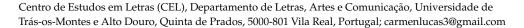




Article

"Too Young to Learn English?"—Nurturing Preschool Children's English Language Learning across an Early Years Curriculum: A Case Study

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Abstract: School readiness can be used as a key target to support children's social, emotional, language, and a wide range of communication skills, particularly to promote equity for children in a democratic society. This is especially important for Portuguese children attending early years foundation settings, as considering "school readiness" creates a much broader educational base for school subjects to subsequently build upon and, in particular, nurturing early years foundation stage Portuguese children's literacy development in English, the privileged language of international communication. However, little is known about how the English language can be best taught at such young ages, as well as the unique outcomes from such an early exposure, at least in the Portuguese context. Language play has been argued to be a "universal" feature common to all human beings, regardless of their age. This study set out to prepare young preschool children with an English language background for the primary school years. As such, this study examined the impact of exposing children to classroom-based storybook reading sessions and original cartoon-based created materials, hence creating a print-referencing-style environment carried out during an academic year. The impacts on preschoolers' early literacy development were examined, focusing specifically on the domain of print knowledge. The study reported here set out to determine to what extent a play-based, cross-curricular pedagogic programme for learning English, fastened in CLIL principles (English across the curriculum), could be effective in promoting early literacy development within an early years setting in Portugal, thus preparing children for the formal years of primary school to come. Fifteen native Portuguese preschool children (3-5 years old) were the focus of this study. Their engagement in English lessons was investigated through audio recordings of peer and group conversations. Cross-reference content analyses were carried out separately, with audio recordings of lessons and researcher's field notes as part of triangulation of the data.

Keywords: school readiness; English as a second language (EFL) approach; CLIL; early years curriculum; cross-curricular pedagogy for learning English



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1. Introduction

Researchers have devoted their attention to second language acquisition in early childhood education settings (i.e., 3–5 years old) and have demonstrated that children develop communicative skills both in their native language (Portuguese) and in their foreign, second language (English) when surrounded by a bilingual friendly and emotional environment [1–5].

Currently, English language education has been disseminated across most European countries, thus enhancing curriculum learning through two languages, resorting to bilingual education, or through one additional foreign language. According to the Eurydice report [6], "all or nearly all (99–100%) primary school pupils in Cyprus, Malta, Austria and Spain learnt English as a foreign language in 2018" (https://ec.europa.eu/eurostat/statistics-explained/index.php/Foreign_language_learning_statistics (accessed

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on 20 February 2023), and further supported by the publications from the Council of Europe [7–10]. The term "CLIL" (content and language integrated learning) was coined in 1994 by David Marsh and Anne Maljers as an umbrella term that could encompass a wide range of situations related to "the experience of learning non-language subjects through a foreign language" [11–15].

Similarly to the study carried out by Anderson, McDougald, and Medina [15], this paper set out to consider the potential benefits and challenges of implementing CLIL for YLs in light of existing research.

It highlights the relative lack of attention that has so far been directed towards learning English in the early years foundation stage as a foreign language, thus suggesting particular pedagogic approaches that might be suitable for CLIL implementation with YLs at different stages.

As a consequence, there is a great need for targeted teacher training, both for in-service and pre-service teachers, since prior research also reveals the pitfalls of trying to implement CLIL when an educational system is insufficiently prepared for the changes in focus and attitude that it implies (and, indeed, demands).

2. Literature Review

2.1. Characteristics of Young Learners (YLs)

YLs have many different characteristics that have to be taken into account in order to have success in learning in general but more so for language learning. All children are unique in that they have their own culture and their ways of doing things; these are often very different from those of adults. YLs must be appreciated in their own right. Decades of research in the psychology of learning have helped provide a better understanding of how YLs perform and function in classroom settings [16–19]. Notably, Piaget (1952) categorised YLs into four developmental stages, complemented by some more recent understandings (Table 1).

Table 1. Stages of cognitive development (Piaget, 1952).

Stage	Age Range	Description
1-3 Sensori-motor (Infancy and toddlerhood)	0–2	 Child learns to interact with the environment by manipulating objects (Nunan, 2022) Linguistically: rapid growth of vocabulary; gradual transformation to real language, from sounds to words Cognitive: responds to step-by-step commands; language skills develop rapidly during this stage
Pre-operational (Preschool age)	2–7	 Acquisition of language Egocentric thinking is literal and concrete; precausal thinking (e.g., "Why does it get dark at night?") Linguistically: consolidates knowledge of the grammatical system; by age 7, acquisition of target grammatical system is almost complete Cognitive: animistic thinking; limited sense of time; egocentric; transductive reasoning
Concrete operational (School age)	7–11	 Developing logical thought processes and ability to reason syllogistically; understands cause and effect Cognitive: able to draw conclusions; can understand cause and effect intellectually
Adolescence	11–15	 Abstract thought; reasoning is both inductive and deductive Cognitive: propositional thinking; complex logical reasoning; can build on past experiences and conceptualise the invisible

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2.2. Self-Regulated Learning in YLs

Much research has taken place since Piaget's cognitive developmental stages, including the creation of a reference framework for early years practitioners [18] and teachers of English working with such young ages.

In addition, the development of self-regulation is key for developing children's autonomy and their English language awareness [20–22]. Perry, Phillips, and Dowler (2004) [23] argued that, although academic self-regulation studies have principally involved students from upper-elementary grades through university levels, the number of reports on younger learners has been growing [22–24]. In his study, Ribeiro (2016) was able to demonstrate that, throughout her "Science Fair" project in an EYFS, it was possible to demonstrate that the CLIL methodology is "an effective methodological approach, given that even in the EYFS is possible to teach a subject through a second language successfully".

The activities for teaching and learning English have been expanding in recent years through the Bilingual Schools Programme, but only concerning primary school education (6–10 years old).

2.3. The Bilingual Schools Programme

As a result of the introduction of the Early Bilingual Teaching Project in primary education in 2011/2015 in a set of public schools in the continental territory, the Bilingual Schools Programme (BSPI) was created in 2016/2017 within a partnership between the Ministry of Education, the Directorate-General for Education (DGE), and the British Council Portugal (https://www.britishcouncil.pt/en/programmes/education-society/bilingual-project, accessed on 31 August 2023), which has been monitored by the Directorate-General for School Establishments (DGEstE). This partnership targeted the creation of a specific national framework for the provision of bilingual learning/teaching within CLIL (content and language integrated learning) in the Portuguese educational system, based on previous pilot-scale studies' results, which were quite favourable to this project.

