Teacher induction programmes

and the capacity of education employers

A working paper

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INTRODUCTION

About the project

The paper has been produced as an initial task within the project *'Capacity building of education employers through the promotion of teacher induction programmes'*, supported by the European Commission under the European Social Fund+ (ESF+) Social Prerogatives and Specific Competencies Lines (SocPL). The project is managed by the European Federation of Education Employers (EFEE).

The project partners are interested in defining and better understanding effective practices within teacher induction programmes with a view to developing guidelines and policy recommendations that will feed into a research report for project partners and other stakeholders.

The project identifies education employers as its primary audience, as well as teacher education providers and school leaders. Promoting cooperation between these and other education stakeholders in the matter of effective teacher induction is an objective of the project.

The Project Advisory Group brings together representatives from Belgium, Hungary, Ireland, Portugal and Slovenia. Peer Learning Activities will take place in Porto, Portugal and Budapest, Hungary, with a Final Conference in Ghent, Belgium. Surveys will provide additional input to these events.

The project's core aim is to support the capacity building of education employers within formal and informal teacher induction programmes. What are the specific roles, responsibilities and effective approaches that school leaders, boards and local authorities can take? What can be done (better) within the constraints and opportunities of a regional or national teacher induction programme? And what can or needs to be done if no formal induction requirements exist?

About this paper

This working paper is the first task in the project, aside from Project Advisory Group meetings.

It has been developed following a review of 114 journal articles, conference papers, books, reports, guidance documents and websites. Search filters restricted results to 2019 and after in order to focus on recent data and contemporary issues, although a few references from before this date are included where relevant to the discussion. Induction programmes in European countries feature the most, although North and South America, Asia, Africa, and Australasia are included.

The paper does not simply describe what various education systems have as features in their induction programmes (see Annex for an overview of European systems); it asks what researchers in different countries have found when exploring or evaluating these approaches as a way of discussing what might be considered effective. The purpose is to explore the rationales, formats, and content, of induction programmes in order to better know and understand contemporary approaches, their opportunities and their challenges.

The literature on teacher induction is vast and this working paper cannot go into each issue in depth. Plentiful detail exists in the books and journal articles referenced, and more besides, and so key points are highlighted as a first step to informing the project.

To be sure of a rounded discussion that is clear in rationale and in practical application, the chapters of this paper are dedicated first to the fundamental questions of 'Why' and 'How' induction fits into system support for professionals. Once this is considered, the chapters then explore 'What' induction

may include; the ways it may be reconsidered given 'Where' new teacher come from and go to; and 'Who' are the main stakeholders involved. It may be tempting for education employers to reach directly for what induction involves as this seems the most practical approach of tangible examples, ones they may have more chance of influencing. However, the other questions should be given equal attention, particular in the context of peer learning between systems with different cultures and policies.

WHY? The benefits of induction are examined at length in decades of literature and induction is a familiar concept across Europe. Rather than repeat old debates, this first chapter considers *why* systems promote induction *in the ways in which they do* and what they hope to gain from including and supporting it as part of teacher education and professional development. This will help to better know the contexts for the different approaches and attitudes to induction.

HOW is induction shaped within the complexity and unpredictability of education ecosystems? As employers and leaders, it is useful to know which forces influence induction policies in the first place; for example, labour market, finance, autonomy (or not) of schools, teacher career structures, and perceived quality standards. What concerns and conceptual ideas shape the design of induction programmes?

WHAT does induction involve? Mentoring is a popular element but other features vary, such as peer groups and networking, courses, reduced workload, and assessment. To better appreciate the capacity needs of education employers, it is important to consider the benefits and challenges in these structural features, and how they contribute to teacher socialisation and identification.

WHERE are teachers journeying from and to, and how does this impact on in-school induction? Teachers working in specific communities may benefit from tailored induction and beginning teachers will have had very different Initial Teacher Education experiences. What bearing might different routes into the profession and the problem of short or disrupted contracts have on education employers managing induction?

WHO is involved in induction that we should pay particular attention to? A large part of research and discussion concerns support to mentors (training, release time, own professional gains). This project is dedicated to building the capacity of education employers, however. How can they help to improve induction for new teachers and how can the process be improved for the employers themselves?

Each chapter ends with a summary of the key points.

The paper concludes by considering what further questions may be asked on this topic, as a preparation for pan-European peer learning, and what specific knowledge may be usefully gained from stakeholder surveys and interviews.

WHY

The benefits of induction are documented in decades of research literature and policy documents. There is a broad consensus that a period of induction is a necessary bridge between Initial Teacher Education (ITE) and employment in schools. In most European education systems, early career teachers (ECTs) that are new to the profession have access to a structured induction that usually lasts one year and it is mandatory in almost all of them (Eurydice 2021)[1].

The purpose here is not to discuss the 'to have or have not' of induction. Rather, in order to better understand different system examples, it is useful to consider why systems do embrace induction and what they hope to gain from including and supporting it as part of teacher education and professional development.

1.1 The '3 Rs' – recruitment, retention, and regeneration

The prevailing narrative is that supporting teachers during the early stages of their career is crucial not only to enhance the quality of teaching but also to reduce exit from the profession (European Commission, 2017). This statement has broad agreement across the EU but may also be problematic in that notions of 'quality' in education are varied and can affect how induction is shaped (discussed in the next chapter, HOW). A more developed sense of the challenge in supporting the profession and of the purpose of teacher education was expressed by the Commission in their 2020 policy guide on teacher and school leader careers; that systems need to equally consider and address 'recruitment', 'retention' and 'regeneration':

**Recruitment** concerns bringing new candidates to the profession;

Retention concerns maintaining the professional population at a level that matches need, often expressed in data sources as teacher to pupil ratio (see for example OECD's Education GPS). It also has a side economic concern of not losing investment in those who would soon leave, alternatively expressed as the potential or actual cost of finding and training replacements (UNESCO, 2023);

Regeneration refers to the continual development of a teacher's professional practice and identity. It is not a matter of simply continuing to exist as a teacher; professionals are developing both themselves as individual reflexive practitioners and supporting the development of their peers as part of a professional culture. This is an ideal mutualism relationship that supports the ongoing adaption of pedagogical practice and school improvement for the benefit of the community.

At first glance, recruitment and retention appear to be a numbers game, whereas regeneration holds the key to notions of teacher and school 'quality'. Retention is not the end goal. Regeneration – criticality, adaption, innovation - is something important to be embedded in the culture of the profession in the early years of one's career as a career-long commitment.

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[1] At the time of the Eurydice report (2021), structured induction for newly qualified teachers had been recently introduced in the Flemish Community of Belgium, Lithuania, Austria and Norway. Selected charts showing systems across Europe appear in an Annex.

However, as the Commission guide (2020) states, and other literature in this paper supports, the motivation, self-efficacy, and sense of career journey that 'regeneration' opportunities – professional support and development – provide can have a positive influence on recruitment and retention.

Recruitment   Retention   Regeneration
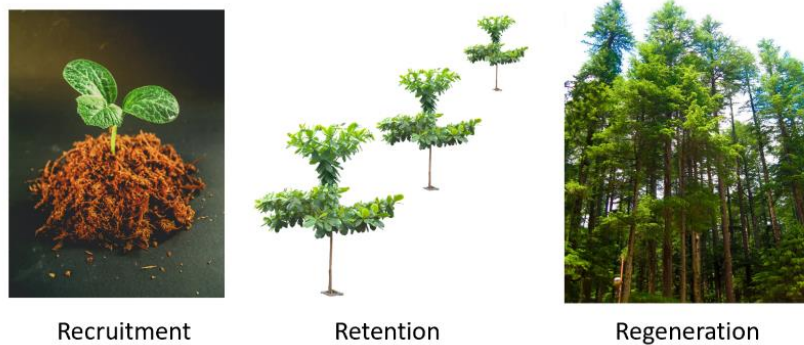
Approaching issues of the '3 Rs' may be likened to boosting numbers of young individual trees compared to, or as part of, sustainable forest management

Considering these challenges, induction is then a policy 'problem' in its own right - how to make it better within teacher education – and a 'solution' to other issues. It can help but it can only do so much, and there is limited power in the hands of the education employer in this. If we look at the conceptual model (graphic below) developed recently by researchers in the USA (Nguyen & Springer, 2023), we see that elements of teacher induction are a small proportion of the many factors influencing teacher turnover. Induction also spans the personal, the school and the external factors. Therefore, induction needs to be developed in conjunction with other policies and programmes (i.e. working with different stakeholder groups and institutions/agencies). This paper focuses on what *can* be done by education employers in the context of the teacher induction.
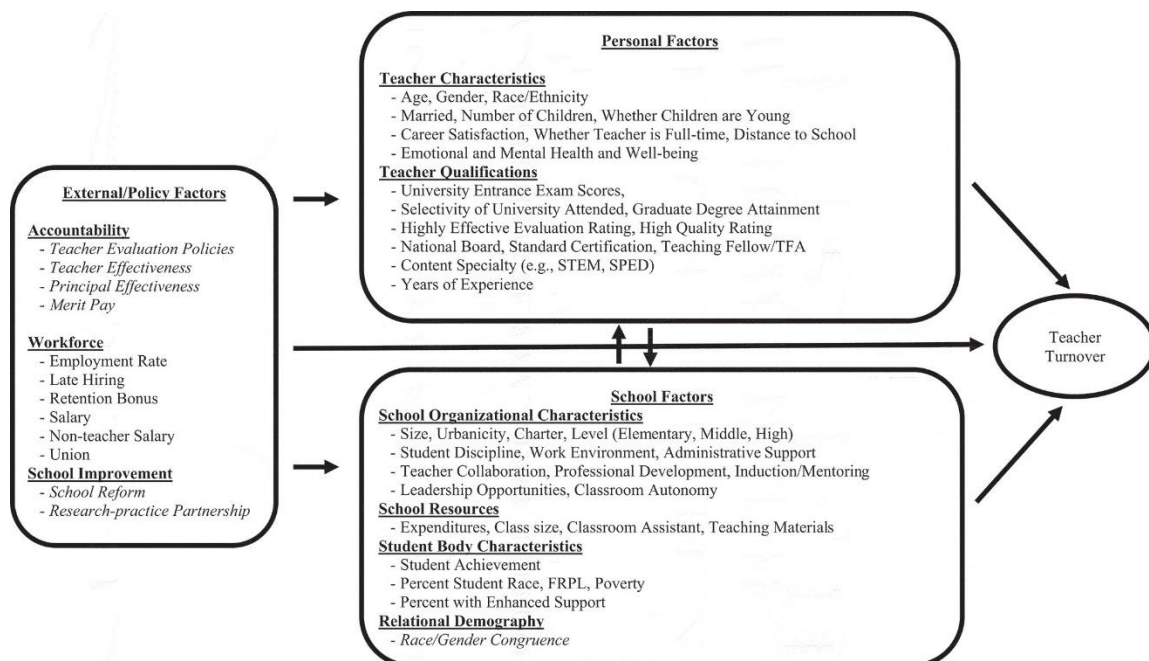

A new conceptual model of teacher turnover developed from a systematic literature review by Nguyen and Springer (2023)

1.2 The concept of a continuum and supportive bridge

Induction is frequently mentioned as a critical phase in the 'continuum', 'journey', or 'pathway' of teacher education and careers. The self-perception and development of oneself as a competent professional and dealing with the complexity of teaching tasks is "far from finished" at end of initial education, hence induction should be a logical continuation (Aarts et al., 2020).

Induction may also be understood as a 'bridge' between the student experience and full employment, although, again, we must be cautious with this metaphor to not imply that the learning is over. In **Ireland**, the official name of the programme of support during induction is 'Droichead', meaning 'bridge' in Gaelic. Induction is, therefore, additional and targeted support that early career teachers benefit from as they journey from one context and identity to another. Researchers in **Germany** found that the sense of coherence experienced by over 500 of their beginning teachers correlated with the perceived induction support that they received (Alles et al., 2019).

