



## Changing Landscapes of Teacher Quality in Initial Teacher Education: Examples from Scotland and Turkey

### Öğretmen Yetiştirme Programlarında Öğretmen Niteliğine İlişkin Değişen Görüşler: İskoçya ve Türkiye'den Örnekler

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**ABSTRACT:** Teacher quality has attracted much attention both conceptually and empirically, especially in tackling some global challenges. Initial teacher education (ITE) has historically been one of the key actors in developing teacher quality and one of the foci in research. The article contributes to these debates by comparing two ITE programmes, from Scotland and Turkey, which have been recently reshaped. Both countries have currently declared new reformative steps and introduced internationally cared new conceptions into teacher quality. This study utilized a comparative approach and document analysis to investigate the evolution of views on teacher quality in different countries. The findings provide insights into the changes that have occurred in each country's perspective over time. Drawing from the two contexts, the paper sought evidence in articulated reports for core values and capacities, digital transformation, teacher agency, and innovative and inclusive pedagogies, which are considered important elements of the teaching profession in related literature. Followingly, the study outlines and compares the decisions and intended actions of these two contexts in terms of similarities and discrepancies under the aforementioned four indicators that can be both an example for international ITE programmes and a road map for teacher quality in ITE curricula design. By comparing two examples of ITE programmes with the suggested indicators of teacher quality, we would like to extract insights to reconsider and re-conceptualize teacher quality in much wider literature and future research.

**Keywords:** Teacher quality, professional competencies, initial teacher education, Scotland, Turkey.

**ÖZ:** Öğretmen niteliği, özellikle bazı küresel zorlukların üstesinden gelmek için hem kavramsal hem de uygulamalı çalışmalar kapsamında oldukça dikkat çeken bir konu olarak yorumlanmaktadır. Öğretmen yetiştirme süreci, tarihsel olarak öğretmen niteliğini geliştirmede kilit aktörlerden ve araştırma odaklarından biri olarak karşımıza çıkmaktadır. Bu durum, öğretmen yetiştirme sürecinin uluslararası düzeyde reformlaşma ve niteliği arttırmada bir yol haritası belirlemede, karşılaştırmalı araştırmaları sıklıkla görmemizin nedenleri arasında sayılabilmektedir. Bu çalışma, son zamanlarda öğretmen yetiştirmeye yönelik reformlar başlatan İskoçya ve Türkiye'den iki örnek sunarak bu tartışmalara katkı sağlamayı amaçlamaktadır. İki farklı içerikten yola çıkan araştırmada, bahsi geçen iki ülkenin yakın zamanda yayınladıkları reform raporlarını inceleyen doküman analizi kullanılmıştır. İlgili resmi raporlarda, öğretmen yetiştirme süreçlerinde evrensel nitelikte vurgulanan, çekirdek değer ve beceriler, dijital dönüşüm, profesyonel yararlılık, yenilikçi ve kapsayıcı pedagojiler olmak üzere dört temaya ilişkin ipucu ve kanıt aranmıştır. Analiz sonucunda, iki ülkenin ilgili temalarda benzerlik ve farklılıklarına ilişkin karar ve niyet edilen eylemleri açıklanmış ve karşılaştırılmıştır. Araştırmanın sunduğu ve öğretmen niteliğini ilgilendiren dört temasının ve rapor bulgularının hem uluslararası düzeyde öğretmen yetiştirme programlarına örnek olması hem de program tasarlama aşamasında öğretmen niteliği bakımından yol gösterici olması beklenmektedir.

**Anahtar kelimeler:** Öğretmen niteliği, mesleki yeterlikler, öğretmen yetiştirme, İskoçya, Türkiye.

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Teachers' professional competencies have been prominent underlying indicators of teacher quality, which is an ever-shifting concept (Cochran-Smith, 2021). Initial teacher education (ITE) has historically been a key factor in equipping prospective teachers with professional competencies and engaging in ongoing debates for improvement (Darling-Hammond, 2020; Estellés & Fischman, 2021). Hence, ITE programs worldwide have witnessed ongoing reforms to improve teachers' different competencies (pedagogy, technology, content knowledge, career development, etc.) for enhancing teacher quality. Scotland and Turkey, despite being context-specific, can serve as excellent examples of recent reform efforts in initial teacher education. Both countries have revised their ITE curricula, providing valuable insights into effective design practices.

Teacher quality, as a concept, can be linked to several indicators and complex dynamics, and ITE programs are expected to promote most of them (Birch et al., 2018). The underpinning indicators of teacher quality, such as professional competencies, can act as a starting point to define basic standards and expected outcomes of ITE programs, to organize practicing and mentoring, to design assessment criteria for recruitment (Guarino et al., 2006), and to assist novice teachers in their early career. These indicators, which are associated with different aspects of ITE programs, are assumed as critically important in promoting teacher quality (Darling-Hammond, 2021) and continually emphasized in reformative actions of ITE programs.