Early Language Learning and Self-Regulation

Why young language learners have the ability to surprise research-practitioners with their own unique personalities, likes, dislikes, and interests; their own individual cognitive styles and capabilities; their own strengths and intelligence styles; as well and their foreign language learning outcomes is due to the fact that some of the most significant growth in those parts of the brain is mostly associated with self-regulation and the development of the pre-frontal cortex, which occur during the pre-school years [24]. This highlights the need for more research on the development of self-regulated learning skills in this age group.

Joyce and Hipkins (2004) argued that, with appropriate teacher support and the use of purposefully designed learning materials, pre-school children can start managing foundational aspects of self-regulated learning (SRL) and can begin taking responsibility for their own learning to varying degrees of sophistication and consistency.

Therefore, in line with previous studies [25–27], early self-regulation predicts long-term academic achievement, such as high school and college completion (and itself constitutes a critical component of academic success).

Although some studies have reported "failure" in self-regulation [18], Perry and VandeKamp (2000) [19], as well as several other authors [28–30] have argued that the "failures" reported in self-regulation appear to be associated with children's difficulties in managing the demands of cognitive and metacognitive processes when they are required to carry out more complex and challenging tasks. Nonetheless, the same studies demonstrate that these "failures" might rather be caused by children's low expectations regarding their future academic success rather than being due to a low ability to perform cognitive tasks.

Unlike the study from Berhenke (2013) [29], which mainly found children's difficulties in the development of self-regulation in five central aspects—routine (not following the routine), emotion regulation (negative emotionality and lability), focus and attention (lack thereof), impulsivity (lack thereof), positive behaviours (negative behaviours), and self-

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directedness (only a characteristic of high self-regulation)—in the present study, it was found otherwise. In line with the research developed by Berhenke (2013), it is vital that teachers are appropriately EYFS-English-trained to plan and put into practice interventions focused on the development of self-regulation skills, instead of punishing young children's behaviour. Guiding teachers to understand how motivation and self-regulation correlate may also assist them in dealing with misbehaviour and strategic learning more effectively in the classroom, especially in a CLIL environment [11–15].

Contrasting with other European countries, Portugal does not have a tradition of bilingual education across the several stages of education and, only in recent years, has started to develop initiatives to overcome that educational "gap". The usual practice is for students to learn English as an additional language as they progress throughout primary, middle, and secondary school. Although in recent years, there has been a growing number of offers for English language teaching in primary schools for learning English as a foreign language and even some bilingual initiatives across a few primary schools through the "Programa Escolas Bilingues/Bilingual Schools Programme em Inglês (PEBI)" (Portuguese Ministry of Education, 2016/2017) [31–33], this attempt to change the educational policy has not been extended to the early years foundation stage. Nonetheless, the Portuguese early years foundation stage curriculum advocates "entitlement to learn a foreign language" within EY foundation settings since 1998. However, no educational policy has been consistently implemented so far at this level of education.

Moreover, the benefits of early foreign language learning extend beyond learning the language itself. The learning potential of young children aged 3–5 and this impact in English language performance, at least in the first two years of primary school, has been extensively studied by Seker (2015) [25] and Lucas et al. (2020) [17,26,29], thus highlighting the connections between English language learning, play, and self-regulation. Accordingly, Klimova (2012, 2013) [34] has contended that "the teaching of English to pre-school children is undoubtedly meaningful if it meets a natural development of a child and it is appropriate to his/her age. Moreover, it is successful if the teacher of English has an adequate knowledge of the target language, masters relevant methodology of teaching English to EYFS and s/he is enthusiastic about teaching young children". Previous studies have demonstrated the positive effect of early literacy activities—in both the native and foreign languages—in fostering overall literacy development [25–27].

While the research on the early stages of English language learning is immense at an international level, within the national context, there is a major research gap, with only scarce and limited short-term studies, not demonstrating the full potential of starting learning English from EYFS and how this impacts pupils' performance in the first and second years of primary school (6–7 years old). For these reasons, it is argued that young children (EYFS) can benefit significantly from early English language learning once it is ensured that it is put into practice through an age-appropriate approach. Therefore, in this paper, we strongly argue that, if tasks are CLIL-based and respect the Piagetian cognitive stages of development and if the pedagogic materials incorporate language play, self-regulation will emerge naturally and provide EYFS children with a sense of self-fulfilment and success, thus contributing to their self-regulation and, consequently, to a positive impact in their academic achievement. As such, in this study, we demonstrate the "unique" benefits of such an early exposure to English.

Therefore, this paper set out to consider what are "the most meaningful teaching practices in teaching English" within the early years foundation stage and how can a continuum for learning English be created for better transition to primary school, endowing children with school readiness in a foreign language, considering that the current educational situation within EYFS might potentially hold back young children in second language learning, particularly in English, which is increasingly crucial for international communication [30–32].

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2.4. Inspiring Principles Underlying the Design of the English Pedagogic Approach: English across the Curriculum

The proposed pedagogic approach was designed bearing in mind that curriculum learning through two languages implies resorting to the integrated learning of curricular content and language, offered through content and language integrated learning (CLIL), under English across the curriculum, which has long been recommended by the European Commission as one of the most effective ways of learning a foreign language. Another premise for the approach's design was to consider sociocultural theory (SCT) as an overall framework for the study. Overall, SCT argues that human mental functioning is fundamentally a mediated process that is organised by cultural artifacts, activities, and concepts [33]. Practically speaking, developmental processes take place through participation in cultural and linguistic settings such as family life and peer group interaction, as well as in institutional contexts like schooling, organised sports activities, and work places.

Considering the children's young age, in order to make foreign language learning more engaging and interactive, teaching has resorted to the use of information and communication technologies (ICTs; a personal computer available in the classroom). The undeniable power of ICTs has been highlighted by Statista (2016) in aiding the teaching and learning process to complement focus on academics and to motivate and engage learners in the language learning process. It is hypothesised that because ICTs are popular and familiar, learners will more easily authenticate and accept their use for formal L2 learning activities. Moreover, the routine nature of technology in English language teaching (ELT) might afford learners access to discourses in the L2 that are normally unrecognised and difficult to replicate in formal instruction. Further, it has been estimated that, by 2018, "social media would be part of the everyday lives of nearly a third of all humans, all over the planet". In line with this, a study on young learners by Neumann, Worrall, and Neumann [26] demonstrated the effectiveness of touch-screen tablets in enhancing literacy skills.

