INCLUSIVE EARLY CHILDHOOD EDUCATION (IECE) PROJECT

EXAMPLE OF IECE PROVISION: PORTUGAL

1. Abstract

The IECE provision selected as an example of inclusive practice is a group of schools called the *Agrupamento de Escolas de Frazão*, located in Paços de Ferreira (Porto Metropolitan Area).

The description of this case is based on:

- a summary of the main inclusive principles in the national legislation/regulations;
- a description of community and school characteristics;
- a characterisation of the quality of educational practices in four preschool classrooms.

The methods used to collect data were: document analysis of national standards and guidelines, curricular plans and individual education plans; interviews with preschool teachers; and observational procedures of classroom quality dimensions, mainly regarding inclusive practices.

We first presented the project to the school pedagogical board and to the preschool education department. All twelve preschool teachers as well as leadership members of the school were informed and collaborated in the first part of data collection. We did interviews with four preschool teachers and completed observations in three preschool classrooms.

Data will be described taking into account the list of criteria that are expected to be met and that was provided by the European Agency. We consider that most of the features listed by the Agency are described in the present document. The school and its workforce understood this case study as an opportunity for organisational improvement and professional development. Based on the collected data, the school community is developing efforts to improve some aspects and to implement some adjustments.

The *Agrupamento de Escolas de Frazão*, located in the north of Portugal, includes four schools (Arreigada Basic School, Frazão Basic School, Seroa Basic School and Basic School of Frazão). It serves 1,192 pupils from preschool to the third cycle of basic education. The Portuguese education system comprises three years of preschool education, which are not compulsory, and nine years of mandatory schooling divided into three cycles: first cycle – four years; second cycle – two years;

third cycle – three years.

There are 11 preschool classrooms, attended by 250 children aged from two to six years, from different socio-economic and cultural backgrounds. It should be highlighted that there is a high percentage of pupils with low socio-economic status, as is apparent given the high proportion of children in need of economic support (N= 119, or 47%) (please refer to Tables 1 to 4).

Most of the classes are heterogeneous in terms of learner age and children vary in the number of years they have attended preschool. Only five classrooms are homogeneous regarding children's age. Most of the classes have children who are attending preschool for the first time. Typically, children attend preschool for two years (when they are four and five years old).

Tables 1 to 4

Tables 1 to 4 summarise the information on preschool classrooms regarding children's gender, age, year of attendance and their family's need for economic support.

Need for economic support (NES) refers to state economic support for families whose socio-economic status does not allow them to fully finance the costs of school attendance (meals, books, supplies and housing). Different levels of economic support are determined based on household placement and vary in terms of the economic support type. The categories are: NES A – most needed, NES B – medium need and NES NN – No Need.

Table 1. Arreigada Basic School

| Class | Female | | Age 2 | Age 3 | Age 4 | _ | Age 6 | 1 st year | 2 nd year | 3 rd year | NES A | NES B | NES NN |
|--------------|--------|----|----------|----------|----------|----|----------|-------------------------|-------------------------|-------------------------|----------|----------|-----------|
| 1 (N= 25) | 15 | 10 | 0 | 0 | 21 | 4 | 0 | 5 | 20 | 0 | 10 | 5 | 10 |
| 2 (N= 26) | 13 | 13 | 0 | 0 | 10 | 15 | 0 | 0 | 18 | 7 | 12 | 4 | 10 |
| 3 (N= 25) | 17 | 8 | 0 | 0 | 0 | 25 | 0 | 2 | 4 | 19 | 10 | 4 | 11 |
| 4 (N= 22) | 15 | 7 | 1 | 21 | 0 | 0 | 0 | 22 | 0 | 0 | 6 | 4 | 12 |



| Class | Female | Male | Age 2 | Age 3 | Age 4 | Age 5 | Age 6 | 1 st year | 2 nd year | 3 rd year | NES A | NES B | NES NN |
|------------------|--------|------|----------|----------|----------|----------|----------|-------------------------|-------------------------|-------------------------|----------|----------|-----------|
| Total (N= 98) | 60 | 38 | 1 | 21 | 31 | 44 | 0 | 29 | 42 | 26 | 38 | 17 | 43 |