Researchers in the **Netherlands** compared the concerns of beginning teachers in their first two years. Both the teaching and increasing workload and the sense of developing professional identity are concerns across this period (29 concerns grouped within 6 contexts were identified). However, the teaching and workload dominates first year concerns, whereas professional identity dominates the concerns of second-year teachers. The significant reduction of support after the first year is viewed as potentially problematic (Aarts et al., 2020).
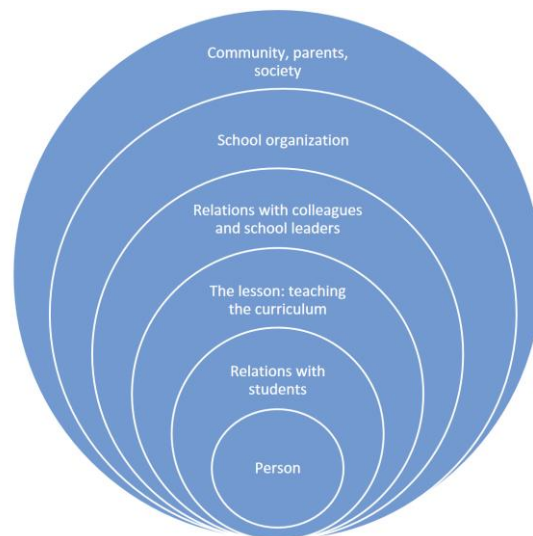
The six contexts in which Aarts et al (2020) found beginning teacher concerns

A secondary analysis of TALIS 2018 data for the **USA** examined relationships between specific teacher induction practices and three outcome variables: teacher practices, teacher self-efficacy – a sense of "can do" -, and teacher job satisfaction, even though previous research only provides weak evidence on the influence of induction on teacher competence measured by various means (Bustamante & Chagas, 2022), and on retention. Induction activities [see chapter on WHAT] were related positively to both self-efficacy and job satisfaction (Reeves et al., 2022).

Similarly, concerning the link between induction and retention, a study of 400+ primary teachers in **Shanghai** found an association between the perceived 'helpfulness' of the induction programme, the

beginning teachers' self-efficacy, and their perceived intention to stay in or leave the profession (Han, 2023). If those with greater self-efficacy would not leave the profession because of feeling a lack of competence, it indicates that other incentives and rewards, including salary, are insufficient compared to their efforts or that there are wider issues. The author points towards negative influences also known in European countries, such as feeling frustrated with the lack of school resources, or being placed in a school in a remote rural area or far from home and one's main friendship groups.

1.3 Quality, competence, and a culture of criticality

Researchers highlight a problem of deficit thinking around why induction is useful and important – both as a way to address a teacher attrition and as teachers being of insufficient quality:

"Early career teachers are being positioned as 'formally qualified, but not yet fully capable', and this implies that they fall short in appropriate expertise. This framing of early career teachers in terms of individual shortcomings (deficits) automatically results in a remedial perspective. In this logic, the ultimate purpose and justification of support for early career teachers is the remediation of their deficits." (Kelchtermans, 2019)

Another criticism is that teacher quality is often defined narrowly within standards frameworks, and contained within a sense of performance outcomes. However, it is also possible to identify more comprehensive understandings of teacher quality which take into account contextual, professional, political and personal dimensions (M. A. Flores, 2019). A positive approach is to be more aware of the Early Career Teacher (ECT) as an 'agent' making sense of education and pedagogy, a 'networker' in their social negotiating with new colleagues, and a potential 'asset', bringing a fresh perspective and criticality to a staff community (Kelchtermans, 2019).

European researchers (Attard Tonna et al., 2023) made a comparison of four systems, **Malta, the Netherlands, Norway** and **Scotland**, to understand the ideologies behind induction. All systems expressed a concern for supporting new teacher needs and the Netherlands's programme is boosted by a concern about retention. The other three take a strong 'scholarly' approach that demonstrates a focus on teacher competence. It is worth noting that none of the systems seem to have a particular concern for developing teachers as change agents. It suggests that the criticality developed as part of the scholarly approach is more to support teacher competence as compliance in the system rather than helping it to evolve.

A study of **Spanish** beginning teachers found a correlation between 'teacher resilience' and self-efficacy and the researchers propose that induction is a key moment for developing this. They emphasise that teacher resilience is not about survival in adverse conditions but is about adaptability: the 'resilience' is about maintaining commitment to and agency in the profession (Gratacós et al., 2023). Given the complexity and unpredictable contexts of schools, employers need to consider creating conditions for developing such commitment and agency.

Schools have a transformative capacity (Burn et al., 2017) rather than simply existing to indoctrinate new teachers, conceptualised in **New Zealand** as 'educative mentoring' (see 3.3). If teachers are not encouraged to consider their role as change agents during ITE or induction, this may be a missed opportunity in supporting professional regeneration.

1.4 Summary of WHY

❖ Induction is seen as a policy 'problem' in its own right: how to make it better as a supportive bridge within teacher education and achieve its aims of teacher preparedness and quality.

❖ Induction is also seen as a policy 'solution' to other issues: how to use induction to make the profession more attractive to candidates (recruitment) and keep new teachers in the profession (retention).

❖ Regeneration is equally as important as recruitment and retention as it captures the professional development of the self and others. Induction is a crucial stage in committing to this ongoing state.

❖ Induction activities correlate positively to both self-efficacy and job satisfaction, but they cannot address all aspects of a teacher's possible reasons for leaving the profession.

❖ Deficit thinking of ECTs as being lacking is problematic whereas a more positive appreciation is to think of beginning teachers in terms of the new perspectives and energies they can bring and the connections they make.

HOW

Starting from the basis that European education systems broadly accept induction as an important part of a teacher professional journey, this chapter explores how induction is shaped. There is certainly a need to appreciate the complex education ecosystem, including its unpredictability and the uncertainty that this brings. As employers and leaders, it is useful to ask, Which forces influence induction, for example, national political narratives of future growth, the autonomy (or not) of schools, understandings of teacher career structures, or perceived quality standards? Is induction shaped more at the national, regional or local level?

A clear political perspective is that teacher quality equals student success, which, in turn, equals future economic prosperity. The recruitment and retention 'crisis' is a threat to this and the trend for education to be held up as a policy 'problem' has led to suggestions of alternative pathways into teaching and tighter regulations and standards (Mifsud, 2023). To this we can add attempts to shift teacher education (including induction) responsibility between schools, universities, local authorities, private enterprises, and back again.

Whereas organisational Human Resource Management (HRM) was previously dominated by strategic thinking in which organisational interests were paramount, De Prins et al argue that there is an increasing interest and opportunity for "sustainable" HRM to focus on human needs (De Prins et al., 2014). This evolution towards human interest widens the sphere of responsibility and may also affect the legal dimension of policies, taking into account, amongst other things: employee contracts; a welfare policy; shared professional accountability; flexibility for individual circumstances; investment in cross-cutting networks; and clear opportunities for professional progression. Ultimately, the challenge for both the system and the employer is to balance the interests and outcomes of employees (satisfying life-work balance, engagement, employability) with that of the school as a learning organisations (quality, efficiency, flexibility, innovation), as well as with the demands of wider society.

2.1 Multiple levels of influence

A literature review of over 100 published works regarding early career teachers, their contexts and induction programmes defined six categories of induction: (a) social, (b) political, (c) cultural, (d) personal/individual, (e) organisational, and (f) administrative (Kutsyuruba et al., 2019). Each of these categories are sub-divided and makes the point that induction can be shaped by something as micro-level as wanting to develop teacher's emotional intelligence right up to state-level politics about diversity.
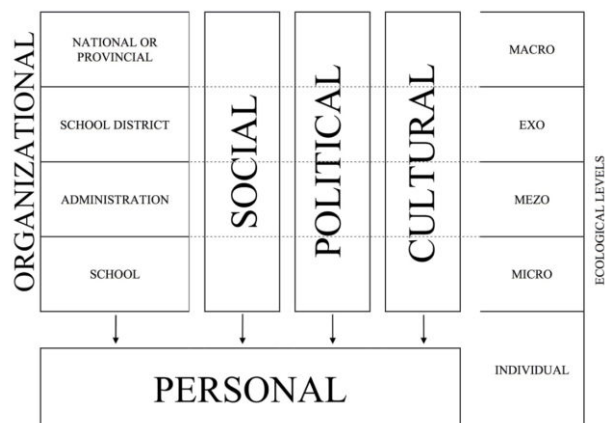
The shaping of induction, as categorised by Kutsyuruba et al (2019)

At the request of the Flemish Department of Education and Training an EU- funded project, implemented by European Schoolnet in co-operation with the European Commission, was designed to support the implementation of teacher induction reform in the **Flemish Community of Belgium**. Guidelines for school team, mentors, school leaders and beginning teachers themselves - all piloted and evaluated in schools during 2021 and 2022, and subsequently revised (European Schoolnet, 2023). Similar to Kutsyuruba et al's findings, the project's conceptual model highlights the personal, social, and professional dimensions of induction, as well as the multiple support influences.

Conceptual model of induction support from a project in Flanders

Other studies of national policy demonstrate the variety of influencing forces and their absence. In **Belgium's French community**, PISA results led to increasing school accountability but with no extra funding and so they have mandatory but informal induction, whereas in the **Netherlands**, increased regional centralisation has reduced school autonomy (Helms-Lorenz & Coppe, 2023).

Scotland's induction programme that guarantees one year of paid employment was partly designed to address the administrative problem that new teachers were struggling to get jobs that allowed them to achieve full qualification status (Day & Shanks, 2023).

Cultural and material factors influence **Romania**'s induction (since 2011 with 2-year probation), with a sense of surveillance combined with a concern for deepening inequities, and influence **Moldova**'s support where teachers' professionalism is tied to notions of national identity (Mitescu-Manea et al., 2023). Research on mentoring specifically focuses more on individual competence and the relationships between mentors and ECTs in **Austria**, and on these relationships and organisational implications in **Israel** (Dammerer & Carmi, 2023).

What relevance does this have for education employers? It may raise questions regarding their sphere of influence in the shaping of induction. One immediate area for support might be to help education employers to better understand this complex landscape and their role in it (see also chapter on WHO). As noted above, induction is not an isolated phase, approach, or policy. It needs to be part of sustainable Human Resource Management (HRM) that addresses the whole flow from recruitment within a broader consideration of how to improve employment conditions and the effective functioning of the school as a learning organisation.

2.2 Frameworks and guidelines

A warning comes from **Australia** where a lack of policy-driven, mandatory guidelines and oversight by regulators and school systems has led to little change in the implementation of induction (the Australian Guidelines), specifically in New South Wales (NSW) schools. A lack of awareness and expertise about what good induction entails, little oversight of the process, and the lack of a mandate to implement has led to great inconsistency. There are various concepts of induction, which is often (mis)understood as 'informal orientation'. School staff also have negative feelings towards the administration of accreditation because they feel that the formal induction process is imposed upon them and intruding on their independence as a school (Kearney, 2021, 2023).

A similar criticism of **Ethiopia**'s teacher professional development framework was made about its generic content and lack of models for basic orientation, beginning teacher development and transformative induction for novice teachers (Geletu, 2022).

Researchers argue that **Scotland**'s induction programme is actually not as comprehensive as it claims to be because of a lack of understanding, compounded by the fact that it is more directed at 'full registration' in an administrative way than fostering a culture of professional learning (Day & Shanks, 2023). The General Teaching Council for Scotland (GTCS) is responsible for teacher qualifications and recently updated its standards, which teachers must be evaluated by. However, the researchers find that this often becomes a superficial tick-box exercise during induction and the process assumes that all professional learning happens in structured way and logical sequence. There are different bachelor, post-graduate and master's level pathways that a teacher can progress through and therefore their non-linear development of practice and expertise, and the dynamic nature of lifelong learning development, are important aspects to consider in the design of teacher education curricula (Raduan & Na, 2020).

Whether or not they have the power to challenge this state of affairs, education employers may usefully be more conscious of, and critically reflect on, the way that teacher standards and frameworks

can be a double-edged sword of clear goals and aspirations on the one side and compliance to a singular ideal of what teaching is on the other (Mifsud, 2023).

2.3 Addressing common concerns of teachers

Induction is often shaped to anticipate and address the common concerns and causes of stress of new teachers: the need to ask questions of, receive guidance from, and be reassured by more experienced colleagues; high workload; shifts in their own professional identity; and their relationships with colleagues, pupils and parents.

A number of research studies have not limited themselves to the one year of induction or probation but have explored the experiences of the first 3 years of teaching, although not necessarily tracking the same teachers over that period.

A survey of over 100 secondary school teachers in **Slovakia**, most with a Master's level qualification and in first 3 years, described the usual varied pressures and a third admitted to considering leaving the profession in their first year (Luchenko & Doronina, 2023). 71% felt confident as a professional within one year, indicating to the researchers that this is a suitable length for induction. More worrying were the findings that 35% had not participated in induction and only one quarter had a reduced workload.