This is because through the use of a foreign language to teach core subjects from the core EYFS curriculum, such as mathematics or social sciences, pupils have the opportunity (i) to use the language they learn without having to wait for a future opportunity to do so; (ii) to be more exposed to a foreign language, without increasing the weekly teaching hours; and (iii) to develop not only a meaningful and motivating learning, given the challenge it poses for students to learn curriculum content in a foreign language, but also their personal and educational paths as Portuguese and European citizens. CLIL programmes include characteristics such as learners' limited knowledge of the L2, and the L2 curriculum parallels the L1 curriculum. Subsequently, the planned curriculum for learning a second language parallels the content learned in the first language within the early years childhood curriculum. As such, the planned approach for teaching English was integrated because the participating researcher started planning from the early years curriculum syllabus. It was designed collaboratively between the preschool regular teacher, the participating researcher, and the learners, thus being "learner-centred" (Nunan, 1998). A "learner-centred" approach was considered as it allowed learners to be actively involved in the decision-making process regarding the content of the EFL curriculum. Thus, effective teaching and learning occurs because the EFL curriculum is tailored to the needs and interests of the learners. Consequently, if children were learning about transport within the Portuguese early years curriculum (social studies), they would learn about transport through the foreign language (English). Because a language is used as the medium of assimilating new knowledge in real communicative situations, language learning becomes more meaningful and more efficient. The L2 pedagogic approach was designed bearing in mind the National Early Childhood Curriculum Guidelines (1998, 2016), thus establishing cross-curricular work with key curriculum themes, such as social studies, mathematics, literacy, and arts and crafts.

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2.4.1. Language Play, Language Learning

Another aspect worth considering when planning such pedagogical approaches is "language play" [34–36]. For instance, for children, playing with toys is as natural as adults enjoying playing football or running. Therefore, here, it will be considered a powerful pedagogic means, enhancing amusing and pleasant learning experiences that promote oral communication and interaction in English, in turn involving children in using language in meaningful situations.

Research studies have found that there is an intricate link between phonological awareness and two specific aspects of literacy: reading and letter-sound knowledge. To a certain extent, the relationship between phonological awareness and reading is a reciprocal one. In addition, studies carried out with children with speech and language difficulties indicate that, if phonological awareness has not developed by a specific age, the child will have severe difficulties in reading acquisition [36,37].

Svalberg [36] named such processes "engagement with language". Whether engagement occurs in classroom practice is largely determined by the level of teacher language awareness [38,39]. In other words, the implementation of language awareness in the classroom depends on the teacher's ability to provide instructions that engage and support students in their language learning process and to recognise possibilities to generate discussion about language. The available literature puts into evidence that successful language awareness practices can be identified via several instructional components, the most important of which include talking (analytically) about language, verbalising ideas, engaging students, and involving them in student-centred discovery and exploration.

A language awareness-raising learning environment includes aspects such as authentic contexts, facilitating student-centred discovery and exploration, and student engagement. Its counterpart, a non-awareness-raising learning environment, includes teacher-centred instruction, focuses mostly on outcomes, and often includes working with typical coursebook exercises [40,41].

However, while not contesting the effectiveness of the "phonics approach" per se, being used in isolation, it can quickly lead children to feel de-motivated [42]. Within this argument, Pikulsky [43] and Allington [42] argued strongly that the phonics and the whole language advocates are both right and that phonics is an effective way to teach children the alphabetic code, building their skills in decoding unknown words. Furthermore, Allington reached the conclusion that phonics instruction per se is not enough to teach children to read. In fact, there is evidence that first-grade reading achievement is a good predictor of later reading achievement and that children who are not reading with a degree of independence by third grade are likely to have reading difficulties in their academic path [43,44].

In line with the previously outlined 10 commandments for English language learning [45], in order to create/maintain "learner engagement", in the present study, teaching resorted to the use of storybooks, together with information and communication technology tools (where interactive whiteboards were used to show the children videos of the stories, thus prompting listening and reading subtitles in English). The main reason for this is that teachers of the 21st century need to keep up with the pace of the most recent technological developments to enhance "learner engagement" whilst supporting English language teaching in order to apply them in the classroom. Worldwide research has shown that ICTs can lead to improvements in students' learning as well as better pedagogical practices. In addition, ICTs have the potential to involve and prepare young children for life in the 21st century [46]. Therefore, in order to involve and engage EYFS children in English language lessons, the Leuven Involvement Scale for Young Children [46–51] was used at each lesson to register the young children's levels of involvement and well-being during the implemented approach.

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2.4.2. The Leuven Involvement Scale for Young Children (LIS-IC)

The Leuven scale is a five-point scale that allows child care experts, nursery practitioners, and teachers to measure a child's emotional well-being and involvement. The idea of emotional well-being and involvement is particularly important in early years because it safeguards a child's emotional development whilst encouraging engagement for the learning development. One of the major advantages of the Leuven scale is that it is observation-based and puts the child at the centre of their own learning. Observation and observation-based teaching have been shown time and time again to be the most effective method of early years development teaching. By focusing on the child and on their mental, social, and emotional well-being, the Leuven scale ensures that the approach does not fall into the trap of being a "one size fits all" pedagogical method that can be blanket applied to every child. It forces practitioners to be adaptive and reactive to a child's needs. The monitoring process begins by observing and registering the levels of well-being and involvement using the levels outlined below (Table 2).

Table 2. Levels of involvement in EFL lessons.

Level	Involvement	Signals	
1	Extremely low	Activity is simple, repetitive and passive. The child seems absent and displays no energy. They may stare into space or look around to see what others are doing.	
2	Low	Frequently interrupted activity. The child will be engaged in the activity for some of the time they are observed, but there will be moments of non-activity when they will stare into space, or be distracted by what is going on around them.	
3	Moderate	Mainly continuous activity. The child is busy with the activity at a fairly routine level and there are few signs of real involvement. They make some progress with what they are doing but don't show much energy and concentration and can be easily distracted.	
4	High	Continuous activity with intense moments. The child's activity has intense moments and at all times they seem involved. They are not easily distracted.	
5	Extremely High	The child shows continuous and intense activity revealing the greatest involvement. They are concentrated, creative, energetic and persistent throughout nearly all the observed period.	