While reforming ITE programs to meet national needs and cultural circumstances, it is important to consider internationally accepted issues related to teacher quality (OECD, 2019) when designing a framework. While nations reshape their own unique programmes and rethink their teacher quality, they tend to follow international represents of the educational ecosystem. Therefore, each jurisdiction often harmonizes global trends and circumstances with their local manoeuvres because science, economy, technology etc., affect human-driven needs and expectations. This is one of the reasons why we see increased impetus in reform agendas to shape ITE programs internationally and also comparative research to identify some roadmaps to better equip teachers.

Against this backdrop, drawing inspiration from successful teaching practices internationally is important. However, it is equally important to conduct comparative analyses of research and reports to identify potential drawbacks that may prevent teachers from becoming competent. The indicated drawbacks are mostly gathered around pre-and-in-service teaching competencies, practices, and the structure of ITE programs. Consented evidence of studies (Benavides et al., 2020; Berkovich & Benoliel, 2020; Flores, 2020; Goodwin, 2020) and reports (OECD, 2019) are reflected as follow:

- Prospective teachers may exhibit a lack of core values and competencies of being a teacher because ITE programs mainly concentrate on technical aspects of teaching. This downgrades pedagogy into a set of techniques and approaches which ultimately risk to detheorise and deskill teaching profession.
- International policies, theoretical and empirical studies, and good examples in teacher education are rarely taken into consideration and/or valued enough by the official institutions and associations. Therefore, reformative steps may not be efficient in program revision.

- Lack of interconnection and cooperation among national and international teacher education institutions and associations may hinder effective adaptation of contemporary competencies in ITE. This may risk addressing global challenges such as technological, social, environmental, and economic at the international and national levels.
- Theories in ITE programs, prospective teachers' beliefs and perceptions towards teaching, and the perceived gap between theory and practice may result in problems in real teaching environments. Hence, prospective teachers can have "reality shocks" in a real classroom environment, especially in their early careers.
- Not acknowledging national and international challenges and dynamics in the curriculum design of ITE may result in insufficient and unsustainable practices, content coverage, values, and competencies.
- The productive power of technology adaptation and the use of digital tools in teaching and learning environments can be underestimated in designing ITE programs so that prospective teachers and in-service teachers can sweat with anxiety about digitally-enhanced teaching and/or digital-based pedagogies.
- ITE programs struggle to foster teacher agency which may generate difficulties in envisaging different possibilities, especially in unexpected situations (e.g., COVID-19).

Although the importance of teacher competencies as part of teacher quality is cited among scholars, the subsequent regulations and practices depend mainly on national contexts (Cochran-Smith, 2021; Snoek, 2021). The way national systems conceptualize teacher quality influences policymakers, teacher educators, and other accompanying stakeholders in ITE to administer teacher education processes, overcome new challenges, and be ready for future expectations and dispositions. Consequently, ITE programs take different stands and forms with diversified adaptations of global debates around teacher quality. These differences include different components of ITE programmes, such as criteria for selection (Flores & Niklasson, 2014), how they comply with professional standards, in-service training procedures, adopted pedagogies, practices, graduation requirements, induction, and many other can vary among nations. It is essential to map out different trajectories that countries take to shed light on ongoing debates around the need for a framework for teacher quality (Olsen, 2021) that can be adapted to different countries. Leaning on the idea that crossing contexts and studies in ITE has the power to identify and empower teaching quality in a wider sense, our paper examines Scotland and Turkey to address this issue by 1) *describing the development of ITE programs in Scotland and Turkey briefly*, 2) *comparing these programs in terms of promoted teacher competencies under four indicators (core values and capacities, digital transformation, teacher agency, innovative and inclusive pedagogies)*, and 3) *offering these four key indicators that are intended to contribute to the literature on consented drawbacks of pre-and-in service teacher education and that can be adapted according to different national contexts*. Drawing from our analysis of recent developments in Scotland and Turkey, our paper aims to reflect on how these indicators are integrated into ITE programs in these contexts. Although there are evolving national and international components of teacher education and teacher quality, we seek to understand and discuss how these two contexts incorporate globally

studied issues into their ITE curricula and provide insights for ITE programs seeking change.

### **The Context of the Study: ITE in Scotland and Turkey**

Scotland offers four-year undergraduate ITE programs and some one-year Post Graduate Certificate in Education (PGCE) courses through accredited universities. There is no prescribed ITE curriculum at the national level. However, a set of professional standards outlines competencies that prospective teachers are required to demonstrate by the end of their ITE program. The General Teaching Council for Scotland (GTCS), which is an independent body, sets the standards and accredits education institutions. These standards were revised in 2021 and were enacted after August 2021. Three categories outline the standards: Being a Teacher in Scotland; Professional Knowledge and Understanding; and, Professional Skills and Abilities. These standards provide a starting point and a framework for educational institutions to design their curriculum. Consequently, each institution may have different modules and organization of content in different ways.

The GTCS published a guideline for initial teacher education programs in Scotland in 2013 (an updated version is expected later in 2021). This document outlines several points, such as the aims of teacher education and requirements for programs to be accredited. These standards and guidance shape the making of the ITE curriculum while leaving space for flexibility for teacher educators.