A survey across all 13 provincial/territorial systems in **Canada** explored programmes for ECTs offered by governments, teacher associations and unions, school boards and individual schools, or in a hybrid format. It was found that these focused mostly on 1st year teachers, whereas support is rare in the 2nd. In the same study it was found that teachers feel more pride in the profession in the first 3 years, but also increasingly considered leaving the profession. 3rd-year teachers are more likely to consider their professional self-identity, whereas 4-5-year teachers become more concerned with working conditions and pay. Support is equally appreciated from formal and informal sources, plus collegial supportive relationships (Kutsyuruba et al., 2022).

In a study of **Belgian (Flemish community)** primary teachers, novice teachers indicated that initial guidance is often aimed at supporting them on a personal level, whereas initial guidance that involves colleagues and focuses on the teacher's performance in the classroom is least present but much-needed, supported by colleagues, in addition to the mentor (Dries, 2021).

Perceived stress causes and stress responses of teachers can change over time, as evidenced in a study of just under 400 ECTs (with less than 3 years teaching) in the **Netherlands** over 3 years (Harmsen et al., 2019). Specific induction arrangement elements appear to be powerful elements to reduce the level, and influence the change over time, of specific perceived stress causes and stress responses. Other aspects did not correlate to specific induction support, such as the stress from perceived negative teacher-pupil relationships. This decreased over time but could be a result of increasing competence in relationship-building and a socialisation in the school community (see 2.4 below).

The feeling of being sufficiently rewarded for efforts is associated with higher supervisor support and lower work pressures. Workload reduction – a feature of some but not all induction programmes around the world – had a significant influence in decreasing high psychological task demands and Harmsen et al recommend maintaining this in the second and third years of teaching.

2.4 Socialisation and teacher identity

'Socialisation' (Kelchtermans & Ballet, 2002) is a popular term given to the integration of the new teacher within the school and wider professional communities. It features regularly in recent research literature on the topic of induction. The dynamic forming and shifting of a teacher's professional identity (their pedagogy, positionality in relation to others, and broader or longer aims for education in their career) is also a topic that researchers are currently paying close attention to (Smetana & Kushki, 2023). Socialisation and teacher identification are known as key influencing factors in the early years of teaching and beyond. Hence, ideas about these are shaping induction programmes and research on induction.

Wales has a new national programme for teacher professional learning. Although there seems to be a fairly consistent implementation of induction, researchers observe that the different individual and school contexts cause varied experiences (Milton et al., 2022). Recent survey results suggest that school leaders have a more positive perception of induction in their schools than general teaching staff. There is a concern that induction happens in a private(ised) and isolated fashion, restricted to the mentor+mentee process and relationship (see 'WHO'), rather than new teachers being 'grown' by the whole school community.

In the **Netherlands**, researchers designed four workshops to support the development of professional identity of new teachers, noting the importance of identity work in terms of sense-making and positivity where negotiating 'self' and 'work' is a complex and emotional challenge (Schellings et al., 2023). Feeling discontent with the profession seems to increase over time but is lower for those teachers experiencing school 'enculturation' (Harmsen et al., 2019).

The main benefit to the teacher of the socialisation in induction is the feeling of having a safe space to try out their practice that is initially developed by the end of ITE with structured support. The benefit for the system is having teachers adapt their pedagogy in a local setting (Day & Shanks, 2023). In a system like **Scotland**, it is also an extra time frame in which to qualify new teachers to the profession by using school-based professionals to further develop and formally assess (grade and sign the portfolio of) their new colleagues. Extra support to this socialisation is given by local authorities (e.g. networking days), although there are mixed reviews from teachers on their rigour.

A recent doctoral study in **Belgium** (Marent, 2021) examined how early career teachers develop personal networks with relevant actors during their first years as part of their professional learning about the social, cultural and political life of the school. A sense of stability, self-image and self-esteem were all caught up in the socialisation process, which featured the navigation and negotiating of differing pedagogical views. Early career teachers discovered and built mutually beneficial relationships in their personal networking. Working conditions, especially the precariousness of short or delayed full contracts, were observed to threaten this vital experience.

Two Ukranian lecturers have published a description of the approach to induction in **Japan**, which they find distinctive, particularly in the broader range of placement opportunities and the cultural sense of developing the inner self through the important mentor relationship (Luchenko & Doronina, 2023). One of the lecturers made a study visit, interviewing 30 local government officials and their description is summarised here:

> Supporting novice teachers (shinninkyōin 新任教員 or shinninkyōshi 新任教師) in Japan takes place in a system where teaching is a high-status and respected profession. The official purpose of the teacher internship is to develop "practical teaching competence", "a sense of mission in teaching", and "a broad perspective as a teacher".

> The induction program for first-year teachers has two main components: in-service training (kōnai kenshū 校内研修) lasts two days per week at individual schools supervised

by the guiding teacher with minimum 60 days per year; and out-of-school training (kōgai kenshū 校外研修) is provided in prefectural educational centers one day per week with minimum 30 days per year. Formal support for newly employed teachers enabled by the teacher induction program is consistent with Japanese organisations' emphasis given to on-the-job training, particularly in the first year of employment (shinnin kenshū 新任研修). They observe that Japanese school community practice and out-of-school placements offer a broader scope for input and experience for ECTs.

The success of the in-school part of the internship depends heavily on the personal relationships of mentors and novice teachers. The uniqueness of the formation of relations between a mentor and a novice teacher in Japanese society is that they are developing under the influence of a complex cultural phenomenon uchi–soto 内・外 (inside–outside). This is embedded in everyday life in Japanese society, and in interactions between individuals and groups. Uchi is the inner self, the core, the part that belongs to a whole, and soto is an outsider, well-respected and treated honourably, but not part of the self of the uchi social group.

Given that ECTs are strongly influenced by their first in-school experiences and relationships with other educators, induction programmes need to ensure that the reality of the socialisation period enables the (individual, school and system) aims for emerging professional identities to be met. Reflections on a study in **Portugal** conclude that early career teachers would benefit from being mentored by those who are similarly more proactive in their attempts to adapt and innovate their practice (M. A. Flores, 2019). Mentoring is discussed further in the chapters 'WHAT' and 'WHO'.

2.5 Summary of HOW

❖ Induction is influenced by personal, social, cultural and political forces.

❖ Teacher standards and frameworks can be a double-edged sword of clear goals and aspirations and compliance to a singular ideal of what a teacher is.

❖ The development of induction programmes has suffered from poor and inconsistent implementation.

❖ Induction is often shaped to anticipate and address the common concerns and causes of stress of new teachers (need for guidance and reassurance; high workload; professional identity shifts; relationships with others).

❖ Socialisation and teacher identification are known as key influencing factors in the early years of teaching and beyond.

❖ Identity formation is highly personal with the development of the inner self, which shapes induction experiences.

WHAT

Induction can be designed in different ways and contain various activities. As observed in the 'HOW' chapter, the design of induction is influenced by social, cultural and political forces. Mentoring and professional development activities are believed to be the two most widespread compulsory elements of structured induction. Although a reduced teaching/working load seems to be particularly helpful during induction, only 10 European education systems regulate it.

This chapter looks at the different features of induction programmes in countries around the world. Due to the complexity of the in-school experience for ECTs, it is difficult to separate out the influence of these individual elements on a teacher's sense of self-efficacy and professional identity, as well as their feelings towards the profession. Nevertheless, many studies do enquire into the self-reported impact of induction activities and hint at what might be considered vital to include in a programme. The literature is vast and a snapshot is provided here.

Two recent reviews of multiple systems identified key elements to contribute to what they perceive as a positive induction experience, namely those that relate to teacher practice, self-efficacy, and job satisfaction (National Center on Education and the Economy (NCEE), 2021; Reeves et al., 2022). The elements include:

- support in lesson and assessment design;
- mentoring and feedback from observation;
- the opportunity to observe and team teach with peers;
- networking and professional learning courses (online or on-site);
- self-reflection (such as learning diaries); and
- reduced workload.

Another systematic review by researchers in the USA outlined features of induction in what then class as six 'high performing' systems, based on their PISA results (Courtney et al., 2023). (See the Annexes for their table but note that PISA ranking as a system judgement is a contested topic.) European researchers have recently reviewed 47 studies in 9 languages, in a response to the Anglo-Saxon/US dominance of research field (L. Frederiksen et al., 2023). They observe a similar range of contemporary research themes but also notice trends in the country context: for example, in the Netherlands a focus on the psychological aspects; in Denmark more on group mentoring; in Norway more on school leaders' role. In *Ecologies of Mentoring and Induction* (Olsen, Bjerkholt, & Heikinnen, 2020), researchers dive into Nordic systems (Denmark, Finland, Estonia, Iceland, Norway and Sweden) in more detail.

To recall, the aim for this paper and project is not to make an exhaustive study of what national systems should include but to raise pertinent questions and give examples that may be useful for supporting the role of education employers within induction.

3.1 Making induction compulsory

In their 2021 report, Eurydice observe that, despite clear political aspiration and various legislations in force, participation in teacher induction remains relatively low (Education, Audiovisual and Culture Executive Agency., 2021). They use TALIS 2018 data from across the European Union where 43.6 % of teachers reported having taken part in induction during their first employment; 2.2% higher for

teachers under 35. However, in eight educations systems, young teachers are less likely to have participated in induction activities compared to the whole teacher population, suggesting obstacles to participation, such as in **Spain** and **Italy** where induction is only available to teachers in a permanent position. *It is worth noting that these TALIS data are now 5 years' old and the landscape may have shifted.*

Top-level regulations on induction seem to contribute to teachers' participation in induction. In countries where induction for newly qualified teachers is compulsory, 47.2 % of lower secondary teachers, participated in induction during their first employment, whereas this was significantly lower (30.7 %) in the remaining countries.

This situation is not something that education employers can easily influence, and yet it is an important underlying factor in setting expectations and responsibility: if induction is not compulsory, what additional barriers and needs exist at school level?

3.2 Length and broad organisation of formal induction

Researchers (Courtney et al., 2023) looked at the duration of induction in some of what were labelled 'high performing' countries in the latest PISA: **Estonia, Hong Kong SAR, Japan, Singapore**, and **South Korea**. Each provides school-based teacher induction from approximately 7 months (South Korea) to two years (Singapore), with mandatory programs in Estonia, Japan, Singapore, and South Korea. This suggests the length of the programme may not be a significant factor in contributing to high PISA scores*; rather, the extent of training these new teachers receive and the support they are given (i.e., through mentors and/or administration) may be the defining factor. Each program does provide beginning teachers with a mentor, who receive specific training in each system except Japan. Most of these programmes provide beginning teachers with a reduced teaching load, with Japan and Singapore also providing mentors with a reduced workload so that they can dedicate time to mentees.

*This type of research raises the question of valid measures of effectiveness of professional learning. In other words, what could a system or school use as its measure of the success of an induction programme? Options could be: learner test scores; PISA rankings; TALIS or national self-reporting by teachers and school leaders; national profession retention numbers; local feedback from mentors, ECTs and other teachers.

3.3 Mentoring and coaching

As discussed in the chapter on 'HOW' induction is shaped, the process of socialisation is crucial for ECTs. Mentoring is known to be a core part of enculturation in the school community. In a 2006 international review of eight different country approaches *(*Australia, Britain, Canada, France, Germany, Japan, New Zealand and the United States), those induction programmes considered the most successful included opportunities for experts and novices to learn together in a supportive environment with time for collaboration, reflection and acculturation into the profession of teaching (Howe, 2006).

This section briefly describes what mentoring is; what it involves. In the chapter on 'WHO', the selection and training of mentors is explored.

The variety in the words used to describe the 'mentoring' relationship and activities, and the nuances in different languages, highlights the very different perspectives in what this element of induction is trying to achieve and what happens. Bozeman and Freeney (cited in (Kemmis & Heikkinen, 2012)) understand the concept of mentoring as "a process of the informal transmission of knowledge, social capital and psychosocial support from a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) to a person who is perceived to have less (the protégé)". 'Coaching' is viewed as something slightly different, more relating to teaching practice: a process of sustained and focused professional dialogue in which the coached teacher (coachee) is given an opportunity to develop their teaching practice, although the coach can also learn from the process (Lofthouse, 2023). In this respect, there is overlap with mentoring as the 'mentor' may be the same colleague who gives feedback having observed the ECT's teaching in the classroom.

Researchers considering mentoring in **Croatia, Ireland** and **Scotland** highlight the importance of the social environment of the mentoring (Aderibigbe et al., 2022). These mentors have to be open and approachable in order to have a positive working relationship with the ECT. However, mentors are frequently responsible for the assessment of first-year teachers and this can cause a change in power dynamics and create tension. School leaders have a role here in the important selection or matching process. **Japan** has a structured programme of mentoring, however, critics question how easily the beginning teachers transfer new pedagogical practice from Initial Teacher Education in universities to their school employment. If the Japanese culture means that the mentor relationship is more weighted towards the wisdom of the veteran teacher, then fewer examples of innovative practice may be shared or retained by the novice (Howe, 2006).

