



Professional Training of Primary School Teachers (Experience of Great Britain, Sweden)

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ABSTRACT

Approaches to the professional education of primary school teachers underwent transformations in the late twentieth and early twenty-first century. The purpose of the study is to find out the algorithms and identify the features of the professional training of primary school teachers on the example of the experience of Great Britain and Sweden. The following methods were used: observation, descriptive method, analysis of the regulatory framework; method of statistical data processing; study and generalization of scientific publications; comparative and comparative methods. The UK and Swedish primary school models have been found to be significantly inferior to the higher education models in which both countries are high in the world rankings. Among the factors of this are teacher training programs. In both countries, there are 13-19 students per primary school teacher, and the trend is growing. This stimulates the government's initiative to regulate the situation. The initiative is implemented in the range of algorithms for obtaining the profession. Ways of training in the UK, such as Initial Teacher Education or Training, Postgraduate Diploma in Education or Postgraduate Certificate in Education, Qualified Teacher Status, Graduate Teacher Program and Registered Teacher Program through the government's School Direct program have been identified. Postgraduate education of primary school teachers is regulated by the programs Continuing Professional Development and In-Service Education and Training. Possible ways of professional training of primary school teachers in Sweden are: specialized university training with a master's degree, courses in Bridging Education Program, Vocational Education Program, Foreign Teacher's Bridging Program, Supplementary Training for Teachers, which lead to the status of certified teacher. Continuous professional development of Swedish teachers is not regulated, it depends on the self-motivation and policy of the administration of educational institutions. Further research on teacher training models at all levels is useful in identifying trends in teacher training to help provide schools with self-sufficient professional staff.

Keywords: professional training, educational-professional program, primary school, primary school teacher, Sweden, Great Britain, initial teacher education (ITE), continuing professional development, in-service education and training.

1. introduction

The World Economic Forum has identified 12 foundations for countries' competitiveness. The content of the fourth of them is formulated as "Health and primary education". It is eloquent that primary education is singled out. Experts on economics and sustainable development are increasingly talking about how the volume and quality of primary education affects the country's economic performance.

Although the quality of education is a complex concept and is marked by ambiguity of approaches to determining its content, the criterion of classroom activity of the teacher remains one of the central ones. Thus, the Norwegian organization Norad (Norwegian Agency for Development Cooperation) in the article "Key elements of quality. Six basic elements influence the quality of education" considers the role of teachers and individual teacher approaches to the presentation of educational material, interaction with the team of students the most important (Norad, 2015). The reference site with twenty years of experience in the field of education ThoughtCo in the Top 10 Characteristics of a Quality School puts the experience of teachers and innovative teaching methods in third place in the paradigm of quality school education (ThoughtCo, 2019).

Despite the fact that higher education in the UK and Sweden is at the forefront of the ratings of reputable publications (yes, the resource The Study.EU (2018) gives higher education systems of these countries 2nd and 7th place, respectively), in the rankings for school education these two countries are not so high. Thus, the rating Quality of primary education across countries index 2017-2018, proposed by Statista (2020) does not include them even in the top twenty. Based on the above information, it can be concluded that the primary education system in the UK and Sweden needs to be reformed. Since the key roles in the quality of school education are played by the personalities of teachers as professionals, it is necessary to talk about the existing problems of professional training of teachers.

Despite the significant scientific interest in the problems of professional training of primary school teachers in both the UK and Sweden, as evidenced by intelligence in recent years, there is a need for systematic analysis of models of professional training of primary school teachers in these countries. In addition, the comparative aspect of the problem, taking into account the practice of both countries, is also of considerable interest. It should be noted that in the last decade, both the United Kingdom and Sweden have developed new policy documents in the field of teacher education, which require close scientific attention. Thus, the purpose of this article is to study the algorithms and features of professional training of primary school teachers in Great Britain and Sweden.

The purpose of the study is to study the algorithms and identify the features of the training of primary school teachers on the example of the experience of Great Britain and Sweden.

Research tasks:

1. Highlight and summarize the features of professional training of primary school teachers in the UK and Sweden.
2. Highlight the features of professional training of primary school teachers in the experience of the United Kingdom, in particular primary professional training.
3. Highlight the features of professional training of primary school teachers in the experience of Sweden, primary professional training and postgraduate education.

Literature Review

Traditional initial teacher education (ITE) and continuing training are distinguished in the training of pedagogical staff for primary school. In OECD countries, the initial teacher education period for obtaining a primary school teacher qualification lasts an average of three years. In the UK, as in other European countries, there has been a transition from the so-called "normal school tradition" ITE, where practical teaching skills have come to the fore (the model focused on training primary school teachers) to the active involvement of "academic tradition" and concepts of "Professionalization" of teaching and "alternative pathways into the profession" (Musset, 2009). Thus, today in the training of primary school teachers is dominated by a mixed typological approach, which is based on:

- mastering the theoretical foundations of pedagogical science (plus academic study of a narrow range of disciplines);
- mastering the practical experience of teaching primary school children through the cooperation of academic institutions with schools;
- research approach to the teaching profession, critical analysis of reality and self-criticism, emphasis on professional autonomy, on the one hand, and skills of cooperation, interaction in the teaching staff, on the other;
- mentoring, mastering the practical skills of teaching experienced teachers, the so-called "on-the-job" training (Musset, 2009).

