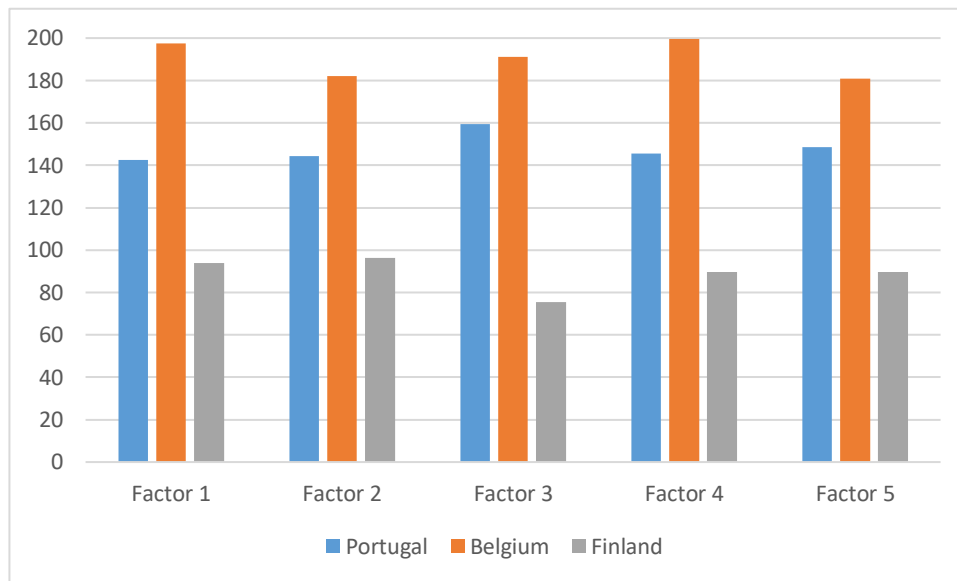


Figure 3. Mean Ranks for Each Dimension by Country

### Discussion, Conclusion and Recommendations

This study was based on literature that proves the importance of the induction period in the future of NQTs (e.g. Avalos, 2016; Kessels, 2010; Kutsyuruba et al., 2016; Marcelo et al., 2016), and on Leithwood and colleagues (2004) research that confirms school leaders as the second most influential factor to students learning. Also, given the importance of principals' action to the quality of institutional practices, and since research on principals and NQTs induction is scarce, especially given the great lack of studies on NQTs induction and school leaders involving different countries, the goal of the study was then to perceive the main needs of principals to support NQTs in Belgium (Flanders), Finland and Portugal. Also, we intended to know the differences in the principal needs, depending on the national contexts in question.

Therefore, a questionnaire was applied, containing three dimensions: professional/ organizational development, pedagogical leadership and work

organization. Methodologically, descriptive statistics and exploratory factor analysis were used, as well as a comparative test involving the countries under analysis.

The research allowed a better understanding of principals' concerns about NQTs in the three countries inquired. The findings show the existence of a consensus oriented towards valuing new teachers' professional and organizational development. According to the results, pedagogical leadership is a matter of shared concern, with regard to instructional, personal and social issues, in line with what has been advocated by international organizations (e.g. OECD), which reinforces the importance of welcoming and supporting beginner teachers and establishing favorable conditions for their professional development. Likewise, there is a clear idea of what they wish to achieve: it should occur within schools, through reflection on practices and supported by senior teachers and school leaders (Cherian & Daniel, 2008).

Moreover, and in line with the recommended by several authors, that school leaders should have a role in giving feedback to teachers, and support them and their pedagogical practices (e.g. Blase & Blase, 2002), results confirm that principals see teachers' guidance and the classroom steering as their responsibility regarding beginning teachers.

Furthermore, principals declare a need to create opportunities for NQTs to work with peers collaboratively, and reflectively, rather than in isolation, which brings us back to the school-centered knowledge that can happen within a learning environment based on a shared responsibility and reflection (Cochran-Smith, 2004; Sunde & Ulvike, 2014).

The findings stress the heuristic potential of reflection that makes teachers more likely to intervene in organizational learning processes (Costa & Almeida, 2016). Indeed, there appears to be a collaborative teaching culture rationale underlying the results, since principals appreciate that teachers choose to work together and show a concern about fostering moments for critical reflection (on practices) and collaboration, in and out of the classroom, with peers, or broadened to different strands of the teacher work. Effectively, it is widely demonstrated in the literature that one learns to teach through a mixture of experiences and interactions, with colleagues and mentors, about problem situations (Feiman-Nemser, 2001). Avalos' (2016) literature review corroborates this idea, highlighting that collaborative learning structures and spontaneous dynamics may impact NQTs' teaching practice, and their ability to cope with pedagogical and contextual demands, tensions and constraints.

