Co-funded by the
Erasmus+ Programme
of the European Union

Teaching learning spaces competence from
early childhood education
TELESPA
2018-1-RO01-KA201-049545

P4: Polytechnic Institute of Bragança, School of Education

National research report on learning spaces and teachers' competence in Portugal

Authors:
Cristina MESQUITA, Catarina VASQUES

Early Childhood and Basic Education in Portugal

1 Educational System in Portugal

The Ministry of Education (ME – Ministério da Educação) (basic and secondary education) and the Ministry of Science, Technology and Higher Education (MCTES – Ministério da Ciência, Tecnologia e Ensino Superior) (higher education) are both responsible for the entire Portuguese education system and are supported by the Ministry of Labor, Solidarity and Social Solidarity (MTSSS – Ministério do Trabalho, Solidariedade e da Segurança Social) in providing preschool education.

The Portuguese educational system falls under the Portuguese constitution (Constituição de República), which sets out the right to education (among other things). Around 1986, the Portuguese education system underwent a number of changes which are documented in the Lei de Bases do Sistema Educativo, Law n. º 46/86, October 14th (Educational System Law). This Law was first amended by Lei 115/97 and then by Law 49/2005. In 2006 the Decreto-Lei 74/2006 regulated the changes introduced by the Lei de Bases do Sistema Educativo regarding the new model of organization of higher education into cycles (Bologna structure). Education is compulsory up to 18 years old, and the language of education is Portuguese, although students learn English since primary school. The academic year runs from September until June/July.

In Portugal, from preschool to higher education, citizens can opt either for a state school (generally free) or a private school.

If any citizen opts for a private school, he can confirm whether it is certified by the Ministry of Education (primary and secondary education), the Ministry for Science, Technology and Higher Education (for higher education), or the Ministry of Labor and Social Solidarity / Institute of social Security (for preschool education).

2.1 Early Childhood Education 0-3

The education of children aged 0-3 is under the supervision of the Ministry of Solidarity and Social Security. The offer can be from private institutions or institutions of social solidarity (non-profit institutions - IPSS). According to the National Council of Education (CNE – Conselho Nacional de Educação), the supply of institutions and vacancies is still in deficit in Portugal. However, in the last years there has been an increase in the number of offered places.

In 2017, by reference to December 31, 2631 day care centers were registered in Mainland Portugal, 75% of which were owned by non-profit institutions, namely the solidarity network.

In 2017, the total number of places in day-care centers was estimated at 118,500, approximately 62% of which are shared by the State through cooperation agreements with institutions of the solidarity network. The number of children attending day-care centers has also increased significantly, reaching almost 100,000 children in 2017 (GEP / MTSSS, 2018) (Table 1).

Table 1 Day-care centers offer in Portugal

N. º of Day-care Centers	**Non-Profit Institutions**	**Profit Institutions**	**Nº of children attending**
2631	1973	658	100000

Socio-educational provision geared towards children under three is made of:

a. Crèche – socio-educational provision (Ordinance n.º 262/2011, 31st August and Ordinance N.º. 411/2012, 14th December), that cares for children up to the age of three while parents or the person who has custody is unable to look after them. Crèches' main aims are the following: (i) to facilitate reconciliation of the household's family and professional life; (ii) to ensure the well-being and overall development of children in a safe and loving atmosphere through an individualized care; (iii) to collaborate with families in sharing duties of care and responsibility in child development; (iv) to be involved in the early detection of any maladjustment or disability, ensuring proper referral.

b. Child-minder – a social service (Decree-Law n.º 115/2015, 22nd June) provided by a duly licensed person by the Institute for Social Security, I.P. (Instituto da Segurança Social, I. P. - ISS) who is paid to take care of children up to 3 years of age or until they reach preschool age at their place of residence. This can be done via direct hiring by families in writing, or within an institution, called family crèche. Each child-minder can care for up to 4 children (preferably of different ages), for up to 5 days a week, between 4 and 12 hours a day.

c. Family crèche – social service/provision (Ordinance n.º 232/2015, 6th August) which consists of a group no fewer than 4 child-minders, who work within an institution (Santa Casa da Misericórdia de Lisboa or private institutions of social solidarity or legally equivalent institutions) designed to care for children aged up to three or old enough to attend a preschool establishment, during parents' or guardians' normal working hours or period that thy cannot care for their children.

d. Child-minders and family crèches aim to provide: (i) a safe and familiar environment for children; (ii) the right conditions for the child's whole development, in an environment that is both physically and emotionally safe; (iii) adequate care for the child's needs and well-being. (iv) State nursery schools are part of school clusters together with schools providing basic education (1st, 2nd and 3rd cycles) and upper secondary education.

e. School centers aim to optimize human and material resources and the equipment existing in schools of basic and upper secondary education, allowing preschool pupils to use, for example, a school library, gym, playing fields, sciences lab and school canteen. In these school clusters a common education project is designed for all education levels (Eurydice, 2019).

2.2 Early Childhood Education 3-6

The Framework Law of Preschool Education (Lei n. º 5/97, of 10th of February) defines preschool education as the first stage of the Portuguese basic education system in a lifelong learning process, and as a complement of parents' role in their children's education. As such, the school should establish a close relationship with families, favoring child development, in order to assure their full integration in society as an autonomous, free and supportive human beings.

Preschool education is optional, recognizing that family plays the most important part in raising children, while making preschool education universal for children from the age of 4 (Lei n.º 65/2015, 3rd July). This educational provision is expected to be extended to children from the age of 3 by the end of this legislature (2019).

Defined as the first stage of basic education in the lifelong learning process, preschool education covers children from 3 years up to the age of compulsory schooling. Preschool education for children is still optional. It is provided by kindergartens, which are run by a variety of State organizations, charitable institutions, private schools and cooperatives, unions and other organizations.

The public and the private network of preschool education institutions, are complementary. The public network is made up of education institutions under the ME and the MTSSS. The private network is composed of for-profit and not-for-profit education institutions. The former are private and cooperative education institutions, while the later are private institutions of social solidarity (IPSS – Instituições Particulares de Solidariedade Social).

In 2017, 5900 preschool centers were registered in Mainland Portugal, 61,25% of which were owned by public institutions, and 38,74% by private institutions most of them from the solidarity network.

According to the CNE, in 2016, 92.5% of children between 4 years old and the beginning of basic education attended preschool education. Data shows a decrease of 2 percentage points since 2012. The data reveal, specifically, that the percentage of five-year-old attending preschool education is higher than the percentage of four-year-old children, showing a difference of 2.7 percentage points. However, there are no significantly gender differences (Figure 1).

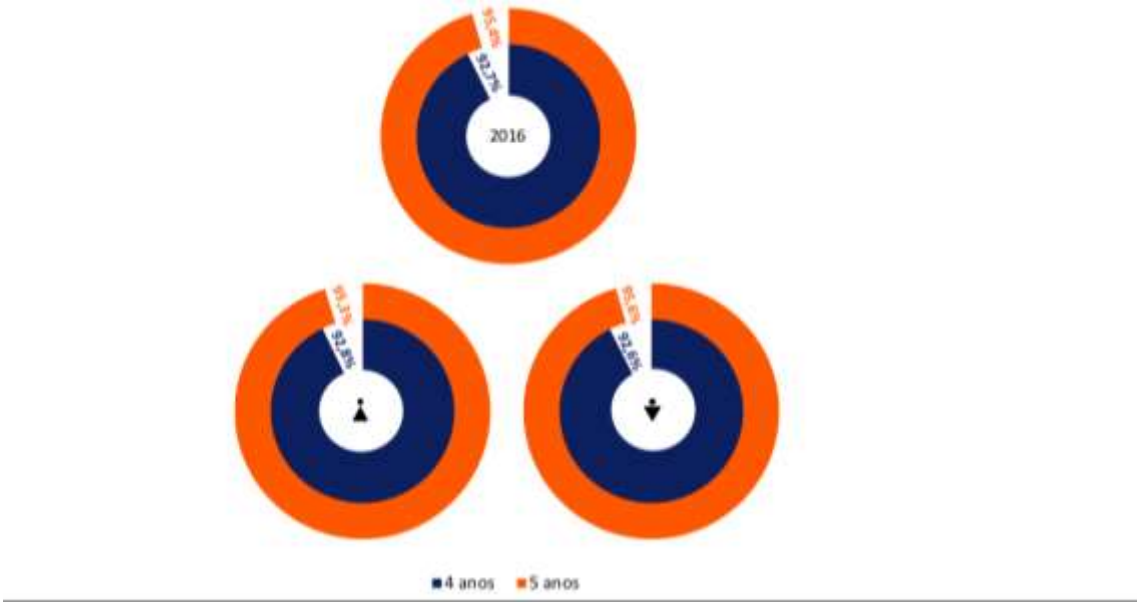

Figure 1 Children attending preschool education (CNE, 2016, p. 14)

The number of children attending preschool was 253 959 children in 2017 (GEP / MTSSS, 2018) (Table 2).

Table 2 – Children attending preschool education.

Total of institutions	**Public Institutions**	**Private Institutions (non-profit and profit)**	**Nº of children attending**
5900	3614	2286	253959

The ME is responsible for ensuring the pedagogical quality of teaching in the preschool education institutions network. Technical supervision is the joint responsibility of the Ministers of Education and Labor, Solidarity and Social Security, which consists of monitoring the organization and operation of preschool education institutions.

The main pedagogical objectives of preschool education are:

- To promote children's personal and social development;
- to foster children's integration into diverse social groups;
- to contribute to equal opportunities;
- to stimulate children's overall development;
- to promote expression and communication development;
- to enhance curiosity and critical thinking;
- to provide children with well-being and security;

- to identify maladjustments, disabilities or giftedness and to encourage families to participate in the educational process.

2.3 Basic education 6-12

Basic education (ensino básico) is compulsory and free for everyone. It is intended for children aged between six and fifteen. Pupils who complete this schooling receive a certificate of basic education.