Having enough time for mentoring activities, ideally protected from interruptions and officially set in the timetable, is an important factor raised in many studies and this is another element in which school leaders may have influence.

In **England**, new guidance from central government (UK Government, n.d.) makes a distinction between what a 'mentor' should do and what an 'induction tutor' should do:

Mentor responsibilities include:

- working with the school to make sure ECTs receive a high-quality induction programme
- meeting regularly with their ECTs to provide support and feedback
- providing or arranging mentoring and coaching around specific phases and subject areas

Induction Tutor responsibilities include:

- providing or coordinating the induction programme for your early career teachers (ECTs)
- carrying out assessments and regular progress reviews

In 2015, the Education Council of **New Zealand** published updated guidance about how induction and mentoring is not about simply giving advice and ticking boxes (Education Council of Aotearoa New Zealand, 2015). They stated a clear desire to move towards a concept of mentoring being "one of skilled facilitation of 'learning conversations' focusing on evidence of teachers' practice" and, "rather than just providing 'advice' and emotional support, the mentor teachers co-construct professional learning, where often the learning is reciprocal."

Despite these various attempts to better structure the mentoring aspect of induction, there are critics that think that approaches remains too formal and narrow in scope. In the literature, they argue that a more holistic approach would address not only professional learning needs but also the emotional and social support needs of early career teachers who are forming their professional identity. They

allude to both structured opportunities such as professional and networked learning opportunities and more informal opportunities that are both more likely to foster well-being (Squires, 2019).

3.4 External offer of courses and seminars

Whilst many programmes are limited to colleague relationships, not all of induction necessarily happens in the school or Early Years setting. **Slovakian** induction is based solely on the mentor-novice teacher relationship whereas **Japanese** school community practice and out-of-school placements offer a broader scope for input and experience (Luchenko & Doronina, 2023).

In a secondary analysis of **USA** data (from TALIS 2018), it was found that those whose induction activities included online courses or seminars, as well as reflective activities and reduced teaching load, reported higher teacher self-efficacy (Reeves et al., 2022). Teachers who reported participating in online activities (e.g., virtual communities) also reported higher job satisfaction.

In **Estonia**, researchers explored peer-group seminars at the university (Lepp et al., 2019). The value of these external seminars for newly qualified teachers is that it gives them the opportunity to talk about issues that they are unable to confide in with colleagues in the workplace. The seminars had added value by supporting the linking of theory and practice (scientific reasoning to the questions raised), and providing a supportive environment where ECTs could share their personal problems and conduct a deep and systematic self-analysis (Eisenschmidt & Poom-Valickis, 2020). See section 3.6 for more on peer group work during induction.

During the COVID-19 pandemic restrictions, online professional learning opportunities flourished and there is a concern from some that their subsequent reduction is detrimental, for example for those teachers in rural locations (Paterson, 2023).

3.5 Self-reflection activities: portfolios, diaries, journals

As with Initial Teacher Education programmes, induction may require or encourage the keeping of self-reflection portfolios with examples of approaches tested, or of diaries or journals. The purpose of these is to frame a more conscious development of pedagogy and professional identity.

Researchers in **Finland** have found that narrative pedagogies – telling or writing stories – have been demonstrated in research as powerful tools in professional development (Uitto et al., 2023). A study with teachers reinforced the belief that "it is important for teachers' professional development that teachers have opportunities to verbalise their own knowledge and understanding related to their work." Whilst there is no formal induction programme in **Finland**, a study has been made of using self and peer reflection as part of a more authentic assessment process (see also section 3.10). Researchers found that encouraging a feedback culture between student-teachers, and between student-teachers and the tutor enabled new teachers to be open about their self-critical observations (Ketonen et al., 2023).

INDIRE, the **Italian** Ministry of Education's research organisation supporting training and innovation is currently piloting an online 'lifelong portfolio for professional teaching' that will capture the "key steps of professionalisation, namely: skills employed in the situation, reflexivity, transferability between

various contexts of what has been learned, and documentation, including the dynamics of what has happened".[2]

3.6 Networking, peer groups, and informal conversations

The theme of having trusted colleagues and peers to learn and grow with professionally continues throughout the induction literature. Having said this, researchers in **Belgium** find that it is not the support itself but the self-perception of competence development that determines job satisfaction (Colognesi et al., 2020). Whereas support from a middle or senior leader can feel like constant evaluation and control, ECTs value the support of trusted colleagues, suggesting ECTs could choose their own mentor. Benefits are felt from informal exchange of ideas and designers of induction programmes need to consider creating the necessary conditions for this.

A survey of 101 newly-qualified teachers (NQTs) and interviews with 13 of these in **Austria** examined the kind of support that NQTs received during the first year of the new induction programme, therefore it was also an implementation study of sorts (Symeonidis et al., 2023). NQTs perceived the personal and social support received more positively than the professional support provided, the latter being particularly significant for the perceived success of induction programmes. The same study found that NQTs' main challenges include high workload, studying in parallel to working, and irregular meetings with mentors.

Likewise, online surveys and interviews of ECTs in **Western Australia** reveal that ECTs participated in a range of formal and informal professional learning activities which were accessed through the Department of Education and their schools. The activities that had the greatest perceived impact on professional development were engaging in informal dialogue with colleagues and participation in an in-class coaching program (Mansfield & Gu, 2019).

The 'Peer-Group Mentoring' model (PGM) was developed in **Finland** through pilot projects in collaboration with the Finnish Institute for Educational Research and a number of municipalities and disseminated by a national network representing all providers of teacher education in Finland: eight universities and five universities of applied sciences (Heikkinen et al., 2020). By 2020, approximately 900 mentors were trained in 150 municipalities. It is estimated that 2,000 educational professionals have been involved in PGM on a yearly basis. The PGM model is based on the idea that the mentor-mentee relationship is reciprocal, with each party providing something of value to the other. Features of the PGM model are:

- deliberately in groups comprising both novice teachers and more-experienced teachers;
- ideal group size between five to ten members, where multiple views can be presented but without crowding the discussion;
- meeting six to eight times during the academic year;
- each meeting lasting around one and a half to two hours.

One study, also in **Finland,** showed that a hybrid model of peer-group mentoring, where student-teachers (ITE) and beginning teachers participated together, enables opportunities for teacher learning that benefit both schools and teacher education institutions (Kiviniemi et al., 2021).

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[2] Pilot project on a professional portfolio in Italy: https://www.indire.it/en/progetto/a-lifelong-portfolio-for-professional-teaching/

In **Gibraltar**, there is not the same teacher retention concern as in other systems. Nevertheless, authorities with less trust in their teachers may still be concerned that professionals are potentially relaxing into a job-for-life attitude where they are not motivated to continue with development opportunities and will perform their basic duties until retirement age. The system recently introduced an adapted form of the Peer Group Mentoring model for their newly-qualified teachers as part of their induction. This was observed as having the dual benefit of emotional support to raise self-efficacy and practical support for professional development (Lima, 2023).

INDUCAS was a pilot project in 2017-18 funded by the European Union and run by European Schoolnet which aimed to investigate how beginning teachers can be better supported through a community of peers facing similar issues. It involved newly appointed teachers and mentors from Italy, France, Sweden and Romania by establishing online communities of teachers and mentors in each country. Participants in the eight communities were able to interact, share and learn in their own languages with other peers to exchange ideas and build a community of practice, with the aim of addressing issues and challenges in a more efficient, effective and engaging way. Once a critical mass was established (two countries had a much lower update than the other two), participation was reported to increase job satisfaction between two-thirds and 72% (European Commission & European Schoolnet, 2018).

There have been efforts to unpick precisely what 'personal support' entails during induction. Researchers in **Hong Kong** developed a 'Teacher Buoyancy Scale' (the capacity to deal with problems as they arise) that they used to analyse 14 interviews with graduates from ITE courses (Tang et al., 2022). Their findings show that ECTs counted on the emotional, cognitive, and behavioural emphases of personal resources in making immediate to short-term responses to everyday challenges. Specifically, 'Striving for professional growth' and 'Taking care of one's well-being' were personal resources that enhanced ECTs' potential to manage these challenges.

3.7 Reduced workload

The workload of an early career teacher is noted in much of the literature, although alongside other factors. It is referred to both in terms of a cause of anxiety and pressure (high workload) and as a recommendation for authorities to adjust if possible (reduced workload). References are made across this working paper in the context of different studies.

One system where workload is adjusted is **Japan**, where the school can hire a part-time teacher as an additional instructor to compensate for the reduced teaching load of a new teacher (reduced to 75%) (Luchenko & Doronina, 2023). New teachers in **Northern Ireland** can also expect a reduced timetable (National Education Union, 2023).

In November 2023, **Portugal**'s Ministry for Education announced in the press a new decree-law including the action for future intern teachers to be assigned classes for up to 12 hours of teaching time per week. Whilst this may be seen as a positive increase in opportunity for new teachers to develop their pedagogical competence, the action was proposed in the context of addressing a shortage of teachers in the workforce. In this respect, the expectation may be that interns work alone and with the full confidence and competence of more experienced teachers.

Ironically, in **England,** a taskforce was recently announced to address concerns about teacher working time but at the same time as implementing a new Early Career Framework where the majority of teachers surveyed stated that this specific policy had dramatically increased their workload.[3]

In **Estonia** and many other systems, the reduced timetable depends on the school culture.

Creating protected time for mentors to carry out their role is discussed in the 'WHO' chapter.

3.8 Lesson design and team teaching

Teacher efficacy (sense of can-do) is linked to the amount that they collaborate with colleagues, typified in the **Japanese** tradition of lesson study. When teachers are able to lead on initiating improvement and innovation in schools, they feel more confident and competent as a result (Schleicher, 2018). Lesson study is a process whereby a lesson is co-designed by a group of teachers and is popular in both induction and ongoing professional development. One teacher elects to facilitate the lesson whilst the other observe and the group then discuss it afterwards.

Whilst team teaching with more experienced teachers is rarely compulsory across Europe (Education, Audiovisual and Culture Executive Agency., 2021) some experience of team teaching during induction was reported by teachers in the **USA** in the latest TALIS (Reeves et al., 2022).

A thematic analysis of 42 interviews with newly qualified teachers in **Norway** revealed three induction practices: 1) solo practices where the teachers plan and evaluate the teaching alone; 2) collaborative practices where the teachers plan and develop the teaching through collaboration with a few colleagues; and 3) collective practices where the teachers can discuss their teaching with all their colleagues and engage in mutually beneficial and productive interactions (Antonsen et al., 2023). The findings suggest that new teachers (specifically these master's graduates) are prepared to bring their fledgling pedagogy to their schools and the school context acts as a springboard for different induction practices. However, the researchers note that, for NQTs to make a professional contribution, there needs to be an interest and reception from colleagues for new insights and updated research knowledge.

3.9 Appraisal at the end of induction

In **Germany**, induction is part of Initial Teacher Education with 1.5 years of placement following 3 years of theoretical study. There is a focus on student teacher's lesson planning competence and 'induction' includes 6 planned demonstration lessons. A study of 172 teachers and 138 of the same towards end of induction found that clear instructions from teacher educators led to a higher level of skill demonstrated in planning. However, in induction, neither the length of plan nor the teacher's knowledge predicted their planning skills. The observed variety in competence, added to the fact that

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[3] The UK Government have provided advice on reducing teacher workload whilst also creating a working time taskforce. Teacher unions have expressed concerns on workload created by the Early Career Framework, including in 2021 by the National Association of Head Teachers.

not all ITE providers make the assessment process clear, questions the validity of having lesson planning as part of the qualification exam (König et al., 2020).

Evaluating novice teachers at the end of the induction period is a widespread approach across Europe. It aims at confirming employment when induction occurs during a probationary period or contributes to certify the teaching qualification when induction is part of the qualification route (Education, Audiovisual and Culture Executive Agency., 2021). In **Lithuania, Switzerland** and **Liechtenstein**, the only purpose of teachers' appraisal at the end of induction is to provide feedback whereas **Croatia** has a state examination.

It is a similar picture around the world, for example in **Mexico** where new teachers receive support from a tutor for two years and complete a diagnostic evaluation after their first year in the classroom (Stanton, 2019).