Source: Laevers 1994: The Leuven Involvement Scale for Young Children.

The procedure is simple and can be compared to "scanning". Practitioners need to observe children as a group or individually for a period of approximately two minutes and then give a score for involvement in the proposed learning tasks. It is thought that unless pupils are operating at level 4 or 5, learning will be limited. It is also useful to observe how well practitioners tune in to the children's levels of well-being and involvement and that they respond to low levels sensitively. Even a low level of well-being and/or involvement can become a learning opportunity that can result in higher levels. If there is a consistent low level of well-being and or involvement, it is likely that a child's development will be threatened. The higher the levels of well-being and involvement that an EYFS setting can enable, the more they can add to the child's development, in particular when it comes to learning a foreign language (English). When there are high levels of well-being and involvement, deep-level learning is taking place, in line with the previous mentioned studies by Craik and Lockhart [52].

Therefore, the use of the *LIS-IC* allowed the researcher to interpret the data right after each lesson, to make any necessary changes, and to cross-reference it with field notes and the designed pedagogic approach. In addition, this qualitative instrument allowed for analysing how involved children were in their work and their "emotional well-being" or emotional literacy in L2 preschool classroom activities. This scale is key

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to allowing professionals working with young children to help each child reach their full potential in terms of L2 learning. Therefore, a sample was taken from the researcher's field notes in order to capture how children's well-being and involvement levels progressed throughout an L2 preschool curriculum theme, My World—my family, thus capturing children's reactions, which is further described in the Results and Discussion section below.

2.4.3. Emotional Literacy

At a time in children's lives where they move from their familiar setting and enter into preschool, emotions, affect, and all the experiences provided to them gain a whole new importance and meaning. As such, preschool might be considered the first institution of socialisation after the family, which helps us understanding the essential value of affect. In line with the findings from several studies [53–60], the affective and cognitive aspects of language learning are inextricably attached. As a result, affect, motivation, and cognition all contribute to intellectual development in which social and cultural contexts are integral to the L2 learning process.

Moreover, as argued by Ogarkova, Borgeaud, and Scherer [61], there are complex constitutive links between language and culture. Some theories advocate emotional literacy. In this respect, Schuman [58] proposed an "affective theory", which attributed to the early years of life a greater social and emotional permeability to language influences than that available in adolescence or adulthood. As such, a second language being learned might also be considered as a way of communicating meanings and of expressing human emotions. Thus, the second language is understood here as a means of making sense of emotions, of "learning how to mean" [62]. This is also in line with the concept proposed by Haddon, Goodman, Park, and Crik (56) of "emotional literacy", focusing on the nature of second language interactions that occur in classrooms, which is key in establishing the dynamics among schools, teachers, and preschool children. Thus, we consider that building positive affective bonds with a second language appears to be vital to children's enjoyment and interest in the language in a life-long perspective [61,63–67]. Although second language reading and writing development has been considered to be crucial in children's future success in school, there are two main research gaps:

- 1. The lack of appropriate EYFS pedagogic approaches;
- 2. Understanding how an early start in learning English can prepare EYFS children for primary school, endowing them with "school readiness".

3. Research Methodology

The present study focused on the development and evaluation of an exploratory programme for introducing EFL into the early years foundation stage curriculum for 5-year-old children in Portugal. This programme was developed with respect to the strategy outlined by the Portuguese Ministry of Education for Early Years Education [31,32], given that there are no formal guidelines from the Portuguese Ministry of Education concerning the teaching of English as a foreign language in the early years foundation stage (the only available advice is contained in the general "Orientações Curriculares para a Educação Pré-escolar" as "the possibility to providing awareness to a foreign language").

Further, when designing the pedagogic approach and action research, the relevance of CLIL was also taken into consideration through an "English across the curriculum" approach [33,38] and the principles the of socio-cultural theory.

A qualitative, interpretive approach [68–71] was chosen to collect and analyse the participating teacher's EFL practices. This approach was chosen because it seeks to understand a phenomenon from an individual's perspective and best facilitates the construction of an in-depth understanding of teachers' everyday classroom practices. The study focuses on phonics-based teaching practices in English as a foreign language in the early years foundation stage (5 years old), as well as its potential effects during the first two years of primary school (first and second grades). This study employed an action-research phonics-based instruction programme to aid reading development in English in the EYFS.

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Qualitative data from EYFS children were collected in Phase I through an open-ended questionnaire, inquiring them about their previous knowledge in English. Meanwhile, qualitative data were also collected from their notebooks from the previous year regarding their knowledge in their native language, so it could be possible to have a starting point to design the English language teaching approach. A test phase was also implemented, through language-based play games, to check children's reading abilities.

Phase II took place when the EFL teacher implemented an action-research plan, anchored in phonics-based instruction, to develop pupils' reading abilities. Phase III comprised presenting a post-intervention, semi-structured questionnaire to the children in order to triangulate the findings. Children's portfolios of evidence as well as the researcher's field notes were also collected to monitor children's progress within the four skills in English language learning, alongside the lessons' recordings and transcriptions.

3.1. Research Design

This study was carried out in an early years foundation stage setting, encompassing children from 3 to 5 years old, which was located in a private school in the city centre, northeast Portugal, classified as a middle-SES setting. The pupils were predominantly from economically privileged backgrounds, and a quick survey carried out with the school manager through student records demonstrated that the vast majority of parents worked in the higher education sector.

Description of the Procedure

The proposed action-research programme to teach English in the EYFS targeted teaching English to young learners, including with authentic storybooks, with the latter using ICTs to maintain learner engagement, in addition to phonics-based worksheets (Table 3), and the collection of documents containing pupils' samples of their work.

Table 3. Phonics-based approach to teaching EFL.