This level of teaching extends over nine years and comprises three cycles:

- The first cycle is structured in four years and is taught by one teacher (who may be assisted by others in specialized areas). Emphasis is placed on the integrated development of studies and activities and the teaching of a foreign language may begin;
- The second cycle, with a duration of two years, covers interdisciplinary areas of basic education;
- The third cycle has a duration of three years and is structured as a set of disciplines or groups of disciplines, incorporating various elements of vocational training. Classes are taught by a single teacher per subject or multidisciplinary educational field.

Basic education is intended to provide a common general education that:

- allows pupils to develop interests, aptitudes and skills and grow as individuals, in accordance with values of social solidarity;
- allows pupils to acquire and master basic knowledge, skills, attitudes and values, forming the basis for further general or vocational studies;
- encourages the development of values, attitudes and practices that help to develop a sense of civic responsibility and willingness to participate in democracy.

3 Curriculum

3.1 Preschool Education

The Curriculum Guidelines for Preschool Education (OCEPE – Orientações Curriculares para a Educação Pré-Escolar), presented to the public on July 2nd, 2016, 19 years after the first version, are the result of the review and update of the guidelines in alignment with the curricular steering documents for the 1st cycle of basic education, promoted by the Ministry of Education.

This new version of the OCEPE presents an integrated and globalizing approach of the different content areas, introducing the learning processes to be developed, with practical examples and reflection suggestions to the caretakers. In the area of Expression and Communication the domains of Physical Education and Artistic Education are valued in this updated version.

Considering the 0-3 age group in ECEC policies, a document is being organized with guidelines for the Crèche, by the Ministry of Education in articulation with the Ministry of Labor, Solidarity and Social Security.

With the coordinated publishing of the new version of the OCEPE and the Crèche's Pedagogical Guidelines, the Government takes a very important step in the promotion of the quality of the offers, facilitating the pedagogical work of the staff, as well as the child's transitions between home-creche and kindergarten, seen as decisive for the educational success.

3.2 Basic Education 1st and 2nd Cycle of

Basic education aims at ensuring a general education common to all students, providing the acquisition of the basic knowledge that allows the continuation of studies. The guiding principles of the organization and management of the curricula of primary and secondary education, the evaluation of the knowledge and the capacities to be developed by the students and the process of development of the curriculum of primary and secondary education are established in the Decree-Law n.º 139/2012 of 5 July.

The 1st Cycle's curriculum includes two components - *mandatory disciplinary areas* and *non-disciplinary areas*. Within *mandatory disciplinary areas* the following disciplines are integrated: Portuguese; Mathematics; Knowledge of the world; Artistic and physical education. The *non-disciplinary Areas* integrate: Project; Homework help and Education for citizenship.

The knowledge and skills to be developed by the students of each level and in each cycle of education are based on the programs of the disciplines, as well as the curricular goals endorsed by the head of education in the Government.

The development of the curriculum and the strategies for its implementation are defined in activity plans and integrated into the educational project of the school centers. It should be adapted to the characteristics of the students by the class teachers, in articulation with the teaching council.

The curricular perspective highlights the pedagogical and organizational autonomy of schools as well as the professionalism and freedom of teachers in the implementation of methodologies based on their experiences and in individual and collaborative practices.

In the 1st cycle, schools will be able to promote the cooperative work among teachers in the areas of the expressions, as well as a reinforcement of the monitoring of the students' performance and their needs of specific supports. For the 2nd cycle, the possibility of daily support for the study is guarantee, depending on the students' previously diagnosed needs.

4 Teacher Education: Legal framework

The qualification system for teachers in preschool education (3 to 5 years old), basic education (1st Cycle – 6 to 9 years old; 2nd Cycle – 10 to 12 years old and 3rd Cycle – 13 to 15 years old) and secondary education has its legal framework established in the Basic Law on Education and supplementary legislation, in particular the one that focus on the accreditation system that provide vocational training for teaching.

According to this structure, kindergarten teachers and basic and secondary education teachers must have qualifications that certify them to the specific training, enabled through teacher education that is organized according to the requirements and

specificities of each level of education, i.e. according to the specific qualification profiles for teaching.

In this regard, the Portuguese Government established a common performance profile for kindergarten teachers and teachers of basic and secondary education. The general performance profile of kindergarten teachers and teachers of basic and secondary education sets out on common benchmarks to the activity of teachers of all levels of education, showing requirements for the organization of their training projects and for the recognition of professional qualifications of teachers. However, conscious of the professional specificities of each level of education, the Government defines the specific profiles of kindergarten teachers and basic education teachers. These profiles define the skills of these professionals considering the following dimensions: i) professional, social and ethical; ii) teaching and learning development; iii) participation in school and community relations; iv) lifelong professional development dimension.

4.1 Initial teacher education

In Portugal, the minimum level of Initial Teacher Education (ITE) is the Master's degree. It combines three years of a bachelor of Basic Education (180 ECTS) plus one and half (90 ECTS) or two years (120 ECTS) of a professional master. The minimum length of ITE is usually between four and a half and five years. Students of Basic Education (Kindergarten and 1st and 2nd Cycles of Basic Education) can choose from the following masters:

- Preschool Education;
- Preschool Education and 1st Cycle of Basic Education;
- Education on the 1st Cycle of Basic Education History and Geography of Portugal on the 2nd cycle of Basic Education;
- Education the 1st Cycle of Basic Education and of Mathematics and Natural Sciences in the 2nd Cycle of Basic Education;
- Musical Education Teaching in Basic Education (Students need a bachelor's in music)
- Portuguese and English teaching on the 2nd Cycle of Basic Education (Students need a bachelor in Portuguese and English).

Special needs education also requires a specialization in Special Needs.

4.1.2 The Teaching Practice

The initial teacher education (bachelor and masters) include five training components to ensure the construction of technical, professional, scientific, educational, ethical, deontological and praxeological such as: a) teaching; b) general education; c) specific didactics; d) cultural, social and ethical area; e) teaching practice.

The Teaching Practice is divided in two phases: the first is the Introduction to Professional Practice (IPP – Introdução à Prática Profissional) with 15 credits, integrated into the 1st Cycle of Studies in Basic Education and a second phase, the Supervised Teaching Practice (PES – Prática de Ensino Supervisionado) within the 2nd cycle of studies (master), ranging between 32 and 48, depending on whether the master is 90 and or 120 ECTS, respectively.

This component aims the integration of future teachers in practical contexts to observe and collaborate in situations of education and teaching. Supervised Teaching Practice takes place in classroom of childhood education centers and in schools of basic education. The students have the support of teachers and of the supervisors of the School of Education.

4.2 Continuing professional development of teachers

In Portugal, the task of determining what teachers need is of the schools' responsibility, which sometimes include the teachers themselves. Teachers of Public institutions are required to attend training, but they can choose those courses that they wish to attend. The offer of training courses is carried out by certificated training centers and conducted by coaches certified by a legal entity.

4.3 Professional Conditions

In Portugal there are 5900 centers of preschool education, namely: 3614 public and 2228 private or Social Solidarity institutions. There are 4209 establishments of basic education - 1st Cycle, namely: 3692 public, 517 private. There are 1201 establishments of basic education 2nd Cycle, namely: 937 public, 97 private dependents of the state and 167 private.

In the Bragança District there are 123 establishments of preschool, basic education and secondary, 98 public and 25 private. Each classroom can accommodate up to 25 children in preschool education, 26 in the 1st and 2nd CEB.

Considering the desertification of this region most of the children of public education, from rural areas, are moved daily to urban centers in county seats.

Most of the schools have very good condition since there was a great investment by the Ministry of Education and Science in recent years. Each classroom has a full teacher and in case of children with special needs, it also has the support of a specialized teacher.

To get into public teaching career, the Portuguese teachers have to apply to a National Contest in accordance with the existing vacancies in each school region. The teachers who hold places in school celebrate contract of indefinite period. Contract teachers placed to fill temporary needs through the recruitment bag or school employment, celebrate labor contract fixed-term.

Teachers can also be hired by the stakeholders of private schools dependent on the State. These teachers have a contract of indefinite duration after three years of work.

The pay scale of the public school has 10 levels in which teachers progress according to the length of service. A teacher of the public sector in the early stage has a basic salary of € 1,518.63. With the deductions for the Health System, tax - IRS, the General Pension Fund he will earn a net salary of € 1,082.44. In the last level teachers receive a basic salary of € 3.364,63 and a net salary of € 1.806,47.

4.4 Accountability

Teacher appraisal is recent and focuses more on accountability for purposes of career progression than on improvement. School self-evaluations and external evaluations are

also new, and not all schools carry out self-evaluations. Schools organize internal student assessment for all subjects and the Educational Evaluation Institute (Instituto de Avaliação Educativa, IAVE I.P, 2013) carries out external student assessments for mathematics and Portuguese.

5. School inspections

In Portugal, the General Inspection of Education and Science (IGEC – Inspeção Geral de Educação e Ciência) is the entity responsible for ensuring the control, audit and supervision of the educational system in the context of preschool education, school education, including basic, secondary and higher (Decree-Law no. 125/2011 - Article 11). Among other, are attributions of the IGEC to

> contribute to the quality of the education system in preschool education, basic and secondary education and extracurricular education, in particular through control, monitoring and evaluation measures, proposing measures aimed at improving the education system and participating in the evaluation of primary and secondary schools and related activities (Decree-Law no. 125/2011 - Article 11, paragraph 2c, p. 5502).

IGEC is active in the field of preschool education and school education, including its special modalities and extracurricular education, in educational institutions, including public schools' centers and private networks, cooperative and social solidarity.

The IGEC (2018) develops several activities among them the systematic interventions, previously programmed that are the responsibility of a team of inspectors and supported by a script that guides the activity of the inspectors and whose purpose is to promote the quality of learning, and the models and management processes. In addition to these, IGEC (2008) provides occasional interventions that are not foreseen, developed by an inspector.

In accordance with article 12 of Regulatory Decree n. º 15/2012, an inspector must hold a bachelor's degree or a higher academic degree. Their integration in the special inspection career depends on the ongoing approval of specific training, which takes place during the experimental period (IGEC, 2008).

