

## INDUCTION SYSTEMS OF PHYSICAL EDUCATION TEACHERS IN EUROPE

## INDUÇÕES DE PROFESSORES DE EDUCAÇÃO FÍSICA NA EUROPA

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## RESUMO

O objetivo da pesquisa foi explorar as semelhanças e diferenças dos sistemas de indução existentes para professores de educação física (EF) na Europa. Especialistas em educação de professores de educação física (PETE) de 25 países europeus compartilharam seus currículos PETE e as melhores práticas em seus sistemas de indução. Os dados foram coletados por meio de um modelo semiestruturado que informou aos especialistas a apresentação dos procedimentos e experiências de indução em seus respectivos países. Todas as apresentações e informações foram tematicamente analisadas. Os resultados afirmaram que na maioria dos países neste projeto, não há programas de indução estruturados coerentes ou sistemáticos para professores iniciantes de EF. Alguns países desenvolveram sistemas de indução, porém, na maioria dos casos, por alguns motivos, esses sistemas são relativamente assistemáticos e não estão totalmente incorporados em seu sistema educacional. Claramente, existe a necessidade de um modelo sistemático e funcional de indução para professores iniciantes de EF em muitos países. A pesquisa sobre indução pode ajudar no desenvolvimento de programas de formação de professores a criar oportunidades educativas e econômicas para professores iniciantes de EF adaptando os programas de sucesso já existentes.

**Palavras-chave:** Indução, formação de professores de educação física, estudo comparativo

## ABSTRACT

The purpose of this research was to explore the similarities and differences of existing induction systems for physical education (PE) teachers in Europe. Physical education teacher education (PETE) experts from 25 European countries shared their PETE curricula and best practices in their induction systems. Data was collected through a semi-structured template that informed the experts' presentation of the induction procedures and experiences in their respective countries. All presentations and information were thematically analyzed. Results stated that in the majority of countries in this project, there is no coherent or systematic structured induction programs for novice PE teachers. Some countries have developed induction system, however in most cases, by some reasons, those systems are relatively unsystematic and not fully embedded in their education system. Clearly, there is a need for a systematic and function model of induction for novices PE teachers in many countries. The present research on induction can help teacher education program developers to design educative, cost-effective opportunities for novice PE teachers by context adapting existing successful programs.

**Keywords:** Induction, physical education teacher education, comparative study

## Introduction

There is a broad consensus among European teacher unions that becoming a teacher should be seen as a gradual process, including initial education, the induction phase and continuing professional development. The point at which newly qualified teachers (NQTs) transfer from initial education and move into professional life is seen as crucial for further professional commitment and development and for reducing the number of teachers leaving the profession<sup>1</sup>. A coherent induction programme may well provide a link between initial teacher education, schools and in-service education, and; thus, contribute to the improvement of all subsystems of teacher education.

NQTs often feel challenged during their first months and years of teaching<sup>2,3</sup>. The transition from being a teacher student in a pre-service education program to being a NQT with full responsibility in a school, has been described as sudden and dramatic<sup>4</sup>. They can also feel isolated and overwhelmed by the new profession mainly due to a lack of support, difficult and heavy teaching load and their underdeveloped teaching skills.

Induction programmes have been reported as a necessary function of teacher development and effective practices in acculturating NQTs to their new profession<sup>5</sup>. Coherent and systematic induction programmes are seen as essential in supporting novice teachers in the first years of their careers and in retaining them in the teaching profession<sup>1</sup>.

Physical education (PE) teachers are not excluded from this process; however, the analysis of induction systems among them is still limited<sup>6</sup>. Actually, PE teachers could experience an even worse period because of specific factors related to the subject: the low status of PE in school, lack of respect given to PE by school colleagues and the social and physical isolation coming from this<sup>7,8</sup>, the lack of equipment or facilities, the personal fatigue, the management of discipline and safety concerns, and the high demanding workload in dealing with unique needs of students, especially of those with disability<sup>9,10</sup>. These issues are responsible for the high attrition rate reported among NQTs. Carre<sup>11</sup> reported 65% of newly qualified physical education teachers (NQPETs) in British Columbia were considering leaving the field in the first five years, and more recently in Finland this rate was found to be 39%<sup>12</sup>. In another study in Finland, the NQPETs attrition rate was 13% with 10% moving to another field of teaching<sup>13</sup>; in addition, in a longitudinal study, Woods and Lynn<sup>14</sup> reported that on six NQPETs examined through the first nine years of their career, only three (the half) remained in the field of PE.