The Scottish Government (2017) published a report to map the content of ITE programs. Seven ITE providers were examined by looking at both the undergraduate degree programs and PGDE programs. The report outlined an overview of the number of hours of contact allocated to literacy, numeracy, health and wellbeing, equality, and data literacy (the core areas of the Scottish Curriculum for Excellence). Moreover, elective study programs, assessment methodology, and pedagogy were also included in the scope of this review.

ITE programs in Turkey were developed by the Higher Education Council (HEC) until 2020, during which the education faculties were authorized to design their own curricula for teacher education. Until then, HEC was responsible for decision-making in the design and revision of ITE programs. These programs were (still are) structured in three dimensions: general knowledge, content knowledge, and pedagogical competencies. In addition to core dimensions for teacher education, there is also a report as Teacher Competencies Framework declared by the Ministry of National Education (MoNE) in 2006 and revised in 2017 to follow certain teacher qualifications sought in prospective teachers. This report outlines general standards and competencies for pre-and-in-service teachers.

In occasionally revised programs, HEC tried to follow international trends in teacher education policies and competencies as well as nation-based reforms. Particularly, during the EU accession period, ITE programs and studies were greatly influenced by European policies and competencies in teacher education. Content and crediting have been revised in Turkish ITE programs to be consistent with ITE programs around Europe. Referenced and suggested trends in pedagogy were varied with elective courses and content in core courses. With the final decision, offered courses in pedagogy were settled as %30-35 of the initial teacher education program,

and some of the courses were renamed and updated. Throughout the revision studies, education faculties could increase/decrease the percentage of the related courses and add/vary similar courses; yet they cared about the references offered by HEC.

The most recent move of HEC, which delegates the authorization in designing authentic curricula for ITE programs to faculties of education, is expected to improve teacher quality by following national and international needs and trends while training prospective teachers. This manoeuvre can enhance teacher competencies as long as it values the core dimensions, local and global trends, and emerging needs that are able to contribute to outlined teacher standards.

With the new decision of the Higher Education Council, the education faculties have the autonomy to design their own ITE programs according to their own priorities. After delegating authority, some education faculties have started developing their own programs. However, it is still incomplete how education faculties conduct their own curriculum development procedure since it is a brand-new issue. Considering curriculum making is a dynamic procedure, authorized faculties should cooperate in many decisions and actions such as research, selection criteria, expected values and competencies in teaching, graduation qualifications, recruitment, early career development, etc. Besides nationwide cooperation, experts and decision-makers should value international cooperation and effective policies/implementations to adapt global changes, trends, and future directions into national contexts.

### **Method**

As illustrated in the above sections, there is an increasing interest in exploring and comparing international trends, discourses, and practices to inform future developments in teacher education (Menter & Flores, 2020; Olsen, 2021). Our main aim in this paper is to examine how professional competencies are presented and promoted in the national documents of initial teacher education in Scotland and Turkey and to offer a roadmap to be utilized internationally. In doing so, the study is designed as comparative research while employing a document analysis as a method.

### **Comparative Research**

Comparative research, which can be renamed as comparative approach, education, analysis, study, etc., has been valued to concern about a phenomenon of a different culture/nation (Phillips, 2006). Therefore, there have been disputes among researchers about distinguishing certain assets in a systematic way. Education, in particular, is one of the social sciences in which various problems exist, and it is not truly possible to select the best way to make comparisons and inferences (Noah & Jennifer, 2013). Together with other scholars, Bereday (1964) also offers a perspective, and following steps that can match with a systematic document review procedure in a comparative study of education. According to the model of Bereday, researchers should first describe the phenomena and collect data; then interpret what the documents present; continue to juxtapose with comparison through leading concepts; and finally, compare the countries' data in line with the research intention and draw conclusions for future acts.

Drawing from Bereday's model, we followed similar steps in this research. First of all, the literature on teacher education and teacher quality was reviewed, then

emerging themes for present and future teacher competencies were listed. Believing that teacher education is a system starting with selection and continues till early career support, we filtered the listed themes and narrowed down the leading concepts of comparison. Subsequently, the paper offers the following four indicators (which are explained in detail in the following sections) of teacher quality in teacher education:

- *Core values and competencies*: They refer to "being a teacher" and expected skills for future teachers.
- *Digital transformation*: It refers to one of the hot topics of the educational ecosystem in which digitally enhanced teaching actions and skills are frequently and pointedly emphasized.
- *Teacher agency*: It refers to both the individual capacity to act and also ecologies (structural and cultural factors) that support or hinder teachers' actions
- *Innovative and inclusive pedagogies*: They refer to pedagogies that can be adapted to students' diverse backgrounds and potentially promote social justice

In the following steps, selected documents were reviewed and interpreted.