Table 2. Frazão Basic School

| Class | Female | | Age 2 | Age 3 | Age 4 | _ | Age 6 | 1 st year | 2 nd year | 3 rd year | NES A | NES B | NES NN |
|-------------------|--------|----|----------|----------|----------|----|----------|-------------------------|-------------------------|-------------------------|----------|----------|-----------|
| 1 (N= 20) | 12 | 8 | 0 | 0 | 20 | 0 | 0 | 4 | 16 | 0 | 4 | 2 | 14 |
| 2 (N= 20) | 11 | 9 | 0 | 0 | 0 | 19 | 1 | 0 | 10 | 10 | 8 | 3 | 9 |
| 3 (N= 19) | 9 | 10 | 0 | 0 | 0 | 19 | 0 | 1 | 4 | 14 | 4 | 5 | 10 |
| 4 (N= 22) | 10 | 12 | 1 | 21 | 0 | 0 | 0 | 22 | 0 | 0 | 2 | 5 | 15 |
| 5 (N= 21) | 10 | 11 | 0 | 5 | 16 | 0 | 0 | 7 | 14 | 0 | 7 | 4 | 10 |
| Total (N= 102) | 52 | 50 | 1 | 26 | 36 | 38 | 1 | 34 | 44 | 24 | 25 | 19 | 58 |

Table 3. Seroa Basic School

| Class | Female | | Age 2 | Age 3 | Age 4 | _ | Age 6 | 1 st year | 2 nd year | 3 rd year | NES A | NES B | NES NN |
|------------------|--------|----|----------|----------|----------|----|----------|-------------------------|-------------------------|-------------------------|----------|----------|-----------|
| 1 (N= 23) | 16 | 7 | 0 | 0 | 6 | 17 | 0 | 6 | 11 | 6 | 7 | 3 | 13 |
| 2 (N= 27) | 12 | 15 | 1 | 14 | 12 | 0 | 0 | 19 | 8 | 0 | 6 | 4 | 17 |
| Total (N= 50) | 28 | 22 | 1 | 14 | 18 | 17 | 0 | 25 | 19 | 6 | 13 | 7 | 30 |

Table 4. Total for Arreigada, Frazão and Seroa Basic Schools

| Class | Female | Male | Age 2 | Age 3 | Age 4 | _ | Age 6 | 1 st year | 2 nd year | 3 rd year | NES A | NES B | NES NN |
|-----------|--------|------|----------|----------|----------|-----|----------|-------------------------|-------------------------|-------------------------|----------|----------|-----------|
| N= 250 | 140 | 110 | 3 | 61 | 85 | 100 | 1 | 88 | 105 | 57 | 76 | 43 | 131 |

Tables 5 to 8

Tables 5 to 8 summarise information regarding the level of formal education of the parents of the 250 children who attend the preschools. 'M' stands for 'mother', 'F' stands for 'father', 'high sch.' refers to 'high school' and 'higher ed.' refers to 'higher education'. The Portuguese education system comprises nine years of mandatory schooling, divided into three cycles: first cycle – four years; second cycle – two years; third cycle – three years.

Table 5. Parents' level of formal education in Arreigada Basic School

| Class | M 1 st cycle | M 2 nd cycle | M 3 rd cycle | M high sch. | M higher ed. | F 1 st cycle | F 2 nd cycle | F 3 rd cycle | F high sch. | F higher ed. |
|--------------|----------------------------|-------------------------|----------------------------|-------------------|--------------------|----------------------------|----------------------------|----------------------------|-------------|--------------------|
| 1 (N= 25) | 4 | 9 | 5 | 5 | 2 | 11 | 12 | 1 | 0 | 1 |
| 2 (N= 26) | 6 | 11 | 6 | 2 | 1 | 1 | 9 | 5 | 2 | 1 |
| 3 (N= 25) | 6 | 8 | 7 | 4 | 0 | 4 | 14 | 6 | 1 | 0 |
| 4 (N= 22) | 2 | 9 | 6 | 2 | 3 | 1 | 12 | 5 | 1 | 2 |
| Total | 18 | 37 | 24 | 13 | 6 | 17 | 47 | 17 | 4 | 4 |

Table 6. Parents' level of formal education in Frazão Basic School

| Class | M 1 st cycle | M 2 nd cycle | M 3 rd cycle | M high sch. | M higher ed. | F 1 st cycle | F 2 nd cycle | F 3 rd cycle | F high sch. | F higher ed. |
|--------------|----------------------------|-------------------------|----------------------------|-------------------|--------------------|----------------------------|----------------------------|----------------------------|-------------|--------------------|
| 1 (N= 20) | 1 | 5 | 8 | 1 | 5 | 2 | 4 | 5 | 5 | 4 |