The studies investigating NQPETs' induction period present differences in theoretical backgrounds and socio-cultural aspects, while a qualitative inquire perspective is the methodology mostly used. In regard to the difficulties NQPETs experience during their first years of teaching, Stroot and colleagues<sup>15</sup> described the journey of three NQPETs in the US through their first two years of teaching. They all experienced reality shock, role conflict, isolation and wash-out effect. Similarly, a case study<sup>9</sup> examined the course of the first two years of teaching of two NQPETs in the US, finding that major contributing factors of the wash-out were the low status of PE in school, facilities and equipment availability, and the teachers' desire for student motivation and enthusiasm. On the contrary, this study found that wash-out could be inhibited by receiving support from a team of teachers and being proactive in asking for help. Shoval, Erlich and Fejgin<sup>16</sup> investigating induction period among 62 NQPETs in Israel, reported five major difficulties they have to face: a high degree of dependence on others; they ignore educational circle outside the classroom due also to the physical separation of the gym from the main school building; NQPETs are highly interested in values-based education, but are frustrated because of their own inability to implement it; they are ready and willing to perform in a dedicated, flexible and innovative way, but they suffer from the environment's lack of appreciation; finally NQPETs have limited knowledge of pedagogical and practical application of what they know. These findings have also been confirmed recently by Gordon<sup>17</sup>, who identified teacher development and classroom management, procedures, and safety as major concerns among NQPETs. Moreover, a distinction between first and second year NQPETs has proposed, with the first more concerned with the self, concentrating on what to teach and how to teach, while the second showing more concern on students.

While the difficulties experienced in the induction stage have been researched quite extensively, Zach and colleagues<sup>18</sup> sought to map antecedents of success as perceived by NQPETs. Following the tenets of the Self-Determination Theory<sup>19</sup>, the core component of success was an active attitude toward teaching that led to satisfaction with NQPETs' self-competence, relatedness, and autonomy needs. Despite the recognized environment influence, individual attitude was perceived as the factor with most power to make a difference.

Literature on mentoring NQPETs, a key strategy often implemented in the induction process, reported how experienced teacher mentor can play a critical and empowering role<sup>20</sup>. Formal mentoring was shown as important in relation to the NQPETs' assimilation into the

school culture<sup>21</sup>, and Gordon<sup>22</sup> indicated that the relationship between the mentor and the NQPET progresses both at personal and working level and is beneficial for both of the parties. The main implications of the mentoring system are related to the importance of mentor training.

Findings of the literature review support the claim that induction programmes are warranted for PE teachers' professional development and different factors contribute to their effectiveness. The strategies selected should be significant for that individual, and for positive effects to occur, an understanding of school culture, school and teaching environment, and students, should be supported. In the last ten years, research on behaviour and functioning of NQPETs has increased; however, the analysis of induction systems among PE teachers is still limited to generalize results or showing strong evidence.

In light of this claim, this study sought to explore the similarities and differences of existing induction systems for PE teachers in Europe. This study intends to offer findings in the area of teacher induction because of the wide array of countries presented in Europe. It is, therefore, expected for readers to embark on finding new, more effective models of teacher induction which, as is agreed throughout the world, is a very important phase of teacher development and needs more attention than it has received so far.

## Methods

### *Context*

This study is part of an Erasmus<sup>+</sup> project titled 'Identifying best practice across physical education teacher education programmes: A European perspective' funded by the European Union. During the three-year project, the Physical Education Teacher Education (PETE) systems (initial, induction and in-service) of Erasmus<sup>+</sup> programme countries were examined. Experts from each of the programme countries were invited to present their respective initial, induction and in-service PETE systems. This study documents and explores the patterns that arise across European induction PETE programmes.

### *Participant selection*

Participant PETE experts were selected among 33 Erasmus<sup>+</sup> programme countries<sup>23</sup>. Non-probability purposive sampling was used in the selection of participants to directly reach the appropriate individuals involved in PETE. Potential invitees were identified as individuals who were involved in studying PETE practices in their respective countries. Convenience sampling was used to identify those who were easily accessible and willing to participate in a meeting<sup>24,25</sup>. Twenty-five Erasmus<sup>+</sup> programme countries (Austria, Belgium, Bulgaria, Czech Republic, Croatia, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden, Turkey and UK (Scotland & England) joined the meetings to present their PETE systems. This meetings organized between 2015-2018. All the experts signed a consent form in which they stated that the information given by them was true and could be used in a research study.