Materials and Classroom Activities	Letter and Sound Recognition	Reading	Identifying Sounds in Words
Week 1 and 2	Classroom activities Hearing the sounds after they have been spoken by the EFL Teacher/audio/song	Classroom activities Hearing the words after the sounds have been spoken by the EFL Teacher or audio	Identifying sounds in words: i.e., 'Is there a 'c' in 'cat'? Where is the 't'? At the beginning, middle or end of the word?
		Practising blending techniques in simple words (C.V.C.) (i.e., cat/boy/ink/jam/pen/sun	
Week 3: c k e h r md	Reviewing the previous sounds which have been learnt Classroom techniques: Sound sheets, songs, letter games, flashcards, Reading classroom: Storybooks		
Week 4: g o u l f d		Practising blending 4/+ letters words	
Week 5: ai, j, ao, ie, ee or		Practising consonant blends and diagraphs	
Week 6: z w ng v little o long oo		Practising blending with regular words with consonant blends	Whole class calling out sounds in given word, i.e., cat
Week 7 and 8: y x ch, sh			
Week 9 and 10: qu, ou, oi, eu, er, ar		Following up words box and sound sbox activity	
		Introducing characters from Reading scheme	

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The children arrived at the EFL teaching room on the preschool campus for a 45 min English lesson. After introductory or feedback activities (usually recalling the previously learned content through their English language portfolios), tasks from the pre-designed EFL cross-curricular approach based on language play were administered to the children. They had been previously provided with an EFL portfolio, at the beginning of the study, where they could include all the completed tasks (usually target vocabulary worksheets), either provided by the bilingual teacher or made by the children acting on their own initiative. All EFL sessions were audio-recorded, transcribed, and content-analysed, which allowed for depicting moments of foreign language learning and L2 self-regulation.

The EFL pedagogic approach carefully took into consideration the learning areas within the early years foundation stage curriculum, such as mathematics, social studies, and arts and crafts (Table 4). All activities were designed to be anchored in the principles of language play [34,72–76], for instance, resorting to cartoons that children were familiar with, such as Sesame Street, Peter Pan, and The Simpsons. As several researcher argued, "language play is important in human life; as such it has the implications for applied linguistics and language teaching. Therefore, language play should not be thought of as a trivial or peripheral activity, but as central to human thought and culture, to learning, creativity, and intellectual enquiry. It fulfils a major function of language, underpinning the human capacity to adapt: as individuals, as societies, and as a species" [34,72–76] (Table 4).

Table 4. An integrated EFL pedagogic approach towards early years foundation stage curriculum themes.

Early Years Foundation Stage key Curriculum Themes	Topics Approached through the EFL Pedagogic Approach	
The world around me/social studies	FamilySchoolTransportationPlaces	
Sciences	BodyFace	
Mathematics	ShapesMore Shapes	
Arts and Crafts	DrawingColours	
Festivities	ChristmasCarnivalEaster	

3.2. Site and Participants

The private school followed the national curriculum framework and the participating researcher directly aligned it with the action-research plan to target key curriculum themes, such as social studies, mathematics, and arts and crafts (Table 4). The classes' daily schedule started with individual literacy and mathematics activities as morning work before the regular daily classes in content areas including English as a second language as the last taught subject, once per week, on Fridays.

The sample comprised 1 cohort of 15 EYFS children (n = 15), aged 5 years old, Portuguese native speakers, who were attending a private school pioneering in offering parents the choice of enrolling their children in learning English. The school is located in northeast Portugal.

3.3. Research Ethics

Research ethics was complied with by obtaining children's parents' informed consent (BERA guidelines, 2018–http://www.bera.ac.uk/publications/guidelines (accessed

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on 20 February 2023)). When resorting to data extractions, the children's names were pseudonymised in order to guarantee anonymity and to thus protect children's identity.

3.4. Materials and Methods

The materials and methods employed in this study were the action-research programme, which consisted in a thoroughly prepared syllabus of the EFL reading programme, resorting to storybooks complemented by ICTs (i.e., videos corresponding to the storybooks), thus delving further into a phonics-based approach, and children's portfolios of evidence, a research diary, and a voice recorder (Table 5). The referenced cross-curricular pedagogic approach, anchored in CLIL principles, as children were learning social studies and mathematics in English, was applied into the EYFS setting by the participating researcher over 33 English lessons (one academic year). English lessons took place once a week for a period of 45 min every Friday at 16.45 pm. In addition, within the pedagogic approach design, the teaching resorted to two main types of play:

- (a) Spontaneous play, initiated by the child;
- (b) Play with a "taught" condition [77].

Table 5. Content analyses' emergent categories.

Themes/Categories	Pattern Coding	
Teacher Profile	EYFS/Primary EFL-Trained	
Effects on EYFS children	LRNRACHIEV = Learner achievement LRNRENGT = Learner engagement LRNRACTPA = Learner active participation effects on preschool learners ORSKIDEV = Oral skill development PHONOLTRAIN = Phonological training COGSKIDEV = Cognitive skills development EMERFLI-LIT = Emergent foreign language literacy SHARFLLGGLEARN = Sharing second	
Positive aspects of the action-research programme	MEANLEARNG = Meaningful learning PLALEARENV = Playful learning environment VOCAL = Vocalisations GMBSDPR = Game-based process USELGGAWAR = Useful for language awareness ACSCSS = Academic success	
Cross-curricular pedagogic approach	CROSS-CURR = Cross-curricular approach MEANLEARNG = Meaningful learning LRGPRT = Learning portfolios SLF-RG = Self-regulation PLALEARENV = Playful learning environment VOCAL = Vocalisations GMBSDPR = Game-based process ENGLRNS = Engaging learners USELGGAWAR = Useful for language awareness	
Recommendations	CROSS-CURR = Cross-curricular approach/CLIL PLALEARENV = Playful learning environment FAMFRGNLGGSDS = Familiarization of foreign language sound suggestions DSSNTEAL = Disseminate English as an additional language in EYFS LIS-IC = Leuven Involvement Scale for Well-being and Involvement EXP BILGED = Expand bilingual education TTRAIN = Teacher training	

The latter implied activities such as orally retelling a story and discovering their way out of a maze, where they found vocabulary related to EYFS standard curriculum themes such as mathematical shapes (Table 4, and Figures 1 and 2). English language learning tasks

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were planned and designed to challenge children either to experience drilling in certain words and phrases, even using peer competition as stimuli, or to interact and communicate in a playful context (role-playing activities as vocalisations or pretending to be the English teacher) in order for tasks to become meaningful. These meaningful tasks could be drawing their families; singing the English alphabet through a karaoke version of a song, thus creating sound and language awareness; identifying the necessary mode of transportation to travel to school; or expressing what their favourite pets were.