Part 2

6). The quality of learning environments 0-12: studies from the Portuguese Context

6.1 Framework and objectives

Quality is a simultaneously polysemic concept (Pascal and Bertram, 1999; Moss and Pence, 1994) and controversial, as it includes several views, and it is not possible to find in the literature a proposition that can finally define this term. Quality is, according to Oliveira-Formosinho (2001) a "constructed concept of a subjective nature, referring to values, beliefs and interests and not an objective and universal reality".

Between researchers and experts, the understanding of the criteria that define and constitute a quality service varies, because it depends on values and beliefs about the subject, so if we extend the issue to professionals, parents, politicians, the community and other agents who linked to early childhood education, there is a greater diversity of criteria on what quality is and its definition becomes even more diverse. In this context,

we wanted to know the perspectives that stand out in the studies conducted on the Portuguese context. This presentation shows a systematic review of the literature produced on the quality of early childhood contexts between 2008 and 2018.

6.2 Literature Review

The papers can be grouped into the three dimensions previously identified by Oliveira-Formosinho and Barros Araújo (2004):

(i) Criteria for thinking quality;

(ii) Quality assessment tools

(iii) Ways to collaboratively assess quality

Analisar esquema 1

Esquemas

(i) Criteria for thinking quality;

(i) In the 1st dimension, the study by Luís, Andrade and Santos (2015) focused on the educational quality of two kindergarten contexts (children from 3 to 6 years old). The study analyzes the educator's experiential attitude, which is fundamental for promoting the child's emotional well-being. In the experiential attitude were considered as quality criteria observation, listening, understanding, questioning as a way to document and assign meanings to the child's action. Two kindergarten rooms (context A and context B) with children (3 and 6 years old) and their educators were analyzed. The authors conclude that when the child feels that his voice is heard, when he feels truly included, he enthusiastically expresses his intentions and thoughts. Listening, sensitivity, questioning and encouragement attitudes assumed by the educator increased the child's participation. Proper and quality intervention, in the light of an experiential attitude, implies attention, respect and trust. By developing an educational intervention that considers these principles the educator can ensure the child's participation.

Also, the study by Correia and Aguiar (2017) interprets the participation of children as a criterion to consider in the quality of action of educators. The study refers to the context of early childhood education, presenting an appreciation of children's participation on various subjects and in different contexts. The authors used the interview as a means of children's expression regarding their representations of freedom and democracy. These two dimensions were analyzed in the dynamics established by the educator in the activity room. The authors concluded that children consider that they have more opportunities to make choices in the room characterized by the participation narrative. They suggest that in rooms where participation is predominant, children expect to feel better and have more fun, central aspects of children's well-being. However, almost half of the children characterized their class as non-participatory, meaning their opportunities to participate and influence choices may have been limited.

Using another focus, the study by Gomes (2012) analyzes public spaces as children's learning spaces, considering that they can contribute to more effective community learning for children. This article recognizes the fundamental value of early childhood

education as a valuable resource for the personal and social development of children, assuming what public spaces can contribute to the construction of full citizenship. However, the author warns that out-of-school programmes for school children may become unbearable due to both its burden and its lightness. The burden relates to the simple trend of accumulating rational discourses throughout schooling, which hinders the emergence of children's own voice. Moreover, it becomes an irresponsible burden if it is not grounded on a shared and deliberative responsibility for education, but rather devised towards children's eventual future adulthood. On the other hand, an unbearable lightness is shown in the absence of teachers' educational actions towards disturbances emerging throughout school's outing.

Another type of approach validate quality criteria emerges from the study by Cadima, Enrico, Ferreira, Verschueren, Leal and Matos (2016) that investigates the interplay between family risk and the quality of classroom interactions and their impact on self-regulation skills in two groups of children—children from socioeconomically disadvantaged backgrounds (at-risk) and non-risk children. Analyses using multiple group structural equation modeling showed that at-risk children had lower levels of cool behavior regulation than non-risk children. In addition, classroom quality was positively linked to cool behavioral self-regulation. overall, this study suggests complex interplays between family risk, classroom quality, and early self-regulation on an understudied population—Portuguese children. given the crucial role of self-regulation skills for early school success. The authors considered that it will be important to investigate further early influences of self-regulation, particularly cross-cultural commonalities and differences across different moderators and self-regulation competence.

(ii) Quality assessment tools

Studies that emphasize the importance of using tools to assess the quality of contexts, define a set of categories, times and procedures that establish a measure of the quality of the educational environment.

In this context, we found the study by Tadeu and Aguiar (2015) that assessed the quality of formal education structures for children up to 12 months. Specifically, the authors intended to describe the overall quality of nursery rooms and the quality of socialization practices of educators / educational aids, to study the association between professional socialization practices and the quality of nursery rooms, and to study the associations between quality of nursery rooms, socialization practices of professionals and relevant structure variables. For this they used the Infant/Toddler Environment Rating Scale (ITERS-R) and the Caregiver Interaction Scale and the Structural Characteristics Record Grid. From the results emerges the need to improve certain aspects of the quality of care provided to younger children, in particular as regards hygiene and health and the activities provided to children. They recommend the creation of a guiding reference for pedagogical practice and more investment in the initial and continuous training of kindergarten teachers, as the quality of the rooms provided by kindergarten teachers who dedicate more time to babies have higher quality results, considering the scale items.

From another perspective, the study by Barros and Leal (2015) uses the Parent Scale Questionnaire and the Childhood Educator Questionnaire (ITERS-RTQ) to assess it, using the Child Environment Assessment Scale (ITERS-R) (Harms). et al., 2003), to

evaluate the same quality items by external observers in the same rooms. The results suggest that parents and educators attribute high importance scores to the quality criteria included in ITERS-R, justifying the use of this instrument in Portugal. Although correlations were found between observer and parent quality ratings and between observer and teacher quality ratings, the results suggest that teachers and parents find education and care in small classrooms substantially more appropriate than that the researchers observed.

The study by Barros, Cadima, Bryant, Coelho, Pinto, Pessanha and Peixoto (2016) had three main goals: the first was to understand the level of classroom quality for Portuguese infants entering center care about 6 months of age, especially as compared to other nations. The second goal was to study the relations between different quality measures by using a new measure along with two of the most widely used observational tools. The third goal was to assess the degree to which structural indicators predict different indices of quality in infant classrooms, with an intention to inform program improvement efforts via policy and professional development. The results revealed that a two-factor structure of process quality with the domains (a) Relationship-ships and (b) Use of Space and Materials provided the best fit to the data. Of the structural indicators that were examined, teacher training showed the most robust relation to both process quality domains. In addition, classrooms with smaller groups and centers located in non-urban areas were likely to show more sensitive relationships between teachers and infants. These findings have implications for public policy and professional development efforts on infant center care.

The study by Portugal (2012) is based on the process of building an instrument - Child Support System (SAC) to support pedagogical practice, facilitating the relationship between observation, assessment and curriculum building practices, seeking to ensure an assessment. “Authentic” and dynamic, based on the experiential approach to education to be used by students in early education, which is based on scales for assessing both emotional well-being and involvement by Laevers (2005). The author concludes that the SAC underpins the development of the curriculum in pre-school education and meets the results of educational action (skills development), giving greater structure and consistency to the process of improving educational quality. It also concludes that SAC serves the objectives of assessment in preschool education, allowing to know the competences of children in their usual contexts and routines, support the design of intervention programs and document the process of development of children, assuming as an 'authentic' alternative assessment practice.

(iii) Ways to collaboratively assess quality

The three studies that focus on ways to collaboratively evaluate quality Oliveira-Formosinho and Araújo (2011), Mesquita-Pires (2012), and Formosinho and Figueiredo (2014) describe the processes and dimensions that are present in collaborative processes of change. and based on the assumptions of Pedagogy-in-Participation and the shared understanding of contexts, actors and learning.

We can also include these studies in the categorization identified by Katz (1992, 1998) that points to multiple perspectives of quality assessment of educational contexts such as: i) the adult perspective (top down perspective) that considers the characteristics of

context, environment, of equipment and program - In this case, the studies by Tadeu and Aguiar (2015), Barros, Cadima, Bryant, Coelho, Pinto, Pessanha and Peixoto (2016), Portugal (2012).

ii) the bottom-up perspective of the child, which highlights the way in which the context is lived, stands out in the studies by Correia and Aguiar (2017), and Luís, Andrade and Santos (2015) use the interview and the observation, respectively, to access children's perspectives on the educational environment, their sense of well-being and their involvement.

iii) the perspective of families and early childhood educators (out-side perspective) that reveals how the context is experienced by those involved is present in the research carried out by Barros and Leal (2015) which analyzes the perception of parents and early childhood educators on the quality of education for children ages 0-3 for children in Portugal.

vi) the perspective of professionals (inside perspective) that shows how they operate, live the practice and relate - evidenced in the studies by Oliveira-Formosinho and Araújo (2011) Mesquita-Pires (2012) and Formosinho and Figueiredo (2014).

v) the societal perspective (out-side perspective) that considers the factors related to service and the satisfaction of the needs of the community and society, in which we can include the study by Gomes (2012).

Method

Research Sample

0-3 Programs. A total of six classrooms from four different daycares that served children aged 0 – 6 were comprised the sample. Convenient sampling was used to recruit nursery teachers who were willing to participate in the study. All the day care centers were integrated in Private institutions of social solidarity . Each center usually had only one classroom designated for infants and toddlers.

Preschools. Data was collected from 14 public preschools located in communities with different socioeconomic status. Three of the schools were in a neighborhood in which mostly high SES people live while two of the schools were in a disempowered neighborhood.

Demographics table for 0-3 programs

School ID	**1**	**2**	**3**	**4**	**5**	**6**
Classroom_Size	64	64	40	21	30	25
Number_of_Adults	1	2	2	2	2	2
Gender	1	1	1	1	1	1
Age	42	27	37	52	26	39
Years_of_Experience	18	3	10	8	1	8
AgeGroup	1	0/1	2	0/1	2	1
EducationLevel	3	4	4	3	3	3
Number_of_Children	15	10	16	10	18	11
SchoolType	2	2	2	2	2	2
Fee	2	2	1	1	1	1

FreeMeal	2	2	2	2	1	2
Parent_SES	2	2	2	2	2	2
Parent_Education	2	2	2	2	2	2
FieldTrip	5	5	1	1	1	4

Demographics table for preschools.