The results also highlight common patterns in the Belgian, Finish and Portuguese school leaders, who show their concern to play a larger role in supporting beginning teachers, placing a great focus on exercising a pedagogical leadership, and going beyond the scope of issuing prescriptions and guidelines to the new teachers. School leaders mostly declare a need to be more focused on pedagogical leadership, and promote NQTs confidence and engagement. Likewise, principals attach equal importance to the implementation of supervisory processes between peers and forms of support from more experienced teachers. Still highly valued is the need to

encourage NQTs to analyze students' learning environments, comprising reflection practices to a better understanding of what happens inside the classroom. Traditionally, this was an issue of concern to teachers only, i.e., almost as an exclusive matter of teacher's action. Moreover, pedagogical leadership, concerning personal and social dimension, is also valued, and is associated with pedagogical practices in conflict resolution and with ethical and deontological practices.

Through principals' need to influence NQTs, leadership appears as a sort of catalytic agency that makes the organization move forward. There seems to be a learning organization rationale underlying the measures that principals elect, concerning (new) teachers' work, such as to stimulate reflection and collaborative work. These are key issues in principals' mission concerning NQTs.

Of no less importance is the evidence that management issues, associated with bureaucratic and administrative aspects, are not valued by school leaders, except for the financing initiatives associated with continuous training, which is the only issue related to the work organization dimension that arises as a principal's main need. Hence, it can be deduced that school leaders mainly associate professional development with pedagogical leadership that supports their need to "enter - rethink - change" what goes on inside the classroom.

In short, the challenges and needs regarding the NQTs induction that these school leaders share in common, cannot but be associated with transnational regulation processes, either in the nature of processes to be undertaken within the school to promote NQTs professional development (e.g. OECD), or in how to enhance their role in developing and improving support for beginning teachers, as stated by the EU.

Currently, there seems to be a shift towards a commitment of principals to become more directly involved in driving teachers' practices and teaching processes. Nevertheless, this consensus is not total, as they value differently, in breadth and depth, the other dimensions, and this must be analyzed in the light of the idiosyncrasies of each educational system. As regards these differences, while it is not our aim to compare countries, it is worth noting the greater valorization of all questionnaire dimensions by Belgians, followed by Portuguese and Finish, respectively. As hypothesis, we can relate those dissimilarities to teachers' professional career status, and the characteristics of the existing NQTs support programs, in each country.

Therefore, in Belgium (Flanders), the school leaders' high levels of concern can be explained by the fact that despite the NQTs induction is not compulsory, most of NQTs have support. Furthermore, the greater need for support in all dimensions declared by the Belgians may be due: first, to contextual problems, as Belgian principals are worried about teachers' high dropout rates and there's a need to create teachers' support systems and to request support from the pedagogical guidance services; second, to the sample composition, as about 40% of the respondents had only a maximum of 5 years' experience in the management position and show a greater concern given their inexperience; third, to teachers qualification, which is the



bachelor's degree and one more year of pedagogical training in school. In the other two contexts, the professionalization is only granted at a master's level.

With regard to Portugal, there are many constraints to the entry into the formal career in the first years after the professional qualification. The probationary period is provided in legislation, but principals don't welcome many inexperienced teachers per year. Every year, they welcome mainly hired teachers with several years of experience. This is a big challenge for Portuguese principals as the mandatory system is exclusively for beginning teachers who enter the career, but those who really enter the career almost always have several years of experience. Therefore, as NQTs can only enter the career many years later, most of them are not covered by the probationary period.

As for Finland, results are not as significant in all dimensions. The lower scores may be due to the fact that NQT's support systems, while dependent on the way each school prepared it, already have some tradition, and they have very consolidated support practices. Thus, we may assume that, over time, Finnish principals have had the opportunity to mature these processes.

Based on the results of this research, it can be concluded that measures need to be taken to encourage and support school principals' professional development to act as facilitative and effective managers and pedagogical leaders, through strategic and planned action, with the objective of increasing support to beginning teachers.

In sum, all these clues lead us to further research avenues, such as studies with larger groups, to allow the application of more robust statistical tests, namely the accomplishment of a confirmatory factor analysis. More research could also be carried out by country to verify the extent to which other variables, such as the years of experience and the training for school management functions, interfere with school leaders' positioning about the induction of NQTs.

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