In **Scotland,** induction is the formal pathway to full teacher registration. There are strict and detailed requirements for a new teacher's 'interim' report and 'final report' that track progress towards the official 'Standard for Full Registration (framework of defined teaching standards to be met and sustained). The second, final report can only be submitted once the interim stage is judged as satisfactory. As an example, the interim report must be assessed by the school head and must contain:

- Initial Professional Development Action Plan (IPDAP) – Minimum of 3 entries: 1 entry in each of the 3 areas of the 'Standard';
- Evidence of 12 supporter/mentor meetings (one per week);
- Evidence of 5 observed teaching sessions;
- Career-Long Professional Learning (CLPL) – Minimum of 6 entries: 2 entries in each of the 3 areas of the 'Standard'.
- Professional Development Action Plan (PDAP) – Minimum of 3 entries: 1 entry in each area of the 'Standard'. (The General Teaching Council for Scotland, n.d.)

Sweden is the only Nordic country to have tested a probationary induction year before teachers are formally certified as teachers. Supported by teacher organisations, this was implemented in 2011 as part of a major competence reform. However, the probation element of the induction programme was discontinued in 2014 because the implementation was too demanding both professionally and administratively [the current debate in England]. It was also believed to risk deterring new candidates to ITE programmes and the profession. The responsibility for taking care of new teachers is now formally delegated to the principals of the schools where they work, but this is followed up only to a limited extent (Olsen, Bjerkholt, & Heikkinen, 2020).

3.10 Summary of WHAT

❖ Induction programmes can be formal or non-formal, and participation is higher when induction is compulsory.

❖ Researchers observe that although support is provided predominantly in the first year, continuing support over the 2nd or 3rd year is beneficial as needs change.

❖ Common elements in induction programmes include: support in lesson and assessment design; mentoring and feedback from observation; the opportunity to observe and team teach with peers; networking and professional learning courses (online or on-site); self-reflection (such as learning diaries); reduced workload; and some form of appraisal at the end.

❖ Mentoring can be understood as a transmissive relationship (imparting knowledge, guidance and feedback from expert to novice) or as mutualism where both benefit from the sharing learning. It relies on a close and trusting working relationship with time dedicated to it.

❖ External activities, such as university courses, can provide a useful and safe space to critically reflect on experiences, share with peers (not colleagues), and link theory with practice.

❖ ECTs benefit from peer group activities and networking, as well as team teaching (although the latter is less common).

❖ Reduced workload lowers stress and enables ECTs to participate in other professional learning.

❖ Systems have diverse approaches to the end of induction: from light appraisal and feedback to strict portfolio requirements or state examinations.

WHERE

With the great variety in teacher education policies and pathways in systems around the world, it is unwise to base discussions around the assumption that teachers journey from undergraduate studies in a curriculum subject(s) into a standard primary or secondary teacher. Even when they do, the different institutions responsible for Initial Teacher Education will have prepared them in slightly different ways, including the existence (or not) of in-school placement - not forgetting the unique experiences of the individual ECT that have long been shaping their ideas and ideals about education.

Induction – both expectations for it and the influence it has – will depend largely on the ITE experience and where new teachers have come from, but also where they are going to. Education employers will need to be aware of this, particularly as suggestions of 'alternative pathways' in the professional learning continuum enter the dialogue on recruitment and retention. There is also an issue in several systems of short, part-time, or low availability of contracts that disrupt the induction process and the journey. Added to this, practitioners wishing to work in specific contexts – kindergartens, Special Educational Needs, rural schools - benefit from tailored induction.

Several systems have undergone significant reform of their teacher career structures in the last decade. One example is **Chile**, whose 2016 law covered a comprehensive 5-step career (3 mandatory, 2 voluntary), including a 10-month induction period (4-6hrs dedicated time per week) and guaranteed mentoring (C. Flores, 2019; Mizala & Schneider, 2020). Many other examples of career pathways from across Europe are documented in *Supporting teacher and school leader careers: a policy guide* (European Commission. Directorate General for Education, Youth, Sport and Culture., 2020)*.

The purpose of this chapter is not to address the full continuum of teacher education, nor to delve into the tricky 'magic bullet' debate of alternative recruitment sources. It provides some examples from systems as food for thought and raises questions for education employers to consider given the known diverse pathways of their employees.

4.1 Impact of ITE on induction

Research supports the idea that thorough preparation coupled with some in-school teaching practice during ITE contribute positively to teacher self-efficacy and job satisfaction (Reeves et al., 2022). This would undoubtedly support induction to begin in a more positive way.

There is evidence that a Master's degree as initial preparation (which could equate to greater level of study, depth of study, or duration, or all three) also contributes to self-efficacy. In **Shanghai,** education degree graduates will have had in-school practice, whereas those studying other subjects can take a written teaching test but have no placement experience before starting. Those without an education degree found induction more helpful and more believed they were likely to stay in the profession, although they had less self-efficacy (Han, 2023). In **Finland,** strong trust in the high level of candidates and the quality of basic teacher education (Master's level since 1979) has meant that too little attention has been paid to the induction phase (Heikkinen et al., 2020). These findings support the notion that rigorous preparation and supported in-school practical experience are both positive influences.

Researchers in **Spain** found their study participants that had better grades showed higher employability rates, increased participation in initial education programmes, and more motivation

towards their profession (Aguilar-Mediavilla et al., 2023). Continuing education programmes were only slightly affected by initial grades. The researchers believe that these findings give weight to the argument for selecting those candidates with the best grades to become teachers. In this case it is not clear how far the researchers controlled for the quality or variety in ITE and other variables in their statistical analysis. In other words, higher employability may have a range of influences, not higher grades alone. Certainly, the effect seemed less in the post-ECT years. Such an argument is also tricky in a recruitment crisis where being too selective may be counterproductive.

A study of 500+ beginning teachers in **Germany** found dissatisfaction with the transition of ITE to induction (starting to teach) but a satisfaction with university preparation (developing subject competence), although data deviations existed (Alles et al., 2019). 'Praxis shock' is a known challenge in the system because the German system is more separated between the university as 'theory' and workplace as 'practice'. Similar findings were made in a survey (questionnaire and interviews) of teacher educators in **Slovenia**. Their view is that there is a sharp division between the role of academics (transmitters of theory), and senior teachers (facilitators of teachers' practical experiences) and that young graduates lack a well-considered and integrated acquisition of practical experience as they move from education to the labour market, i.e. too little attention to developing professional competence, or to linking theory with practice, even though school mentors are formally assigned (Pavlin, 2020).

Whilst the research recommendations are not necessarily addressed to education employers, the previous experience of incoming staff that are ECTs will have a bearing on their approach, such as setting realistic expectations and providing more support where needed.

4.2 Short contracts and difficulty finding work

It has already been noted how teachers in systems that have short contracts or a limited availability of suitable posts might find it difficult to complete their full teacher education journey in a smooth and swift manner. Guaranteeing a first-year contract was part of **Scotland**'s original induction design.

It has also already been noted that socialisation is a key feature in ECT professional development. In a small study of primary school ECTs in **Belgium (Flemish community)**, the ECTs were highly conscious of their professional appearance and strategically treated others (school leaders) as gate-keepers to advance their career opportunities (Marent et al., 2020). This becomes their dominant behaviour due to self-preservation. The formal job tasks become loaded with meaning beyond the daily work of the teacher and impact on their relationships with other staff, as well as their developing self-understanding. Their worry about short contracts is compounded by not being able to establish relationships with other permanent staff.

4.3 Different pathways

Although systems broadly follow the phases of Initial Teacher Education (ITE), induction (formal or informal) and Continued Professional Development (CPD), there is an evidence diversity of routes, qualification steps and support mechanisms across the systems. Because of this diversity, it is perhaps inaccurate to be using the term 'alternative' pathways, which suggests that there is an obvious norm

that systems have settled upon. The word 'alternative' also may also suggest something not needed or desired by many, exceptional, or bizarre.

It may even be that after another five years, the old norm may be the out-of-date alternative compared to a preferred new approach. If the message in teacher careers is to provide flexibility and diverse pathways, then difference is perhaps to be embraced, albeit with challenges in trying to accommodate more variety in the complexity of education systems. In this paper, the word 'alternative' is avoided, although it is worth further reflection.

A list of different pathways is provided here and may be added to according to national and regional variations:

Pathways to qualification and employment as teacher		
Master's degree in Education (in-school experience included in later years)		
Bachelor's degree in Education (in-school experience included in later years)		
Part-time versions of courses may also be considered a different pathway		
Bachelor's or Master's degree in subject areas	1-year options	School-based initial teacher training (school experience + university/ITE provider studies)
Bachelor's or Master's degree in subject areas		Post-graduate course in education/teaching (university/ITE provider studies + school experience)
Bachelor's or Master's degree in subject areas		School apprenticeship (employed/salary with in-school training)
Bachelor's (high grades) or Master's degree in subject areas	2-year	e.g. *Teach First* (UK) 1. employed/salary with 80% teaching hours, plus training centre sessions leading to qualification 2. external support during first full-time year
Bachelor's degree in subject area (no teacher education) – employment contract may or may not require attending a part-time teaching course		
Professional certificate in teaching (no bachelor's degree) – employment contract may or may not allow for studying part-time for a degree		

Gaining qualifications through different routes

Different pathways to teacher qualification do exist and are documented in the 2021 Eurydice comparison of European systems in section 2.1.3 (Education, Audiovisual and Culture Executive Agency., 2021).

Figure 2.5: Alternative pathways to a teaching qualification and their duration, lower secondary education, 2019/20

Alternative pathways provided through:

- ■ short professional-oriented programmes
- ■ employment-based training
- ▨ Other alternative pathways
- ▨ No alternative pathways

Source: Eurydice.

Duration of alternative programmes expressed in ECTS (c), years (y) or hours (h)

BE de	DE	DK	EE	FR	LV	LT	LU	MT	NL	AT	SK	SE	UK-ENG	UK-WLS	UK-SCT	CH	TR
30 c	1-2 y	150 c	●	●	650 h	60 c	230 h	180 c	●	120 c	2 y	90-120 d	O	O	O	300 c	1 y

● Duration is not regulated   O Several alternative routes exist

Explanatory note
A brief description of the alternative pathway(s) is provided in Annex I.2.

Figure on 'alternative' pathways to a teaching qualification from the 2021 Eurydice report on teacher careers (page 72).

As an example, the availability of different routes is a point of current debate in **Scotland.** In a review of Initial Teacher Education, some stakeholders expressed the view that diversity of entry routes is good, but for others this has led to too much variation across and between institutions. While variety possibly helps local provision and efforts, it does not contribute to an overall sense of a 'Scottish' profession, qualification, or teacher education programme and some critics go as far to say that ITE loses its prestige (Kennedy et al., 2023).

In **England,** the landscape has become increasingly complicated with many different routes. Undergraduate (4-5 years) and post-graduate (1-2 years) study is mostly led by universities, but not always. Induction (to become fully qualified) takes place in the year after. It is possible to begin teaching with a salary immediately whilst working towards qualified teacher status (QTS) and this is facilitated by schools with or without support from other agencies. There are other options that are direct but non-salaried and the new teacher pays a fee. Promotion of these routes to new candidates by agency websites is highly simplified, potentially masking the differences, and do not appear to address or explain the huge discrepancy between academic and non-academic opportunities to explore education theory and critical thinking around pedagogy.[4] At the time of writing, the UK government are also considering cuts to apprenticeships, which would threaten the opportunity for a route into the profession with a salary, as well as leadership apprenticeships. This issue of unsustainable funding is worth noting for policy makers hoping to invest in teacher recruitment.

As part of a teacher action plan up to 2026, **Estonia** declared an intention to open up and fund training leading to a full teacher qualification for all those in the profession who, for various reasons, had not originally completed their Initial Teacher Education. Whilst this is not directly an 'induction programme' concern, it further highlights the complexity of situation in European countries where

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[4] UCAS is the main UK portal for education and training and for university admissions, listing opportunities for prospective teachers.

new, early career, and experienced teachers have encountered hugely diverse levels of support and opportunities for development.

'Fast-track' and shortening the stages of teacher education

Shortening Initial Teacher Education (ITE) is a regular discussion in some education systems but with the prevailing counter-narrative that reducing university-based study will inhibit engagement with educational theory and reflection on pedagogical practice.

In **Luxembourg,** earlier in 2023, there were mixed responses to the introduction of a new one-year post-graduate teaching course. Students were struggling to pass the requirements of the 4-year education degree, however to study theory and practice in one year is seen by many as impossible. The teacher's union proposed that a 2-year teaching programme following a 3-year subject bachelors would be better.