Current intelligence on the training of primary school teachers in the United Kingdom and Sweden is characterized by a variety of approaches to addressing this issue. Thus, Smithers et al. (2013) records in the United Kingdom a significant reduction in undergraduate students under the Undergraduate ITE program: in 2011-2012, only 40% of all applicants for this profession chose this path of obtaining the qualification of a junior teacher. According to Smithers et al. (2013), this may affect the quality of teacher training and, as a consequence, affect the success of the acquisition of educational programs by primary school students. Unwin (2004) discusses the shortcomings of professional training of representatives of various specialties in the UK. In particular, it is about the professional practical training of primary school teachers. Murray and Passy (2014) point out that in the realities of the modern world and multicultural society, the role of primary school teachers actually loses the regulation of

professional skills and abilities in the direction of their maximum expansion. This requires the highest quality and rich training of primary school teachers, who in modern conditions must have a broad and flexible worldview and practical skills of providing information to children of primary school age, taking into account all the psychophysiological characteristics of children of the information age.

The issue of professional training of primary school teachers is complex and for its better understanding can be divided into a number of narrower:

- quality of student preparation within the ITE primary school teacher for the dominant and complex role of the class teacher, in the paradigm of which primary school teachers must teach a significant number of individual subjects (and to have in-depth knowledge of these disciplines) and implement effective interdisciplinary links to ensure quality teaching their students;
- knowledge of psychophysiological features of the child's development by applicants;
- ability to manage the social and emotional aspects of the role of the primary school teacher;
- ability of short-term programs for the qualification of primary school teachers to lay the foundations for further professional development of primary school teachers, including the realization of research potential;
- willingness to adapt quickly, be flexible and creative in curricula and numerous pedagogical changes in the regulation of primary school (Murray and Passy, 2014).

The key problems in the training of primary school teachers in the UK, according to Murray and Passy (2014), which correlates with the above alarming position of Smithers et al. (2013), is the dominance of short-term models of postgraduate education for the qualification of primary school teachers. This also means placing additional responsibilities on schools as the main focus of professional education and training for young teachers who have just obtained ITE and whose training requires improvement. Douglas (2020) states that the reforms related to teacher education in the UK, implemented in the late 20th century, especially the reforms adopted by the British authorities after 2010, have shifted the function of control and content formation of young teacher training: from many obligations. universities were deprived of languages and instead delegated to their schools.

Another disadvantage is that some schools in England are allowed to hire workers without the previously compulsory status of a qualified teacher. Accordingly, the role of school principals and school administration in general in promoting alternative vocational training for young professionals (school-led provision system), who are allowed to "learn to teach" directly during teaching (Douglas, 2020). A similar position in the assessment of reforms is held by Barron (2019), Whiting et al. (2018). Such a policy of the Department of Education can be explained only by the need to quickly fill vacancies in an environment where the number of representatives of this profession is significantly reduced. In contrast to the British system of teacher training, Douglas (2020) cites the experience of Finland, Norway, the Netherlands and Portugal, where a teacher has the right to work in the specialty only with a master's degree in pedagogy.

This state of affairs is contrasted with the "gold standard" of the five-year ITE master's degree in Finland. Murray and Passy (2014) also emphasize the current problem of transition from adaptive models of primary school teacher teaching to the so-called "developmental" model, which is based not on mastering ready-made conceptual paradigms of teaching at the primary school level, but on inquiry and investigation principles.

Sjöberg (2019), Drakenberg (2001), Wermke (2011), Stolare (2017) and others focus on topical issues of the Swedish primary education system. A number of works develop the implementation of primary school teachers and the teaching of certain disciplines. Thus, Nilsson et al. (2016) investigate the technological literacy of primary school teachers. While the study Stolare (2017) is devoted to the disclosure of civic content in the pedagogical activities of primary school teachers. In particular, through the submission of materials on historical topics. Intelligence Stigberg & Stigberg (2020) develops a vector of practical aspects of teaching programming and mathematics by primary school teachers. All these works in one way or another address the issue of completeness and sufficiency of professional training of primary school teachers in Sweden. Asami-Johansson et al. (2020) focuses on the mathematical education of primary school teachers in a comparative way: the alternative experience of Japan and Finland is taken into account.

Drakenberg (2001) focuses on the professional development of teachers in Sweden as a whole. This problem is covered in the concepts of professional responsibility of teachers, the structure of the school teacher's career, new concepts of teaching and learning, the culture of the teaching profession, the quality of educational services and the role of the research component in professional development. The exceptional role of postgraduate teacher education in the UK was discussed in the second half. 20th century (Henderson, 1977; Altun, 2011).

In general, scientific works on the professional training of primary school teachers in Great Britain and Sweden are marked by diversified approaches to covering this problem. At the same time, there is a noticeable lack of intelligence in the format of specific cases, on the one hand, and systematic generalization works, on the other.