### **The Data and Analysis**

In this research, we examined official reports on teacher education. These reports were published by the two countries' authorized bodies, namely GTCS for Scotland and HEC and MoNE for Turkey, to declare reforms on teacher education and teacher quality/standards. Table 1 presents the documents included in our analyses. These documents comprise the framework for ITE providers to design their curricula.

After accessing the data, each researcher initiated the first round of analysis. More specifically, the data were sorted according to the titles defining the expected teacher qualities. The repeated and underlined keywords that emerged in these documents were listed for each context. This stage was also helpful in introducing the contexts of this study to the readers. In the second round, the documents were shared with two curriculum and instruction experts (also lecturers) from each context as part of peer scrutiny; then, the listed keywords were extrapolated. Examining the raw data, we first compared the main tenets of the promoted professional competencies underpinning teacher quality in both contexts.

In terms of the main tenets between the two countries' reports, we conclude that the two contexts share some commonalities and differences. Major changes in the two countries, Scotland revising professional standards and Turkey empowering universities as ITE providers to be flexible, meaning that there are upcoming potential changes in ITE curriculum-making practices. These practices would include updating their content, adding different modules if necessary, highlighting different values and practices more than others, and subsequently promoting certain professional competencies. Another similarity shared by the two contexts is that ITE providers are flexible in designing their curricula following the recent changes in Turkey. Nevertheless, certain frameworks need to be considered in this process. It is important to reveal some of the key messages promoted in these documents regarding professional competencies that will ultimately shape how ITE curricula are designed. Drawing from international research, our paper also aims to map potentially missing or under-emphasized areas to inform future practices in both countries and for others.

Table 1  
*ITE Related Documents Analysed*

Countries	Documents	Brief outline of the framework	Underlined keywords emerged in the documents
Scotland	<p>The Standard for Full Registration - <a href="https://www.gtcs.org.uk/web/FILES/Professional-Standards/Standard-for-Full-Registration.pdf">https://www.gtcs.org.uk/web/FILES/Professional-Standards/Standard-for-Full-Registration.pdf</a></p> <p>Literature Review on Teacher Education Entry Requirements - <a href="http://www.gtcs.org.uk/web/FILES/research/GTC-S-Literature-Review-on-Teacher-Education-Entry-Requirements.pdf">http://www.gtcs.org.uk/web/FILES/research/GTC-S-Literature-Review-on-Teacher-Education-Entry-Requirements.pdf</a></p>	<p>Professional values: Social justice, trust, respect, integrity</p> <p>Professional Knowledge and Understanding: Curriculum and pedagogy, professional responsibilities,</p> <p>Professional Skills and Abilities: Curriculum and pedagogy, the learning context, professional learning</p>	<p>Social justice, diversity, inclusion, equity, teacher agency, global educational and social values, children's rights, learning for sustainability, teachers' strong moral and ethical principles and values, collaborative professional learning, leadership of learning, a variety of pedagogical approaches, research and practitioner enquiry, curriculum design, digital literacy and digital technologies, additional support needs, assessment, legislations, national and international education systems, learning communities, differentiation, progression, nurturing and positive relationships with colleagues, parents, and students, learner participation, research-informed decisions, Reflective and critical practice</p>
Turkey	<p>Initial Teacher Education Curricula - <a href="https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yetim-Ogretmen-Yetistirme-Lisans-Programlari/AA_Sunus_%20Onsoz_Uygulama_Yonergesi.pdf">https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Yetim-Ogretmen-Yetistirme-Lisans-Programlari/AA_Sunus_%20Onsoz_Uygulama_Yonergesi.pdf</a></p> <p>General Competencies for Teaching Profession - <a href="http://oygm.meb.gov.tr/meb_iys_dosyalar/2018_06/29111119_TeachersGeneralCompetencies.pdf">http://oygm.meb.gov.tr/meb_iys_dosyalar/2018_06/29111119_TeachersGeneralCompetencies.pdf</a></p> <p>National Document of Teacher Strategy <a href="http://oygm.meb.gov.tr/meb_iys_dosyalar/2017_07/26174415_Strateji_Belgesi_RG-Ylan-_26.07.2017.pdf">http://oygm.meb.gov.tr/meb_iys_dosyalar/2017_07/26174415_Strateji_Belgesi_RG-Ylan-_26.07.2017.pdf</a></p>	<p>Professional Knowledge: Content knowledge, pedagogical knowledge, knowledge on legislation</p> <p>Professional Skills: Planning of education and teaching, creating learning environments, managing the teaching and learning process, assessment and evaluation</p> <p>Attitudes and Values: National, moral, and universal values, approach to students, communication, and cooperation, personal and professional development</p>	<p>Subject area, fundamental theories and approaches, information and data sources, national and moral values, research methods and techniques, curriculum, child development and learning styles, teaching strategies, methods and techniques, assessment methods, individual rights and responsibilities, accounted legislation, rights, and responsibilities of educational stakeholders, flexibility, individual differences and sociocultural characteristics, material development, effective communication, time management, locality, cooperation, child and human rights, cultural differences, universal values, environment, historical and cultural heritages, role modelling, empathy, school development, ethics</p>

As part of the final analysis, we compared the two contexts referring to four indicators as *core values and competencies*, *digital transformation*, *teacher agency*, *innovative and inclusive pedagogies* that we believe capture the essence of the commonalities and differences between Scotland and Turkey are identified. These indicators are also presented and discussed as a framework to reflect on international ITE curriculum changes to tackle global challenges and develop teacher quality. Next section will examine these interrelated indicators with references to the two contexts of this research and wider to shed light on the future developments in ITE.

