

## **Supervised Teaching Practice in Initial Teacher Education of Early Childhood Teachers in Portugal**

<b>Paulo Viana<sup>1)</sup></b>	<b>Marta Abelha</b>	<b>Helena Inês</b>	<b>Patrícia Gramaxo</b>	<b>Filipa Seabra</b>
Universidade Aberta	Universidade de Coimbra	Universidade Aberta	Universidade Aberta	Universidade Aberta

### **Abstract**

Supervised teaching practice (STP) is a fundamental stage of initial teacher education, including preschool educators and teachers of the first cycle of basic education (1<sup>st</sup> CBE), which impacts their future practices. Our objectives were: a) to characterize STP in the curricula of degrees habilitating teachers for preschool education and teaching of the 1<sup>st</sup> CBE; b) to gather indicators about the process of STP implemented by the same cycles of studies; and c) to describe the improvement recommendations by the Agency for Evaluation and Accreditation of Higher Education (A3ES) to the same cycles of studies, concerning STP. The study was based on the documentary analysis of the plans of study, and A3ES reports on the initial teacher education programs preparing preschool educators and teachers of the 1<sup>st</sup> CBE of public higher education institutions (HEI) in Portugal, available during the academic year of 2020/2021. The results point to discrepancies in the definition of contact hours and the number of hours dedicated to supervised teaching practice across HEI. The recommendations for improvement by the A3ES about STP encompass cooperating teachers, the accompaniment by the HEI, and the conditions of reception at the cooperating schools.

**Keywords:** teacher education, teacher supervision, practicums, early childhood education

---

Corresponding author, <sup>1)</sup> paulviana@gmail.com

## Introduction

Effective teachers during the initial years of a child's education are fundamental to setting the foundations for successful development in academic achievement and social and emotional dimensions (NHCID, 2003; Hamre et al., 2014). Effective teachers must possess a variety of non-academic attributes, but also a “finely tuned skill sets that allow them to respond to classroom dilemmas”(Lindstrom et al., 2021, p. 23). Teacher candidates experience of supervision in clinical contexts, where the roles of PreK-12 schools and universities converge, is essential to developing that skill set (Burns et al., 2020). Acknowledging childhood education as crucial, teacher preparation for early childhood teachers should also be a primary concern. Associations, such as the National (USA) Association for early childhood professional preparation, include reflective, collaborative learning with experienced professionals as part of their standards: “Even as beginning teachers, early childhood candidates demonstrate involvement in collaborative learning communities with other candidates, higher education faculty, and experienced early childhood practitioners” (NAEYC, 2009, p. 20). The practicum is a complex experience that consists of “classroom-based opportunities carried out under the supervision of a lead classroom teacher (i.e., cooperating teacher) provides opportunities for teacher candidates to develop “experiential understanding” of children's learning and appropriate teaching strategies under the mentoring of a cooperating teacher” (Paro et al., 2018, p. 366). The practicum or supervised teacher practice (STP) is widely recognized as an essential element of teacher education (Ellis et al., 2020; Hoffman et al., 2015; Paro et al., 2018). Thus, we were interested in studying the programs developed in Portuguese public Higher Education Institutions (HEI) to habilitate teachers for early childhood education (including childhood educators who teach preschool children aged three to six years and the first cycle of education teachers (1<sup>st</sup>CBE) who teach children aged six to ten years), focusing primarily on the STP they include, by legal mandate (Law-Decree no. 79/2014). Currently, teacher education is under scrutiny and may soon be revised, as Portuguese teachers are an increasingly aged professional group. Many are reaching retirement age, leading to a shortage of qualified teachers in some areas of the country. This increases the relevance of studying teacher education and STP as a particularly relevant element to ensure its quality.

Although supervised teacher practice is a wide and active field of research worldwide, and its relevance to teacher education is well-established (Paro et al., 2018; Sumrall et al., 2017), to the best of our knowledge, a study of all the Portuguese degrees that educate prospective teachers, from a curricular standpoint, and looking specifically into the time dedicated to STP in those degrees has not been done before.

In response to this scenario, our study aimed: a) to characterize the STP included in the curricula of degrees habilitating teachers for Preschool Education and 1st CBE; b) to gather indicators about the STP process in the curricula of degrees under study, and c) to analyze the recommendations of the Agency for Evaluation and Accreditation of Higher Education (A3ES) for improvement the degrees under analysis in what concerns STP.

We conducted a qualitative study analyzing the curricular plans of Portuguese degrees habilitating teachers for the education levels under analysis from public HEI and the year 2020/2021. Analyzing reports by the A3ES about the same degrees was a complementary procedure.

Next, we will present a brief contextualization of STP and its place in teacher education in Portugal after the Bologna process.

## **Literature Review**

### **The Bologna Process and its implications for initial teacher education in Portugal**

The Bologna Declaration, signed by several European countries (including Portugal) in 1999, aimed at creating a European Higher Education Space. The Bologna Process (BP) promoted a generalized harmonization of European higher education structures. This included a similar basis at HEI's structural and organizational levels, offering comparable education programs and conferring diplomas of equivalent professional and academic value (European Ministers of Education, 1999). This justified the adoption of a European system of curricular credits based on students' work hours – the ECTS (European Credit Transfer and Accumulation System). This has led to greater transparency, making learning outcomes' academic equivalence across institutions clearer.

The ECTS expresses the number of total work hours necessary for the student to successfully conclude a curricular unit, encompassing not only contact hours but also all the time spent developing autonomous work by the student. A curricular unit is a “teaching unit with specific training objectives, which is the object of administrative enrollment and evaluation, translated into a final classification” (Law-Decree No 42/2005, 2005, art. 3, section a). Contact hours are “the time spent in collective teaching sessions, namely in classrooms, laboratories or fieldwork, and in personal guiding sessions of tutorial nature” (Law-Decree No 42/2005, 2005, art. 3, section e).