School	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Classroom_Size	40	57	58	51	21	47	140
Number_of_Adults	3	4	2	2	2	2	2
Gender	1	2	1	1	1	1	1
Age	40	40	40	32	34	39	37
Years_of_Experience	14	12	15	8	10	17	14
AgeGroup	5	03/04/05	03/04/05	5	4	4	3
EducationLevel	3	4	3	4	3	3	3
Number_of_Children	25	25	14	25	21	22	25
SchoolType	1	1	1	1	1	1	1
Fee	2	2	2	2	2	2	2
FreeMeal	2	1	2	1	1	1	1
Parent_SES	midle	midle	midle	midle/ hight	midle	midle/high	midle/high
Parent_Education	3	2	4	2	2	2	2
FieldTrip	3	3	5	3	1	3	3

Demographics table for primary schools

School	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Classroom Size m2	40	40	47	49	49	49	49
Gender	1	1	1	1	1	1	1
Experience	32	35	34	40	32	35	34
AgeGroup	8	6	7	8	8	7	6
Teache_Ed_Level	3	3	3	3	5	3	3
ClassSize	26	9	16	6	26	24	24
SchoolType	1	1	1	1	1	1	1
Fee	2	2	2	2	2	2	2
FreeMeal	2	2	2	2	2	2	2
ParentsSES	2	1	2	2	2	2	2
ParentEducation	3	3	3	3	3	3	3
FieldTrip	3	3	3	3	3	3	3

Research Instruments

Demographics Form. This form was developed by the researchers and used for all the programs observed for the study. It included such questions as the age group served, socio-economic statuses of parents, teacher's education level, and whether the program provide free meals.

Infant/Toddler Environment Rating Scale (ITERS-3). ITERS-3 is a valid and reliable instrument that relies on information collected through on site three-hour-long observation of classrooms for children under 36 months. There are 33 items covering six subscales of the instrument including Space and Furnishings, Personal Care Routines, Language and Books, Activities, Interaction, and Program Structure.

Caregiver Interaction Scale. CIS was developed by Arnett (1989) and was designed to measure the emotional tone, disciplinary style, and the responsiveness of the educator. This four-point Likert style measure includes 26 items and filled out by the observer. CIS was used to test criterion referenced reliability for ITERS-3.

Early Childhood Environment Rating Scale (ECERS-R). It is a valid and reliable instrument that relies on information collected through on site three-hour-long observation of preschool classrooms. There are 43 items covering seven subscales of the instrument including Space and Furnishings, Personal Care Routines, Language and Reasoning, Activities, Interaction, Program Structure and Parents and Staff.

PK2

Marzano

Data Collection. Raters who would administer the scales were trained until inter-rater reliability was established. Once the test intra-rater reliability established, data collection process was started. Data was collected through observations of the same classrooms on two different days two-weeks apart in the Spring of 2019.

Findings

Daycares

ITERS-3. The scale consists of 33 Items that are organized into six subscales including Space and Furnishings, Personal Care Routines, Language/Books, Activities, Interactions, and Program Structure. Total mean scale scores and average subscale scores for each daycare are given in Table…

A. **Space and Furnishings**. This subscale consists of items that explore the qualities below:

1. Indoor space. This item evaluates the classroom space in terms of sufficiency, cleanliness, maintenance of the furniture and space, ventilation and lighting, and accessibility. Only one classroom was in excellent condition. The rest of the classrooms neither public nor private met the criteria to be considered in good quality. Meaning, there were far from providing adequate space for children to move freely and play and for daily routine care and activities, overall maintenance of the environment was poor, and space is not accessible for people with disabilities.

2. Furnishings for care, play, and learning. This item evaluates the conditions of furniture, whether they are in adequate number, child-sized for infants and

toddlers, in good condition, there is softness provided, and there is adaptive furniture. None of the classrooms observed met the criteria to be considered in good quality. In fact, the score each room obtained for this item was 1, and one received 2 and another three, meaning they were all performed poorly in terms of this aspect of quality.

3. Room arrangement. This item evaluates how the room is organized in a way to enable adult supervision of children, accessibility, easy flow of traffic, and to set up interest centers. All of the classrooms received the either the score 1 or 2 for this item meaning they all failed to provide enough space for children to play and to set up learning centers, are not structured or organized in a way to enable supervision of all children at all times.

4. Display for children. This item evaluates if displayed materials are appropriate and at children's eye level, regularly changed, and become a topic of conversation. All of the classrooms observed performed poorly in terms of this aspect receiving 1s and 2s pointing out the inadequacy of visual materials that would stimulate learning.

Space and Furnishings	**1**	**2**	**3**	**4**	**5**	**6**
Indoor Space	7,00	7,00	7,00	7,00	7,00	7,00
Furnishings for care play and learning	7,00	7,00	6,00	7,00	4,00	6,00
Room arrangement	7,00	7,00	7,00	7,00	7,00	7,00
Display for children	6,00	1,00	6,00	6,00	6,00	4,00
Subscale average	6,75	5,5	6,5	6,75	6	6

Table .. Space and Furnishings subscale scores.

Overall, the classrooms, both public and private, received average scores between 1 or 2 indicating inadequate quality. Meaning, the space they offered to young children for their routine care and play was too small to function efficiently. Furniture decorated the classrooms were not in good condition nor offered soft surfaces that would create coziness and home-like environment young children need. Learning centers were not set up. There was not enough display materials at children's eye level that would stimulate and support their learning.

B. Personal Care Routines. This subscale consists of items that explore the qualities below:

5. Meals/snacks. This item evaluate whether food served to children is nutritious, meal/snack times are pleasant and flexible enough to meet individual children's needs, and supervision and sanitation is ensured. One third of the classrooms was in good to excellent condition while the rest received poor scores for this item mostly because of failing to follow the sanitary procedures.

6. Diapering/toileting. This item checks if sanitary procedures are followed, diapering/toileting schedule meets individual children's needs, adult supervision is provided, and any teaching moments occur. Scores for this item showed a range from 1 to 6 with one public and five classrooms obtaining 1

while the rest changed between 4 to 6 as none being in excellence. Those that were given scores indicating inadequacy failed to follow sanitary procedures. In none of the classroom's adults were observed engaging in teaching in their interactions with children during diapering/toileting.

7. Health practices. This item evaluates hygiene practices in terms of sufficiency, pleasance, and teaching moments. Of observed, only one classroom received 7 indicating excellency in health practices engaged in. The scores for this item given to other classrooms ranged between 1 -3 mostly because of failure to follow proper hand washing rules and lack of sanitation practices.
8. Safety practices. This item evaluates indoor and outdoor space in terms of safety hazards and adult supervision. Scores for this item varied between 2 (inadequate) to 6 (good to excellent). A quarter of the classrooms observed received 2 indicating inadequacy and causing concerns about the safety of children in care; while the rest received scores between 4 - 6 meaning safety hazards were relatively not in an amount to cause any threat or concern, supervision of children were provided while in some classrooms staff failed to inform children about potential consequences of their unsafe actions.

To sum up the findings for this subscale, in 41% of the classrooms quality was not ensured in meeting the basic needs of children through personal care routines. In another 41% of the classrooms, quality was barely adequate. None of the classrooms was in excellent condition.

Personal Care Routines	**1**	**2**	**3**	**4**	**5**	**6**
Meals/snacks	1,00	7,00	6,00	7,00	7,00	4,00
Diapering/toileting	7,00	7,00	7,00	7,00	7,00	7,00
Health practices	7,00	7,00	6,00	7,00	7,00	7,00
Safety practices	7,00	7,00	2,00	7,00	7,00	2,00
Subscale average	7,5	10,5	6	9	9	6,75

C. **Language and Books.** This subscale consists of items that explore the qualities below:

9. Talking with children. This item evaluates occurrence and nature of conversation between staff and children. Of the classrooms observed, four (33%) received a score between 1 - 2 meaning conversations between adult and children were limited, insensitive to children's interest, play, or mood, or unplayful. Staff in the other classrooms showed an excellent performance that was characterized by personalized, informal, pleasant, and playful talk with children.
10. Encouraging vocabulary development. This item evaluates how teachers support new vocabulary acquisition. Staff members working in the classrooms that were found inadequate in terms of talking with children were also observed to be performing poorly in cultivating children's language development. The scores of the others classrooms in regards to this aspect

ranged from 4.5 to 6 meaning teachers working in those classrooms did a conscious effort for promoting language development by naming objects, people, actions as they appeared in children's play and routines, repeating words, talking about both current and past/future experiences of children, and making comparisons.

11. Responding to children's communication. This item is about how teachers respond to what children communicate, whether it is pleasant, educative, and responsive to what child needs. The teachers who showed a poor performance in terms of previous two items were also inadequate in their responses to children as they displayed a disregarding approach to children's attempt to communicate or were negative in their response. The teachers in the 33% of classrooms observed were good at responding to children while 33% of teachers did an excellent job by not only responding positively to children's communication but also expanding on whatever children tried to say.
12. Encouraging children to communicate. This item evaluates how teachers initiate conversations with children, ask questions, and answer questions raised by children. The teachers who showed a poor performance in terms of previous items of this subscale were also inadequate as they did not engage in back and forth conversation with children, asked questions meaningful for children, or stayed positive when questions not answered. Of the teachers observed, 50% was relatively close to being considered good. Only in one classroom, staff was observed to be excellent with frequent turn-taking conversations with children, many appropriate questions directed to children during their play and care, and waiting for children to answer questions.
13. Staff use of books with children. This item is about how staff reads books to children and responds to children's behavior and reactions during book time. Of the classrooms observed in this study, 75% received scores indicating inadequacy in this respect. In fact, there was not any occasion of adults reading books to children taken place during the observation periods in three of those classrooms. Only in 25% nursery classrooms, teachers received scores 3.5 indicating that there was a book time that appeared to be pleasant for both adults and children who could see content of the book, but no informal readings with children who were actively involved during the process.
14. Encouraging children's use of books. This item checks appropriateness, circulation, availability and accessibility of books and whether staff provides positive attention when children engage in independent reading. All of the classrooms observed were inadequate in this aspect. There was no book available or accessible for children.