In **England**, it is possible to spend 1-3 months providing the necessary evidence to a registered institution (a university or training centre), in order to achieve qualified teacher status (QTS). However, this is intended for those who have been working in schools, unqualified, for at least 2 years. The target professionals are those from private schools who may have been employed on the basis of their university bachelor's degree without formal teacher education, or those who have taught in another country and are seeking formal qualification in England.

In **Portugal,** a new 2023 decree-law (80A) permits recruitment of teachers with only a bachelor degree in a subject area if there are no candidates with education degrees. These teachers will have priority access to School Association Training Centres. However, this means that their initial teacher education, induction phase, and full-time employment demands happen all at the same time. The experiences of new teacher and school leaders in these circumstances is worthy of future research.

Reducing time for in-school secondments (as part of ITE courses) is also believed to increase the 'practice shock' during and throughout the first induction year. Both research and professional advice have considered the way in which school conditions and pupil behaviour changes, which is why new teachers need to gradually experience the full seasons of the academic year, including pupil vacation behaviour, exam stress, summer heat, winter weather, and excitement in the build-up to holidays, such as Christmas.

A new research report on the *Teach First* programme, where almost a full timetable of classes is given from the first week, reveals lower numbers of teachers staying in the profession than hose in other pathways (McClean & Worth, 2023). Teachers on the programme were more likely to be promoted to leadership earlier in their careers, which could be positive for those with leadership ambition but may reduce further the number of full-time classroom teachers and encourage earlier moving on to other employment after acting in leadership.

Despite offering a fast-track to qualified teacher status in **England,** and already having an established offer of different one-year post-graduate pathways, there has been a recent change to extend the formal induction phase ('Newly Qualified Teacher') to two years. Whilst one the one hand offering extended support to early-career teachers, it has placed significant demands on staff and schools in the need for extended mentoring and completing further portfolio documentation. It also delays the final stage of full qualification, which has salary, promotion, and relocation implications.

The potential impact on employers

Naturally, an education employer receiving new staff from these different routes will have teachers with varied experiences, expectations and needs arriving at the same time and arranging support will need to be tailored. Returning to the concept of 'regeneration' (see 1.1), research evidence suggests that direct entry to school risks an underdeveloped sense of professional identity, lower self-efficacy, and a lower sense of agency in contributing to ongoing school improvement and community innovation.

4.4 Specialist teacher induction: Early Years, SEN and rural

Early years settings

A survey as part of the Erasmus+ Proteach Project[5] found that the key predictors for the integration of new teachers are: professional support from mentors; self-efficacy for working in the kindergarten; high motivation (boosted by professional support and workshops); and low level of burnout. Kindergarten work is different from that of school teachers because they must combine the role of caregiver, tending to the physical, emotional and educational needs of very young children, with the task of being 'managers' or 'leaders' of their respective kindergarten units (Carmel et al., 2023).

Education employers within Early Years are likely to have a better sense of the specific needs of their new staff, although local/regional officers may be less knowledgeable and induction programmes may be biased towards the school teacher experienced.

Special educational needs

New teachers working specifically in the area of special educational needs (SEN) – or 'additional learning support' (ALS) – are believed to be challenged by the need to provide effective instruction while making sense of roles that are highly varied, and can often be defined in ambiguous and contradictory ways depending on the school context (Billingsley et al., 2019). Existing in a more nomadic and isolated role within a school community makes socialisation more difficult.

Tailored induction practices and a shared language could provide coherence. In the same way that different disciplines within the curriculum have different pedagogical approaches and challenges – compare science, music and physical education – specialist support needs to go beyond core induction practices. Opportunities to develop SEN competence within ITE will also benefit later specialist practice in induction and beyond.

The same point about education employers considering the pathway of new staff and tailoring the induction process for the benefit of the school and the individual is relevant.

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[5] The Proteach Project was co-funded by the European Union under the Capacity Building in the Field of Higher Education (CBHE) theme of the Erasmus+ program - https://proteach-project.macam.ac.il/ . Participating institutions were from **Israel** plus the universities of Bucharest, Tallinn, Salzburg and Exeter.

Rural schools

Retaining and supporting ECTs to work in remote schools is a particular concern in countries with large rural areas and **Australia** is a popular example. One of the reasons that incentives appear to be failing could be that they do very little to transform the preparation and induction models for new teachers to better work in and for rural schools and their communities (White, 2019). University preparation as a one-size-fits-all accreditation is not useful for the difference in school contexts. Understanding the ways in which ECTs view 'community' is important as well as considering the ways in which teachers might engage (or not) with the area from which students are drawn. The rural 'disadvantage' narrative does not help with recruitment nor with integration into school community.

Education employers receiving ECTs in (or sending them to) remote communities may be doing so not knowing how prepared or motivated the teacher is to work in that space. Socialisation therefore becomes a particularly important part of induction.

4.5 Summary of WHERE

- ❖ Induction – both expectations for it and the influence it has – will depend largely on the ITE experience and where new teachers have come from, but also where they are going to.

- ❖ Thorough preparation coupled with some in-school teaching practice during ITE contribute positively to teacher self-efficacy and job satisfaction, which may carry forward to induction.

- ❖ Education employers need to be aware of the different previous experiences of new staff, particularly as suggestions of 'different pathways' in the professional learning continuum (as a solution to recruitment) may drastically alter ITE experiences.

- ❖ Short, part-time, or low availability of contracts can disrupt the induction process and the professional journey.

- ❖ Practitioners wishing to work in specific contexts – kindergartens, Special Educational Needs, rural schools - benefit from tailored induction.

WHO

When we consider 'who' is involved in induction, we are thinking about the rights and responsibilities of different stakeholders. The research literature reveals an intricate interconnection between professional identity, accountability demands, and teacher agency and teacher education as a continuum requires a co-ordinated, system-wide approach (Mifsud, 2023).

The diversity of stakeholders required to support induction are evident in **Austria**'s one-year programme:

> Teachers in their first year of service are assigned a mentor to support them in their tasks and also have to attend specific induction courses at colleges of teacher education or universities. School directors are responsible for evaluating NQTs' performance, submitting an official written report to the relevant education authorities two months before the end of the induction phase and taking into account mentor feedback as well as their own impressions of NQTs' performance. Education authorities communicate the results of the evaluation to NQTs. (Symeonidis et al., 2023)

As described in other chapters in this paper, the ECT needs time to grow relationships with colleagues and other key actors. These professional relationships must be given the chance to become intrinsically relevant and a source for professional growth. ECTs need to experience appreciation and recognition as a teacher so that they feel treated as a valid member of the learning community; someone with agency, and somebody who already has relevant professional expertise (Marent et al., 2020).

Novice teachers have the right to receive good quality support, but they also have a duty to play an active role in the demand for that support, which suggests a mutual commitment that the school and the novice teacher should enter into together. In a study in **Belgium (Flemish community)** it is found that the recent policy attention on induction has prompted this mutual commitment (between school and new teacher) to be made. As a result, more and more teachers are receiving the necessary support and guidance in the first years of their teaching career (Dries, 2021).

LOOP: Empowering teachers personal, professional and social continuous development through innovative peer-induction programmes (Erasmus+ 2020-23) https://empowering-teachers.eu/

This recent project brought together 3 Public authorities in the educational sector, 6 universities and 4 research organisations and from 7 European countries: Croatia, Germany, Greece, Italy, Portugal, Slovenia, and Spain.

They created a collection of effective induction practice examples, country case studies as background analysis *which included survey results*, policy briefs and have recently been testing their work in schools in the different countries. See https://empowering-teachers.eu/policy-experimentation/

The **Teacher Induction Programme** includes a detailed step-by-step guides for school leaders and mentors on facilitating the induction process, suggestions and materials for induction activities, and extensive literature references:

The **Mentor's Capacity Programme**

5.1 The school head / principal

Official government agency or other guidance may specify the responsibilities of school heads (principals) in induction. For example, in **Northern Ireland**, where there is an induction year plus two further years of early career development, guidance by the National Education Union (National Education Union, 2023) details the responsibilities of school heads (see graphic below).

Responsibilities and priorities are not necessarily clear or aligned, as found in a survey of school leaders and NQTs in **Finland**, in which school leaders felt that providing support regarding school changes and parent relationships were priorities, whereas NQTs referred more to support for administrative tasks (Harju & Niemi, 2018).

Graphic below left: extract of guidance to teachers going into their induction year in Northern Ireland

The principal's role

You are entitled to support from your principal, who has overall responsibility for your induction and assessing whether you satisfactorily meet the Teachers' Standards and Competencies.

They are responsible for ensuring you receive advice on:

- timetabling of lessons and support arrangements, names/contacts of key school staff, and a schedule for formal assessment and meetings
- reporting arrangements and entitlements to pay during sickness absences, named contacts for other absences, eg maternity leave
- arrangements for pay
- provisions for pensions and any other entitlements
- health and safety, and equal opportunities policies
- other relevant policies, including arrangements for cover and child protection
- the nature of the contract of employment
- duties and management arrangements.

Researchers found a shift towards a commitment of principals to become more directly involved in driving teachers' practices and teaching processes in **Belgium, Finland** and **Portugal**, but this is not consistent across and within these systems (Costa et al., 2019).

Principals are influential in their pedagogical and organisational leadership. There is also a reciprocal influence of professional and organisational development. Principals highlight the need to support new teachers towards differentiated pedagogy, critical reflection and collaborative practices. Principals can influence a beginning teacher's self-confidence and professional development through direct feedback to individual teachers but also through staff development opportunities and resources, and encouraging reflection as a cultural practice.

The researchers hypothesise that high level of Belgian principals' concern is due to high drop-out rate and also NQT support being popular although not mandatory with the full experience of preparation relying on in-school professionalisation. The perceived challenge in Portugal is that school intake is more likely to be experienced teachers with different needs. Reporting from Finland was seen as less significant in the discussion, possibly because of their long-matured teacher education process.

A large and growing body of literature exists on the influence of school leaders on the professional development of teachers and what is commonly termed 'transformative leadership'. Attributes of

leaders are commonly described as the ability the create a strategic vision, consult and collaborate with staff, and motivate staff to work towards common goals for the school community. Studies demonstrate the interplay between direct and indirect support from the school head and teacher self-efficacy and job satisfaction (Thomas et al., 2019, 2020).

In **Viet Nam**, the school governance charter clearly defines the role of principals as "leaders of teaching and learning". Principals are required to maintain their teaching status with a minimum of two teaching periods per week. Therefore, principals are both teachers and leaders of teachers. This enables school principals in Vietnam to closely monitor the quality of teaching practice. To help them in that task, subject heads and regularly carry out classrooms observations or collect observation reports from subject-group peer reviews. School principals also play a strong accountability role in the education system (OECD, 2020).

Recommendations for school heads/principals include:

- Increased investment in professional development programmes for principals in which training in transformational capabilities is emphasised;
- Consider induction support as a school-wide responsibility instead of limiting this support to mentorship only;
- Create the structural, cultural, and formal conditions that are important for teachers to meet and exchange ideas, including scheduled time and dedicated spaces for teachers to develop professional support ties;
- Promote professional collegial support by shaping a school culture with norms of collegiality, collective and mutual responsibility, and accountability for one another's support;
- Develop and nourish pairs or groups of teachers that can support each other professionally, such as in professional learning communities (PLCs) and team teaching;
- Maintain a balance between professional collegial support and autonomy, and take into account teachers' individual personal-professional identities. (Thomas et al., 2019)

5.2 The mentor

Two main choices or concerns for the education employer regarding mentors is 1. their selection, and 2. how to support their role.

Norway's national evaluation in 2014–2016 documented that there were large variations in the frequency and scope of mentoring, and that many mentors lacked formal qualifications. The latest guidance underlines that mentoring should preferably be conducted by qualified mentors who are academically up to date, and that the mentor should, in principle, not be in a leadership relationship with the NQT to prevent any conflict or loss of mutual confidence (Bjerkholt & Olsen, 2020).

Researchers made a comparison of mentoring in the **USA** with their established induction approaches and **Turkey** where induction is relatively new. Through document analysis and semi-structured interviews with program directors, beginning teachers and mentors, findings suggest a number of selection and support approaches:

- Selecting high-quality mentors based on known qualities of an effective mentor (building trust and confidence, active listening and facilitating reflexive practice, supporting the socialisation process);
- Offering mentors initial and continuous professional development opportunities;

- Providing protected time in the school day for mentor-teacher interactions;
- Describing the roles and responsibilities of all program stakeholders clearly and promoting cooperation among all stakeholders (Tekir, 2021).