It is estimated that one ECTS corresponds to 25 to 28 work hours by the student. The number of ECTS to be attributed to each curricular unit is determined through the following principles: i) work is measured in terms of estimated work hours by the student; ii) the number of work hours to be considered includes all the hours predicted, including study time; iii) the number of credits corresponding to one academic year is 60, which means a full-time student should dedicate between 1500 and 1680 work hours to complete an academic year successfully.

In Portugal, the implementation of the BP began in 2005, with the publication of the principles regulating the European Higher Education Space and the introduction of changes to the Law of Basis of the Educational System (Law No. 49/2005, 2005). The main alterations affected the redefinition of the objectives of HE and the specification of guidelines for its two subsystems (university and polytechnic), as well as the principles and conditions of access to a higher education cycle of studies. The requirements for initial teacher education (ITE) and the formative paradigm – a shift of focus from teaching to learning – were also relevant changes introduced by the Bologna Process (Sousa-Pereira & Leite, 2018).

Concentrating on ITE, the Bologna Process transformed initial teacher training by transitioning from a system based on transmitting knowledge to a system based on competence development (Cabral, 2019).

The creation of a European HE area, by “defining the recognition of degrees obtained in different European countries and the compatibility of HE systems, as well as the possibility of transferring students within that space, has pushed the country [Portugal] to the creation of systems that would guarantee the quality of the programs and therefore, their evaluation” (Guerra & Leite, 2022, p. 349). In that line of thought, in 2007, Law-Decree No. 369/2007

created the Agency for Evaluation and Accreditation of Higher Education (A3ES) to ensure the quality of HE in Portugal by implementing the evaluation and accreditation of cycles of study and HEI. This agency is currently responsible for analyzing the fulfillment of what is legally stipulated for ITE degrees (Law-Decree no. 22/2014, 2014; Law-Decree No. 43/2007, 2007) and evaluating the quality of their functioning. ITE is governed by the same demands in all public and private HEI, which the A3ES supervises.

As Mouraz, Leite, and Fernandes (Mouraz et al., 2012, p. 192) recognize, the Bologna Process was at the roots of new teacher education policies in Portugal. Firstly, ITE programs had to be restructured to respect the cycles of studies determined by Bologna (the first cycle corresponding to a bachelor's degree lasting three or four years, and the second cycle corresponding to a master's degree and lasting one and a half or two years), which faced HEI with new challenges and called for changes in the qualification of teachers, namely requiring them to obtain a master's degree to access the profession,

which demonstrates the effort to elevate the qualification level of the teaching body, aiming at reinforcing the quality of its preparation and the valuing of their socio-professional status (Law-Decree No. 43/2007, foreword).

However, “although teacher education now corresponds to a masters’ level, we cannot conclude that the time dedicated to the pedagogical and didactic training and contact with professional situations has increased” (Mouraz et al., 2012, p. 192). The evolution of these requirements is expressed in Table 1, below.

Table 1. *Required teacher education in Portugal, before and after the Bologna Process.*

Before the Bologna Process	A 4-year degree was mandatory for teacher education (Law number 115/97, of September 19 <sup>th</sup> ).
After the Bologna Process (Law-Decree no. 43/2007, of February 22 <sup>nd</sup> )	A 3-year undergraduate degree in Basic Education (180 European Credit System Units, ECTS) complemented by a master's degree ranging from 60 to 90 ECTS was required for early childhood educators.
Law-Decree no. 79/2014, of May 14 <sup>th</sup>	A 3-year undergraduate degree in Basic Education (180 ECTS) is still required. The mandatory masters’ degrees now range between 90 to 120 ECTS.

### **Early childhood teacher education in Portugal: an ongoing story**

Currently, the training of early childhood teachers is guided by Law-Decree no. 79/2014, which organizes initial training in two cycles of study: the first, with the duration of three years, the bachelor's degree in basic education, and the second cycle, a master's degree, which has several options, including preschool education and teaching of the 1st CBE (2 years). According to that law, the different initial teacher education programs include the following areas: teaching, general education, specific didactics, cultural, social, and ethical area, and introduction to professional practice (IPP). Integrated within the scope of the curricular units of other domains, the following dimensions are also included: cultural, social, and ethical training and educational research methodologies. This compartmentalization conflicts with the holistic character of learning in early childhood education.

Several criticisms have been pointed out to this normative (Folque, 2018):

- the overvaluation of the teaching area, namely in the domains of Mathematics and the Portuguese language;
- the residual percentage (13%) defined for the general education area, which includes psychology, school administration, curriculum management, and work with students with special educational needs;
- specific didactics being guided by disciplinary contents, disregarding pedagogy;
- STP in initial teacher education is mainly at the end of the training program, which induces a sequential logic, from theory to practice (Idem), instead of an integrated training logic.

Even in the first cycle of studies in Basic Education, a minimum of 15 ECTS must be dedicated to IPP (introduction to pedagogic practice) – evidencing some concern with the contact of prospective teachers with their professional contexts. We also note that, in the second cycle of studies (master's degree), there is a higher investment in Supervised Teaching Practice (STP), requiring a minimum of 48 ECTS.