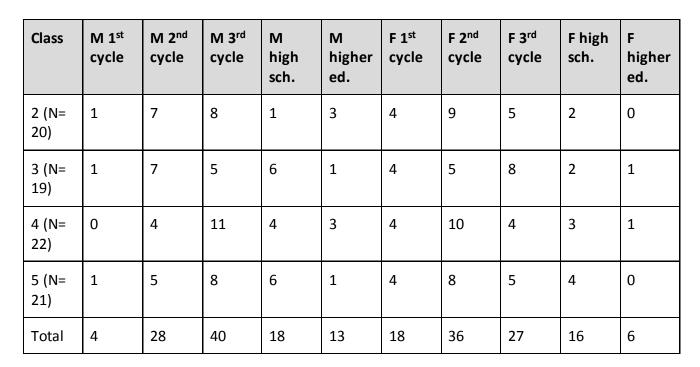


Table 7. Parents' level of formal education in Seroa Basic School

| Class | M 1 st cycle | M 2 nd cycle | M 3 rd cycle | M high sch. | M higher ed. | F 1 st cycle | F 2 nd cycle | F 3 rd cycle | F high sch. | F higher ed. |
|--------------|----------------------------|-------------------------|----------------------------|-------------------|--------------------|----------------------------|----------------------------|----------------------------|-------------|--------------------|
| 1 (N= 23) | 2 | 7 | 3 | 7 | 3 | 3 | 9 | 7 | 3 | 1 |
| 2 (N= 27) | 7 | 6 | 6 | 4 | 4 | 11 | 6 | 5 | 2 | 3 |
| Total | 9 | 13 | 9 | 11 | 7 | 14 | 15 | 12 | 5 | 4 |

Table 8. Parents' level of formal education for Arreigada, Frazão and Seroa Basic Schools

| Class | M 1 st cycle | M 2 nd cycle | M 3 rd cycle | M high sch. | M higher ed. | F 1 st cycle | F 2 nd cycle | F 3 rd cycle | F high sch. | F higher ed. |
|-----------|----------------------------|-------------------------|----------------------------|-------------------|--------------------|----------------------------|----------------------------|----------------------------|-------------|-----------------|
| N= 250 | 31 | 78 | 73 | 42 | 26 | 57 | 98 | 56 | 25 | 14 |

There is a diversity of children in need of additional support, but only two of them are eligible for special education services under the special education legislation,

Decree-Law 3/2008. Mainstream teachers **provide support** to all the children as part of regular activities in the classroom, adapting activities in order to promote each child's participation and engagement.

Each classroom has a preschool teacher, responsible for planning, organising, implementing and evaluating educational activities. Operational assistants support the preschool teachers.

The *preschool teachers work collaboratively*, jointly organising curricular activities. These *activities are based on a holistic approach to curriculum guidelines*, aiming to promote all aspects of children's development and learning. Lesson plans include the following areas:

- Personal and social education
- Knowledge of the world
- Oral language and writing
- Mathematics
- Expression
- New technologies.

The children in need of additional support benefit from differentiated measures, if necessary. These measures are mostly of an educational nature and are developed in the context of the classroom and in *collaboration with the family*. The adaptations for children with special needs try to follow the 'minimal intervention' approach. At the primary-school level, the Integrated Support Service for Learning Improvement provides support that operates according to the *Response to Intervention* model, emphasising collaborative and preventive interventions.

The leadership promotes staff collaboration and opportunities for professional development by allocating time in the schedule for joint work and co-ordination with other professionals, such as school teachers and a school psychologist, and enabling the involvement of external experts in key areas.

2. Inclusive features

In Portugal, preschool education serves children from three to six years old – the age of transition to compulsory primary education. Preschool education is optional, as the law acknowledges that the family has the primary role in childcare and education (Law 5/97 of 10 February). Nevertheless, Law 65/2015 of 3 July, amending Law 85/2009 of 27 August, establishes the *universality of preschool education for all children*, from the year they turn four years of age. Legislative orders defining the guidelines for classroom organisation and opening hours for

educational institutions are published annually. For the current school year, Legislative Order 7-B/2015 of 7 May states that priority must be given to older children and those with special educational needs (in accordance with Decree-Law

3/2008 of 7 January).

In the 2015/2016 academic year, 251 children enrolled in preschool education in the *Agrupamento de Escolas de Frazão*, with only one child awaiting a vacancy. *The schools aim to ensure that all children in the community attend preschool education*. According to the school register, about 4% of pupils attending primary school did not attend preschool education, which has led the schools to organise dissemination activities within the community about the importance of preschool education, implemented through the parish and local councils and through close contact and communication between staff, parents and other community members.