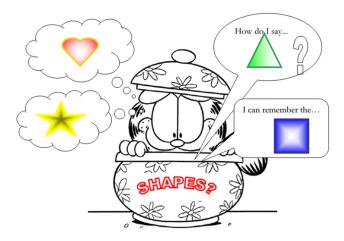


Figure 1. Enhancing metacognitive regulation through EFL play.

1. Let's learn some vocabulary about the Farm Animals: horse, cow, chicken, pig and sheep their names under each picture.

2. Listen to your teacher, repeat and point after her to the right picture.

3. Can you guess which animal your teacher drawing? If you guess, you're next!

4. Help the mother cow to find her baby cow.

3. Can you guess which animal your teacher drawing? If you guess, you're next!

5. Can you guess which animal your teacher drawing? If you guess, you're next!

5. Can you guess you're next!

Figure 2. Early years foundation stage curriculum: "The World Around Us: Farm Animals".

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3.4.1. The L2 Portfolio

Another pedagogic tool that provided EYFS children with the opportunity to take ownership of their L2 learning was the L2 portfolio. This allowed an interaction between the L2 teacher and children's parents, thus putting into practice the European principle of *learning how to learn*. This represented an opportunity for children's self-study and, in turn, self-regulation. Indeed, this is in agreement with the literature related to *portfolios* as being "a collection of personal and intellectual experiences, thus leading to high-order thinking skills". Recent studies have reported that "portfolio keeping in EFL writing is beneficial to the improvement of vocabulary and grammar knowledge, reading and writing skills" [78–81] EYFS children were able to produce clear written "productions", which, in our own view, are "outstanding", considering the scarce amount of time spent learning English at school (45 min per week). As such, it was found that learning portfolios are equally strongly emergent literacy enhancers for preschool children.

3.4.2. The Use of Information and Communication Technologies

Teaching has resorted to the use of interactive information and communication technologies [79,82], through the use of child-friendly PowerPoints, where children could watch videos of the storybooks they read in English. These were considered suitable for this age group, as they had the capacity to involve, motivate, and engage learners within EFL tasks. For instance, learners had to recall the words for each of the family members in English as they "popped-up" on the screen. The following description of an "interactive task" includes the group of participating children carrying out the problem-solving task of helping a separated family to reunite (Appendix A).

Interactive Task: An interactive PowerPoint was prepared beforehand and presented in the preschool classroom on the screen of a personal computer. The PowerPoint script was based on a "make-believe story", resorting to relatively familiar cartoons. Children's help consisted of remembering the English words for each of the family members (mother, father, sister, brother, and baby sister) in the story in the L2 case and calling out the words in English, in order to reach a happy ending, which was the family being all together. While watching the video, the bilingual teacher fostered children's interactions, so they could use the second language. As children orally completed the gaps in the story, this activity allowed for oral and cognitive skill assessments. The PowerPoint structure was (1) family picture; (2) family picture + pets (3 times); and (3) family members appearing individually (father, mother, sister, and brother) and pets (dog and cat), and then the youngest family member (baby sister). Afterwards, in the presentation, there was a means of transportation (car). All of these also aimed to test children's categorisation abilities. Each element of the story appeared smoothly on the computer's screen, and for example, when the car appeared, children were able to identify a "red car", thus identifying its colour. The PowerPoint was considered suitable as it prompted oral interaction and an "informal" way of assessing children's learning. It should also be mentioned that the children were very pleased, as the used cartoons were cartoons they enjoyed watching on TV.

3.4.3. Other Relevant Procedures

The bilingual teacher's voice was always affable, and their voice was constantly raised and lowered to keep the children engaged in the story and to not feel pressured by the assessment. Moreover, throughout the 45 min, they were constantly engaged in the English learning activities. These could be listening; oral production, i.e., singing songs or karaoke; or listen, look, and match exercises. Therefore, the entitlement to a childhood was preserved, and everything was carried out based on language play. It was mostly guided play by the teacher, but there were instances in the data where spontaneous play was initiated by the child. The portfolio was used to save the worksheets, containing, for instance, read and match exercises. This was sometimes used as a pedagogic tool to recall/prompt feedback from previous lessons. In line with the published research by Kerckhaert, Vanderline, and

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van Braak [47], "ICT use with preschool children supports content learning as well as individual learning needs", which is strongly related to the achievement of pre-schoolers.

As can be observed in Figure 1 below, prompts were embedded in the worksheet in thought bubbles such as "I can remember the.?", which was completed orally in English with the target word by pronouncing the name of the mathematical shape properly. Another interactive prompt was "How do I say...?", to which the children completed the sentence with the target word/shape.

Afterwards, the children pretend played with their peers using the prompts provided to "interact" with the cartoon. This might help explain the finding that the children could retrieve and recall information related to L2 curriculum themes in the long term. Therefore, as the children gradually became more confident with the second language, their levels of oral interaction improved significantly, which leads us to the consideration that the development of self-regulatory processes and early EFL performance are closely interrelated. It should be highlighted that all the activities were play-based, considering the children's young age. As such, all the EFL activities, although having an intended learning outcome, were achieved through "guided" play, with activities guided by the EFL teacher (Figure 1).

Thus, the L2 pedagogic activities represented opportunities for children to "pretend" play and also "taught" play, both found to be helpful in the process of L2 learning, self-regulatory, and metacognitive processes.

Similarly, if in the literacy classes, they were learning the alphabet, they would learn the alphabet song in English. Further details are provided in Table 4. In addition, if in the social studies/sciences classes, they were learning "The World Around Us: Farm Animals", they would learn them in English. There was also an emphasis on developing children's English language skills, attempting to gather the EYFS Themes and the British Early Years Foundation Stage framework (UK Department of Education, 2014) (Table 4 and Figure 2).

For instance, in Figure 2, it can be clearly observed that, besides orally learning the names of the farm animals in English and helping a baby cow find the way out of a maze, the children practised their mathematical skills whilst learning English.