However, the preparation for the teaching exercise occurs late in the program, hindering conditions to ensure socialization into the teaching profession (Leite & Sousa-Pereira, 2022, p. 5). Craveiro (2016) suggests that STP should occur in all ITE programs that provide

professional qualifications for teaching in early childhood education. A gap between theory and pedagogical practice remains in initial teacher education (Mark et al., 2020). This view is shared by students who mentioned a mismatch between the initial education received and the institutional and social demands attributed to schools and teachers (Jesus, 2019). It is, therefore, essential to promote opportunities for STP beginning in the early years of training (Brown et al., 2017). It is fundamental to create conditions for contact with real professional situations, particularly the planning of classes, construction of evaluation procedures and elements, preparation of activities related to the school educational project, contact with families and other stakeholders, and collaborative work in defining responses to students with learning difficulties and disabilities. The articulation between schools and HEI rests on the shoulders of supervisors and cooperating teachers (Cabral de Oliveira et al., 2019). Paro et al. (2018, p. 365) stress the relevance of the role of the cooperating teacher when they consider that “The relationship between the cooperating teacher and teacher candidate can be viewed as a central element in the experience”.

In addition to the curricular plan, the profile of teacher educators is essential to ensure the quality of teacher education. Indeed, “students’ learning is more influenced by who is teaching them than by the content being taught” (Furlong et al., 2000, in Leite & Sousa-Pereira, 2022, p. 3). Considering that supervision affects the quality of training (Winaryati et al., 2020), adequate academic and professional profiles are necessary for teacher educators. In this sense, training is intended to be scientific and social to promote learning how to act in the diversity and complexity of real situations. As such, in this comprehensive and broad sense of training, the importance of supervised professional experiences supported by dynamics of individual and shared reflection is recognized. This education praxis will contribute to preparing teachers in training to prepare for the challenges of schools, to gain confidence (Wee et al., 2014), to make curricular decisions, build their professional identities, and integrate professional communities oriented toward continuous pedagogical and didactic improvement (Leite & Sousa-Pereira, 2022).

Concerns with the quality of education have gained centrality, in a globalized world, mainly in HE, and after the creation of the European Higher Education Area (2010), which boosted the need to demonstrate the good management of public funds, as well as the scientific and social recognition of institutions (Guerra & Leite, 2022, p. 349). This concern

with quality is anchored in training teachers who reflect, collaborate, and research, making them agents of change, also in early childhood education (Cabral, 2019; Figueiredo, 2020).

However, we note that teacher training does not end with a degree. Professional identity is built throughout the professional life (European Education and Culture Executive Agency (European Commission), 2020).

## Method

**Research site:** The study took place in Portugal, considering the scope of all initial teacher education courses that prepare teachers for early childhood education in that country. The choice of this context was due to the researchers' origin and place of work, leading to a specific concern with the Portuguese reality, as well as to the current interest in the country in question about changing initial teacher education.

The study is based on documentary analysis (Mayring, 2014) of public documents and has a descriptive nature (Creswell, 2002, 2013).

The documents under analysis are curricular plans and reports from the A3ES. The curricular plans refer to study plans that prepare and habilitate prospective teachers for early childhood education (Preschool and 1<sup>st</sup> CBE), taught by public HEI in Portugal. The plans were gathered in the curricular year 2020/2021 – therefore, some may have been altered since. Twenty plans of bachelor's programs in Basic Education and seventeen curricular plans of master's programs in Preschool Education and 1<sup>st</sup> CBE teaching were gathered – these are all the plans available at the time of data gathering and therefore represent the universe of programs preparing teachers for these two levels of education, simultaneously.

The A3ES reports pertaining to the same higher education programs were also analyzed. These correspond to the evaluation years 2014 and 2020. These reports evaluate the degree of implementation of norms, certify the internal systems of quality assurance of HEI in Portugal, and culminate in recommendations for improvement. Thus, they present an external perspective on the programs under analysis, allowing for data triangulation (Stake, 2010). The following reports were analyzed: 16 reports of preliminary evaluation/accreditation of new cycles of study; 2 reports from the External Evaluation Committee of functioning cycles



of study; 7 deliberations of the Council of Administration on the evaluation of functioning cycles of study; 2 special requests for renewal of accreditation of cycles of study and 18 reports of accreditation of functioning cycles of study.

The choice of these sources of information was determined by how they may assist the researchers in answering their research questions. Objectives a) and b) relate to the curricula of degrees habilitating teachers for Preschool Education and 1st CBE, whereas objective c) is specifically linked to the recommendations of the Agency for Evaluation and Accreditation of Higher Education (A3ES) for improvement the degrees under analysis in what concerns STP.

Concerning the analysis of curricular plans, the categories of analysis were deductive (Bardin, 2014), derived from the legislation concerning initial teacher education in Portugal (Law-Decree no 79/2014), which defines the presence of STP teacher training plans. Based on Law-Decree no 107/2008, we sub-categorized the types of work hours expected from the students. The analysis of the A3ES documents was inductive, and categories were related to

Table 2. *Categorisation Scheme*

Categories	Subcategories
Types of supervised teaching present in bachelor's degrees' curricular plans And Types of supervised teaching practice present in master's degrees' curricular plans	Theoretical-practical classes Fieldwork Internship Laboratorial sessions Seminars Supervision
ECTS attributed to STP	General educational area Specific didactics Initiation to Teaching Practice or Supervised Teaching Practice Field of teaching
Hours dedicated to STP	Number of hours
A3ES recommendations	Curricular plans Teaching staff Cooperating teachers (at the schools) Students' accompaniment Research and publication Monitoring instruments Infrastructures Percentage of conclusion

our research objectives. Table 2 represents the categorization scheme used.