The preschool teacher is responsible for developing the educational plan comprising activities for the group of children based on the goals set for this level of education and framed by the benchmarks expressed in the Curricular Guidelines for Preschool Education (Order No. 5220/97 of 4 August). This legal document comprises a set of pedagogical and organisational global principles, allowing the professional a diversity of educational options. The content areas recommended in the Curriculum Guidelines for Preschool Education are personal and social education, expression and communication and world knowledge. According to the teachers, these guidelines constitute a general reference for planning and assessing learning opportunities. The preschool teacher performs curriculum by defining strategies and adapting the context, taking into account the children's interests and needs.

At the *Agrupamento de Escolas de Frazão*, each group has a teacher with a bachelor's/master's degree in preschool education, who is responsible for planning, organising and implementing educational activities with the group. In doing so, preschool teachers must take into account the priorities of the school and the needs and interests of all children within each group. They prepare an annual plan of activities, which will be adjusted throughout the school year. All the *professionals meet regularly*, *aiming to set goals*, *plan activities and evaluate the teaching process and the results*.

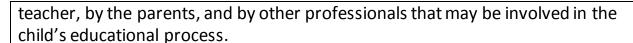
Moreover, these meetings comprise *professional training in specific areas* that are selected in accordance with professional needs. For example, there are training activities for teachers in areas such as oral language, writing and maths and, consequently, there is implementation of activities / projects (for example, *Speaking, Reading and Writing in Preschool Classrooms; Living Maths*). However, teachers state that they implement holistic curricula that promote all aspects of children's development and learning and take into consideration the diversity of

children.

Teachers also *involve families and other community members* in everyday activities. We highlight the *Integration Project*, developed at the beginning of every school year, in collaboration with the family, the municipality and other community institutions, aiming to promote children's initial participation and involvement in activities. Throughout the school year, preschool teachers plan activities to facilitate the transition of preschool children to first grade (e.g. by carrying out joint activities between preschool children and primary school children). In addition, *preschool teachers co-operate with the first grade teachers* in joint meetings for preparation of cycle transitions. Moreover, there are joint meetings between cycle co-ordinators. The management deliberately plans such meetings.

Throughout daily regular activities, the preschool teachers promote participation and engagement of each child and provide feedback and support. Based on observation and rating with the Early Childhood Environment Rating Scale (ECERS-E; Sylva, Blatchford and Taggart, 2003), preschool teachers score between good and excellent regarding relationships between adults and children, adult involvement in peer interactions, support for communication, adaptation of group activities and membership. The children with additional support needs benefit from differentiated measures, whenever needed. As mentioned above, these measures are mostly of the educational type and are developed in the context of the classroom, in collaboration with the family. Also taking into account the additional support needs of children, the **Agrupamento de Escolas de Frazão** created the Integrated Support Service for Learning Improvement, which operates according to the *Response to Intervention* model, focusing on multi-level action and on collaborative, preventive and early practice. Indeed, the preschool activities have a universal design and are developed taking into account the theoretical and scientific inputs obtained through training, sharing of support materials and through joint working meetings. In addition, a screening of children's skills is carried out twice during the school year, aiming to organise specific activities or additional support measures.

To meet the special educational needs of children attending preschool education, Decree-Law 3/2008 establishes educational measures that aim, among other things, to achieve educational success and to prepare learners for further studies. These measures must be set out in an Individual Education Plan (IEP) and are applied whenever a child is eligible for specialised support to carry out the activities and experiences included in the common curriculum that is being implemented with the group to which the child belongs. Such measures also encompass adaptations to the curriculum design that depart significantly from this common framework so as to meet the needs of individual children. It is mandatory for the IEP to be prepared jointly by the preschool teacher responsible for the class, by the special education



On 6 October 2009, Decree-Law 281/2009 was published in Portugal. This legislation established a National Early Childhood Intervention System (NECIS), as a shared responsibility of the Ministries of Health, of Education, and of Labour, Solidarity and Social Security, with the collaboration of Private Social Solidarity Institutions, and in close co-operation with families. The NECIS aiming to provide early childhood intervention to children between 0 and 6 years, who are at risk of developmental delay or have established conditions, and to their families. It integrates local intervention teams comprising professionals from different disciplines within the three ministries, who perform their activity in defined geographical areas.

In this school, there are two children attending preschool classrooms who are eligible and benefit from measures under Decree-Law 3/2008. In addition to the support given under this legislation, there is the collaboration of community institutions in health, social and other areas, depending on the children's needs.

3. Inclusive highlight

As mentioned, a high percentage of children who attend this school are from disadvantaged socio-economic backgrounds. School registers document the *linguistic limitations of families and pupils and the reduced cultural opportunities of this community* and highlight such aspects as a *priority for intervention*.