### *Data Collection*

Data was collected by asking individuals to address a list of questions in a PowerPoint template. The list of questions related to induction PETE are noted in Table 1. The questions and a template PowerPoint were emailed to invited experts at least two months before the meeting and the experts were asked to prepare an oral presentation to last for 90 minutes including a question-answer session. During the meetings oral presentations were recorded, with the permission of experts, to be transcribed to allow the researchers to categorize

responses aligned with the questions listed in Table 1. Experts were encouraged to add any additional information that may be interesting to international colleagues.

**Table 1.** Questions related to induction PETE

<p><b>Induction:</b> <i>The support and guidance provided to novice teachers and school administrators in the early stages of their careers.</i></p> <ul style="list-style-type: none"> <li>- What minimum qualifications are required to teach physical education at primary and post-primary levels?</li> <li>- Do you have information about current employment prospects for graduating physical education teachers at primary and/or post-primary levels? If yes, please provide.</li> <li>- Is there a structured induction programme for newly qualified physical education teachers at primary and/or post-primary levels?</li> </ul> <p>If yes:</p> <ul style="list-style-type: none"> <li>Who facilitates this induction?</li> <li>What are the format and requirements of such induction (e.g., duration, content, expectations of teachers, expectations of facilitators, requirements for completion)?</li> <li>Who is responsible for determining the format, content and requirements of induction?</li> <li>How are such decisions made?</li> </ul> <p>If no:</p> <ul style="list-style-type: none"> <li>How are physical education teachers inducted at primary and/or post-primary levels?</li> </ul>
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Source: Authors

### Data Analysis

Data was analyzed qualitatively, relying on the constant comparative method<sup>26</sup> by using open coding technique. Open coding involved revisiting the presentations and defining and developing categories, somewhat dependent on the questions asked to participant PETE experts. All presentations were coded and thematically analyzed by two authors. Data triangulation was completed across the recordings of the presentations, the respective question-answer sessions in the meetings and draft chapters written for a collective publication.

### Results

In this study, it was seen that while 14 of the 24 countries had compulsory induction system (Austria, Croatia, France, Germany, Greece, Ireland, Italy, Luxembourg, Macedonia, Malta, Poland, Slovenia, Spain and Turkey) (Table 2), 10 of the countries had no compulsory induction system (Belgium, Bulgaria, Czech Republic, Latvia, Lithuania, Netherland, Slovakia, Sweden and Portugal). Under the findings, countries with and without compulsory induction system will be examined.

#### *Countries with compulsory induction*

The duration, facilitation, mentoring evaluation (Table 2), format and content of the induction systems (Table 3) differentiate among countries.

As shown in Table 2, in the countries with compulsory induction, the period of induction systems shows a great diversity from 3 months to 3 years. In this study, the shortest induction system among compulsory countries is Spain with 3 months and the longest induction system is in Luxembourg with 3 years.

In most of the countries involved in this study, their compulsory induction systems are facilitated by central governments like in Poland, France and Germany; and in countries like Turkey and Croatia their central governments work collaboratively with ministries and school administrations. In Ireland and Luxembourg, Teaching Council and national education

training centres organize induction programs while in Austria and Italy school administrations play a key role on induction programs. In Spain and Greece, autonomous communities' education departments and regional training centres organize induction programs.

Among the countries, mentoring is the main type of support offered during induction. In most of the countries involved in this study (Austria, Macedonia, Spain, Italy, Malta, Turkey) mentors are experienced school-based teachers. In Ireland, professional mentors from the National Induction Programme for Teachers help school-based mentors. The experience and qualification of mentors are very different from those of the teachers they mentor. Mentors are experienced teachers often employed on a permanent basis. In many countries they become mentors as experienced teachers. In some countries, they also get special training and other forms of support to help them with their task.