## Results

Following sections will explain each indicator and make links to Scotland and Turkey. These components are dynamic entities that interact with each other to generate a framework that can be used as a starting point for rethinking ITE curricula internationally. We aim to illustrate how these components may shape the upcoming ITE curricula developments in both contexts and also draw some conclusions that can be mobilized to different settings.

### Core Values and Competencies

Generally, teaching is considered a highly prestigious profession among people. While intending to be a teacher, this perception may even seem as a criterion. However, it is not the case in all countries or national contexts. Not every prospective teacher can have internal motivation to truly feel as a teacher and/or understand a teacher's responsibilities (Flores & Niklasson, 2014). In this case, ITE programs are expected to comprise persuasive content to make prospective teachers deeply understand what being a teacher means at heart and what responsibilities a teacher should have. The recent updates in the documents of Turkey trend in empowering the professional status of teachers. This effort is infused into ITE programs by re-determining selection criteria and assuring teacher quality with revised program structures. The academic success determined with the national standardized test scores has been increased for the entry to education faculties, and the accreditation process has been initiated for ITE programs. However, there is no official report to prove successful results of these steps yet.

Although we see similar trends in Scotland, such as emphasizing professional values and professionalism, how these are sought to be achieved seem to be different. While Turkey pays more attention to the selection criteria and proposes some changes in the list of content to be taught, Scotland tends to offer a comprehensive vision and more nuanced insights regarding the professional values, which are located at the heart of 'Being a Teacher in Scotland' (GTCS, 2021a). For example, the social justice aspect is an overarching theme in Scotland, while this aspect is not clearly stated as a theme in the analysed documents of Turkey. Although there is not a direct reference to this theme, social justice is briefly explained as one of the reasons to update Turkish ITE programs to raise awareness among prospective teachers, and is included as a theme in a new must course "Morals and Ethics in Education". It would be much better to evidently see justified values and core dimensions to refer to apparent changes in line with the professional development of the new reforms in Turkish ITE programs.

The 21st century has brought additional insights into teaching competencies worldwide apart from the already established ones (Tican & Deniz, 2019). Becoming more interconnected, teachers have been introduced to new concepts such as being a global citizen, addressing social justice issues, being aware of global challenges, etc. Additionally, the sense of being a teacher has evolved in these new concepts and taken more competitive and affectionate responsibilities for teaching practices. Consequently, ITE programs have started to adopt a universal vision of a teacher with a global perspective and teaching skills (Bozkurt, 2020; Darling-Hammond, 2006). In such a vision, there is this intersection of global and local contexts, named "glocality" (Zhao, 2010; Goddard, 2005), which summarizes the present and future disposition of core values and competencies delineating teacher quality.

In a local sense, classrooms, real teaching environments, are very dynamic, with many challenges. These challenges become more compelling with internationally introduced new concepts. Though teaching practices are maintained in local contexts, ITE programs need to prepare teachers to combine authentic teaching contexts with these new concepts, which are agreed to be global cores of present and future education systems (OECD, 2019). Concepts such as multiculturalism, ethnic diversity, social justice, critical thinking, and entrepreneurship, as well as global phenomena such as health, technology, environment, democracy, human rights, and citizenship, are no longer regarded as "others" issues. Therefore, literature (Estelles & Fischman, 2021; Pushpanadham, 2020) supports the idea that teachers should be prepared for these concepts and issues to facilitate teaching and elaborate them within international and national contexts. Inspired by these new concepts, ITE programs in Turkey have extended teachers' general competencies in the attitudes and values domain. Accordingly, Turkish programs are to be designed with attaching more importance to globally-declared values as well as national and moral ones, which mark children's and human rights, individual and cultural differences, environment and sustainability, preserving cultural and historical heritages, etc. Although the intention of value-added competencies is clearly outlined in Turkish documents, the answer to how ITE programs will respond to it remains unknown.

### **Digital Transformation**

Digital transformation is one of the rapid changes the world has gone through. As in every field, digital transformation happens at all levels of education, in teaching skills and learning environments of today (Falloon, 2020), and so policies in education are also highly affected. The revised standards released by the International Society for Technology in Education (ISTE, 2017) summarize the competencies for prospective teachers to design and practice learning environments with digital tools. Therefore, products and structures in instruction have been still evolving with digital technologies (Balyer & Öz, 2018) and continue to require new priorities in teaching skills as well.

Recently experienced earth-shaking pandemic and its global effects on education have flashed on emergent needs of teachers' skills and competencies in how to use technology in education, be capable of instructional technologies, and adapt them in teaching (König et al., 2020; Lynch, 2020). Digital technologies have become an inevitable part of teacher quality to maintain effective teaching and leverage learning outcomes.