Methods

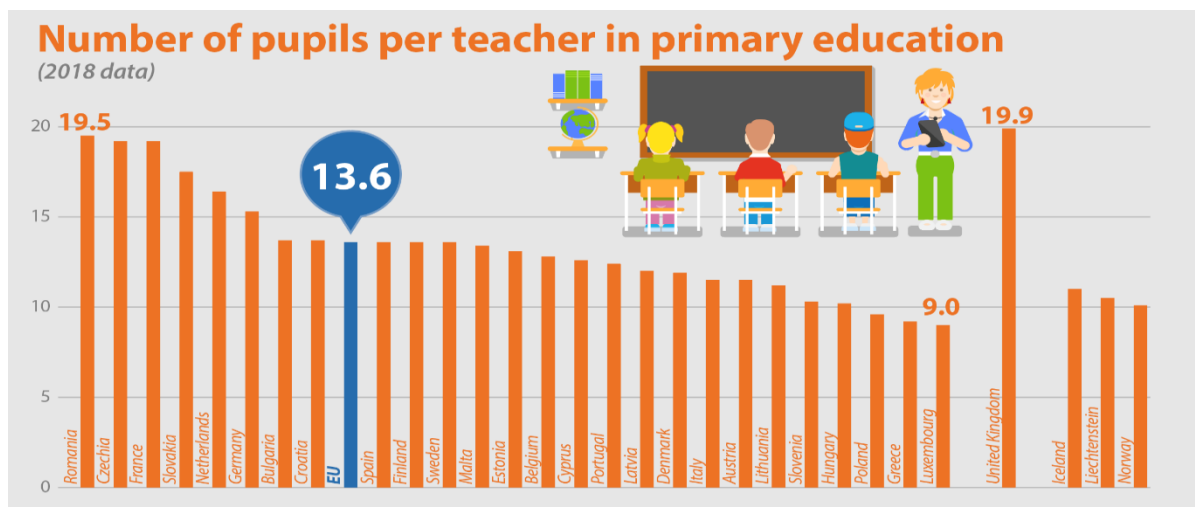
To achieve the purpose of this exploration, research methods were used, such as:

- observation and descriptive method (during the differentiated study of teacher training algorithms in Great Britain and Sweden);
- analysis of the regulatory framework for the training of primary school teachers (current national and international regulations on strategies for teaching and implementation of modern approaches to teacher education in the UK and Sweden);
- method of processing official statistical data (reports of the European Commission, Statista, Eurostat, UNESCO, UCAS, etc.);
- method of studying and generalizing scientific publications on the topic for the last five years;
- study of electronic resources dedicated to the professional training of primary school teachers in Great Britain and Sweden (websites of official organizations, authoritative national Internet publications);
- study of separate programs of university professional training of primary school teachers in Great Britain and Sweden (information from the official websites of the University of Manchester, University of Brighton, Stockholm University).
- comparable and comparative methods for determining the current areas of development of professional training of primary school teachers in the UK and Sweden.

Results

1. General insights in Great Britain and Sweden primary school teachers' vocational training

According to Eurostat, as of 2018, 24.5 million students were enrolled in primary schools in EU member states (including 4,892,502 in British schools; 893,495 in Swedish schools), and 1,8 million were enrolled in British schools (including 4 in British schools). 279,097; Swedish - 69,249). Thus, on average, there are 13-14 students per EU primary school teacher. Although in general the situation varies greatly from country to country, the data for Sweden are just as relevant. While in the UK, statistics say otherwise: one primary school teacher here has as many as 19-20 students. This is one of the highest rates in Europe. Thus, the burden on primary school teachers in the UK is greater (Fig. 1).



Source: Eurostat (2020).

Fig. 1. Number of pupils per teacher in primary education schools of European countries

The gender aspect plays an important role in understanding the specifics of the professional training of primary school teachers (Table 1).

Table 1. Gender Distribution of Primary School Teachers, 2014

Country	Number of teachers (in thousands)	Share of women (%)	Share of men (%)
Sweden	63.5	77.2	22.8
United Kingdom	258.0	84.1	15.9

Source: Compiled by the author based on data of Eurostat (2016).

Thus, in both countries there is a significant prevalence of female teachers. The gender gap is 6.9% smaller in Sweden, however, it does not negate the thesis that the profession of junior teacher is predominantly female. This is

explained by a number of historical and socio-psychological factors, however, it is a clear insight for the development of gender approaches and overcoming gender inequality, first in attracting applicants for the profession of primary school teachers, and then for the transformation of training programs. Despite stereotypes about the femininity of this profession, modern world experience shows that men in the role of primary school teachers show significant success both in professional academic teaching and in terms of interaction with primary school students and establishing an atmosphere of cooperation within teaching staff.

Interestingly, of the 279,097 primary school teachers in the UK, 58,199 are aged 25-29 (one in five), and 5,498 (one in twelve) in Sweden. Under the age of 25 - 23,284 in the UK (every eleventh) and in Sweden - 1,470 (every forty-seventh!). In general, European countries are still characterized by the “rejuvenation” of primary school teachers. For example, in 2014, there were only 17,732 teachers under the age of 25 in UK primary schools. Compared to 2018, this number has grown by more than 5.5 thousand. For Sweden, this trend is just as relevant: in 2014, there were only 701 primary school teachers under the age of 25, and in 2018 this number doubled.

A starting point for understanding all the features of the professional training of primary school teachers is the starting salary for a novice teacher. It is the monetary reward that is often the determining factor in stimulating the professional development of a young specialist. Table 2 compares the salaries of primary school teachers in the United Kingdom and Sweden.

Table 2. Average annual primary teacher starting salaries in selected European countries in 2018

Country	Salary Level (in US dollars)
Sweden	39131
United Kingdom (averagely)	31905

Source: Compiled by the author based on Clark (2020).

The salaries of primary school teachers in Sweden are slightly higher, but in terms of the monthly equivalent, this difference is not so significant. Both countries can be considered to offer mediocre salaries for primary school teachers (Clark, 2020). This is, for example, almost twice less than in Luxembourg (USD 74400) and twice as much as in Hungary (USD 14545).