Language and Books	**1**	**2**	**3**	**4**	**5**	**6**
Talking with children	7,00	7,00	7,00	7,00	7,00	7,00
Encourage vocabulary development	7,00	7,00	7,00	7,00	7,00	7,00

Responding to children's communication	7,00	7,00	1,00	4,00	7,00	2,00
Encourage children to communicate	7,00	7,00	7,00	7,00	7,00	7,00
Staff use of books with children	7,00	7,00	7,00	7,00	7,00	7,00
Encourage children's use of books	7,00	7,00	7,00	7,00	7,00	7,00
Subscale average	5,83	5,83	4,83	5,33	5,8333333	5

Overall, among the observed classrooms that were selected from 12 different nursery programs, 33% seemed to be inadequate in terms of promoting language development of very young children. In the other programs, teachers showed good or excellent performances in their communications with children. However, none of the programs offered a literacy rich environment in which numerous and age appropriate books and reading materials made available for children throughout the day in an environment where informal reading was encouraged and facilitated.

D. Activities. This subscale consists of items that explore the qualities below:

15. Fine motor. This item checks availability and accessibility of manipulatives, and learning opportunities provided during the use of fine motor materials. All the classrooms observed except one received the score 1 indicating their inadequacy in promoting fine motor skills of children. There was not any fine motor material accessible for use of children in any of the classrooms observed.

16. Art. This item is about availability and accessibility of art materials, supervision and support provided during their use. All the classrooms observed except one received the score 1 indicating inadequacy. There was no art materials/ activities available/accessible for children during the observation periods in those classrooms.

17. Music and movement. This item checks availability and accessibility of music materials, use of music and music/movement activities. In 33% of the classrooms, there was no music/movement activity or sing along taken place. Some but still inadequate level of music/ dance activity observed in the other classrooms.

18. Blocks. This item evaluates availability, accessibility, and storage of blocks and block center, and how staff cultivates learning at block play. Majority of the classrooms (83%) showed inadequacy. There were either no blocks available for children's use or there were blocks accessible but no accessories and no adult involvement in block play. In two of the classrooms, block play was minimally supported.

19. Dramatic play. This item evaluates availability and accessibility of dramatic play materials and dramatic play center, and staff promotes dramatic play. All of the classrooms except one were inadequate in their promotion of dramatic

play. There was not any dramatic play material available for children's use in those classrooms.

20. Nature/science. This item checks availability of opportunities to observe nature indoors and outdoors, to play with sand and water, to have conversations about natural/ scientific phenomena, and presence of a science center in classroom. All of the classrooms were inadequate in this respect. There was not any nature/science material available for children to explore in any of the classrooms observed for the study. Children were not given any opportunity to explore natural world.
21. Math/number. This item checks availability and accessibility of math materials, use of math language by staff in their interactions with children, and provision of opportunities to learn math. All of the classrooms were inadequate in this respect. There was not any math material available for children to explore in any of the classrooms observed for the study.
22. Appropriate use of technology. This item evaluates nature and appropriateness of tech materials and their use. All of the classrooms were inadequate in terms of use of technology. Technology was not used in a way to cultivate creativity or extend on what children were interested in and explored at the time.
23. Promoting acceptance of diversity. This item evaluates whether diversity is reflected in classroom displays and activities. All of the classrooms were inadequate in their promotion of diversity. There was no materials reflecting diversity.
24. Gross motor. This item evaluates access to, quality, and use of indoor and outdoor gross motor play area. Seventy five percent of the nursery schools showed failure in promoting gross motor play and received 1 as they did not provide any appropriate space or equipment for gross motor play. Three nursery schools that showed minimal level of adequacy had some indoor and outdoor gross motor play area with some equipment accessible as well as fence, shade and windbreak for protection.

Activities	**1**	**2**	**3**	**4**	**5**	**6**
Fine motor	7,00	7,00	5,00	7,00	7,00	7,00
Art	7,00	7,00	2,00	2,00	2,00	4,00
Music and movement	7,00	7,00	2,00	2,00	2,00	7,00
Blocks	7,00	7,00	3,00	7,00	7,00	6,00
Dramatic play	7,00	na	4,00	4,00	7,00	4,00
Nature/science	7,00	7,00	1,00	7,00	7,00	6,00
Math/ number	7,00	7,00	1,00	7,00	7,00	6,00
Appropriate use of tech.	7,00	7,00	1,00	7,00	7,00	1,00

Promoting acceptance of diversity	7,00	7,00	3,00	7,00	7,00	7,00
Gross motor	7,00	6,00	2,00	2,00	2,00	4,00
Subscale average	7	6,888888889	2,4	5,2	5,5	5,2

Overall, the nursery schools and their classrooms observed for this study received an average score of 1 indicating poor quality in activities subscale. There was hardly any educational materials available or accessible for children. Teachers did not provide any materials or learning opportunities in the areas of art, music, science, or math. Diversity was not something that was given any consideration.

E. Interaction. This subscale consists of items that explore the qualities below:

25. Supervision of gross motor play. This item evaluates provision of challenging, vigorous, and pleasant gross motor play under adult supervision. Fifty percent of the programs were found to be inadequate and given a score of 1 or 2 while 41% of the programs obtained the score 3 - 5 indicating a performance between minimal to good. Of the nursery schools observed, only one obtained a score of 6 and showed almost excellent practice by providing encouragement for, appropriate supervision and behavior management during gross motor play.

26. Supervision of play and learning (non-gross motor). This item checks if constant and individualized supervision of children is provided, and how staff intervenes when needed. Of the classrooms observed, 41% were found to be inadequate in terms of adult supervision of play and learning. Teachers working in those classrooms were mostly busy with managerial or routine care work and their attention was on the large group ignoring the individual play or interest of children. A quarter of teachers from the sample received scores 5-6 meaning they provided constant supervision, intervened when conflicts arose, and supported individual play.

27. Peer interaction. This item evaluates how staff encourage children interact with each other and facilitate and guide children during the process, models social skills, and acknowledge positive social interactions. Of the classrooms observed, %58 were found to be inadequate in terms of teachers being sensitive to children's need to play alone without interference by others. Rather, in those classrooms, children were kept in large groups and conflicts were ignored. In 41% of the classrooms, minimal level of quality was reported meaning children were given some degree of freedom to play alone, intervened when needed, and facilitated interactions between children.

28. Staff-child interaction. This item evaluates whether staff provide emotional support to children when they need, positively respond to children's communication efforts, and interact with all children in their care. Of the classrooms observed, 25% was coded as inadequate because of teachers' mostly unpleasant interactions with children. In 41% others, teachers received the scores 4 or 5 meaning their interaction with children was or close to being

good. In 33% of the classrooms, however, teachers were excellent in the way they interacted with children by being observant of their needs and supporting accordingly.

29. Providing physical warmth/touch. This item checks if teachers are a source of constant caring and warm physical contact matching individual preferences and needs of children. Forty one percent of the classrooms were found to be inadequate in this sense while another 41% received scores indicating good and excellent quality.

30. Guiding children's behavior. This item checks if staff uses positive behavior management strategies including focusing on positive behavior, teaching empathy and social skills to solve conflicts, and setting appropriate expectations. Scores for this item ranged from 1 to 7 with 25% of the classrooms being inadequate while 16% being excellent.

Interaction	**1**	**2**	**3**	**4**	**5**	**6**
Supervision of gross motor play	7,00	7,00	7,00	7,00	7,00	7,00
Supervision (non-gross motor)	7,00	7,00	7,00	7,00	7,00	7,00
Peer interaction	7,00	7,00	7,00	7,00	7,00	7,00
Staff- child interaction	7,00	7,00	7,00	7,00	7,00	7,00
Providing physical warmth/touch	7,00	7,00	7,00	7,00	7,00	7,00
Guiding children's behavior	7,00	7,00	7,00	7,00	7,00	7,00
Subscale average	7	7	7	7	7	7

Overall, when subscale average scores considered, in none of the nursery classrooms observed, staff members found to be providing excellent atmosphere where emotional needs of children were met through care and warmth. While %16 of the classrooms were in good condition, %41 received scores indicating minimal level of quality and 33% was inadequate.

F. Program Structure. This subscale consists of items that explore the qualities below:

31. Schedule and transitions. This item checks whether schedule and transitions are flexible enough to meet individual needs of children, activities are prepared ahead of time in a way to leave no room for waiting periods with nothing to do, and transitions are smooth. Of the observed, none was excellent and only one was in good condition. Seventy five percent of the classrooms were inadequate with their long transition periods while 16% received the scores 3-4 indicating that in those classrooms daily schedule was flexible enough to meet individual needs of children, transitions were almost smooth but teachers were a little busy with preparations.

32. Free play. This item evaluates if children are given ample time and materials for free play with adults being the facilitator and promoter. Eighty three percent of the classrooms was inadequate in terms of availability and accessibility of play materials. Only one classroom was found to be in good condition and one in minimal.
33. Group play activities. This item evaluates whether group play activities are voluntary, engaging, carried out in smaller groups, adjusted to needs of children, and go along with alternative activities for those not participating. None of the classrooms scored higher than 3 with four classrooms receiving 1 meaning not participating in staff-led whole-group activities was not an option for children.

Program Structure	**1**	**2**	**3**	**4**	**5**	**6**
Schedule and transitions	7,00	7,00	4,00	7,00	7,00	7,00
Free play	7,00	7,00	1,00	7,00	7,00	7,00
Group play activities	7,00	7,00	2,00	4,00	7,00	7,00
Subscale average	7	7	2,333333	6	7	7

Overall, out of the 12 classrooms observed, none was near to being qualified as good in condition with 83% failed to provide a quality environment that was supplied with plenty of educational toys and materials for children to play with during free play period; children had to wait too long during transitions with nothing to engage; and daily schedule was too rigid that large group activities taking up all the time leaving no opportunities for individual or small group work or play.