With such experiences, technology has been asserted as one of the dynamic components of teacher competencies for quite some time (Hicks, 2011; Sr.-Clarke & Zagarell, 2012). In this respect, digital transformation seems to continue in future education processes, and consequently, teachers' competencies in technology are no longer a demand but a must (Gudmundsdottir & Hatlevik, 2018). To fulfil this necessity, ITE programs generally offer courses for prospective teachers on enhancing digital technologies for instruction. However, there is a growing need to add complementary content (Borthwick & Hansen, 2017) in which prospective teachers can produce their own materials, deliver the context, assess performance, and maintain teaching and learning outside the classroom (in virtual classrooms).

In Scotland, digital technologies constitute an important part of the Professional Knowledge and Understanding that teachers are expected to meet (GTCS, 2021a). In fact, the Scottish Government published a national strategy to support teachers in 2016 (Scottish Government, 2016). This strategy illustrates that digital transformation is well underway, and ITE programs are placed to offer relevant content to further support prospective teachers in achieving these aims. Although there may not be a specific module devoted to digital technologies, it is a requirement for ITE programs to cover different aspects of digital technologies as well as digital literacy elements in most of the modules so that prospective teachers can achieve related standards.

In Turkish ITE programs, there is one and only technology-based offered must course: Instructional Technologies. The content of the course basically covers introductory technology and generic digital knowledge with little essence of pedagogy, and there is no satisfactory indicator of increasing and/or enhancing related courses, content, or further policies. While analysed documents emphasize digital competencies and skills in teacher quality, reforms on technology are harmonized mostly with in-service teachers' professional development. ITE programs, therefore, teacher educators, stand-alone in improving prospective teachers' digital competencies now and then.

### **Teacher Agency**

Teachers are offered more flexibility to adapt curriculum, for which they need some specific expertise, capacities, and supportive and nurturing environments (Sinnema & Aitken, 2013). Even in most centralised education systems, teachers always find ways to mediate their practices to respond to local needs, their students' needs, or external pressures (Sivesind et al., 2013). Teacher agency, a phenomenon achieved in a complex interaction between personal, structural, and social factors, is a key concept to understanding to what extent and how teachers can use that flexibility (Priestley et al., 2015). The notion of teacher agency is attracting much attention globally (OECD, 2018), in Scotland (Hizli Alkan, 2022), and also in Turkey in recent years (Gülmez, 2019) Following Priestley et al.'s (2015) ecological approach we understand teacher agency as something that is informed by personal and professional experience, oriented towards the future with values, beliefs, aspirations, and enacted in certain situations. Hence, it is identified as one of the central indicators of professional competencies underpinning teacher quality. Considering the fluid times, we are in an ongoing global challenge, which requires teachers to think and do differently to respond to the continued changes, there needs to be increased attention to how teacher agency is fostered in ITE curricula.

Because teacher agency is not solely about individuals' innate capacity (Priestley et al., 2015), there is a strong chance to enhance students' repertoire and offer them meaningful educational experiences so that they can achieve their agency in different circumstances. Although Scotland's new standards (GTCS, 2021a) have a reference to teacher agency, in Turkey and in general, there is still a lack of attention and a need to foster this notion in ITE curricula.

More specifically, collaboration and enquiry have been identified as two ways of developing teacher agency in the context of Scotland, whereas in Turkey, there is no specific reference made in the analysed documents. Scotland's ITE curricula are expected to achieve the standards that mention critical and reflective questioning and

engagement with educational policy and practice and, doing so, challenging some assumptions and professional practice, which are linked to the notion of teacher agency. Moreover, teachers are offered flexibility for curriculum making in their unique contexts, meaning that ITE curricula promote adequate knowledge, skills, and attitudes through benchmarking to the standards. Turkey, on the other hand, does not specifically have the notion of teacher agency. Teachers are encouraged to deliver the curriculum rather than be flexible with it. However, the recently introduced School Improvement Model in the documents somehow heartens teachers to reconsider curriculum adaptability and standard educational policies in favour of local needs and sources. It is wished to draw more attention to teacher agency in the policy of teacher quality and ITE in Turkey.

### **Innovative and Inclusive Pedagogies**

Pedagogy, the core of teaching, is often downgraded to a set of skills and strategies following rather a technicist approach (Giroux, 2008). This may also be projected in the design and content of the related modules in ITE. Further, there is a need for a more nuanced and sophisticated understanding of pedagogy for teachers to become critical, context-sensitive, innovative, inclusive, and research-informed (Baker-Doyle, 2019; Guðjónsdóttir & Óskarsdóttir, 2020; Philpott, 2014). Hence, there is a strong potential for ITE to address these points by strengthening and enriching pedagogy-related content and practices.