Namely, the Department of Preschool Education considers these needs as priorities. In conjunction with the Integrated Support Service for Learning Improvement, the preschool teachers develop diverse activities to promote emergent literacy skills integrated into the Speaking, Reading and Writing project. This project requires the participation and involvement of all children in the classroom, links among all preschool teachers and between them and the primary education teachers, as well as family participation. This project also aims to increase scientific knowledge through training preschool teachers in key areas, to promote closer collaboration with the school library, and to stimulate partnership with institutions and collaboration with experts in key areas. Moreover, the project seeks to share its initiatives through outreach activities in the community and the evaluation of the impact of activities on children's development.

During the 2014/2015 academic year, a training workshop on key issues of emergent literacy was implemented in collaboration with experts from the University of Minho. *Preschool teachers actively participated in this project and incorporated the principles and activities into their daily practice, involving children and families*. In the present school year, preschool teachers are continuing



the project, and conditions for the integration of new professionals have been created as well as for dissemination activities in the wider community.

Also, in order to address the needs of this community of learners and their families, a survey was conducted aiming to document children's developmental and learning needs in the cognitive and language areas. The results of this survey confirmed the specific need for intervention in these areas and led to the *development of family literacy activities*, directed to all children from 3 to 6 years and their families, and developed in partnership with community members with schedules planned to enable the participation of families.

4. Other evidence of quality IECE

a. External recognition

Some universities have considered the *Agrupamento de Escolas de Frazão* as a partner in projects about learning and development. This partnership is viewed as an important external recognition. For example, the school participates in the University of Minho's 'I'm still learning...' project, which aims to develop an online platform for assessment and intervention in reading disabilities.

The school also received a national award for best practice for the 'Indiscipline at school: For an integrated practice and coherent intervention' project. The Department of Preschool Education participated in this project.

b. Children and families

As mentioned, preschool teachers contemplate children's needs and interests in their daily practice, involving families in the process as much as possible. Moreover, preschool teachers have developed some specific projects that bring families and the community to the school. For example, the 'Let's read together' project aims to develop literacy activities with the families of children from 3 to 6 years.

c. Workforce

The staff has some qualities that characterise a provision of high-quality inclusive environments for all children. We highlight the staff's responsiveness to children's needs, their daily practices aligned with the priorities for the education of the community, their involvement in real opportunities for continuing professional development, the regular and on-going collaboration among professionals and between professionals and families, with continuing promotion of families' engagement in school life.

d. Collaboration

As mentioned, the school has some opportunities for real collaboration among professionals, between professionals and families and between school and community. As an example, the preschool teachers meet regularly, aiming to set goals, to plan activities and to evaluate the teaching process and the results. The school management deliberately plans such meetings.

e. Any other important quality characteristics – evidence from observation

Observation of inclusive practices in three classrooms of Agrupamento de Escolas de Frazão

In order to study in detail the **quality of inclusive practices** of three classrooms in the Agrupamento de Escolas de Frazão – namely, Arreigada, Frazão and Seroa – an observer spent one day (from 9 a.m. to 3.30 p.m.) with each group. The following instruments were used to assess the quality of practices used by teachers to promote the inclusion of children with disabilities within daily classroom processes:

- Inclusive Classroom Profile (ICP; Soucacou, 2007).
- The special needs subscale of the Early Childhood Environment Rating Scale (ECERS-E; Sylva, Blatchford and Taggart, 2003).

Both the ICP and the ECERS-E items are rated on a seven-point Likert-type scale with descriptors for 1 (inadequate), 3 (minimal), 5 (good) and 7 (excellent).

In addition, in order to assess **individual child engagement** during preschool classroom activities, two children (one child with special needs and one child with typical development) were observed during two activities (free play and structured activity) using the Individual Child Engagement Record revised manual (ICER-R; Kishida & Coral Kemp, 2009) (Portuguese adaptation by Almeida & Grande, 2013).

In Arreigada's preschool classroom there was one adult in the morning – the preschool teacher – and two adults in the afternoon – the teacher and an assistant; 24 children (5 years old) were in the classroom; the teacher identified four children as presenting developmental difficulties – however, they had not yet been referred for an evaluation. This is the first year this teacher has gotten to know this group and the four children mentioned earlier have a high rate of absenteeism, which makes it difficult for the teacher to evaluate them properly and to further notify the special education team.

In this classroom, the mean score obtained on the ICP was 4.6, meaning that this classroom shows minimal to good adaptations to accommodate children with special needs. None of the children in this classroom is eligible for special education services. Therefore, there are many provisions that have not yet been implemented and the teacher's activities do not explicitly target children's specific needs because these have not been acknowledged and properly documented yet. In addition, the rate of absenteeism is high in this classroom, especially among the children identified as having more difficulties.