Average Subscale Scores	**1**	**2**	**3**	**4**	**5**	**6**
Space and Furnishings	2	3	1.5	1	1.5	1.2
Personal Care Routines	3.5	4	1.7	4	3.2	3.7
Language and Books	4.5	6.6	1.1	3.6	3.8	1.3
Activities	1.3	2.3	1	1.1	1.3	1.5
Interaction	3.9	3.6	1.3	3	31	1.8
Program Structure	1	4.3	1	1.3	2.6	2
Total Mean Score	2.7	3.4	1.2	2.2	2.8	1.8

Mean scores for ITERS-3 showed a range of 1.2 to 3.4. Out of the 12 nursery classrooms observed, none received an overall mean score indicating good or excellent quality. In fact, 83% of the classrooms received scores indicating inadequate level of quality. When

each subscale's average scores were examined it seems that Space and Furnishings and Activities subscales were the ones with the lowest scores.

Preschools

ECERS-R

The scale consists of 43 Items that are organized into seven subscales including Space and Furnishings, Personal Care Routines, Language-Reasoning, Activities, Interactions, Program Structure, and Parents and Staff. Total mean scale scores and average subscale scores for each preschool are given in Table…

Subscales	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Space and Furnishings	3.4	1.5	3.3	2.2	2.2	2.5	
Personal Care Routines	3.2	1.8	3.9	3.2	5.2	2.6	
Language-Reasoning	1	2.4	3.7	1.6	2.7	1.5	
Activities	2	1.7	1.9	1.5	2.4	1	
Interaction	2	3.2	5.6	1	5.6	3	
Program Structure	2.3	1.3	1.3	1	1.8	1.6	
Parents and Staff	3.4	2.4	2.6	2.9	3.4	2	
Total mean scale score	2.9	2	3	2	3.4	2	

Table . Average scores for ECERS-R and each subscale.

As shown in Table …, total mean scores obtained from the entire scale by each preschool indicated that none of the preschools, even the ones serving in affluent neighborhoods, failed to show an excellent performance. Only one school where the sum of all subgroups in this scale is at a good level was detected. Mean scores of 13 schools ranged between 2 to 4.9, inadequate to be close to good.

A. Space and Furnishings. This subscale consists of items that explore the qualities below:

1. Indoor space. This item evaluates the classroom space in terms of sufficiency of the space, maintenance of furniture and space, ventilation and lighting, and accessibility. Two preschool classrooms that was located in an affluent neighborhood obtained 7, meaning its indoor space was in excellent condition. Among the preschool classrooms observed, four serving in a disadvantaged neighborhood and one preschool in a middle SES community were found to be in poor conditions receiving 1 and 2 for this subscale. The other preschool classrooms received between 4 and 6 score placed between minimal and good.
2. Furniture for routine care, play and learning. This item evaluates the conditions of furniture, whether they are in adequate number, child-sized, in good condition, and if there is any adaptive furniture. Three preschool classrooms located in disadvantaged neighborhoods and one preschool in middle class neighborhood were found to be inadequate in terms of this item by obtaining scores 1 or 2. The other six classrooms were found to be in good condition with scores ranging from 5 to 6. The other three preschool classrooms received 4 score placed between minimal and good.
3. Furnishings for relaxation and comfort. This item evaluates how much comfort and coziness is created within the classroom. When the scores of for this item were

evaluated 7 preschool classrooms received a point between 1 to 2 meaning in these classrooms there were no soft toys and furnishings accessible to children (such as upholstered furniture, cushions, rugs, bean bag chair, stuffed animals and soft dolls). In five classrooms that received between 3 and 4 scores indicating minimal level of quality there was some soft furnishings and soft toys accessible to children. Two classrooms observed were in good or excellent condition (received 5 or 7 point) in terms of this item.

4. Room arrangement for play. This item checks the organization and functionality of learning centers. Among the classrooms observed, six classrooms were in inadequate level receiving scores of 1-2. One in a disadvantaged and one in an affluent neighborhood were found to be in good condition while remaining four classrooms were scored (4) between minimal to good level. Two the classrooms met the criteria for excellency (between 6 and 7) that required existence of at least five different interest centers with a variety of learning experiences that organized for independent use by children (ex. labeled open shelves, labeled containers for toys, open shelves are not over crowded; play space near toy store; and additional materials available to add to or change centers).
5. Space for privacy. This item is about whether space is provided for individual child to work alone. Scores obtained by the classrooms observed showed 13 classrooms were either inadequate or at minimal level in this aspect meaning no such space is available for children to work alone or with a friend without any intrusion by other children. Only one classroom was found to be between good and excellent condition with 6 scores.
6. Child-related display. This item evaluates whether displays on the walls are appropriate, in parallel with children's work, and on children's eye level. Four of the classrooms observed did poorly in this respect and received the score 2. Nine classrooms that made the scores between minimal or good level that means appropriate materials for predominant age group and much of the display relates closely to current activities and children in group. The remaining classroom was in excellent condition (received 7 point) in terms of this item. In this classroom, individualized children's work predominates were provided.
7. Space for gross motor play. This item evaluates the adequacy of indoor and outdoor playgrounds and how it is organized. Among those observed, only one preschool scored 2 meaning the outdoor or indoor space used for gross motor /physical play was too small and unsafe. The other 11 preschools scored between minimal (3 point) to good (5 point) level that means 5 preschools provides some motor space outdoors or indoors 6 preschools supply adequate space outdoors and some space indoors (4-5 points) . Two classrooms were in excellent condition (between 6 and 7 points) in which different types of play were possible in the outdoor gross motor space.
8. Gross motor equipment. This item evaluates the adequacy and accessibility of gross motor equipment. Five of the preschools observed scored between 1 and 2 in this respect and were found to be inadequate in their provision of gross motor equipment. Eight classrooms scored between minimal (3 points) to good (5 points) level. Only one classroom was between good or excellent condition (6 points). Both stationary and portable gross motor equipment are used in that classroom. Gross motor equipment stimulates skills on different levels.

Space and Furnishings	**1**	**2**	**3**	**4**	**5**	**6**
Indoor space	1,00	7,00	7,00	4,00	7,00	7,00
Furniture for routine care & learning	1,00	6,00	4,00	7,00	2,00	7,00
Furnishing for relaxation and comfort	3,00	7,00	6,00	4,00	5,00	4,00
Room arrangement for play	3,00	7,00	6,00	7,00	4,00	7,00
Space for privacy	1,00	7,00	4,00	na	2,00	na
Child-related display	5,00	7,00	4,00	6,00	7,00	6,00
Space for gross motor play		7,00	3,00	7,00	2,00	7,00
Gross motor equipment	1,00	7,00	1,00	2,00	1,00	2,00
Subscale average	2,5	6,9	4,4	5,4	3,8	5,7

Table . Item scores of the preschools for Space and Furnishing subscale

In summary, when we looked at the detailed sub scales averages, only 4 classrooms reached at a good level related to sufficient space and furnishing for children in the learning settings.

B. Personal Care Routines. This subscale consists of items that explore the qualities below:

9. Greeting/departing. This item evaluates warmth provided to children during arrivals and departures. Eleven classrooms, observed for the study scored inadequately, that is greetings of children are often neglected and departure is not well organized for children either. Only one classroom reached at the minimal level. Two classrooms were between good or excellent condition (5-6 points). In these classrooms each children is greeted individually.

10. Meals/snacks. This item evaluates if food served nutritious, meal times are pleasant, and child independence is encouraged. Scores of the preschools in terms of meals/snacks, varied between minimal (2/3) to excellent (7) point. Feeding schedule in the preschools was appropriate for children and meals/ snacks were presented to children in a non-punitive atmosphere. Moreover, children were given opportunities to help during meals (such as set table, clear table wipe up spills).

11. Nap/rest. This item evaluates sanitary and supervisory conditions, timing, and pleasantness of nap time. This item was excluded from the scoring system because all the preschools in the study served part-time with no naptime offered.

12. Toileting/diapering. This item evaluates material, sanitary and hygienic conditions and pleasantness during toileting/diapering. Scores of the preschools for this item ranged between 2 to 7. Two classrooms scored between 2 and 3 and nine classrooms found to be in excellent condition (6-7 points). Three of the preschools received 4 points showing a placement between minimal and good. Sanitary conditions were maintained and child sized toilets and low sinks were provided for children. Moreover self-help skills were promoted as children are ready.

13. Health practices. This item evaluates what precautions have been taken to prevent spread of germs, whether staff are being good role models, and children are dressed appropriately and clean. Four of the classrooms were inadequate in terms of this item (2 points). Ten of the classrooms were found to be in good or excellent condition in which individual toothbrushes properly labeled and stored, used at least once during the day in full-day programs and children taught to manage health practices

independently. Moreover children are dressed properly for conditions both indoors and outdoors.

14. Safety practices. This item checks the safety precautions taken. Scores for this item ranges from inadequate to excellent (Five classrooms were scored 1-2, four of the classrooms were scored 3 to 5, the remaining four were scored 6 to 7). That means the preschools that were inadequate in safety practices lacked supervision indoors and outdoors. On the other hand, some of the classrooms provide play areas that are arranged to avoid safety problems.

Personal care routines	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Greeting/departing	7,00	7,00	7,00	1,00	1,00	1,00	1,00
Meals/snacks	6,00	7,00	4,00	4,00	1,00	4,00	4,00
Nap/rest	1,00	6,00	7,00	6,00	6,00	na	6,00
Toileting/diapering	2,00	7,00	7,00	7,00	4,00	7,00	7,00
Health practices	7,00	7,00	7,00	7,00	7,00	4,00	7,00
Safety practices	7,00	7,00	7,00	6,00	6,00	7,00	7,00
Subscale averages	5	6,8	6,5	5,2	4,5	4,6	5,333333333

Table . Item scores of the preschools for Personal Care and Routines subscale

In summary, when we looked at the detailed sub scales averages, five classrooms reached at good level and excellent level related to greeting and departing of children in the classroom

C. Language-Reasoning. This subscale consists of items that explore the qualities below:

15. Books and pictures. This item evaluates variety, appropriateness, accessibility, and richness in reading center and whether book reading is a part of daily routine. In terms of this item, six of the classrooms observed scored 1 or 2 indicating their inadequacy, which means in those classrooms there were few books and staff rarely read books to children, there were no daily story times, and little individual reading to children. The remaining eight classrooms were at a minimal level (2.5 - 4 points). In those classrooms, some books were accessible by children. Children had enough books to avoid conflict during free play time, and there were at least one staff–initiated receptive language activity time daily.