Innovative and inclusive pedagogies, such as co-creation (Maloney et al., 2019) and culturally relevant pedagogy (Allen et al., 2017), aim to facilitate learning so that students are empowered with knowledge and skills to address and cope with global and local challenges effectively. These pedagogies are mainly emerged after technological advancements (Baran et al., 2017) and as a response to the global, social, and environmental crisis (Boylan & Woolsey, 2015). Moreover, recent international discourse (e.g., 21st-century skills) and policy point out a need to match current teaching practices with the agenda set by different transnational organizations, such as the OECD (Guerriero, 2017). Hence, ongoing changes and developments diffuse into teaching practices, and ITE plays a key role in taking this responsibility, partly by paying special attention to innovative and inclusive pedagogies.

Scotland offers good examples regarding this theme by emphasising the importance of inclusion, sustainability, and social justice elements of pedagogy, which is one of the core elements of professional standards (GTCS, 2021a). For example, Learning for Sustainability and Global Citizenship have been two key themes in ITE programmes, that offers a context for prospective teachers to develop and apply their pedagogy in innovative and inclusive ways. In fact, GTCS proposes that Learning for Sustainability underpins the professional standards as an intersected theme (GTCS, 2021b).

Turkey also values pedagogy-based trends in ITE programs and offers a variety of central courses of innovative pedagogies, yet it is still limited to subject-based pedagogies. As one of the developing countries where cultural and socio-economic backgrounds are diversified, Turkish ITE programs continuously emphasize inclusion in addressed teacher behaviours (MoNE, 2017). Although, in analysed documents, the emerging needs for revision of ITE programs are justified with such backgrounds, there

is no direct reference for published teacher competencies. Besides, with the increased population of immigrants and refugees that settle down in Turkey, there are new regulations for teachers to extend the rights and opportunities of immigrant students in schools (MoNE, 2017). While such circumstances should prompt policies and ITE programs to clearly define the pedagogical patterns of teacher education processes, the related documents inadequately address the themes of innovative and inclusive pedagogies. Innovative and inclusive pedagogies are important not only because they address global and local challenges but also because their context-sensitive and research-informed nature is key in developing teachers professionally (Tatto, 2021). The more teachers engage with such pedagogies and discussions around context, research, learning theories, and application practicalities; the more teacher agency will be fostered (Priestley et al., 2015). Consequently, teachers will be in a strong position to manoeuvre their practices in unprecedented times.

### Discussion and Conclusion

The compared countries have recently introduced new pathways for ITE and, therefore teacher quality. As an overview, Turkey, with the delegation of authorization in the curriculum design of education faculties, seems to enable local needs to be met by the local ITE providers. Yet, it may also undervalue the national and international standards of teacher quality as a whole. Additionally, education faculties are independent bodies of each university, and it can be very challenging to figure out what is more urgent in reform actions. On the other hand, Scotland appears to follow some emerging international trends and outline teacher professional standards, offering a roadmap for revising ITE curricula.

To continue in detail, we have summarized the key professional competencies from ITE documents in Scotland and Turkey and examined them in more detail in relation to the four indicators we proposed in this paper. Drawing upon Scotland and Turkey, we outline some implications for ITE curricula internationally.

The concepts on which our present literature debates address many aspects of teacher quality. The ongoing issues of students' success (Canales & Maldonado, 2018; Harris & Sass, 2011), digitally-enhanced teaching practices (Benavides et al., 2020), environment and sustainability (Walshe & Tait, 2019), inclusion (Watkins & Donnelly, 2014; Symeonidou, 2017), and varied hot topics (will be) asserted in national and international contexts are (will be) sorted out with teacher quality. Empowering teacher quality in a systematic way, ITE programs are referenced to offer primary values and competencies which share clues about what to do and how to do it as a teacher.

Prospective teachers, each representing their unique social and cultural background, advance in teacher education programs with both national and international driving forces. Although teaching is often seen as an individualized profession, becoming a teacher is challenging, complex, and an ongoing process, and there is no single prescription for this dynamic journey. To improve, in ITE programs, teacher educators can support prospective teachers with core values and competencies, such as focusing on social justice and learning for sustainability, at a certain level since these are rarely developed in isolation. Without being aware of this global reality, teachers may have lower efficacies in maintaining teaching and bringing success. It is reasonable

to present nationally and internationally available and useful values and competencies before saying farewell to novice teachers.

The captured literature on digital transformation broadly explains how essential the digital competencies of teachers are. Unfortunately, there are still misunderstandings in training digitally-enhanced teachers of ITE programs (Alibrahim, 2020; Foulger et al., 2020). In order to improve prospective teachers in digital skills and competencies, Foulger and her associates (2020) accentuate that ITE programs are expected to infuse technology more than simply introduce it with limited technology-based courses and discuss the advantages. Rather, technology should be inspired by integrating curriculum and pedagogy across teacher education periods. It is necessary to remember that design designing and practicing digitally enhanced teaching and learning activities has a broader conception than being active users of web servers or "smart" things.