With the growing role of young teachers in schools in both the UK and Sweden, interest in their training is growing. Since we are talking about the age of 25 and the age of 25+, it is worth focusing more on the university model of training specialists-practitioners of primary school pedagogy. After all, their professional training mostly takes place directly during training. The role of practice and self-education increases with years of experience. For teachers of 30+, especially relevant in the context of this intelligence will be ways to expand, improve training in the process of training courses and postgraduate education in general.

2. Professional training of primary school teachers: the experience of Great Britain

2.1. Initial professional training

Until 2018, The National College for Teaching and Leadership (NCTL) dealt with strategic issues related to teacher training in the UK. However, from April 1, 2018, the Department for Education and its subordinate body - the Teaching Regulation Agency (TRA) will be in charge of regulating teacher education. The late 1920s and 2000s were marked by significant reforms in the training of teachers, including primary school teachers in the United Kingdom (DfE, 1993a, 1993b, 2011, 2014; DfEE, 1996, 1998; Ofsted, 1995, 2002). The primary document for the primary school degree is The initial training of primary school teachers; New criteria for courses (DfE, 1993a).

The website of the British UCAS (Universities and Colleges Admissions Service) contains information on the required educational and qualification level of a candidate for the position of a primary school teacher. To teach in a UK public school, a potential teacher must have a certain academic degree and an officially recognized, documented pedagogical qualification. There are at least two ways to become a primary school teacher in the UK:

1) obtain at least a bachelor's degree in the Initial Teacher Education or Training (ITET) program;

2) obtain at least a bachelor's degree in a special education program (obtain a qualification in a specific school discipline) and undergo a postgraduate teacher training program, resulting in a Postgraduate Diploma in Education or Postgraduate Certificate in Education.

The next step is to have a criminal record checked by the police or a specially created government body, the Disclosure and Barring Service (DBS), to help employers ensure the safe employment of citizens. This stage is very important when it comes to teaching.

In addition, the UCAS website contains a list of basic skills and required interdisciplinary competencies of a primary school teacher. The structure of the main educational and qualification components of a primary school teacher in Great Britain is summarized in Fig. 1.

Essential qualifications	Related skills	Related subjects
Undergraduate education degree OR undergraduate degree AND a PGCE/PGDE DBS or police records check	Administration Communication Creativity Interpersonal skills IT Leadership Literacy Numeracy Organisation Patience Word processing	Art Biology Business studies Chemistry Computer science Design technology Drama, music, and performing arts English Food technology Foreign languages Geography History Maths Media studies Physical education Physics Religious studies

Source: Compiled by the author based on data of UCAS (2020).

Fig. 1. Primary School Teacher's Basic Qualification Paradigm

Qualified Teacher Status (QTS) is required to start teaching in schools in the UK. The Teaching Regulation Agency (TRA), which is delegated to the Secretary of State for Education, is responsible for teacher training. It provides QTS to residents of England, as well as other regions of the United Kingdom (Wales, Scotland, Northern Ireland), EU countries, Iceland, Liechtenstein, Norway, Switzerland, Australia, Canada, New Zealand and the USA.

The British National Careers Service provides a list of ways to obtain primary school teacher qualifications if a potential teacher chooses the Undergraduate education degree. This is the achievement of the educational qualification level Bachelor of Education (BEd), Bachelor of Arts (BA) with QTS, Bachelor of Science (BSc) with QTS. The basic requirements for applying for QTS are 5 marks in GCSEs with grades ranging from 9 to at least 4 (or equivalent if the certificate is not issued in England), necessarily including mathematics and science. It will be recalled that the assessment for the GCSE is on a scale from 1 to 9 points, 9, respectively, are awarded for the highest level of mastery of the subject. The appellant must also achieve A/Advanced in at least 2-3 university subjects. In addition, obtain a degree (minimum - a bachelor's degree in any discipline).

To obtain a QTS, you can take special training courses or apply for this status through the Assessment Only Route (possible only for an applicant who is an experienced teacher with a previous degree). Assessment Only Route saves time and resources if you have the necessary educational documents, pedagogical knowledge and skills for people who previously have the necessary qualifications. However, the Assessment Only Route requires the applicant to have at least a grade of 4 in English and Mathematics in the General Certificate of Secondary Education (GCSE) at the first stage. For a primary school teacher, there is also a mark of at least "4" in natural sciences (biology, chemistry and physics) in the certificate of general education. If the scores of the certificate do not meet these requirements, you can prove the presence of the required level of knowledge with the help of Equivalency Testing (<https://www.equivalencytesting.com>).

To appeal the Assessment Only Route, the applicant must contact a state-authorized service provider. These can be relevant universities, colleges, schools and School-centered initial teacher training (SCITT). After receiving QT status, the appellant is entered into a single database of qualified teachers. All qualification data of this person will be posted on the website and available online through the Teacher Self-Service Portal (<https://teacherservices.education.gov.uk>).

In addition, as there is a shortage of teachers in UK primary schools, as mentioned in the 1:19 teacher/student ratio, one of the highest in Europe, the government has developed alternative programs to start a teaching career.

This is the so-called employment-based approach, which consists of the Graduate Teacher Program (GTP) and the Registered Teacher Program (RTP). These models provide for the admission of an unqualified teacher to the position of primary school teacher at the stage of his / her pedagogical education (Gov. UK, 2003). Acquisition of qualifications in this case takes place through the government's School Direct program lasting one year. With the School Direct option, the number of teachers who qualify in this way in contrast to traditional university teaching has increased significantly. Table 3 summarizes the latest available statistics on School Direct (Roberts & Foster, 2019) over a five-year period from 2011-2016.