In countries with compulsory induction, evaluation of induction usually ends with a state exam, which may confirm the recruitment of those concerned as teachers or enable them to register as such. This is the case in Macedonia, Luxemburg, Croatia, Germany-Bavaria, Italy, Slovenia and Turkey. This exam is prepared and organized by Ministry of Education in these countries. The exam is theoretical in Slovenia, practical (conducting a class in school supervised by commission composed by experienced university professors) in Macedonia, writing professional paper in Croatia and oral and written exam in Turkey. Alternative to the state exam, in Poland school induction teams (head of the team, mentor and head of the school) apply oral and written exams for newly qualified teachers, in Spain candidate's final report including planning, development and assessment of the teaching-learning process, participation in teaching staff and school activities, guidance and tutoring, personal assessment of the induction experience, is evaluated and in France NQT must meet the standards and competencies. In some countries like Italy and Turkey, NQTs are allowed to enter the state exam second time if they fail from the first one. Only in Luxembourg, NQTs take preliminary tests on the three official national languages and on school legislation and regulation in Luxembourg as the first step towards a career as a primary or post-primary teacher in Luxembourg. After passing this exam, teachers enter a three-year induction phase for civil servants at the National Education Training Institute.

**Table 2.** Details of countries with compulsory induction system.

Countries		
<b>Duration</b>	3 - 12 months	Austria, Ireland, Italy, Macedonia, Poland, Slovenia, Spain, Turkey
	13 - 24 months	France, Germany, Greece, Malta
	25 - 36 months	Luxembourg
<b>Facilitated by</b>	School Administration	Austria, Italy
	Ministry of Education/ Governmental Bodies	Croatia, France, Germany, Malta, Poland, Turkey
	Other professional bodies	Greece, Ireland, Luxembourg, Spain
<b>Mentor</b>	School-based teacher	Austria, Croatia, Germany, Greece, Ireland (Probation), Italy, Macedonia, Malta, Poland, Spain, Turkey
	Headmaster	Slovenia
	Other	Ireland (Droichead)
<b>Evaluation</b>	State exam	Croatia, Germany, Greece, Italy, Luxembourg, Macedonia, Slovenia, Turkey
	Final report	Spain
	Final Interview	Poland
	Evaluation	Ireland, France (required standards and competencies)

Source: Authors

In countries with compulsory induction, as seen in table 3, various kinds of activities are undertaken ranging from courses/workshops to supervised teaching practice. In addition to

courses/workshops and supervised teaching practice (Austria, Germany, Slovenia), in some countries like Croatia, Greece, Italy, Poland and Turkey, it is expected from NQT to gain experience by observing classes with the supervisor. In Ireland, Croatia and Slovenia there are alternative pathways in induction system. Only in Luxembourg induction programme for primary and post primary NQT is differentiated.

In France, induction is conducted with a Master degree (120 ECTS- European Credit Transfer System). Procedures for induction are linked with the competitive examinations that are nationally defined by the central governmental bodies. The national recruitment competition for the future PE teachers is composed of two steps, 1) The eligibility tests are two written papers (5 hours each): -Socio-historical and epistemological foundations of PE, Teaching and learning processes in PE in a situated context; 2) The admission tests consisting of 2 oral tests and 3 sport performances: presenting a PE lesson in a situated context defined by the video of the previous lesson and various documents about the school, the students, and the pedagogical project, presenting learning settings adapted to student's activity in a simulated context related to a physical activity that is one of the PE subjects of the national curriculum, assessment of applicant's sport performance in 3 sport activities. At the end of the second-year pre-service teachers as civil servants, after validating the master, have to pass the final induction to be confirmed. The induction process is characterized by evaluation and pedagogical visits by inspectors and teacher educators. An inductive commission comprising inspectors, teacher educators and some cooperative teachers from the schools confirm that the pre-service teacher can pursue her/his career. Exceptionally, some of the pre-service teachers may not pass the induction, but they are offered a second year of internship to get the final teacher certification.

In Turkey, during the induction process, which lasts approximately for 24 weeks, the educational durations that will be provided for the pre-service teachers are determined as 384 hours of intra-classroom and intra-school, 90 hours extra-curricular activities, 168 hours in-service training activities, which make a total of 642 hours.

In Spain, if the candidate passes the probation programme, he or she gets a permanent position in the Spanish public school system. Nevertheless, an OECD report<sup>27</sup> stated that "The practical stage in the selection system is entirely formal: no one ever 'fails' this third and final stage of the process", which gives an insight of the insubstantiality of this probation. According to Egido<sup>28</sup>, it would be necessary to reformulate its entire organization.