Digitalization is not limited to available digital agents in education. In this digital world, teachers as individuals should be aware of new terms such as digital identity, digital community, digital security, digital games, and so on. Besides, using digital technologies and agents does not necessarily mean that learning effectively and continually occurs. Applying digital technologies in teaching and learning may not positively affect student engagement or high success in student performance. In such cases, teachers should be able to use technology to overcome any challenge, which represents the notion of "professional digital competence" of Intesfjord and Munthe (2018). Teachers can gain different digital competencies as generic digital competence (Aslan & Chang, 2017), digital teaching competence (Gudmundsdottir & Hatlevik, 2018), and professional digital competence (Instefjord & Munthe, 2017) throughout their initial teacher education and can supervise these competencies and skills while practicing.

In terms of teacher agency, at least four areas can be identified where teachers may lack certain skills in order to learn about their agency and how to bring it into action; developing educational discourse, critical and reflective thinking, rich repertoire to envisage different education possibilities, and constructing supportive learning networks (Hizli Alkan, 2021; Priestley et al., 2015). First, educational discourse is important as it can frame how teachers think about the purposes of education in general, and their beliefs about students and learning. Developing critical and rich educational discourse will better position teachers to challenge, for example, policy discourses and ask deeper questions to prevent superficial implementation of curriculum policy. This is much needed as countries often tackle the issue of the curriculum implementation gap, partly due to a lack of teachers' sense-making (Pietarinen et al., 2019). Second, critical and reflective thinking, which is tied into the first area, is crucial for engaging with educational policies and different initiatives for continuous and meaningful development. Teachers matter in line with much of curriculum policy discourse, and they are the key actors in educational change. However, their agency will be limited without equipping them with critical and reflective thinking. Third, there needs to be space and support given to develop repertoires, including research, pedagogy, and assessment, to envisage different education possibilities. This is particularly important during uncertain times. Finally, supportive learning networks that will offer rich insights and resources to think deeply about education and change are essential to foster teacher

agency. ITE programs should begin to consider these areas by examining the design and content of the programs.

As a final point, ITE programs need to consider moving away from solely teaching a set of strategies in a technical manner to creating opportunities for pre-service teachers to explore their personal and professional identities to bring about social justice and change (Boylan & Woolsey, 2015). Although the social justice element in ITE has been a focus in some countries, including Scotland (GTCS, 2021a), it is still an underemphasized dimension elsewhere (e.g., Turkey). We argue that innovative and inclusive pedagogies offer an opportunity to achieve this end. More specifically, drawing from research (Baran et al., 2017; Maloney et al., 2019), ITE programs should project research evidence to pedagogy-related classes, examine a range of fit-for-purpose and meaningful innovative and inclusive pedagogies, offer time and spaces for students to reflect on these and enact their pedagogy in classroom settings.

### **Concluding Thoughts**

As a globally concerned issue, teacher quality has been evolving with many human-driven needs. The main attention here is to grant the best teaching and learning practices in different contexts. Efforts in carrying out studies and enforcing policies are meant to improve teachers to be professionally competent in their subject field as well as in their teacher identity. Though previous endeavours intended to meet more nationwide needs and trends, present perspectives on education seek more international collaborations and comparisons to serve more equal opportunities for all and map some effective trajectories for improvement. Inspired by the globally agreed issues as humane qualities, digitalization, open-ended professional development, and research-based evidence, this study presents an international comparison to illustrate two different approaches in developing a roadmap for ITE programs.

Wishing to welcome much more indicators that can be infused into ITE programs to be able to act in accordance with research suggestions, we narrowed down our motives to enrich views on teacher quality. Core values and dimensions are regarded as both initial insights for the teaching profession and continuing qualities to connect with exemplified global issues. Digital transformation, as an inevitable topic in every field of human life, is iterated to remind the fundamental necessity to adapt prospective teachers with advanced digital competencies. Teacher agency, as a concept that has attracted increasing attention in the last few years, is included to highlight teacher professionalism and the importance of nurturing supportive environments to catch teacher educators' and policy makers' attention in rethinking ITE programs for future directions. Finally, we briefly glance at innovative and inclusive pedagogies referring to recent global changes.

To conclude, in this paper, we focus on the ITE documents in Scotland and Turkey to examine the promoted professional competencies and offer a framework to be utilized as a discussion point for ITE curricula developments. However, we are aware that there might be discrepancies between what these documents indicate and what actually happens in ITE curricula in the two contexts. Thus, future research could focus on how these standards and policies are enacted in Higher Education contexts, perhaps through qualitative research with teacher educators. Second, because establishing global roadmaps for ITE has attracted increased attention, this research calls for large-scale

comparative research in different countries. In saying that, we are cognizant of the cultural and social differences amongst countries. Nevertheless, international collaborative research has a strong potential to offer evidence and a rich picture to inform initial teacher education. This is especially imperative considering the global challenges all nations face.

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Bilge Aslan Altan examined and reported the Turkish documents and finalized the whole manuscript (60%). Sinem Hizli Alkan examined and reported the Scottish documents reported (40%).

### Conflicts of Interest

Authors declare that there is no conflict of interest.

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