Table 3. Growth of School Direct

	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016
HE provider of teaching profession	28,669	28,841	26,790	23,095	22,224
School Direct share of postgraduate trainee numbers	0	772	9586	15,254	17,609

Source: Roberts & Foster (2019).

From Table 3, it is clear that the path to teacher qualification through School Direct, which is suitable for both primary and secondary school teachers, is rapidly gaining popularity and may even exceed the traditional path of qualification through special university education in the long run.

The QT standard is based on compliance with the official "Teachers Standards document. Guidance for school leaders, school staff and governing bodies", which came into force in September 2012 (UK Government. Department of Education, 2011). According to him, any teacher must have certain beliefs and skills, clearly diversified by the document into teaching and personal-behavioral (Table 4).

Table 4. Teachers' Standards Set by the Department of Education of UK Government

Teaching Skills	
1	Set a demand for high expectations that inspire, motivate and challenge students to strive to improve.
2	Promote quality progress and good student achievement.
3	Demonstrate good knowledge of the subject and curriculum.
4	Plan and teach well-structured lessons.
5	Adapt the teaching process according to the strengths and needs of all students.
6	Ensure accurate and productive assessment.
7	Effectively manage classroom behavior to provide a supportive and safe learning environment.
8	Respond to broader professional responsibilities: make a positive contribution to school life; develop effective professional relationships with colleagues; effectively use the services of school support staff; be responsible for improving their teaching methods; communicate effectively with parents about student achievement.
Personal and Professional Conduct Skills	
1	Maintain public confidence in the teaching profession, to profess high standards of ethics and behavior in and out of school through: <ul style="list-style-type: none"> - decent attitude to students, building relationships based on mutual respect, adherence to appropriate boundaries; - take into account the need to protect the welfare of students; - show tolerance and respect for the rights of others; - adhere to fundamental British values, respect for them and tolerance for other worldviews, mental and religious beliefs; - make sure that their own beliefs do not manipulate students, do not push them to break the law;
2	Respect the values and standards of the school where the teacher works. Adhere to punctuality.
3	Understand your job responsibilities and perform them clearly.

Source: Compiled by the author based on data of UK Government. Department of Education. (2011).

One of the official websites of the Ministry of Education of the United Kingdom states that there are three possible levels of qualification of a primary school teacher:

- *General primary*: teaching students 5-11 years a wide range of subjects;
- *Primary as a PE specialist* basic package with an emphasis on physical culture, which will allow the teacher to conduct quality lessons throughout the curriculum of junior classes;
- *Primary as a maths specialist* basic package of professional competencies of a primary school teacher with an emphasis on mathematics (Get into Teaching, 2020).

Studying in a primary school in England takes 6 years. During this time, students study 10 compulsory subjects: English, Mathematics, Science, Art, Computing, D&T, Geography, History, Music, Physical Education, Languages (from the 3rd year of study) (UK Government. Department of Education, 2013). Thus, the training of professional competencies of applicants who plan to link their own activities with teaching in primary school, is aimed primarily at mastering the methods of teaching the above disciplines.

The main focus of the basic ITE curriculum for primary school teachers, implemented in British universities, is aimed at the practical training of future teachers, ensuring students' compliance with the requirements of teaching in modern primary schools. The study of certain school subjects in the process of obtaining a specialty is focused on professional training, rather than on a high scientific level of mastery of the subject. In general, higher education curricula prepare students for the "effective implementation" of the national elementary school curriculum, with junior teachers acting as intermediaries for the implementation of public education programs and development strategies.

For comparison, we propose to take the models of professional training of primary school teachers in two free educational institutions of England: University of Manchester, University of Brighton (Table 5). The PGCE qualification program is chosen because of its superiority over the full undergraduate education degree program.

Table 5. Comparison of PGCE Training Programs for Primary School Teachers in HEIs of England

Criterion of evaluation	University of Manchester – <i>top university for Primary PGCE training in the North of England (Good Teacher Training Guide 2017)</i>	University of Brighton – <i>one of the UK's largest teacher training universities</i>
Duration of the PGCE	10 months	1 year
Conditions of entrance	Bachelor's degree (minimum 2:1 or international equivalent). Two A-levels in non-vocational subjects (minimum grade C). GCSEs in English Language, Mathematics and Science, plus at least three other non-vocational subjects (minimum grade C).	An applicant has to be a graduate with a good honours degree or equivalent, in an area that has some relevance to primary school or early years teaching. Normally an honours degree, or equivalent qualification. GCSE (minimum grade C or grade 4). At least English language, maths and science.
<i>General peculiarities of studying process</i>		
Course structure	University-based sessions cover education theories, ideas and concepts, and will enhance applicant's awareness of current educational issues. An applicant will spend a significant amount of time studying the core subjects on pedagogical science, while also studying Religious Education, History, Geography, Art, Music, Design and Technology and PE.	One third of educational time is spent on lectures, seminars and independent study.
Collaboration with partner schools	The university collaborates with more than 200 schools, academies and colleges.	The university collaborates with over 600 schools and colleges in the south east offering opportunities in large, small, urban and rural settings.
Practical teacher training	Applicant has to pass 24-week teaching under supervision. An applicant will observe and teach classes under the guidance of an experienced primary teacher. An applicant will also have a mentor to help in planning lessons, deal with marking and assessment, and improve applicant's teaching skills.	Two-thirds of the course is based in partnership schools. Applicant has to pass 24-week teaching under supervision. School-based training is arranged in two different schools and age-phases. The first phase of school-based training runs simultaneously to the university-based programme, which ensures that teaching theory is effectively integrated with practice