In Greece, as it happens worldwide, beginning PE teachers are facing significant personal and organizational challenges, concerning their professional support and assimilation into the field. The recent economic and financial crisis has adversely affected PE teacher induction, since new teacher hiring has frozen and mentoring processes for novice professionals have been cut<sup>29</sup>.

**Table 3.** Format of the systems in countries with compulsory induction

Format	Countries
Supervised teaching practice	Macedonia
Workshops/Courses + Supervised teaching practice	Austria, Germany, Ireland, Luxembourg, Malta, Spain
Workshops/Courses *Observation *Supervised teaching practice	Greece, Italy, Slovenia, Turkey
Observation + Supervised teaching practice	Croatia, Poland
Master programme	France
Online training and personal study	Italy
Filling measurement and evaluation forms	Turkey

Source: Authors

### *Countries with non-compulsory induction*

There is no compulsory induction system in countries like Bulgaria, Norway, Slovakia, Latvia, Belgium, Czech Republic, Netherlands, Sweden, Portugal and Lithuania. Although induction is non-compulsory in these countries, in some countries attending induction system is voluntary (Norway) while in some other countries a programme is conducted (Latvia, Netherlands). In Norway, without any formal requirements or evaluation of NQTs, novice PE teachers seem to hold a great deal of autonomy over their professional learning journey. Lithuanian teachers are not obliged to have continuing training, but they are encouraged to improve their professional qualifications, which in turn are related to their salary. Latvian lower secondary teachers reported limited support mechanisms for new teachers, with low levels of participation in induction and mentoring programmes in 2013<sup>30</sup>.

Duration of induction years may vary in different countries like 1 year in Slovakia, 3 years in Latvia and 1 year in Czech Republic (3 months probationary period). In Slovakia and Czech Republic induction programmes are facilitated by school administrations while in Portugal it is facilitated by Ministry of Education. Of the majority of the countries with non-compulsory induction system (Bulgaria, Norway, Belgium, Czech Republic and Portugal) NQTs are mentored by experienced school-based teachers. In Belgium, induction strategies consisted of a model whereby senior teachers assisted junior teachers in their professional development through, for example, observing lessons and the provision of feedback, sharing of knowledge, and organizing team teaching. However, financial support for induction was cancelled by the Flemish government due to budgetary restrictions. Especially in primary schools, PE teachers suffer from professional isolation and induction strategies remain informal or absent (Department of Education and Training based on data from the Teaching and Learning International Survey<sup>31</sup>). As these countries have no formal and structured induction systems, NQTs have no formal evaluation.

## **Discussion**

Findings indicate that there is a range of different compulsory induction programmes with a wide range of period across EU countries. The duration, facilitation, mentoring, evaluation, format and content of the induction systems differentiate among countries. In countries with non-compulsory induction, there is no structured induction programme and the induction phase is mostly limited to mentoring, but countries like Belgium, Czech Republic, Latvia and Netherland expressed this issue as a major concern and widely discussed and indicated the importance of a more formal and structured induction program for NQPETs for future. Christensen<sup>32</sup> investigated NQPETs' difficulties of two Australian NQPETs about the environment in a PE teacher staffroom to report on informal induction. One participant reported sense of frustration, lack of cohesion, feeling of discomfort and intimidation by the experienced PE teachers. On the contrary, the second participant felt well supported, recognized a cohesive relationship with the staff, reporting to play basketball all together during the week. The findings highlighted the importance of the complex interactions in the staffroom in the provision of informal induction, but this should not be a substitute for formal induction programmes.

In countries with compulsory education, evaluation of induction programmes usually ends with a state exam (Macedonia, Luxemburg, Croatia, Germany-Bavaria, Italy, Slovenia and Turkey). According to results of this exam, in most of the countries NQPETs are fully employed. Not surprisingly, countries with non-compulsory induction have no evaluation or inspection system. In most cases experienced school-based teachers (mentor) and school principal decide about NQPET's contract for the next year. This might cause disparity among schools in a country with non-compulsory induction system.