Since STP was the focus of our research, when analyzing curricular plans, we looked at the curricular areas where it could be implemented: in the case of the bachelor's degrees – initiation to pedagogical practice (IPP), and in the case of masters' degrees – supervised teaching practice (STP). One university did not categorize the curricular areas of their programs according to this terminology (University of Aveiro) – for that university, the areas more directly related to STP, and where STP was included were didactics and educational technology in case of the bachelor's degree and teaching in the Masters' degree. Therefore, we considered those curricular areas equivalent to IPP and STP.

## Results

We will present results organized according to our research objectives.

### **Characterizing the practice of STP in the curricula of programs that prepare and habilitate teachers for early childhood education**

The first level of analysis was focused on the number of work hours each HEI allocates to STP in both cycles of studies (Bachelor's degree and master's degree).

The average number of hours allocated to the subjects related to IPP in the bachelor's degrees under analysis was 468 hours ( $SD = 114$ ). In the master's degrees under analysis, the average number of work hours dedicated to STP was 1399 ( $SD = 172$ ).

These data evidence that the investment in STP is predominant in second cycle degrees and that there are expressive differences among programs, as is clear in the high standard deviations.

The bachelor's degree from the University of Aveiro attributes 918 work hours to curricular units under the scientific area related to IPP, which is far above the average. We should note, however, that because this university used a different way of organizing curricular units into scientific areas, the area most directly related to IPP – didactics and educational technology – includes a broader range of curricular units, not all of which are

practical in nature. The remaining degrees attribute a number of work hours to STP, which is close to the national average.

Concerning the second cycle of studies, the Polytechnic Institute (P. I.) of Coimbra stands out by having the highest number of hours attributed to STP in the master's program HEI offers (over 2000 work hours) (Table 2).

Table 2. *Total Number of Hours and ECTS Dedicated to IPP/STP Curricular Units by Institution and Cycle of Studies*

HEI	Work hours		ECTS		Total %
	1 <sup>st</sup> Cycle	2 <sup>nd</sup> Cycle	1 <sup>st</sup> Cycle	2 <sup>nd</sup> Cycle	
University of Açores	448	1 344	16	48	21,3%
University of Aveiro	918	1 296	34	48	34,2%
University of Algarve	420	-*	15	-*	8,3%
Polytechnic Institute of Beja	425	1 250	17	50	22,3%
Polytechnic Institute of Bragança	432	1 350	16	50	22%
Polytechnic Institute of Castelo Branco	432	1 350	16	50	22%
Polytechnic Institute of Coimbra	420	2 016	15	72	29%
University of Évora	390	1 248	15	48	21%
Polytechnic Institute of Guarda	432	1 431	16	53	23%
Polytechnic Institute of Leiria	432	1 392	16	50	22%
Polytechnic Institute of Lisboa	388	-*	15,5	-*	8,6%
University of Madeira	504	1 400	18	50	22,6%
University of Minho	420	1 400	15	50	21,6%
Polytechnic Institute of Portalegre	400	-*	16	-*	8,9%
Polytechnic Institute of Porto	440	1 391	16	51,5	22,5%
Polytechnic Institute of Santarém	432	1 350	16	50	22%
Polytechnic Institute of Setúbal	513	1 323	19	49	22,6%
University of Trás-os-Montes and Alto Douro	486	1 296	18	48	22%
Polytechnic Institute of Viana do Castelo	486	1 485	18	55	24,3%
Polytechnic Institute of Viseu	542	1 458	20	54	24,6%
Average	468	1 399	17,37	51,56	
Standard Deviation	114	172	4,2	5,7	

-\* - These institutions did not offer, at the time, a master's program in preschool education and teaching

Considering the sum of the number of work hours of IPP and STP in both cycles of studies (Bachelor's and master's degrees), the University of Évora shows the lowest number of hours dedicated to STP.

Since the number of ECTS is closely linked to the number of work hours, unsurprisingly, the distribution of this indicator is similar. The Law-Decree no. 79/2014 indicates a minimum of 14 ECTS attributed to IPP in bachelor's programs and a minimum of 48 ECTS dedicated to STP in masters' degrees. All the programs analyzed followed those guidelines. In fact, most exceeded them, as the average number of ECTS is higher than the minimum number determined by law.

The data also reveal that students who frequent both the bachelor's degree in basic education and the master's degree in preschool education and teaching of the 1st CBE at the same HEI will dedicate at least 21% of their whole workload, as calculated in terms of ECTS, to STP.

### **Indicators about the process of STP in the degrees under study**

Besides the number of hours and ECTS attributed to STP and IPP, it is important to characterize the distribution of those hours by types of contact hours to look deeper into the amount of time dedicated to effective contact with the schools and supervision (Table 3).

Curricular units distribute their total workload in terms of: a) autonomous work, characterized as a time of study and research the student should dedicate to the themes of this curricular unit; b) fieldwork, which seems to be considered equivalent to internship, since HEI tend to classify their work hours as one or the other, alternatively; c) internship – moments effectively spent at the schools; d) laboratory work, characterized as didactic approaches to develop and reflect about the contents to be developed in the future work contexts; e) theoretical-practical lessons, typically configured as classroom activities at the HEI; f) supervision hours, dedicated to providing support, accompaniment, clarification, and evaluations of the teachers in training; and g) seminar hours, dedicated to lectures and moments of scientific dissemination.