Additional notes	An applicant should take into consideration that time of the university-based learning combined with school-based placements will roughly equate to the time commitment of a full-time job, with additional time required in evenings and weekends for background reading, lesson planning and completing written assignments.	
Results of studying	Completion leads to a postgraduate qualification and recommendation for Qualified Teacher Status (QTS).	
Perspectives	Education MA after PGCE completion.	
Fees	UK students (per annum): £9,250 International, including EU, students (per annum): £20,000	UK/EU (full-time) £9,250 International (full-time) £14,604

Source: Compiled by the author based on data of official websites of University of Manchester & University of Brighton <https://www.manchester.ac.uk/>, <https://www.brighton.ac.uk/index.aspx>

Regarding Additional notes, it is important that they are directly spelled out in terms of admission to the training program. This applies to the role of self-education and individual learning, which is assigned to the overall structure of the program. Despite the short duration of the course, it can be considered intensive. An important role is played by the balance of theoretical and practical training with the predominance of the latter in order for the applicant to be ready to start professional activity immediately after obtaining the QTS.

The UK government has a mission not only to teach but also to work with the government on key youth development issues, supported by the National Service Framework for Children, Young People and Maternity Services (DH, 2004), Every Child Matters. Gov. UK, 2003), Extended Schools Program (DE, 2006). According to them, teachers are responsible for uniting all children around the curriculum, taking into account the specifics of health, development, family well-being, etc. of all students in the class. To do this, a primary school teacher needs knowledge of the legal framework, social programs of the country, mechanisms for initiating and providing social assistance to students, mechanisms for involving parents in interaction with school institutions in order to provide adequate conditions for the child's education regardless of social status.

2.2. Postgraduate education (Continuing Professional Development and In-Service Education and Training)

Postgraduate education in the UK can be provided by different providers:

- Central government (DfE (Department for Education) and the TTA (Teacher Training Agency);
- LEAs (local education authorities);
- School governing bodies;
- Head-teachers;
- The individual teachers concerned.

A number of factors constrain the role of postgraduate education in the training of junior teachers: high workload, lack of time, lack of funding for postgraduate projects, lack of financial and moral support from school management, the nature of teachers' obligations (complicates the opportunity to learn new experiences). clear financial or career incentives, etc. Among the new forms of postgraduate education in the UK, mobile simulators (specialized applications), distance learning with the help of media and online through special platforms are widespread.

The responsibility for Continuous Professional Development (CPD) of the teacher lies with each individual school, regardless of the type of ownership. However, it is often not provided by special extracurricular activities, but directly at the school by the administration of the institution. One can distinguish the strategic goals of the CPD and the immediate ones, which are in accordance with the requirements of the school development plan. McNamara et al. draws attention to the fact that the disadvantage of this CPD format is ignoring the individual professional development needs of teachers (McNamara et al., 2013).

3. Professional training of primary school teachers: the experience of Sweden

3.1. Initial professional training

The Swedish National Agency for Education is the body dealing with strategic issues of teacher education in Sweden. The reform of the Swedish teacher training system, in particular primary school, began in the late 2000s. Thus, in 2008 the document A sustainable teacher education was adopted. Report of the Inquiry into a new teacher education (SOU, 2008).

As of today, Sweden is experiencing a shortage of teachers (Table 6). Although the primary teacher/student ratio is 1:12 in primary school, which is not the highest in Europe, the Swedish government is introducing simplified teacher training programs. Note that the ratio of the number of primary school students to the number of teachers in official statistical reports will differ. Thus, according to Eurostat (2020) data presented above in Fig. 1, we have as of

2018 a ratio of 1: 13.6, and Statista (2020) provides data that in the calculation give a ratio of 1: 12.1. The difference is not so significant, but still shows some statistical error.

Table 6. Number of pupils and teachers in primary schools of Sweden from 2015 to 2020

	2015	2016	2017	2018	2019	2020
Number of pupils	949460	985620	1023956	1049490	1068274	1086180
Number of teachers	78363	80515	85272	86109	88193	92890
The ratio of the number of pupils to the number of teachers	1:12	1:12	1:12	1:12	1:12	1:11

Source: Compiled by the author according to the Statista (2020b, 2020c).

As already mentioned, the Swedish government is working to develop official programs to increase the number of teachers and increase the attractiveness of the teaching profession. This is also due to the fact that over the next five years, the number of primary school students is projected to grow rapidly. And due to the fact that a large proportion of teachers of pre-retirement age work in primary schools, in the future the number of working teachers will decrease. In order to avoid collapse, appropriate decisions are made on the training of young people. According to The Local (2020b), the profession of primary school teacher in Sweden will be among the most popular (based on data from the Swedish Confederation of Professional Associations). The Swedish Council for Higher Education (UHR) is one of the government-mandated institutions, which, among other things, focuses on this goal. In early 2019, UHR launched an abbreviated postgraduate course to qualify as a teacher. A trend that correlates with the British experience in teacher training. The courses are suitable for applicants with previous professional pedagogical experience, as well as those who have a university degree or pedagogical title obtained in a foreign country.