The items with the highest score ('excellent') are Transitions between activities and Membership. In relation to Transitions, there are several positive aspects to consider, namely, the teacher uses songs to prepare children for the next activity; there is a schedule that children understand and to which the teacher refers at different times; and the teacher gives extra time for some children to complete their work. As a result, children can finish their work and the teacher is able to work individually with each child. Regarding Membership, there are plenty of

opportunities for children to choose activities and materials and to take responsibilities in the classroom. For instance, three children brought books to school, so the teacher asked the group to vote on which book they preferred and the most voted book was the one she read. Respect for children's individual differences is another positive aspect of this classroom—whenever a child takes more time to answer a question, every other child waits and respects their need for extra time.

The lowest score given to this classroom was on Monitoring children's learning (rated as *minimum*). To monitor children's development, this teacher made a diagnosis test with the main goals to be achieved at five years of age. Each child completed this test at the beginning of the school year, allowing the teacher to make a chart about the children's needs in order to guide the work in the classroom. Nevertheless, this monitoring is not frequent and the teacher does not collect evidence of children's weaknesses; she keeps a portfolio of their work and makes an evaluation at the end of each period.

Most items in ICP were coded as 4, thus presenting *minimum to good* adaptations to inclusion, namely: Adaptations of space and materials/equipment, Adults' guidance of children's play, Conflict resolution and Feedback. Such rating on these items indicates the use of specific strategies and an intentional practice oriented towards individual goals, which are not yet stated.

Three items were considered *good*: Adult involvement in peer interactions, Relationships between adults and children and Support for communication. In terms of the Relationships between adults and children, it is important to note that the teacher develops activities such as experiences with different materials to see which ones float, promoting discussions among the children, asking them questions about the experience, expanding their ideas and challenging their knowledge about the objects. Regarding Support for communication, in the same experience, when one of the children was having difficulty in communicating, the teacher carefully listened and repeated his words and asked him to look her in the eyes while talking to her, explaining how this would facilitate communication.

Finally, the item Adaptation of group activities received a score of 6 (between *good* and *excellent*). In fact, as observed, the teacher uses some strategies aiming to support all pupils to engage, she helps them participate, and validates even the smallest comment or response.

To sum up, there is a visible effort on the part of the teacher to fully include all children in the classroom activities; nevertheless, there are some areas that would be improved with a deeper knowledge of the developmental needs of the four children identified by the teacher.

In Arreigada, the mean score obtained in the special needs subscale of ECERS-E was 4.8, which denotes good practices concerning children with special needs. The items of this subscale with lower scores (4 – between *minimal* and *good*) were *Individualisation* and *Multiple opportunities for learning and practicing skills* – this may be related to the fact that the children identified by the teacher as potentially having developmental difficulties do not have a programme with specific objectives, nor a plan of intentional or repeated opportunities to achieve them.

Two items – *Peer interactions* and *Promoting communication* – were given a score of *good*. Concerning *Peer interactions*, the teacher's efforts to promote interactions are evident, but that effort could be more frequent. Child H was frequently seen in parallel play during free play. Sometimes the teacher promoted his interaction with peers, but less so at other times. The same is true for *Promoting communication*.

The *Engagement* item was given the highest score (6 – between *good* and *excellent*). Although this teacher uses some strategies to facilitate and inform children about transitions, which work well, their engagement decreases when they finish the activity before their peers and have to seat in a circle waiting for the others.

In this classroom, to evaluate individual child engagement during the activities, the teacher chose a child with a brain tumour (H) and a child with typical development (C) – one of the best pupils in the group. They are both five years old.

The structured activities observed with ICER-R were:

- 1. an experience with an aquarium containing only water and several objects of different materials to see which ones floated,
- 2. discussion and conclusions about the experience, and
- 3. drawing of the experience.

During activity 1, H was passively engaged 57.5% of the time (teacher explaining) and 25% actively engaged (teacher asking H direct questions). Similarly, in activity 2, H was passively involved most of the time (49%) (other children answering teacher's questions) and actively involved 31% of the time (teacher questions to H). As for C, during activity 2, she was actively involved 52.5% of the time and interacting with the teacher 17.5% of the time (answering questions). When the activity involved a more active role, as seen in activity 3, C was actively engaged for 80% of the observed time.

During structured activities the teacher actively involved her pupils through direct questions, which resulted in increased and more active engagement.

During free play, H was actively involved most of the time (72.5% building with blocks, and 82.5% playing with cars in the garage). While playing at building, H changed toys more than once. When the teacher noticed this, she promptly helped



H. C's engagement in free play was completely active with puzzles (95%) and building (100%).

In this classroom, the playing centres and materials are diverse and invite children to actively engage in free play.