16. Encouraging children to communicate. This item evaluates if children are encouraged to communicate throughout the day and during activities. The findings varies between adequate level (7 classrooms scored 1-2 points), minimal level (5 classrooms scored 3-4 points) and excellent level (2 classrooms scored 7 points). That means majority of teachers observed for this study did not provide opportunities that would encourage children to communicate. Only two teacher balanced listening and talking appropriately for age and abilities of children during communication activities (such as leave time for children to respond; verbalize for child with limited communication skills).

17. Using language to develop reasoning skills. This item evaluates if children are encouraged to reason to solve problems and are introduced concepts accordingly.

Parallel with the findings for the previous item, the scores of the teachers for this item ranged from adequate level (6 classrooms scored 1-2 points) and minimal level (5 classroom scored 3-4 points), good level (1 classroom scored 5 point) and excellent level (2 classrooms scored 7 points). That means in this sample majority of teachers observed (6/14) did not talk with children in a way to cultivate their reasoning skills. In five classrooms, teachers sometimes talk about logical relationships or concepts at a minimal level. Only in two classrooms, concepts were introduced in respond to children's interests or needs to solve problems.

18. Informal use of language. This item evaluates how much communication opportunities are given to children throughout the day and nature of conversations between children and staff. In two of the classrooms observed, teachers talked to children primarily to control their behavior and manage routines. Other than that, they rarely responded to children's communication attempts that was discouraged much of the day. In ten classrooms that scored at minimal level (between 3 and 4), some of the staff communicate with children. There was only two classrooms (7 points) in which the teacher asked questions to encourage children to give longer and more complex answers.

Language-Reasoning	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Books and pictures	2,00	7,00	7,00	6,00	4,00	6,00	7,00
Encouraging to communicate	1,00	7,00	7,00	7,00	7,00	7,00	7,00
Language to develop reasoning skills	2,00	7,00	7,00	2,00	2,00	7,00	7,00
Informal use of language	4,00	7,00	7,00	6,00	2,00	7,00	7,00
Subscale averages	2,3	7	7,00	1,00	3,75	6,75	7,00

Table . Item scores of the preschools for Language – Reasoning subscale.

In summary, when we looked at the detailed sub scales averages, only two classrooms reached at a point between good and excellent levels related to books and language materials for children in the classroom.

D. Activities. This subscale consists of items that explore the qualities below:

19. Fine motor. This item checks the amount, variety, accessibility, and organization of manipulatives. Five classrooms were inadequate in provision of fine motor materials accessible for daily use and those materials were generally in poorly maintained or incomplete conditions. Seven classrooms were between minimal level and good level. These classrooms provided some developmentally appropriate fine motor materials of each type accessible by children in the education settings. Two classrooms were in excellent conditions that means materials were rotated to maintain interest.

20. Art. This item checks the amount, variety, and accessibility of art materials and whether children are given extended periods of time for their art projects. When the scores of "Art" item were evaluated, 8 classrooms from 14 schools received 1 point, which means in these classrooms art activities were rarely available to the children. In one classroom, children were permitted to play with art materials and some art materials were provided for at least 1 hour a day. The findings varies between

adequate level (1 classrooms scored 2 point), minimal level (2 classrooms scored 3-4 points) and good level (2 classrooms scored 5 points). Only one classroom had excellent (7 points) conditions in terms of art materials. In that classroom, three-dimensional art materials such as clay, play dough, wood gluing, and carpentry tools were accessible to children at least once a month. And there were also some other art activities provided such as painting in fall colors when learning about seasons, and inviting children to make pictures following a field trip.

21. Music/movement. This item checks the amount, variety, and accessibility of music materials, and whether occasional music activities take place. Two of the classrooms observed in this study were inadequate, 10 classrooms were at a point between adequate and minimal level (2- 3 points). Two classrooms were in excellent condition in which music materials and music activities were accessible as a free choice or group activity daily for children.

22. Blocks. This item checks the amount, variety, and accessibility of blocks and accessories and whether there is a special block area set aside out of classroom traffic. Two of the classrooms observed in this study were inadequate The other findings varies between adequate level (one classroom scored 2 points), minimal level (6 classrooms scored 3-4 points) and good level (5 classrooms scored 5-6 points). Some of the classrooms provides few blocks are accessible for children's play. Some of the schools provides enough blocks and accessories are accessible for three or more children to build at the same time.

23. Sand/water. This item checks if water and sand play along with toys are provided indoors or outdoors. Only three from 14 classroom provide some toys to use for sand or water play (scored 4 points). Different activities in most of the classrooms are not implemented with sand and water both outdoors and indoors in the schools settings. These classrooms were in inadequate level receiving scores of 1 and 1.5 points

24. Dramatic play. This item checks the amount, variety, and accessibility of dramatic play materials and whether there is a dramatic play area set aside. Of the observed, 4 classrooms were inadequate in provision of dramatic play materials such as dress up clothes, hose keeping props, dolls. The other findings varies between adequate level (4 classrooms scored 2 points), minimal level (5 classrooms scored 3-4 points) and good level (1 classroom scored 5 points). Classrooms were at minimum conditions, which means there were some dramatic play materials and furniture accessible so children could act out family roles themselves. Materials were accessible by children for at least 1 hour daily. On the other hand classrooms were at good conditions, which provides materials accessible for a substantial portion of the day.

25. Nature/science. This item checks the amount, variety, and accessibility of nature/ science materials, and if nature/science activities are provided. The findings varies between inadequate level (8 classrooms scored 1 points), adequate level (3 classrooms scored 1.5- 2 points) and minimal level (2 classrooms scored 4 point). Only one preschool was excellent in terms of activities for nature and science accessible for children. In the classroom observed, nature and science activities (such as cooking, simple experiments like measuring rainfall, field trips) requiring more input from staff were offered at least once every 2 weeks. Moreover books, pictures and visual materials were used to add information and extend children's hands on experiences.

26. Math/number. This item checks the amount, variety, and accessibility of math materials, and if daily activities are used to promote math skills and concepts. Nine

classrooms were at inadequate conditions related to math and number materials in the learning centers of the classrooms. 4 classrooms were at a point between adequate and good level (1.5- 4 points). These classrooms provided some developmentally appropriate math and number materials in daily routine at a minimal level. Unfortunately, only one classroom was in excellent condition with many developmentally appropriate materials of various types accessible for a substantial of the day and daily activities used to promote math and number learning. That classroom was found to be excellent in provision of materials and activities with materials rotated to maintain interests of children.

27. Use of TV, video, and/or computers. This item evaluates if technology used in a way to encourage children actively involve and extend classroom leaning. Four classrooms were inadequate in terms of materials not being developmentally appropriate and not providing alternative activity while tv or computer being used. Seven classrooms were found to be between adequate and minimal condition (1.5-3 points) with all materials used being nonviolent and culturally sensitive and alternative activities accessible while TV or computer being used. Only one classroom received a score indicating good level of using developmentally appropriate educational materials and two classroom were found to be functioning at excellent level with materials used to support and extent classroom themes and activities being insufficient.

28. Promoting acceptance of diversity. This item evaluates whether diversity is reflected in classroom displays and activities. All of the classrooms observed were inadequate and adequate in their promotion of diversity (Classrooms scored 1- 2 points).

Activities	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Fine motor	6,00	7,00	7,00	6,00	1,00	6,00	7,00
Art	3,00	7,00	7,00	7,00	7,00	7,00	7,00
Music/movement	2,00	7,00	7,00	2,00	7,00	4,00	7,00
Blocks	4,00	7,00	6,00	6,00	1,00	7,00	6,00
Sand/water	1,00	1,00	7,00	4,00	1,00	4,00	7,00
Dramatic play	4,00	7,00	6,00	4,00	3,00	4,00	7,00
Nature/science	1,00	7,00	4,00	1,00	2,00	4,00	5,00
Math/number	1,00	7,00	7,00	4,00	1,00	4,00	7,00
Technology	1,00	7,00	4,00	4,00	1,00	4,00	7,00
Diversity	1,00	7,00	7,00	3,00	7,00	6,00	7,00
Subscale averages	2,3	6,4	6,2	4,1	3,1	5	6,7

Table . Item scores of the preschools for Activities subscale.

In summary, when we looked at the detailed sub scales averages, only two classrooms reached at minimal level related to different kinds of activities (language, arts, blocks, fine motor etc.) for children.

E. Interaction. This subscale consists of items that explore the qualities below:

29. Supervision of gross motor activities. This item evaluates if supervision is provided and precautions are taken to prevent accidents during gross motor play, how staff interact with children, and whether they help children develop their play. Two classrooms got inadequate points (1points), since they have insufficient supervision in gross motor areas to protect children's health and safety. Most staff-child

interaction is negative. One classroom was adequate level (2 points). Seven classrooms got minimal points (3 or 4 points) since they have adequate supervision in gross motor areas to protect children's health and safety. Some staff-child interaction is positive. Three classrooms got good points (5 or 6 points) since they have good supervision in gross motor areas to protect children's health and safety. Most staff-child interactions are pleasant and helpful. Only one classroom was in excellent conditions that means staff talk with children about ideas related to their play. Moreover staff help with resources to enhance play.

30. General supervision of children (other than gross motor). This item evaluates how supervision is provided and nature of it. Three classrooms got inadequate points (1 points) because of insufficient supervision of children. Most supervision was punitive or overly controlling. Eight classrooms got between minimal and good points (between 3 and 5) since staff approaches to children are positively. Sufficient supervision to protect children's safety. Moreover they give children help and encouragement when needed. Unfortunately only one classroom staff talk to children about ideas related to their play. In this classrooms teachers encouraged children to explore independently and ask questions and added information to extend children's thinking. Three classrooms were found to be functioning at excellent level. Staff talk to children about ideas related to their play, asking questions and adding information to extent children's thinking. Moreover a balance is maintained between the child's need to explore independently and staff input into learning.