We begin by analyzing the data relative to the bachelor's degree (1<sup>st</sup> cycle of studies), as reported in table 3. Concerning autonomous work, there are vast discrepancies, ranging from

# Supervised Teaching Practice in Initial Teacher Education of Early Childhood Teachers in Portugal

Table 3. *Type of Work Hours, per HEI, in Bachelor's Degrees in Basic Education Curricula*

HEI	Aut. W	Field	Intern	Lab	Th-P	Tut	Sem	School	HEI
U. Açores	133	75	0	0	150	90	0	165	150
U. Aveiro	403	131	0	10	162	120	92	251	264
U. Algarve	219	120	0	6	0	15	60	135	66
P. I. Beja	185	0	175	0	0	65	0	240	0
P. I. Bragança	243	87	0	0	39	36	27	123	66
P. I. Castelo Branco	124	0	240	0	0	8	60	248	60
P. I. Coimbra	43	0	160	0	155	62	0	222	155
U. Évora	180	140	0	0	55	15	0	155	55
P. I. Guarda	222	0	150	30	0	30	0	180	30
P. I. Leiria	262	0	0	60	83	28	0	28	143
P. I. Lisboa	117	43	145	0	43	26	14	214	57
U. Madeira	246	0	60	45	180	18	0	78	225
U. Minho	240	30	0	30	120	0	0	30	150
P. I. Portalegre	200	0	80	0	0	25	50	95	50
P. I. Porto	230	0	130	0	80	0	0	130	80
P. I. Santarém	80	0	200	0	144	8	0	208	144
P. I. Setúbal	286	0	54	0	65	66	42	120	107
U. Trás-os-Montes and Alto Douro	288	75	0	0	105	18	0	93	105
P. I. Viana do Castelo	294	0	0	0	192	0	0	0	192
P. I. Viseu	265	0	158	0	30	0	90	158	120

P. I. – Polytechnic institute. Aut. W – autonomous work; Field– fieldwork; Intern – internship; Lab – laboratory work; Th-P – theoretical-practical classes; Tut – tutorial guidance; Sem – seminars.

School – Fieldwork, internship, and tutoring guidance, combined, representing activities likely developed at the cooperating schools.

HEI – Laboratory work, theoretical-practical classes, and seminars combined, representing activities likely held at higher education institutions.

43 hours at the Polytechnic Institute of Coimbra to over 400 hours at the University of Aveiro. Concerning internship or fieldwork hours, the Polytechnic Institute of Castelo Branco takes the lead, with 240 hours, far above the average of 112 hours.

Few HEI include laboratory work hours among the activities they promote. The Polytechnic Institute of Leiria is where more hours are dedicated to this component (60).

Theoretical-practical classes are quite relevant among the 1<sup>st</sup> Cycle of Studies activities, taking up an average of 80 hours. However, some institutions do not attribute any IPP hours

to activities of that nature. The Polytechnic Institute of Viana do Castelo dedicates the largest number of hours to this component – 192; that means the entirety of IPP curricular units at the bachelor's degree of this institution are classified as independent work and theoretical-practical classes.

Supervision hours are present in most of the curricula analyzed, with the exception of the University of Minho, the Polytechnic Institutes of Porto, Viana do Castelo and Viseu. The University of Aveiro dedicates 120 hours to these activities.

Whereas most HEI do not attribute any work hours to seminar activities within IPP curricular units, the University of Aveiro and the Polytechnic Institute of Viseu allocate over 90 hours to such activities.

Overall, there seems to be no pattern in how the mandatory ECTS dedicated to IPP and STP practices are translated in terms of the number of contact hours, or types of activities developed. Also, different interpretations of what constitutes each type of contact hours may exist. Fieldwork and internship hours seem to be interpreted by many HEI as the same thing – only one HEI includes both types of contact hours in the curricular units related to introduction to pedagogical practice, and one includes no contact hours in either category. In most cases, either one or the other category is present. To simplify the interpretation of these data, we created a new variable called hours in the school context, and hours in an academic context. The number of hours in the school context is the sum of contact hours dedicated to fieldwork, internship, and tutorial guidance. It intends to be an indicator of the number of hours probably spent at the cooperating schools, interacting with children, cooperating teachers, and colleagues, and, therefore, the actual STP activities. On the other hand, the number of contact hours in the academic context is the sum of hours allocated to theoretical-practical classes, laboratory practices, and seminars, which should be an indicator of the number of hours preparing for the presence at the schools, likely at the HEI institution. The number of hours in the school context may be a closer proxy to indicate the weight of supervised teaching practice in teacher education programs.

The analysis of these indicators further highlights the discrepancies among cycles of studies that range from attributing 0 contact hours to types of activities likely conducted in the school context and 251 hours.

We will now present data about the second cycle of studies (master's programs) (Table 4).

Autonomous work ranges between 502, and 1350 hours, with an average of 758 hours. Unlike what happened with the bachelor's programs, no HEI lists fieldwork or laboratory work as activities among STP curricular units.

Table 4. *Type of STP Work Hours, per HEI, in Masters' Programs in Preschool Education and Teaching of the 1<sup>st</sup> CBE, per Institution*

HEI	Aut. W	Field	Intern	Lab	Th-P	Tut	Sem	School	HEI
U. Açores	707	0	460	0	30	57	90	<b>517</b>	120
U. Aveiro	596	0	540	0	0	40	120	<b>580</b>	120
P. I. Beja	590	0	605	0	0	55	0	<b>660</b>	0
P. I. Bragança	1350	0	420	0	0	126	54	<b>546</b>	54
P. I. Castelo Branco	681	0	575	0	15	29	50	<b>604</b>	65
P. I. Coimbra	936	0	600	0	0	0	480	<b>600</b>	480
U. Évora	522	0	588	0	0	18	120	<b>606</b>	120
P. I. Guarda	711	0	570	0	45	105	0	<b>675</b>	45
P. I. Leiria	502	0	708	0	0	60	122	<b>768</b>	122
U. Madeira	790	0	360	0	0	190	60	<b>550</b>	60
U. Minho	845	0	360	0	0	0	195	<b>360</b>	195
P. I. Porto	845,5	0	440	0	45	8	60	<b>448</b>	105
P. I. Santarém	750	0	460	0	0	40	100	<b>500</b>	100
P. I. Setúbal	735	0	190	0	40	191	167	<b>381</b>	207
U. Trás-os-Montes e Alto Douro	654	0	480	0	0	42	60	<b>522</b>	60
P. I. Viana do Castelo	913	0	390	0	186	0	0	<b>390</b>	186
P. I. Viseu	750,5	0	550	0	0	22,5	135	<b>572,5</b>	135

Aut. W – autonomous work; Field– fieldwork; Intern – internship; Lab – laboratory work; Th-P – theoretical-practical classes; Tut – tutorial guidance; Sem – seminars.