A survey of beginning teachers, supervisors, researchers, pedagogical supervisors, educational inspectors and employees of the Department of Education and Training enquired into the support given in primary schools in **Belgium**. Despite the abolition of mentoring hours some time ago, most schools seem to be returning to this form. However, the quality of support from mentors varies widely supporting the argument for mandatory training for mentors and other beginning teacher supervisors (Dries, 2021).

Some systems have formalised the competence development of mentors. In the state of **North Carolina, USA,** the 2016 state policy defines mentor standards and protected mentoring time as part of their Beginning Teacher Support programme. Materials are available and a certificate can be acquired after following an online training programme.[6] **Singapore's** Instructional Mentoring Programme is the latest (2015) iteration of mentor support that has existed since 2006. The three focus areas are: Promoting Mutual Growth, Relationship Building, and Localising Mentoring.[7]

Graphic showing key elements of Singapore's mentor programme

Researchers in **Iceland** conducted an evaluation of a university education programme with a focus on mentoring worth 30 ECTS credits. Data were generated through focus-group interviews, self-evaluation and action research of participants in the programme. The researchers found that teachers were more competent after completing the mentoring course, with a deeper understanding of the theories behind mentoring which was reflected in their increased engagement in school improvement (Svanbjörnsdóttir et al., 2020). The Directorate for Education and Training in **Norway** has, in collaboration with the National network for mentoring of newly qualified teachers, also developed new national frameworks for a combined further education in mentoring (30 ECTS credit points).

Mentors in **Austria** are required to complete formal training in the form of a university course to the extent of 30 ECTS credit points in order to carry out their work.[8] The law requires mentoring to be given to teachers in their first year, although informal mentoring is also facilitated by other colleagues

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[6] North Carolina mentor training: https://www.dpi.nc.gov/educators/recruitment-support/beginning-teacher-support/mentor-training

[7] Singapore's mentor programme: https://academyofsingaporeteachers.moe.edu.sg/professional-learning/for-education-officers/instructional-mentoring/

[8] University of Vienna mentor course: https://lehrerinnenbildung.univie.ac.at/en/further-education/mentoring-training-pps/

and/or school management. Results indicate that experiences of mentoring are mostly positive (Haas et al., 2023).

The selection of mentors may not be following a university qualification but via another recognised definition of being 'experienced'. In **Peru,** a new teacher's induction period lasts 6 months and is conducted by a teacher mentor who is assigned through a regional competitive process among teachers who have reached at least Level III (of five) teacher salary scale. Mentors may come from the same school or the same Education Management Unit as the mentee (Choque, 2019).

Whilst education employers may not be able to persuade local universities to offer accredited courses, other guidance and training may be available. In **Norway**, online guidance is available providing examples and advice regarding how employers can follow up on the principles and obligations for the induction of new teachers.[9]

Despite the widespread knowledge and support around mentoring of teachers, systems and schools still encounter problems.

Researchers contrasted the situation in **Scotland** (induction since 2002), with that of **Malta** (induction since 2010) and **Denmark** where there is no national scheme, but support may be organised by municipal authorities or schools. In all three countries mentors lacked time for observation and feedback but also guidance in how to mentor. Based on their findings the researchers emphasise that both mentors and NQTs need time away from their teaching commitments to devote to their mentoring relationship (Shanks et al., 2022). In **New Zealand**, where there should be 20% release time for mentees, a 2021 discussion paper by the teachers union NZEI says that this is not consistently happening (NZEI, 2021).

The situation is portrayed as particularly challenging in **Indonesia** where it was reported that mentor teachers do not carry out their guidance duties nor properly understand the induction programme, and focus more on their own teaching with the limited time that they have. Many teachers are unwilling to serve as mentors. School heads/principals have a difficulty implementing the programme in their schools and struggle to assess teacher progress, compounded by their own high workloads (Courtney et al., 2023; Niron et al., 2019; Yuliana, 2020).

5.3 Regional authorities

The role of local or regional authorities in induction receives less attention in the literature.

One example where it is considered is in a reflection on the support for newly qualified teachers (NQTs) in **Denmark**, where there is no formal programme or national policy on induction. Teacher education has its quality measures, objectives and monitoring process centrally-defined but it is up to the local level, i.e., the municipalities, schools and teacher educators, to take responsibility for fulfilling these. As a consequence, the support for NQTs varies from one municipality to another and from school to school. As municipalities rarely choose to form policies on teacher induction for their schools, it is left to the local principals to decide if, and to what extent, they want to provide teacher induction. Researchers observe that NQTs get far less support than they need and lack a basic understanding of

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[9] Norway guidance on induction: https://www.udir.no/kvalitet-og-kompetanse/veiledning-av-nyutdannede/hvordan-kan-det-gjennomfores/

the teaching policy of the municipality and the educational focal points of the local school (L. L. Frederiksen, 2020).

In similar systems, this implies that regional authorities need to seek greater consistency across schools or that school leaders need to come together to agree on a coherent approach – or both. The implication for education employers is, again, that new teachers need the school community to provide that which they would normally be expected to do, plus those beneficial elements that would additionally come with a formal or more centralised induction programme.

5.4 Peer networks and groups

Following on from the challenge facing schools and authorities where there is no formal or centralised induction programme, researchers in **Belgium** argue for strengthening the networking competence of ECTs. The also argue for school heads and other school leaders to help in the creation and growing membership of networks (Thomas et al., 2019). This is based on their study's findings that interacting with one another for work-related challenges, and being professionally supported, is dependent on the interplay between beginning teachers and their network of colleagues. Their article describes the approach in more detail, and specific suggestions include considering where in the school building the beginning teacher has their classroom, i.e., ideally in a central location.

Another study in **Belgium** considered the informal support relationships that ECTs sought. It was found that networks were wide and reached beyond the formal support network provided by the school. Network size decreased, or was "more selective" in the second semester and internal networks stabilised quickly. In particular, other novice colleagues were perceived as allies. Opportunities to collaborate were seen as important by ECTs, not necessarily to improve their own teaching but to feel as if they were contributing to and part of the school community (i.e., socialisation). The researchers see this as rejecting the passive-actor and deficit model (not yet good enough) perceptions of ECTs (März & Kelchtermans, 2020).

5.5 The university

The section on external courses and seminars for beginning teachers (3.4) described the potential benefit of universities being a space for supporting shared reflection and dialogue about school experiences (a safe space away from colleagues) and for linking theory and practice.

In the section on mentors (5.2) the role of universities in providing accredited professional learning is evident. Universities may also play a role in the implementation of whole national induction initiatives.

In 2004, Tallinn and Tartu universities launched **Estonia's** induction programme with the support of the Ministry of Education and Research. This required close cooperation between parties, although researchers observe that the main responsibility for implementation seems to have been left to the universities, who were seen as particularly invested in the continuity of teacher education (Eisenschmidt & Poom-Valickis, 2020). Estonian school principals have autonomy, including the authority to hire and negotiate working conditions and employment contracts for teachers, the allocation of school finances, educational priorities and development plans for the school. This contributes to the fact that the execution and quality of mentoring varies among schools, which can be a problem for new teachers.
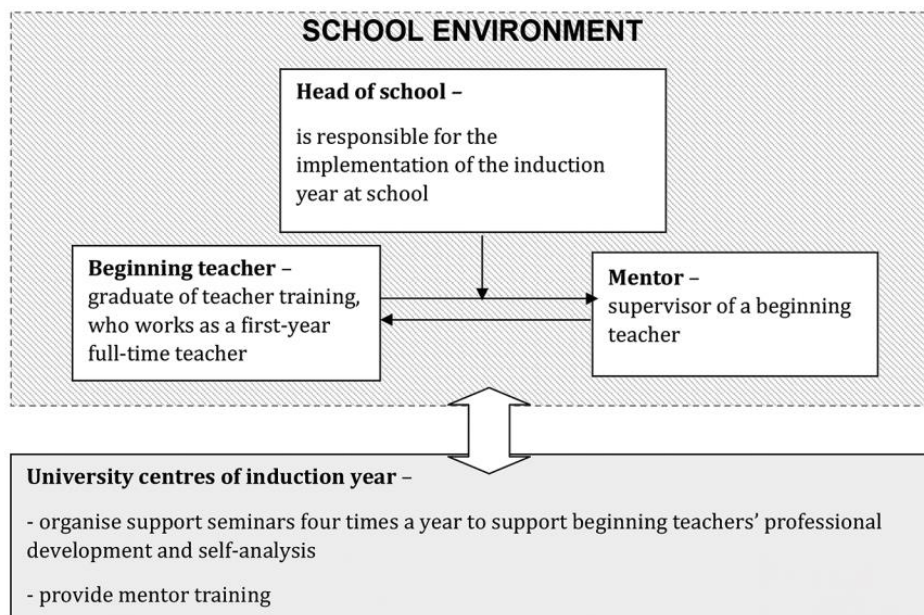
Figure 4. Parties to the induction year (Eisenschmidt, 2006).

The relationship between different stakeholders in the implementation of Estonia's induction programme

5.6 Summary of WHO

❖ Teacher education as a continuum requires a co-ordinated, system-wide approach and a range of stakeholders are required to support induction, even though it takes place mostly in schools (and Early Years and VET settings).

❖ ECTs need time to grow meaningful relationships with colleagues and other key actors, both in-school and in wider networks. They also need to be more proactive in and take some responsibility for their own induction experiences.

❖ School heads/principals strongly influence induction through their pedagogical and organisational leadership. They are responsible for creating the ideal conditions and culture for professional development and may also have direct involvement in the appraisal of ECTs.

❖ Mentors need to be motivated and competent, and can benefit from specific training, which can also contribute to higher education credits. They can also benefit from allocated time to dedicate to the relationship with the mentee.

❖ In decentralised systems or those without formal programmes, regional authorities have responsibility to ensure consistency and the provision of support. Universities may also take on the responsibilities of programme implementation and external course offers.

MOVING FORWARD

In policy, induction is closely linked with retention as an employment statistical issue – trying to prevent new recruits from leaving – even though attrition is part of a wider working conditions debate. Induction is also rationalised in terms of school improvement and performativity: induction → better teacher of prescribed curriculum → higher learner test scores.

What emerges as a dominant finding in the research literature is that induction is a vital stage in a professional learning journey, in which identity formation, socialisation within the school community and profession, and reflection with peers are key to self-efficacy and job satisfaction, but in a way that encultures new teachers to professional regeneration.

Effective approaches, including specific induction activities, are widely known and practised, although there are clear barriers to their coherent implementation across whole regions or systems.

EFEE project aims

If this paper has provided satisfactory responses to the Why, How, What, Where and Who questions, then the aim for the project and the participants is to consider What Next?