31. Discipline. This item evaluates disciplinary methods used in classroom. Two classrooms got insufficient points (1 points), since children are controlled with severe methods. Expectations for behavior are largely in appropriate for age and developmental level of children. The findings varies between adequate level (1 classroom scored 2 point), minimal level (5 classrooms scored between 2.5 and -4 points) and good level (4 classroom scored between 4.5 and 5 points). Two classrooms had excellent (7 points) conditions in terms of discipline. In this classroom staff use non- punitive discipline methods effectively. Staff actively involve children in solving their conflicts and problems. Moreover staff use activities to help children understand social skills. The children and staff are very happy in other two classes that got 7 points.

32. Staff-child interactions. This item evaluates how staff interact with children, whether they display caring behavior when children needed, provide warmth and establish respectful environment for everyone. Two classrooms got inadequate points, which means that the teachers were not responsive to children and physical contacts were used to control children. Negative interactions occurred between children and teachers The findings varies between adequate level (2 classrooms scored 2 point), minimal level (4 classrooms scored between 2.5 and -4 points) and excellent level (6 classrooms scored between 6.5 and 7 points). The results are good because 6 classrooms' staff seem to enjoy being with the children. Moreover staff encourage the development of mutual respect between children and adults.

33. Interactions among children. This item evaluates whether there is sufficient opportunities for children to interact with each other and develop their social skills. There was almost no interaction among children in three of the classrooms causing their scores to remain as 1 point. Two classrooms were scored between adequate and minimal level (1.5-2.5 point). The other five classrooms are at good level based on

interaction among children. Moreover teachers set good examples for the children to develop good social behaviors with their peers. Four classrooms had excellent interactions and children had opportunities to cooperate together.

Interaction	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Supervision of gross motor activities	7,00	7,00	7,00	7,00	7,00	7,00	7,00
General supervision	5,00	7,00	7,00	7,00	7,00	7,00	7,00
Discipline	4,00	7,00	7,00	7,00	7,00	7,00	7,00
Staff-child interactions	7,00	7,00	7,00	7,00	7,00	7,00	7,00
Interactions among children	4,00	7,00	7,00	7,00	7,00	7,00	7,00
Subscale averages	5,4	7	7	7	7	7	7

Table . Item scores of the preschools for Interaction subscale.

Overall, one classroom was found to be inadequate, meaning interaction was almost negative. The interaction in six classrooms was at a desirable level.

F. Program Structure. This subscale consists of items that explore the qualities below:

34. Schedule. This item evaluates whether daily schedule provides a balance between structures and child initiated activities, individual needs are considered, and transitions are smooth. In two classrooms, schedule was inadequate since all of them got 1 points. Ten classrooms are scored between 1.5 and 2 as adequate level. Two classrooms were at good and excellent levels related to schedule. In fact schedule should provide balance of structure and flexibility. Additionally variations in schedule could support individual needs of children. Smooth transitions between daily events in the classroom are needed. Therefore these classrooms provide smooth transitions between daily events.
35. Free play. This item evaluates if children are given ample time and materials to engage in free play under adult supervision. In five classrooms, either the materials were insufficient or there was no opportunities for free play or staff does not supervise the children. The findings varies between adequate level (3 classrooms scored between 1,5 and 2 points), minimal level (3 classrooms scored between 3 and 4 point). Three classroom was at good and excellent levels in terms of new materials and experiences for free play added periodically.

36. Group time. This item evaluates how much portion of activities group time take, and if children are given opportunities to engage in small group or individual activities. The findings varies between inadequate level (8 classrooms scored 1 points), adequate level (2 classrooms scored 1.5- 2 points) and minimal level (one classroom scored 4 point). Three classrooms were good and excellent level. In these classrooms many play activities done in small groups or individually. Some routines done in small groups or individually. Moreover Different groupings provide a change of pace throughout the day.
37. Provisions for children with disabilities. This item evaluates whether teachers follow an individualized education plan for the child with disabilities included in the classroom, make necessary adaptations so that the child could participate in activities, and parents of the child are involved in. In eleven of the classrooms, there was no

provision for children with special needs. One classroom is scored as minimal level (2.5 points). For two other classrooms, the score for this item was 6.5 and 7 indicating excellence in collaboration of professionals and parents in their efforts to meet the needs of children and necessary adaptations being made for inclusion of children with disabilities in group and classroom activities.

Program Structure	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Schedule	2,00	7,00	7,00	7,00	2,00	7,00	7,00
Free play	7,00	7,00	7,00	6,00	6,00	7,00	7,00
Group time	4,00	7,00	7,00	7,00	7,00	7,00	7,00
Provisions for children with disabilities	na	na	7,00	na	6,00	na	7,00
Subscale averages	4,33	7,00	7	6,7	5,25	7	7

Table . Item scores of the preschools for Program Structure subscale.

Overall, only two classrooms were at a good level related to program structure.

Parents and Staff. This subscale consists of items that explore the qualities below:

38. Provisions for parents. This item evaluates whether parent involvement occurs and parents are provided information about the program, pedagogical approaches used, information about their children, and referral services when they are in need. Only one classroom scored poorly for this item indicating there was no offer of parent education or involvement. The findings varies between adequate level (1 classrooms scored 2 point), minimal level (9 classrooms scored between 2.5 and -4 points) and three classrooms had excellent (between 6 and 7 points) conditions. Parents were informed about administrative processes, activities, school decisions, and invited and encouraged (in some classes) to get involved in children's activities. In some classes, parents were involved in decision making for children's program and activities.

39. Provisions for personal needs of staff. This item checks if personal needs of staff members are considered including a separate lounge area and breaks when they need are provided. In eight of the classrooms, personal needs of teachers were not considered. There was not any closet or cabinet for staff to keep their personal belongings. There was not any private time for teachers. Moreover only two classrooms scored as 1.5 point and two as adequate level. Two classrooms is scored minimal level and two classrooms also scored between good and excellent level (5 and 6 points).

40. Provisions for professional needs of staff. This items checks for availability of enough storage space, a meeting room and administrative office for the use of staff members. In five classrooms, staff had no access to telephone, no storage place for professional materials. In five other classrooms, staff had access to phone, storage places, and area that could be used for individual meetings. In four classrooms is scored between good and excellent level (5 and 7 points) related to separate adult lounge area. Electronic devices are ready for staff. Some spaces and places are reserved for staff and their usage. The places are comfortable, conveniently located for conferences and group meetings.

41. Staff interaction and cooperation. This item evaluates if information about individual children are exchanged between staff members, if their interaction interferes with their duties towards children, and if responsibilities of each staff

member is clearly defined and equally divided. This item was not coded because of the fact that there was only six adults working in each classroom. Only four classrooms are at good and excellent levels classrooms based on responsibility of each staff member are clearly defined.

42. Supervision and evaluation of staff. This item checks if annual staff evaluations are made as well as constant feedback on their performance is provided, and if evaluation is followed by measures taken to improve performance. In seven classrooms, there was hardly any supervision, feedback or evaluation about staff and their performance. In seven classrooms, some supervision and feedback about staff performance were provided at a minimal and good level even though it is not at excellent level.

43. Opportunities for professional growth. This item evaluates whether staff members receive orientation, in-service training, and support to attend professional development activities. Of the observed, three of the classrooms were scored inadequate for its lack of support for professional development. There was no meetings or an orientation program held or in-service training provided for staff. Scores for the other ten classrooms varied between 3 and 5 points from minimal to good level. Only one classroom scored as an excellence level because support available for staff to attend courses, conferences, or workshops not provided by the program.

Parents and Staff	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Provisions for parents	4,00	7,00	6,00	4,00	4,00	4,00	6,00
Provisions for personal needs of staff	2,00	7,00	2,00	4,00	1,00	4,00	2,00
Provisions for professional needs of staff	7,00	7,00	4,00	7,00	7,00	7,00	7,00
Staff interaction and cooperation	4,00	7,00	7,00	6,00	7,00	4,00	7,00
Supervision and evaluation of staff	1,00	7,00	5,00	4,00	4,00	4,00	7,00
Opportunities for professional growth	4,00	7,00	6,00	4,00	4,00	4,00	4,00
Subscale averages	3,7	7	5	4,8	4,5	4,5	5,5

Table . Item scores of the preschools for Parents and Staff subscale.

Overall, the preschools evaluated in this study did poorly in terms of meeting the needs of parents and teachers. The average scores for this subscale remained between 2.2 to 5.3 indicating failure to meet basic needs of teachers who had to work alone with no teacher assistant available.

References

Conselho Nacional de Educação (CNE) (2018). *Estado da Educação 2017*. Lisboa: CNE

EURYDICE (2019). Portugal - Early Childhood Education and Care. Retrived from https://eacea.ec.europa.eu/national-policies/eurydice/content/early-childhood-education-and-care-60_en.

Gabinete de Estratégia e Planeamento & Ministério do Trabalho, Solidariedade e Segurança Social. (2018). Carta social – rede de serviços e equipamentos 2017. Lisboa: GEP/MTSSS. Acedido em www.cartasocial.pt; www.gep.mtsss.gov.pt

Fundação Francisco Manuel dos Santos. (2018). *Estabelecimentos nos ensinos pré-escolar, básico e secundário público: total e por nível de ensino*. Lisboa: Pordata. Acedido em: https://www.pordata.pt/Portugal/Estabelecimentos+nos+ensinos+pré+escolar++básico+e+secundário+por+n%C3%ADvel+de+ensino-1237

Fundação Francisco Manuel dos Santos. (2018). *Estabelecimentos nos ensinos pré-escolar, básico e secundário privado: total e por nível de ensino*. Lisboa: Pordata. Acedido em https://www.pordata.pt/Portugal/Estabelecimentos+nos+ensinos+pré+escolar++básico+e+secundário+privado+total+e+por+n%C3%ADvel+de+ensino-1242

Fundação Francisco Manuel dos Santos. (2018). *Alunos matriculados: total e por nível de ensino*. Lisboa: Pordata. Acedido em https://www.pordata.pt/Portugal/Alunos+matriculados+total+e+por+n%C3%ADvel+de+ensino-1002-7951

Inspeção Geral de Educação e Ciência (IGEC). (2019). Quem somos & O que fazemos. Retrieved from http://www.igec.mec.pt