School – Fieldwork, internship, and tutoring guidance, combined, representing activities likely developed at the cooperating schools.

HEI – Laboratory work, theoretical-practical classes, and seminars combined, representing activities likely held at higher education institutions.

An average of 488 hours is dedicated to internship activities, but once again, there is a wide variation between a minimum of 190 hours and a maximum of 708 hours.

Theoretical-practical classes are less prevalent among the curricula of the masters' degrees under analysis – only six HEI attribute any hours to those activities. However, the P. I. of Viana do Castelo does not follow that tendency, as 186 hours are dedicated to such activities in the curriculum of the master's program this HEI offers.

As for tutorial guidance, the University of Minho and the Polytechnic Institutes of Coimbra and Viana do Castelo do not attribute any time for those activities. On the other end of the spectrum, the University of Madeira and the Polytechnic Institute of Setubal dedicate 190 or more hours to supervision.

Again, with seminars, there are discrepancies in the number of hours attributed to those activities, including HEI where they are absent and one where 480 hours are allocated to seminars (Table 4).

Again, considering the indicators of hours likely to be in the school context and hours likely to be in an academic context, we find evident discrepancies between a minimum of 360 contact hours likely to take place at the cooperating schools (University of Minho) and a maximum of 768 contact hours likely to take place in the school context (Polytechnic Institute of Leiria) – a difference greater than 100%.

### **Recommendations for improvement by the A3ES concerning STP/IPP**

This study analyzed the A3ES reports concerning the first cycles of studies in Basic Education and the second cycles of studies in preschool education and 1st CBE, particularly the recommendations for improvement of those programs. The majority of the HEI received at least one recommendation for improvement directly related to IPP/STP (15 HEI).

The need to promote greater proximity with school contexts and ensure that the number of hours in school context was implemented was pointed as an area for improvement in two cycles of studies, specifically two bachelor's programs of the University of Aveiro and the Polytechnic Institute of Beja – curiously none of which were among the institutions that attribute a lower number of work hours to activities in the school context. One of these bachelor's degrees also had the recommendation of improving the relationship between theory and practice (P. I. Beja).

Cooperating teachers were the focus of numerous recommendations, including the promotion of their specialized training in pertinent areas, such as pedagogical supervision (in seven master's degrees), the definition of criteria for choosing or evaluating cooperating teachers (in two bachelor's degrees and one master's degree), and the presentation of the curricula of cooperating teachers (one bachelor's degree).



The internship contexts were also the focus of some improvement recommendations, including the promotion of their diversity (seven bachelor's degrees), the improvement of the reception of the students in those contexts (one bachelor's degree), and the establishment of protocols with the cooperating institutions (one bachelor's degree).

Finally, the conditions of accompaniment of STP at the HEI were also considered, including the promotion of progression between the curricular units devoted to IPP (in one bachelor's degree), to revise the moments of tutorial guidance (in two bachelor's degree and one masters' program), and to ensure that the teachers who are responsible for IPP or STP curricular units have adequate scientific training and production, as well as professional experience adequate to those curricular units.

## **Discussion and Conclusion**

We begin the conclusion with the final analysis – that of the recommendations of the A3ES. The prevalence of recommendations related to STP and/or IPP is evidence of the recognition of their importance in the frame of ITE, as has been sustained by multiple authors (for instance, Ellis et al., 2020; Hoffman et al., 2015; NAEYC, 2009; Paro et al., 2018; Sumrall et al., 2017). At the same time, and on a less positive note, it is also evidence that despite the legal framework allocating a relevant number of ECTS to IPP and to STP in ITE programs (Law-Decree no. 79/2014) the implementation of those practices is not always evaluated as being of irreprehensible quality. In particular, cooperating teachers are the focus of concern in several programs of study, with recommendations affecting how they are chosen and evaluated, as well as their continuing education in supervision or other areas relevant to their roles. This is in agreement with the perspectives expressed by Leite and Sousa-Pereira (Leite & Sousa-Pereira, 2022) or Winaryati and collaborators (Winaryati et al., 2020) who stress the importance of the profiles of the cooperating teachers and supervisors to the success of STP and the learnings it enables, as part of a social learning process.

The HEI are also the focus of some recommendations for improvement relative to the profiles of teachers who are responsible for the STP and IPP curricular units, as well as to the relevance of tutorial guidance from the part of the HEI during those processes, which,

again, points to the relevance of the profiles of teachers (Winaryati et al., 2020).

A more global concern relates to the relation between theory and practice, including the scope and diversity of the placements offered or how students are involved in the cooperating institutions. This criticism echoes those of Folque (Folque, 2018) and Mouraz and collaborators (Mouraz et al., 2012) when they stress that IPP/STP tends to be subsequent to the theoretical components of the programs of study, which is not ideally suited to promote the articulation between theory and practice, and that the requirement of a master's degree to become a teacher does not directly imply an increase in STP experiences.