Such programs are:

- KPU (bridging education program) - for applicants with a degree in a particular school subject.
- Yrkeslärarutbildningen (vocational education program) - for applicants with extensive professional experience in teaching for middle school students.
- ULV (foreign teacher's bridging program) - for applicants with a teaching degree obtained abroad.
- VAL (supplementary training for teachers) - for applicants who work as unqualified teachers.

In general, the analysis of the resources in the thematic area of this study allows us to trace the trend of promoting the involvement of foreign nationals in teaching in Swedish schools. In fact, wherever possible paths to the teaching profession in Sweden are discussed, a separate section provides detailed information for foreign applicants (e.g. Skolverket, 2020 - The National Agency for Education; The Local, 2020a). Knowledge of Swedish is a requirement for all foreign applicants.

The certificate of a qualified teacher indicates in which types of schools, in which subjects and in which years the teacher has a qualification and permission to teach. Only certified teachers have a permanent job, regardless of where they are educated (in Sweden or abroad). In addition, if a certified teacher proves to be unprofessional, the teaching authorization may be revoked by the Teachers' Disciplinary Board of the Swedish National Agency for Education.

With regard to the university training of primary school teachers, it should first be noted that in April 2010 the Swedish government proposed to replace the bachelor's / master's degree with four pedagogical degrees, including the primary school teacher's degree.

For the teaching profession, there are three specializations within the primary school that require appropriate professional training (EASNIE, 2020):

1) preschool teacher (for children after preschool for a year before the beginning of secondary school - transitional class) and 1-3 years of study in secondary school. This qualification degree contains 240 credits of the training curriculum. Students acquire a wide range of theoretical knowledge and acquire special skills aimed at the harmonious development of early school students and the appropriate level of teaching most subjects of primary school. Knowledge of the development of reading and writing skills and in-depth knowledge of mathematics for teaching children aged 7-10 are fundamental (SOU 2008: 109);

2) teacher for grades 4-6 in primary school. This qualification degree includes 240 ECTS credits. It is characterized by much higher requirements for mastering general and special disciplines at an advanced level. In addition to the basic requirements for a high level of Swedish, mathematics and English for 10-12 year olds, students have the right to choose additional subjects in the social field of knowledge, natural sciences and technology, or one or more practical (eg, labor training)) or art objects. The future teacher also acquires assessment skills, which is not the case at the previous stage. In addition, he learns subjects that help in the process of teaching students aged 10-12 to touch on issues of identity, sexual development, relationships between people (e.g., conflict studies);

3) teacher specializing in Out-of-school care. This degree is a feature of the Swedish model of primary school teacher training and the primary education system in general. These teachers specialize in out-of-school care (in so-called recreational centers, which are designed to accommodate children before and after school and during the holidays). This degree includes 180 ECTS credits. The program of this specialization is mostly focused on knowledge in the field of extracurricular education and mastering one or more practical or artistic subjects (Prop 2009/10:89).

The content of curricula is regulated by the Swedish System of Qualification.

Stockholm University offers three-component teacher training programs:

1. Part one: Subject studies and subject didactics. Study of specific school and university disciplines and didactics.

2. Part two: Educational science. Study of pedagogical disciplines in accordance with the specialization of the future teacher. For primary school teachers - general pedagogical and those that meet the age characteristics of early childhood education.

3. Part three: Placement. The practical part of training. Participation in the daily work of primary school. Opportunity to apply the acquired theoretical knowledge in practice and the opportunity to gain the first direct teaching experience. At this stage, a police certificate of no criminal record is required.

ITE programs for primary school teachers last 4 years. As a result, a student of pedagogical specialty receives a master's degree. There is also a 'Bridging Teacher Education' program, which consists of studying pedagogical sciences and undergoing industrial pedagogical practice directly in schools (for applicants who are qualified in school subjects but do not have pedagogical education).

3.2. Postgraduate education of primary school teachers in Sweden

With regard to postgraduate education and continuing professional development of Swedish school teachers, an important organizational aspect is that the requirement of continuous professional development (CPD) is not statutory and is not directly linked to the mechanisms of pedagogical training. However, the teacher is interested in CPD, because with the help of special courses and programs for the development of pedagogical competencies, he potentially has a better chance to get a better job and get a higher salary. The CPD can be taken into account on the initiative of the school principal when forming agreements with Swedish trade union representatives to determine the amount of salary for a CPD worker.

Teachers' unions agree on the organization of CPD workers with the Swedish Association of Local Authorities and Regions. This is mainly a volume of 104 hours / year for each teacher. The CPD is implemented during regulated working hours, so the time spent by Swedish teachers on CPD is paid. To ensure that the CPD does not interfere with the learning process, the CPD is carried out mainly during teachers' spare working hours: for example, during students' vacations.

Although CPD is not mandatory, as mentioned above, an educational provider (eg, a municipality) should provide teachers with opportunities for professional development. And then the decision to take or not to participate in them for the teacher individually. However, much of the intensity of the CPD depends on the policy of the school administration, which is designed to stimulate the professional self-development of each employee. Responsibility for teachers' CPD lies with the local authorities of Sweden. Whereas neither the government, nor the ministry, nor other competent authorities in the field of school education have yet initiated policy documents that would require teachers to undergo special qualification training under the CPD.

Among the resources for professional growth in the arsenal of Swedish teachers are, in particular, electronic materials and conferences Swedish National Agency for Education (Skolverket). These activities are funded through the Swedish Ministry of Education and Research (EACEA, 2018).