Another issue significant to the induction system is mentoring system. No matter countries with or without compulsory induction program, there is a mentoring system in most of the EU countries. As it is stated in literature on mentoring NQPETs, the notion that experienced teacher mentor can play a critical and empowering role in NQPETs is clear. McCaughtry and colleagues<sup>20</sup> carried out a longitudinal 2-year study investigating outcomes of a reform-based mentoring programme involving 15 experienced teachers and 15 NQPETs in the US, with the aim of understanding how mentors and protégés experience the mentoring process. Differences from pre- to post- were investigated by means of questionnaires. The mentoring programme resulted in a large increase in NQPETs' views of the mentoring relationship and in the mentors' self-competence. The importance of formal mentoring was showed also in relation to the NQPETs' assimilation into the school culture<sup>21</sup>: sympathetic listening and offering reassurance are two essential tasks that mentors can fulfil. Moreover, the authors suggested that for the best outcomes, mentors should be aligned in the same discipline as their protégés. With the purpose to examine first year PE teachers' perceptions of levels of support provided by their mentors in US, Rikard and Banville<sup>33</sup> found only 9 of 20 participants (45%) served well by their mentors and 11 (55%) not served. Opposite to underserved and not served, the NQPETs well served reported high activity of their mentors, quality feedback, planning time and co-teaching opportunities as characteristics of effective mentoring. More recently, in order to identify how NQPETs perceived their mentoring in their induction year, 5 participants were involved in a case study in the US<sup>34</sup>. NQPETs reported needing a mentor who could help them with both the policies/procedures of the school and the content planning, class management, and their teaching practice; reported also needing an inclusive induction and mentoring process where they can play an active/reciprocal part. Moreover, NQPETs who self-selected a mentor found that the association led to a more collaborative relationship. On the other hand, the participants reported that opportunity for professional development was dependent largely on funding issues and stated that attended mainly workshops not relevant for their subject.

In this study, it is evident that NQPETs need high-quality on-site support from an expert mentor in PE field during their first years of teaching. However, majority of the countries didn't give an importance of choosing and training high quality mentors to facilitate NQPETs in their system. In a study, Gordon<sup>22</sup> applied the lens of relational mentoring<sup>35</sup> to study a dyad, a NQPET and his mentor, during the first-year mentoring process to deeply focus at both the individuals involved in the mentoring relationship. Results indicated that the relationship progressed both at a personal and at working level and was recognized as beneficial from both the parties involved. The main implication was related to the importance of mentor training: if the mentors are able to build respectful working relationship as well as meaningful, cohesive personal relationship, NQPETs are more confident in their teaching abilities and are more likely stay in the profession.

Positive emotional and social support from administration, faculty and students were seen to impact NQPETs experience<sup>36</sup>. The support is reported as a key variable in the perception of the quality of the induction programme in which a PE teacher is involved<sup>37</sup>. This claim is also supported by Banville and Rikard<sup>38</sup>, who examined five successful induction programmes in the US by using factors identified by Ingersoll and Smith<sup>39</sup> and the New Teacher Center<sup>40</sup>. Authors recommended that, due to specific circumstances (i.e. large class size, equipment, extracurricular duties), NQPETs need multiple sources of high-quality support during their first years of teaching. Key aspects for a positive, effective and sustainable teaching development were reported to be: on-site support from an expert mentor in PE field, participation in seminars and workshops, being part of a network, and being responsible for personal teaching. Also, the PE department was found to be a positive influence as a learning community for two NQPETs in the United Kingdom<sup>41</sup>. More recently,

this idea was supported by a case study in the US<sup>42</sup> in which a middle school NQPET rated the informal mentoring and support received from colleagues as more beneficial than the state-required formal mentoring program (including a formal mentor). An induction process restricted to simple “hierarchical apprenticeship” could serve only to replicate the past<sup>43</sup>, strengthening the notion that NQPETs have limited influence on current practice in schools. Ensign and Woods<sup>44</sup> summarized key aspects on the three levels of professional development identified by Vonk<sup>45</sup>. Aspects on personal, professional, and environmental dimensions were reviewed as essential imperatives to be addressed to help NQPETs.

## Conclusion

As a conclusion, there is no single model of effective induction policy and the induction programmes of PETE in EU countries show a great diversity. Comparing the induction systems across EU countries might inform policy makers and induction providers on how to improve the quality of the induction programmes for NQPETs. It is expected that this study will make a contribution to develop a network across Europe to share and discuss about the best practices for the future.

Based on the results of this research it is evident that majority of the countries in this study didn't pay importance to choosing and training high quality mentors to facilitate NQPETs in their system. It is expected that a mentor should have effective mentoring skills and should regularly update their content and pedagogical content knowledge in PE. Therefore, it could be recommended that special attention should be given to the selection and training of a quality mentor.

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