This remark leads us to the first two objectives we pursued with our study. The analysis of the work hours and ECTS attributed to IPP and STP in the cycles of studies under analysis reveals that, while the number of ECTS is in agreement with the legal dispositions and even tends to surpass them, the ways how those ECTS are translated into contact hours, and even more importantly between types of contact hours is extremely discrepant, leading to important inequalities in students' access to learning in practical contexts. There seems to be no pattern in how work hours are distributed between contact hours and independent work hours. Contact hours were analyzed by aggregating those probably spent in the school context (Practicum, Fieldwork, and Tutorial guidance) and those probably spent in an academic context (Theoretical-practical, Seminar, and Laboratory). That organization further highlighted these inconsistencies, ranging from one degree where no hours were attributed to activities expected to be carried out in a school context to others where over 700 hours should happen in that context. However, we do not propose a linear interpretation of this result – we do not expect a program where no activities took place in a practical context to be accredited, and, in fact, the A3ES report refers to practical activities – that implies that the ways in which HEI interpret and apply the concepts of contact hours are not uniform. This aspect calls for further research and may be the motto for complementary research based on interviews with course coordinators. The principles of the Bologna Process, calling for greater transparency, translatability, and equivalence of degrees (European Ministers of Education, 1999) may be put at stake by this dispersion, and this concern also carries political implications, recommending the clarification of such concepts and the monitoring of how they are applied by HEI.

We acknowledge that basing our study exclusively on documentary evidence is a

limitation. To circumvent this limitation, we propose future studies may take into account the perspectives of the participants directly involved – degree coordinators, supervisors, cooperating teachers and students, as well as evaluators associated with the A3ES. We propose that future studies may complement the present research by conducting interviews and observation in context, enriching and deepening the understanding of how IPP and STP are happening in the programs preparing teachers for preschool education and the 1st CBE. Another limitation stems from our data: since reports by the A3ES predate the moment of data gathering, some of the recommendations may already be implemented. Therefore they do not necessarily correspond to the current situation of the programs analyzed.

Despite these limitations, our results may be useful to policymakers, suggesting that closer attention may need to be given to the amount of time spent in the school context, as this is not a necessary correlate of the number of ECTS attributed to those areas. Furthermore, they may be relevant for A3ES evaluators and degree coordinators alike, when evaluating or revising programs, to take this dimension into account, paying close attention to promoting practical experiences to prospective teachers during their initial education. This is currently the focus of intense debate in the national Portuguese context, as teacher education is being rethought to fight the current paucity of prospective teachers.

Finally, given the pivotal role of early childhood education (preschool and 1<sup>st</sup> CBE) in the social, emotional, and academic results of students (Hamre et al., 2014; Sumrall et al., 2017), and the relevance of STP to ensure the quality of education at those levels (NAEYC, 2009), we consider that continuing research on ITP, including the roles of the cooperating teachers and HEI is a necessary undertaking.

## References

- Bardin, L. (2014). *Análise de Conteúdo*. Edições 70.
- Brown, Z., Edwards, T., & Perkins, H. (2017). The placement journey: Do year one placement modules support Childhood Studies students' professional development? *Journal of Adult*, 23(2), 162-177. <https://doi.org/10.1177/1477971417695818>
- Burns, R. W., Jacobs, J., & Yendol-Hoppey, D. (2020). A Framework for Naming the Scope

- and Nature of Teacher Candidate Supervision in Clinically-Based Teacher Preparation: Tasks, High-Leverage Practices, and Pedagogical Routines of Practice. *The Teacher Educator*, 55(2), 214-238. <https://doi.org/10.1080/08878730.2019.1682091>
- Cabral de Oliveira, M. P., Carvalho Lopes, D., Jacinto, M. T., & Pereira, S. (2019). A formação inicial de professores/ educadores da infância no Brasil e em Portugal. *V Seminário Luso-Brasileiro e II Congresso Luso Afro Brasileiro de Educação de Infância*, 1-7. <http://portal.inep.gov.br/web/guest/sinopses-estatisticas-da-educacao-basica>
- Cabral, A. F. (2019). *Formação de Professores de 1o CEB para atuar em contextos inclusivos* [Universidade de Lisboa]. <https://repositorio.ul.pt/handle/10451/44165>
- Craveiro, C. (2016). Formação inicial de educadores de infância, realidade e identidade profissional em análise. *Revista Latinoamericana de Educación Infantil*, 5(4), 31-42.
- Creswell, J. W. (2002). *Research Design: Qualitative, quantitative and mixed methods approaches* (2<sup>nd</sup> ed.). SAGE.
- Creswell, J. W. (2013). *Qualitative Inquiry and Research Design. Choosing among five approaches* (3<sup>rd</sup> ed.). SAGE.
- Ellis, N. J., Alonzo, D., & Nguyen, H. T. (2020). Elements of a quality pre-service teacher mentor: A literature review. *Teaching and Teacher Education*, 92. <https://doi.org/10.1016/J.TATE.2020.103072>
- European Education and Culture Executive Agency (European Commission). (2020). *Teachers in Europe Careers, Development and Well-being*. <https://doi.org/10.2797/997402>
- European Ministers of Education. (1999). *Bologna Declaration*.
- Figueiredo, M. (2020). Investigação e ensino: contornos e contributos na formação inicial de educadores de infância. In H. Ramalho, A. P. Cardoso, C. Lacerda, J. Rocha, & M. Figueiredo (Eds.), *Aprender é coisa séria: Contributos para a construção do saber escolar* (pp. 3-19). Escola Superior de Educação de Viseu. <https://doi.org/10.34633/978-989-54743-0-1>
- Folque, M. A. (2018). A formação de educadores de infância: Da exigência e complexidade da profissão ao projeto de formação na Universidade de Évora. *Poiésis*, 12(21), 32-56. <https://doi.org/10.19177/prppge.v12e21201832-56>