In the Frazão preschool classroom, two adults were present all day – the preschool teacher and an assistant. Sixteen children attended the class (five year olds).

Regarding the ICP results, a mean score of 5.6 (between *good* and *excellent*) was obtained, meaning that this classroom presents good conditions as an inclusive setting, therefore implementing the necessary adjustments to meet the individual needs of all children.

The minimum score attributed in this classroom was 4 (*Adults' guidance of children's play*) and the maximum 7 (*Feedback*), which mean this classroom scored above the minimum in all of the ICP items. *Feedback* is the strongest dimension in the quality of this classroom, justified by the fact that the teacher uses every opportunity to praise children's efforts and work. In the morning, the teacher showed a drawing a child did at home and spent a couple of minutes exploring how he did it and what the drawing means to him.

Four items were scored 'good': Adult involvement in peer interactions, Relationships between adults and children, Transitions between activities and Monitoring children's learning. The scores given to the items related to children's play and peer interactions were influenced by the activity the teacher scheduled for the day – the teacher explored Children's Rights in various ways: by showing a film, asking children to make drawings and making a poster with children's drawings to exhibit for the whole school. That poster was made with each pupil's handprints, which entailed individual work with each pupil and, therefore, less time to monitor children's free play and peer interactions, thus lowering some of the scores.

Most of the items were rated 'very good', namely: Adaptations of space and materials/equipment, Conflict resolution, Membership, Support for communication, Adaptation of group activities and Family-professional partnerships. In relation to the Adaptations of space and materials/ equipment, there is a child with major difficulties in movement (T), which means she needs adult help to access all the areas of the classroom. It is notable to observe that, despite this, both adults help the child choose different toys and materials and promote as much independent use of materials as possible. In addition, in this classroom the teacher used every opportunity to celebrate and accept individual differences, for example, using the Children's Rights, the teacher explained T's type of needs and how her peers must help her. Concerning Membership, it is relevant that children had a voice in the classroom: the teacher explained to them that one of their drawings about

Children's Rights was going to be chosen by them to represent the group, so they voted on the drawing they preferred. It was clear that they are used to this type of democratic vote and accept its outcomes. Another aspect that is relevant in this classroom was the amount of responsibility given to the children – they freely used materials and toys and cleaned up with hardly any intervention by the adults. Observing this classroom, the adaptations made for the girl with identified special needs were almost indistinguishable as she is part of the group as much as any other child, participating in the same way.

In Frazão, the special needs subscale of *ECERS-E* obtained a mean score of 6.2, which means that the quality of inclusive practices in this classroom is *good* to *excellent*. The minimum score obtained is good regarding *Multiple opportunities for learning and practicing skills*. This score, although high, is the lowest in this classroom and is due to the fact that the teacher mostly used structured activities as a path to learning and acquiring competencies, which was not as frequently seen during routines and other events.

Two items were coded as 6, thus between good and excellent, namely *Individualisation* and *Promoting communication*, indicating that the teacher made adaptation of tasks and activities so that every child participated equally; this was apparent in every activity observed in this classroom.

Two other items were coded *excellent*: *Engagement* and *Peer interactions*. In relation to Engagement, it is worth stressing the variety of materials to choose from, and the possibility of changing games and centres as strong aspects of this classroom. Finally, regarding Peer interactions, in free play, the teacher asked T where she wanted to play. She said 'home', so, despite the girl's difficulty in moving in that area of play, the teacher saw an opportunity to improve her relationship with her peers, so she joined them and found a way to actively play with them.

To evaluate children's individual engagement, the teacher selected the only child with special needs (T), who has been diagnosed with cerebral palsy, and one pupil with typical development (M). Both children were observed during two structured activities:

- 1. watching a film about Children's Rights; and
- 2. drawing of the Children's Rights.

During activity 1, both T and M were passively involved most of the time (77.5% and 65%, respectively). There were efforts made by both adults in the classroom to engage children. In M's case, she answered most of the teacher's questions (27.5% active engagement) while the assistant helped T, by repositioning her, by asking if she was ok, by commenting on the film, etc.

When involved in activity 2, both children were actively engaged for almost the entire period of time they were observed (T: 92.5%, M: 80%). In that activity, T interacted with the classroom assistant 35% of the time, answering questions about the colours or explaining her drawings.

During free play, T was actively engaged 97.5% of the time making a puzzle and 75% of the time playing in the home centre. However, during this activity, the adults only supervised her play, but did not interfere, in order to promote T's relationship with peers. M was actively involved in painting (95% of the observed time) and with play dough (97.5%).