The gathered data came to show us that these playful strategies were helpful in the language learning process and provoked long-lasting learning effects, in line with the depth of processing hypothesis [52].

4. Results and Discussion

4.1. Data Analysis

The EFL pedagogic approach itself, the researcher's field notes, the learners' portfolios of evidence, and the teacher's assessment protocols were considered as documents and were therefore included in the content analysis procedures. The unprocessed data went through a systematic process of initial and refined coding; each piece of raw datum was assigned a code and then analysed through a system of thematic and categorical analysis. Coding and categorising data began with "open coding", aiming at discovering, naming, and categorising the phenomena. This approach has been well documented by Strauss and Corbin [71] and by Miles and Huberman [69], which suggests a "provisional start list of codes" drawn from research questions, hypotheses, and/or key issues that the researcher brings to the study. The strategy of applying content analysis procedures was defined by Julien [70] as "the intellectual process of categorizing qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes". Therefore, content analyses provided insights as well as in-depth understanding of the implementation and monitoring of this study (Table 5). To ensure validity of the data, Creswell's guide [68] was followed:

 The data were organised and prepared for analysis. This involved transcribing the lessons, scanning the material, typing up the notes, and arranging the different types of data. Educ. Sci. 2023, 13, 949 15 of 28

2. The data were all processed. They were read first to obtain a general sense of the meaning of the sets of information and then to reflect on any emerging global interpretation to obtain a first impression, from the ideas and the overall depth. Notes were made on the side margins. Field notes and a research diary were kept.

- 3. A coding process was instituted by organising the material into segments of text before assigning codes to the content. Creswell further suggests that, when coding, researchers should code what readers expect to find based on the past literature and common sense, code what is surprising, and code for the unusual. The data of this study were hand-coded, and colour schemes were used.
- 4. How the description and themes will be represented in the qualitative narrative was decided.
- 5. An interpretation was made, or the meaning from data was derived, including questions about the lessons learnt and the information gleaned from the literature that confirm or diverge from those interpretations.

4.2. The Application of the Leuven Involvement Scale for Young Children (LIS_IC)

As per the emergent codes in the data analysis procedures and as mentioned in the Research Methodology section, the internationally used instrument, the *Leuven Involvement Scale for Young learners (LIS-IC)*, developed by Ferre-Laevers (1994) [48–50], was adapted to monitor children's involvement within EFL themes. Children listened to the teacher's task instructions, and their involvement was monitored through the *LIS-IC* adapted protocol and audio-recorded to cross-check the findings. This is a five-point rating scale and a unique, known instrument especially designed to be applied with preschool children in order to assess their involvement and well-being in their preschool daily activities. Thus, it was found to be suitable for the present study, in that, per our view, children should always feel involved and that their *well-being* is considered, a positive attitude towards the experience of learning a new language.

As can be depicted from the researcher's field notes, the children's involvement and well-being levels across the EFL theme were progressively higher. Therefore, the children evidently experienced increasing involvement, starting with involvement at a 4.0 level and then increasing up to the 5.0 level, which means increases in total concentration on, implication of, and involvement in the proposed activities. Thus, it can be argued that children's high levels of involvement can be interpreted as a synonym of emotional wellbeing. It is our view that this finding contributes to the argument of the *unique* attitudinal features of young children being exposed to languages as early as possible, as involvement or engagement might diminish considerably with an increase in age [48–50] As such, children would happily leave their playground setting and joyfully attend an English lesson. This certainly implies that children's involvement and well-being can be considered to be interrelated with the emotional and motivational regulation proposed in the analytical model of self-regulation [75–78].

Involvement, Well-Being, Language Play, and EFL Language Learning

The findings also suggest that L2 language play, added to a planned *scaffolded* learning environment, appears to be a major contributor to the learners' self-regulation and emergent L2 skill development (i.e., emergent reading and writing behaviours), impacting the landscape of consciousness and emotion [54–60]. The L2 pedagogic strategy consisted for example in one word or two-word phrases, whose linguistic meaning emerged from its connection with reality such as children's names, their home environments (i.e., their family) and the world around them (i.e., means of transport and colours).

The playful character of the L2 approach also helped children in acquiring some L2 basic structures, different from their native language. For example, the adjective–noun pattern in the two-word phrases followed the English syntactical pattern. This situation represented a contrast with children's native language in that the Portuguese syntactical order is 1—noun ("carro") + 2—adjective ("vermelho"), thus carro vermelho (2—adjective),

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whilst in English, the order is (2—adjective) red car (1—noun), and the adjective precedes the noun. These were useful in helping children answering questions such as "what's this?", where children would reply "it's a red car". This language feature, in which the L2 words are mapped onto an unknown grammatical structure, differently from children's L1, in our own view, prepares children with the necessary background for L2 academic achievement. This awareness of the specific features of the "new" language was thought to be beneficial because success in the assessment phases required generalisation of learned associations into new visual contexts, therefore identifying the correct visual target, involving more than a mere "translation process".

As previously mentioned, one plausible justification for this engagement within the language is the playful character of the L2 cross-curricular approach (i.e., make-believe play). L2 playful learning was further found in teacher's and learner's vocalisations as well an in listening/singing L2 songs. Furthermore, certain classroom actions such as pretend play (pretending to be the teacher) and the use of a mascot provided opportunities for second language use, thus putting in evidence playful learning. This is another echo of research studies related to the effects of play, reaching the conclusion that "play impacts upon self-regulation as well as in the metacognitive processes" [78,79]. The development of children's self-regulatory abilities is essential because they have been considered to be both profound and long-term and as background tools for children's academic school readiness [79,80]. This occurred when children pronounced L2 target vocabulary with a high or low tone of voice and when attempting to sing songs in English. Therefore, providing children with repeated experiences for modulating their EFL oral performance with the aid of music and songs, with a certain rhythm and rhyme pattern (i.e., Hello, how are you? Mother, father, sister, brother?/Hello, how are you? Are you happy? Are you sad? Hello, how are you?) might be considered a good exercise for young children's emerging L2 self-regulatory skills. Previous studies have found evidence that play impacts self-regulation and metacognitive processes, and as a consequence, its effects emerge most clearly in tasks and aspects of development that involve problem-solving and creativity, rather than simpler recall and non-strategic learning [81-83]. As such, children evidently showed an ability to recall EFL content, thus putting into evidence long-term memory skills.