Peer learning and new surveys will usefully explore the responsibilities, decision-making, and necessary capacity-building of employers regarding, for example:

- The selection, support, and recognition of mentors and other peer roles
- Positioning induction and beginning teachers within a culture of school improvement
- Creating tailored opportunities for ECTs on different pathways
- Collaborating and negotiating with regional and national authorities, and with universities, on induction programmes
- Creating holistic and sustainable Human Resource Management strategies that attend to the needs of individuals, the school as a learning organisation, and the education system within society as a whole

Discussions will unpick these topics in more detail but across all of them is the question of **what do employers need (e.g., competence, autonomy, guidance, funding, legal backing) for these topics or processes to be effective?**

ANNEXES

Teacher induction programmes of high-performing PISA jurisdictions

Table 5 from Courtney, Austin, and Zolfaghari (2023) 'International Perspectives on Teacher Induction'.

| Jurisdiction	Teacher Induction System
Estonia	Mandatory one year induction program: • New teachers provided support from mentors • New teachers provided self-reflection seminars from university • Funded by Ministry of Education and Research Mentors: • Supported by schools • Complete 160-h mentor training curriculum at university • Provide feedback to initial teacher education institution from which beginning teacher received qualification University monitors and analyzes the induction year
Finland	Peer-group mentoring (PGM) model developed in collaboration by The Finnish Network for Teacher Induction and local education authorities (e.g., teacher-education departments in universities, the vocational teacher-education institutions) Funded by the Finnish Ministry of Education and Culture Personnel responsible for induction may vary from school to school (e.g., principal, senior teacher) Mentors: • Trained regionally in collaboration with universities' teacher education departments, continuing professional development centers and vocational teacher training institutions • Training program consists of five two-day seminars • Rewards or compensation depend on school • Mentors are group members of equal status to other PGM members PGM small groups meet monthly to discuss professional issues and challenges.
Hong Kong SAR	Beginning teachers provided with one year of support from experienced teachers (mentors). *Induction Tool Kit* provides support to schools on introducing or refining school-based teacher induction program. Mentors: • Trained by the Education Bureau (EDB). • May be subject-oriented. • May be the administrative supervisors. Self-Reflection (by beginning teachers): • Analyze their own and others' lessons. • Analyze a case of student development.
Japan	Mandatory one-year induction period:

Jurisdiction	Teacher Induction System
	- Consists of 300 h of training in total, including 120 h of in-school training, and at least 25 days of off-site training - New teachers are supervised by an experienced teacher who acts as a mentor. - New teacher and mentor provided reduced teaching responsibilities to work together on classroom management, subject guidance, planning and analyzing classroom teaching. Mentors: - Selection varies across prefectures (district under the government of a prefect) and even individual schools. - Mentors are not provided special training nor additional compensation. Induction program organized in collaboration between the school and teacher education institution/ministry New teachers hired on a probationary basis. - At end of induction period, a teacher may be hired as a fully employed regular teacher. *Shokuin Shitsu* (Teachers' Room) - Shared space overseen by administrators in which all teachers have individual desks and meet daily to prepare, complete work, and collaborate on practice.
Singapore	Two-year induction program for all beginning teachers. Induction program led by Academy of Singapore Teachers (AST) and funded by Ministry of Education. Beginning teachers have a reduced teaching load to attend classes and work with a trained mentor. Time allotted for training incorporated into schedules. Systemic framework for school-based mentoring, the Structured Mentoring Program (SMP), administered by School Staff Developer and/or school leaders.
South Korea	14-month induction period Reduced teaching hours for new teachers to provide more time for induction support. Induction program organized in collaboration between the school and teacher education institution/ministry Responsibility for supporting new teachers rests with provincial offices of education Three-stage school-based induction: - Pre-employment training - two weeks; focused on the practical elements of job preparation, like classroom management; post-employment training, and follow-up training. - Post-employment training – six months; typically provided by principals, vice principals, and teacher mentors; involves instructional guidance and evaluation, classroom supervision, and instruction on clerical work and student guidance. - Follow-up training – two weeks; new teachers share what they have learned through presentations, reports, or discussion with peers.

Induction programme comparison charts from Education, Audiovisual and Culture Executive Agency (2021) 'Teachers in Europe'.

*NOTE THAT THE DATA IN THIS PUBLICATION ARE FROM 2018-2020 AND THAT MORE RECENT DATA MAY BE FOUND IN NATIONAL STATISTICS, CONTEMPORARY RESEARCH, AND THE EURYDICE WEBSITE.

2.2.1. Status, length and organisation of formal induction

Figure 2.6: Status and duration of induction for lower secondary education teachers, 2019/20

Induction is recommended

Induction is compulsory

No top-level regulations on induction
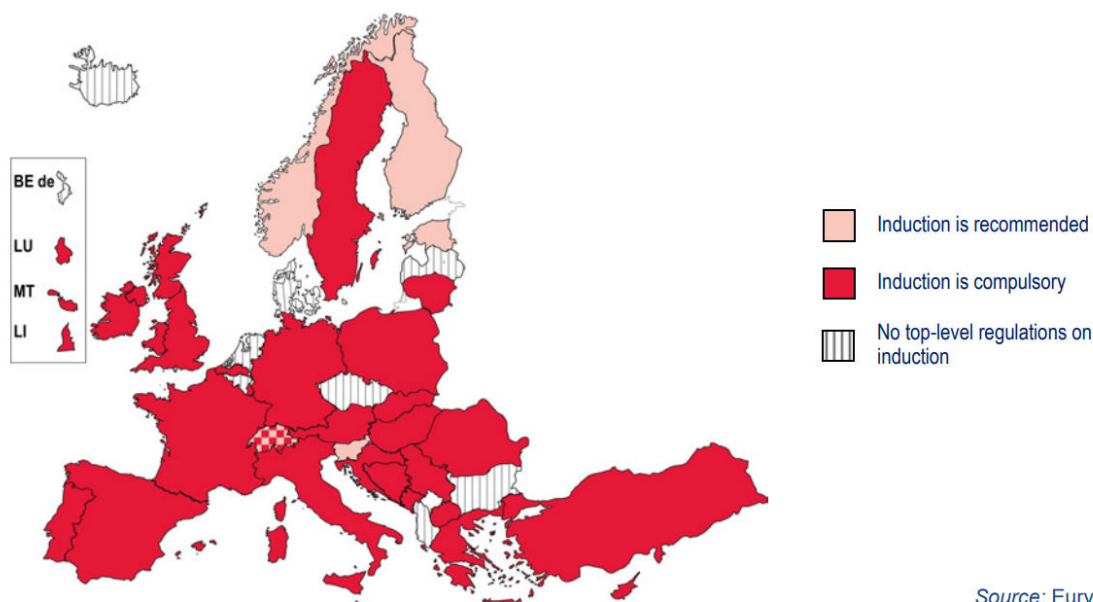
Source: Eurydice.

Duration (in months)

BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU	MT	NL	AT
⊗	⊗	○	⊗	⊗	⊗	12-24	12	(200 hours)	○	3.5-6	12	12	12	5	⊗	12	24	24	24	⊗	12

PL	PT	RO	SI	SK	FI	SE		UK-ENG	UK-WLS	UK-NIR	UK-SCT	AL	BA	CH	IS	LI	ME	MK	NO	RS	TR
9	12	12	10	○	○	12		12	12	12	12	⊗	12	12-24	⊗	○	9	12	24	12	12

⊗ No top-level regulations on induction   ○ Minimum duration of induction is not regulated at top-level

Source: Eurydice.

Country-specific notes

Germany: Information provided in the Figure refers to compulsory remunerated preparatory service at school *(Vorbereitungsdienst)*. In addition, ten *Länder* organise an induction programme for fully qualified teachers. In seven of them it is optional, while in Brandenburg and Hessen it is compulsory, and in Bremen partially compulsory.

Ireland: Since September 2020, *Droichead* is the only induction model available to newly qualified teachers. The *Droichead* process consists of two strands: school-based induction (underpinned by reflective practice, mentoring and professional conversations) and additional professional learning activities (cluster meetings and one other activity chosen in consultation with Professional Support Team (PST)). A post-primary teacher must complete a minimum of 200 hours of teaching in an eligible setting from the date on which they were first appointed to a post recognised appropriate/eligible for *Droichead* in a post-primary school. Newly qualified teachers have 36 months to meet their registration requirements.

Spain: The content and duration of the induction phase vary depending on the Autonomous Community.

Slovenia: The data provided in the Figure and the table above refer to the induction phase that applies only to trainees recruited by the Ministry. Qualified candidates, directly recruited by schools to fill vacant posts, receive mentoring for two months in order to prepare for the professional examination.

United Kingdom (SCT): Induction can be undertaken either through the Teacher Induction Scheme (TIS) or following the Flexible Route. The information on the duration of induction period refers to the Teacher Induction Scheme.

Switzerland: Induction programmes are regulated at cantonal level. A majority of Cantons have compulsory programmes, in others these are optional. In some Cantons, the duration may be tailored to individual needs.

2.2.2. Participation in induction (NB despite widespread compulsory requirement)

Figure 2.7: Proportion of lower secondary education teachers who took part in formal or informal induction programmes as newcomers to teaching, 2018
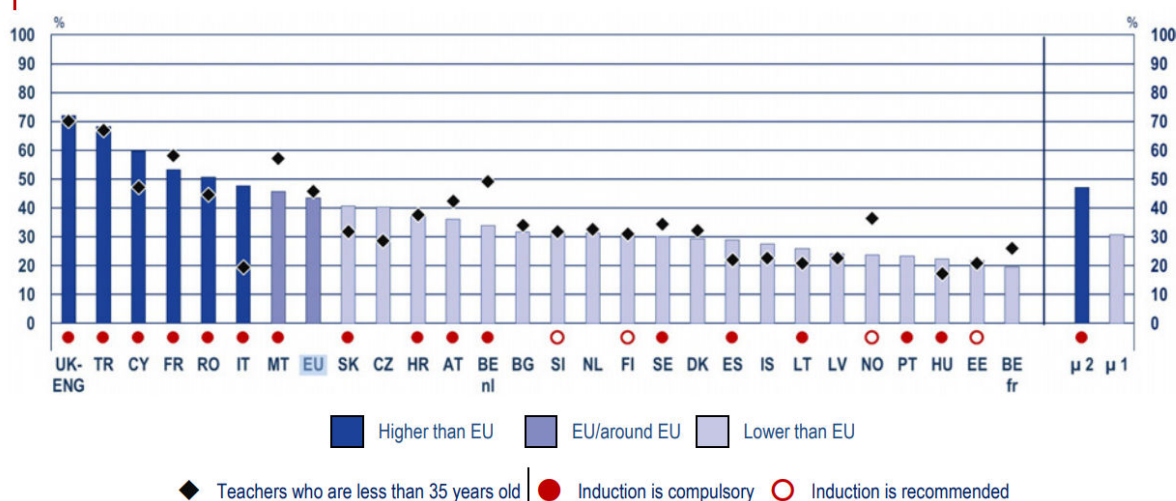
%	EU	BE fr	BE nl	BG	CZ	DK	EE	ES	FR	HR	IT	CY	LV	LT	HU
All teachers	43.6	19.6	33.9	31.8	40.4	29.3	21.7	29.0	53.3	37.6	47.7	59.6	24.1	25.9	22.3
Teachers who are less than 35 years old	45.7	26.1	49.1	33.9	28.7	32.2	20.8	22.0	58.1	37.7	19.5	47.3	22.7	20.9	17.2

%	MT	NL	AT	PT	RO	SI	SK	FI	SE	UK-ENG	IS	NO	TR	µ 2	µ 1
All teachers	45.6	31.3	36.2	23.4	50.8	31.7	40.6	31.0	30.1	72.0	27.5	23.8	68.3	47.2	30.6
Teachers who are less than 35 years old	57.2	32.7	42.3	:	44.6	31.8	31.8	30.9	34.5	70.2	22.7	36.4	66.9		

Source: Eurydice, on the basis of TALIS 2018 (see Table 2.5 in Annex II).

Explanatory notes

Data based on teachers' answers to question 19 'Did you take part in any induction activities?' sorted by age groups according to answers given to the question 2 'How old are you?'. Only teachers having answered 'yes during my first employment' in question 19a (I took part in a formal induction programme) or 19b (I took part in informal induction programme) are considered as having taken part in a formal or informal induction. Teachers who ticked both answers a) and b), were counted only once.

The intensity of the bar colour and the use of the bold in the table indicate statistically significant differences from the EU values.

The data in the Figure is arranged in descending order of all teachers who have participated in induction and in protocol order in the table.

EU includes the European Union countries/regions that participated in the TALIS survey in 2018. It includes UK-ENG.

The dots 'Induction is compulsory'/'induction is recommended' show the top-level regulations, see Figure 2.6.

µ1=average for countries where induction is recommended or there are no regulations on induction, µ2=average for countries where induction is compulsory.

Country-specific note

Portugal: For the novice teachers (<35 years old), there are too few or no observations to provide reliable estimates.

2.2.3. Compulsory elements of induction (mentoring, courses, reduced workload, team teaching) and regulation

Figure 2.8: Compulsory elements of induction for teachers in lower secondary education, 2019/20

Source: Eurydice.

Explanatory note

The Figure refers only to four listed mandatory elements.

Country-specific notes

Germany: The information provided in the Figure refers to *Vorbereitungsdienst*.
Germany, France and **Cyprus**: Trainee teachers attend courses and seminars in the ITE institutions where they are enrolled.
Estonia: Induction is recommended, but enrolment in induction programme is not mandatory. When it is provided, mentoring and courses/seminars are compulsory.
Ireland: Information in the Figure refers to *Droichead*.
Spain: Types of support included in the induction programme may differ between the Autonomous Communities.
France: Information presented in the Figure relates only to ITE students who have succeeded in the competitive examination the first time.
Slovenia: The data provided in the Figure refers to the induction for trainees recruited by the Ministry.
United Kingdom (SCT): The data in the Figure refers to the Teacher Induction Scheme.

2.2.4. Appraisal at the end of induction

Figure 2.9: Appraisal at the end of induction period of lower secondary education teachers, 2019/20

Country-specific note

Luxembourg: The data in the Figure refer to teachers with the status of civil servant with contracts of indefinite duration. For teachers with the status of a public employee with a contract of indefinite duration under public law, the appraisal at the end of induction period is not mandatory.

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