In free play, children were encouraged to choose and change areas and materials/toys, from a wide range of possibilities. They have also shown responsibility since they cleaned up after using certain materials, for example, paintbrushes and pencils.

In the Seroa preschool classroom, 24 children attend school in the morning and 23 in the afternoon. During the day, children were guided by two adults – the classroom teacher and an assistant. In the morning, in addition to the two aforementioned adults, the special education teacher worked with a boy with special needs.

Based on the ICP ratings, the quality of inclusive practices observed in Seroa was considered good, since the mean score obtained in this classroom was 5. Three items received a score of 4 (minimum to good conditions), namely: Adults' guidance of children's play, Relationships between adults and children and Feedback. In fact, during the observation, the teacher was rarely observed involved in children's play, instead, she used children's free play time to help other children finish worksheets (painting a fish), followed by a structured activity (after painting, children had to cut out the picture and make a puzzle with it). Concerning Relationships between adults and children, although the relationships observed were positive, they failed to be intellectually engaging. In terms of Feedback, the teacher was only seen using verbal feedback.

One item was scored as 'excellent' – *Membership*, because all the right ingredients were present at this classroom: all children took responsibility in the classroom, they were allowed to make many choices and the individual differences among children were fully accepted. To support this, the teacher explained how children are different and unique, using the story about the fish to illustrate it.

The majority of items were evaluated as 'good', specifically: Adult involvement in peer interactions, Conflict resolution, Support for communication, Transitions between activities and Monitoring children's learning. Regarding Conflict resolution, children were reminded about the rules and expectations of the classroom, but

these are not consistently reinforced or posted in the classroom. For example, there is a limited number of children allowed in each area, but on the observation day, the teacher allowed an extra pupil to 'play house', which confused the pupils and created conflicts between them. With regard to Support for communication, the teacher used some strategies to support language and communication, but not in a

variety of contexts. Concerning transitions, they were effective, only lacking a visual

schedule.

Finally, three items revealed 'very good' conditions for children with special needs, namely: Adaptations of space and materials/equipment, Adaptation of group activities and Family-professional partnerships. Indeed, there was a range of areas and materials available for independent use. Another relevant aspect was the adaptation of group activities to meet the children's needs and ensure active participation. When reading the 'rainbow' story, the teacher was 'interrupted' several times by M (child with special needs) and she used his inputs to elaborate on the story.

The results obtained from the ECERS-E special needs subscale indicate that this classroom has very close to good conditions for children with atypical development (with a mean score of 4.8). The majority of the items in this subscale were scored accordingly, namely: *Individualisation*, *Multiple opportunities for learning and practicing skills* and *Promoting communication*. For *Individualisation*, there is only scant evidence of adjustments in the activities to accommodate for children's special needs, maybe because the activities observed enabled all children to participate in an equal manner. Concerning *Multiple opportunities for learning and practicing skills*, these moments occurred mainly during structured activities, in large group or individual work. In relation to *Communication*, on the observation day there was no evidence of the use of alternative communication.

Peer interactions was one strong aspect in this classroom, especially because the teacher provided opportunities for the development of interactions, which occurred throughout the day, during free play, across routines, at individual structured work or even in group activities.

Lastly, the level of *Engagement* in this classroom was excellent, which can be attributed to the variety of materials and areas to choose from, the way transitions were organised with songs and poems, and the way the teacher promoted engagement by posing questions while telling a story, giving children ownership of the story.

In this classroom, when using ICER to assess individual child engagement, the structured activities observed were a story about 'rainbow', a fish that would not share its colourful scales with its friends, and painting a picture of a fish (the same



worksheet for all children, to be made into a puzzle).

The pupil with special needs selected in this classroom for ICER was M, a four-year-old boy with a hearing impairment. The pupil with typical development chosen by the teacher for the observation – R – was the same age as M.

During activity 1, M and R were passively involved most of the observed time (72.5% and 87.5%, respectively). In the same activity, M was actively engaged 20% of the observed time, intervening several times, making comments about the pictures in the book and asking the teacher questions. The teacher paused the story numerous times, promoting the pupil's participation.

In the second structured activity, both children were actively engaged for most of the time: M: 85% and R: 80%, which is justified by the nature of the activity since it required a much more active role from the pupils.

In the afternoon, some children engaged in free play and the two pupils observed only played at one centre in the classroom: the home centre. M was 100% actively engaged at both times he was observed and R's involvement was mostly active (85% the first time and 82.5% for the second ten minutes). While M played different roles – first he did housework and the second time, he played doctors –, R's play consisted of different household tasks. The materials available were diverse and attractive.