Discussion

The professional training of primary school teachers is an issue that is relevant for most modern European countries, regardless of the level of economic development and general welfare indicators (Whiting, 2018; Stigberg & Stigberg, 2020). The study raises current issues in the development of professional training of primary school teachers in the UK and Sweden, which are inextricably linked with issues of school education and education in these countries and Europe, the world as a whole. On the one hand, vocational education in the twenty-first century is variable, and universities and subordinate government agencies offer numerous ways to obtain the necessary qualifications (Unwin, 2004). Especially for those professions that, with the loss of prestige (Clark, 2020) or under the influence of other social and, in particular, demographic factors, need to respond quickly in order to fill vacancies (Musset, 2009). On the other hand, such state-initiated loyalty and versatility of professional training programs leads to the intervention of relevant factors that in some way affect the quality of professional training (Douglas, 2020). Thus, common to the UK and Sweden is the tendency to simplify the technology of in-service training for primary school teachers (Whiting et al., 2018), which is dictated by a significant reduction in staff involved in this field, a situation that coincided with the births of current primary school students and preschoolers who are still preparing

to join the school ranks (Huhtala & Vesalainen, 2017). It is planned that the discrepancy will only increase in the next five years, which is why there is an urgent need to attract specialists to vacant positions (Murray & Passy, 2014). There is a question of efficiency of the decision of a problem and its qualitative party (Brown, 2017; Drakenberg, 2001).

Sweden is the EU country with the largest share of GDP in education (6.8%), which is much higher than the EU average (4.6%). The share of total public spending on education is also very high (13.7%, while the EU average is 10.2%). The percentage of public spending on education in the period from 2013 to 2017 increased by 1.1%. It is demonstrative that Sweden spends 63.3% of this on preschool and primary education. These expenditures are the highest in the EU and almost double the EU average (European Commission, 2019). However, despite significant funding, the country's primary education system is still far from perfect (Nilsson, 2016; Norad, 2015). As for the UK and Swedish primary education systems, there is a marked dissonance in the rating of the quality of their functioning in comparison with the much more successful higher education systems, which occupy the leading positions in the world. This is an alarming signal and can be seen as a request to reform the primary school system as a whole, including the reform of the vocational training systems of primary school teachers (Sjöberg, 2019). After all, the teacher's figure is fundamental, driving the whole learning process, especially in primary school, where the authority of the teacher is the best stimulus for student activity (Smithers et al., 2013). The issue of gender inequality (the need to involve more male students in primary school training) and the rejuvenation of middle-aged teachers (Palmer et al., 2019; Keys & Withers, 2020) remains open. As of 2019, about 40% of Swedish teachers are aged 50+, and 10% of teachers are aged 60-65 (European Commission, 2019).

The issue of lifelong professional development of teachers also remains topical (McNamara et al., 2013). In particular, the semantic component of the issue (areas of professional development of working primary school teachers), resource component (range of available courses and programs, as well as the material and technical side of the issue), motivational component (incentives for self-development of primary school teachers). In addition, it is important to determine the quality of in-service training programs (Wermke, 2011).

Conclusion

Thus, the issue of professional training of primary school teachers in the United Kingdom and Sweden is complex and can be considered only as a whole, without separation from the main areas of concern and factors that affect this multi-vector process. Systemic educational reforms at the end of the last century and those initiated at the beginning of the current century are largely effective in avoiding a collapse in the labor market, i.e. preventing an acute shortage of professionals in primary school. This is achieved through the promotion of accelerated training programs and more loyal conditions for obtaining the status of a qualified teacher (in the UK) or a certificate of permission to be a primary school teacher (in Sweden). The study revealed that the basic for obtaining permits to teach any of the ways regulated by the Ministries of Education (during special specialized university training in the specialty "Primary School Teacher" or postgraduate education in abbreviated curricula) is proper mastery of primary school subjects, knowledge methods of their teaching, knowledge of age psychology of development of young schoolchildren, knowledge of the language in which education is conducted.

It has been established that the popularity of abbreviated professional training programs for primary school teachers has grown many times over the last decade. However, the scientific literature on the subject raises questions about the shortcomings of these accelerated models of vocational training. In particular, it is a question of insufficient quality of professional training of applicants for the teaching profession. Particular emphasis is placed on the lack of theoretical knowledge, low level of mastery of psychological and pedagogical disciplines, low activity of primary school teachers in participation in research activities. An option to fill the gaps in the professional training of modern primary school teachers is a compensatory path - through lifelong vocational training programs and special refresher courses. These programs are especially important for both young professionals and the older generation of primary school teachers to help some gain the necessary experience in the short term and others to adapt to new trends in the education of primary school students.

The positive features of all models of professional training in Great Britain and Sweden are considerable attention to the practical side of the implementation of professional training. Education is carried out in close cooperation with the immediate environment of future professional activity: universities enter into formal agreements with schools on close cooperation in the formation of practical skills and abilities to teach primary school subjects and interaction with students and teachers of schools in general.

Further research of models of professional training of teachers of all levels of secondary school is relevant for the invention of the most effective ideological and managerial solutions. This applies to both general scientific works and those that specialize in the systems of professional training of primary school teachers in a particular country and comparative research. The purpose of such investigations is a diagnostic function and assistance in developing theoretical and practical principles of providing schools with self-sufficient professional staff capable of teaching at a high quality level from the beginning of teaching career and throughout teaching in schools.

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