- Guerra, M., & Leite, C. (2022). Estudo descritivo sobre o sistema de avaliação de cursos de educação superior em Portugal. *Avaliação: Revista Da Avaliação Da Educação Superior*, 27(2), 347-365. <https://doi.org/10.1590/S1414-40772022000200008>
- Hamre, B., Hatfield, B., Pianta, R., & Jamil, F. (2014). Evidence for General and Domain-Specific Elements of Teacher-Child Interactions: Associations With Preschool Children's Development. *Child Development*, 85(3), 1257-1274. <https://doi.org/10.1111/cdev.12184>
- Hoffman, J. V., Wetzel, M. M., Maloch, B., Greeter, E., Taylor, L., DeJulio, S., & Vlach, S. K. (2015). What can we learn from studying the coaching interactions between cooperating teachers and preservice teachers? A literature review. *Teaching and Teacher Education*, 52, 99–112. <https://doi.org/10.1016/J.TATE.2015.09.004>
- Jesus, M. E. (2019). Tornar-se professor do 1º Ciclo do Ensino Básico: Um estudo sobre o início da carreira docente. *Revista Multidisciplinar*, 1(2), 107-120. <https://doi.org/10.23882/MJ1915>
- Law no. 49/2005, (2005). <https://dre.pt/dre/detalhe/decreto-lei/49-2005-608175>
- Law-Decree no 22/2014, (2014). <https://dre.pt/dre/detalhe/decreto-lei/22-2014-570766>
- Law-Decree no 42/2005, de 22 de fevereiro -, (2005). <https://www.dges.gov.pt/pt/content/decreto-lei-no-422005-de-22-de-fevereiro-principios-reguladores-de-instrumentos-para-criacao>
- Law-Decree no. 369/2007, (2007). <https://www.dges.gov.pt/en/node/300>
- Law-Decree no. 43/2007, (2007). [https://sigarra.up.pt/fpceup/pt/legislacao\\_geral.ver\\_legislacao?p\\_nr=350](https://sigarra.up.pt/fpceup/pt/legislacao_geral.ver_legislacao?p_nr=350)
- Law-Decree no. 79/2014. Aprova o regime jurídico da habilitação profissional para a docência na educação pré-escolar e nos ensinos básico e secundário, (2014) (Ministério da Educação).
- Leite, C., & Sousa-Pereira, F. (2022). Condições de socialização com a docência em Portugal: análise do modelo de formação e perfil de formadores. *Revista Electrónica Educare*, 26(3), 1–18. <https://doi.org/10.15359/ree.26-3.23>
- Lindstrom, D., Jones, G., Thompson, M., & Hertlein, J. (2021). Developing Preservice Teacher Conceptions of Effective Teachers Using Classroom Scenarios to Practice Difficult Conversations. *Australian Journal of Teacher Education*, 46(12), 21-21-34.

- <https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1333313>
- Mark, S., Id-Deen, L., & Thomas, S. (2020). Getting to the root of the matter: pre-service teachers' experiences and positionalities with learning to teach in culturally diverse contexts. *Cultural Studies of Science Education*, 15, 453-483.  
<https://doi.org/10.1007/s11422-019-09956-5>
- Mayring, P. (2014). *Qualitative Content Analysis Theoretical Foundation, Basic Procedures and Software Solution*.
- Mouraz, A., Leite, C., & Fernandes, P. (2012). A Formação Inicial de Professores em Portugal Decorrente do Processo de Bolonha: Uma Análise a Partir do “Olhar” de Professores e de Estudantes. *Revista Portuguesa de Pedagogia*, 189-209.  
[https://doi.org/10.14195/1647-8614\\_46-2\\_10](https://doi.org/10.14195/1647-8614_46-2_10)
- NAEYC. (2009). NAEYC Standards for Early Childhood Professional Preparation Programs.
- Paro, K. M. La, Schagen, A. Van, King, E., & Lippard, C. (2018). A Systems Perspective on Practicum Experiences in Early Childhood Teacher Education: Focus on Interprofessional Relationships. *Early Childhood Education Journal*, 46, 365-375.  
<https://doi.org/10.1007/s10643-017-0872-8>
- Sousa-Pereira, F., & Leite, C. (2018). Formação de professores e Processo de Bolonha nas oportunidades de inovação educacional. *Revista Intersaberes*, 13(28), 163-174.  
<https://doi.org/10.22169/REVINT.V13I28.1408>
- Stake, R. E. (2010). *Qualitative research. Studying how things work*. The Guilford Press.
- Sumrall, T. C., Scott-Little, C., Paro, K. M. La, Robert, S., Pianta, C., Burchinal, M., Hamre, D., Bridget, Downer, J., & Howes, C. (2017). Student Teaching Within Early Childhood Teacher Preparation Programs: An Examination of Key Features Across 2- and 4-Year Institutions. *Early Childhood Education Journal*, 45, 821-830.  
<https://doi.org/10.1007/s10643-016-0830-x>
- Wee, S.-J., Weber, E. K., & Park, S. (2014). Early childhood practicum students' professional growth in the USA: areas of confidence and concern. *International Journal of Early Years Education*, 22(4), 409-422. <https://doi.org/10.1080/09669760.2014.911644>
- Winaryati, E., Mardiana, & Hidayat, M. T. (2020). Conceptual framework of evaluation model on 4 c's-based learning supervision. *International Journal of Learning, Teaching and Educational Research*, 19(8), 173-193. <https://doi.org/10.26803/ijlter.19.8.10>