English language learning self-regulatory behaviours were emergent and identified from audio-recorded data and in researcher's field notes during L2 tasks inside and outside the preschool classroom (Table 6). This is in line with the paper from Artherton and Nutbrown (2016), where the authors highlighted that the place of mental activity in learning relies on the fact that "the infant's mastery is organised and purposeful, even if it is not obvious to us". Many of the identified events showing the richest evidence of L2 self-regulatory behaviour were playful but also involved children in collaborative problem-solving, which required them to reflect upon and talk about their own thinking or activity in line with the L2 metacognitive regulation presented by Pino-Pasternak (2006) and further developed by Whitebread and colleagues (2009) (Table 7).

For instance, children, going through the pages of their portfolio, stated: "you know teacher, we can say all the vocabulary we learned in English until now. Do you want to hear me?" Other instances of children taking up the initiative of "demonstrating previously learned vocabulary" was depicted in the researchers' field notes, audio recordings, and lesson transcription, which shows their self-regulatory behaviours in the foreign language. The deeper analysis of these data was in agreement with the perspectives that second language play impacts L2 self-regulation and metacognitive processes. Thus, we present some data excerpts to illustrate the types of emergent self-regulatory behaviours, supported by relevant literature along with interpretations and further elaborations from the author. It should be highlighted that, before starting attending English lessons, children had no other contact with the foreign language, which is why the descriptive analysis of the data is particularly significant. In addition, it should also be taken into account that English lessons only took place once a week, on Friday afternoons. Consequently, it is worth looking at the descriptive analysis of the data, where several dimensions from self-regulation can be

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found, but especially metacognitive regulation, thus putting into evidence children's ability to reflect on their own cognitive/learning processes. In support of our view, we further include transcribed excerpts of each type of metacognitive regulation.

Table 6. Emergent self-regulatory behaviours.

Observed Activity	Analysis
Children: pointing to each page of the English learning portfolio, matching each of the pictures to the corresponding target words: This is the mother, this is the father, this is the sister, this is the brother and this is the baby brother. I also know the words we have learned about breakfast: cereals, cookies, milk, cheese, ham, butter.	In this observation, a familiar strategy, counting, is applied to a new situation. The cognitive process is supported by the nonverbal gesture of pointing and verbalise EFL learning/target words. Control and regulation: applies a previously learned strategy to a new situation, in this case supported using a non-verbal gesture together with verbal interaction
After going through all the pages of the portfolio, children smile broadly and say: There! You know, teacher, we have taught these English words to our parents too and now we all talk in English at home! Our mom and dads were surprised that we "can actually talk in English" and loved it!	The pleasure in having demonstrated to the EFL teacher their ability to recall previously taught content and to correctly pronounce words in English is evident in the tone of their utterance, an interpretation supported by the use of facial expression. Emotional/motivational monitoring: expresses awareness of positive emotional experience of a task. The second element to the utterance also indicates that the outcome of the task has been evaluated in relation to the intended goal and has been deemed to be successful. Reflection and evaluation: evaluating the quality of performance
Table 7. Analytical model of self-regulation.	
1 Metacognitive knowledge (Flavell, 1987)	The individual's knowledge about personal, task, and strategy variables affecting cognitive performance.
2 Metacognitive regulation (Brown, 1987)	Processes taking place during ongoing activities involving planning, monitoring,

5. Descriptive Analyses of the Data

3 Emotional and motivational regulations

 $5.1.\ Metacognitive\ Knowledge\ (Data_Excerpt_1)$

Teacher (L1): What had I asked you to draw in the comic strip?

Children (L1): To draw.

(Zimmerman, 2000)

Teacher (L1): Right, but what had to be there?//

Anne (L2): Father, mother, sister, e [and] brother.

Teacher (L1): Things we had learned, such as?

Children (L2): Shapes.

T (L2): Shapes. What are shapes?

Vicky (L1): Figuras geométricas.

Teacher (L2): *Very good.*//(L1) Very well, Vicky. Vicky has been paying attention in lessons. Congratulations!

control, and evaluation.

learning tasks.

The learner's ongoing monitoring and control

of emotions and motivational states during

Mary (L2): *E* [and]...(L2) *transportation*.

Teacher (L2): *Transportation*.

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John (L2): *E* [and] *family*. Teacher (L2): *Family*.

Teacher (L1): What (L2) transportation (L1) have we learned? Do you still recall?

Children (L2): Car.

In the above excerpt, learners were aware of their L2 knowledge and also of the tasks and strategies helpful in the L2 learning process, thus recalling the content from the topics approached through the EFL pedagogic approach and providing that information to the L2 teacher. First, the learners were willing to show that they were able to recall what they have learned in English, thus highlighting their cognitive performance. Second, they were enthusiastic in showing the L2 teacher that they are able to recall L2 content after several weeks without English input on a specific curriculum theme. Therefore, the children were putting into evidence both cognitive and metacognitive knowledge in the sense that not only are they able to show good cognitive performance but also, they are equally able to reflect upon their own L2 learning strategies and are conscious of them. Therefore, we consider the learners as carrying out *intentional learning* [84]. This consciousness has been identified in the literature as a synonym of awareness, thus being the precursor of second language acquisition (Schmidt, 1990).

5.2. Metacognitive Regulation (Data_Excerpt_2)

Teacher (L1): Now, we are going to do a game that is called (L2) "role-play". I choose one of you; one of you pretends to be the teacher and teaches me the members of the family. Mary is going to start. I do not know the members of the family; you are going to teach me.

(Learner turns the worksheet to the L2 teacher, starts pointing left to right to the corresponding character in it and starts describing the picture.)

Mary (L1): It's the (L2) father, brother...//

L2 teacher (L1): I have to repeat, say it again.

Mary (L2): Brother, mother, sister, ...

(As audio recordings are not as potent as video recordings, in order to ensure that the learner actually knew the L2 content, the L2 teacher made an attempt to puzzle the learner.)

Teacher (L1): So, the (L2) sister (L1) is the (L2) mother, (L1) is it?!

Mary (L1): No, it's the (L2) sister! (Não, é a mana).

Teacher: And, the (L2) father (L1) is the (L2) brother?!

Mary: No, it's the father! (Não, é o pai).

Teacher (L1): And, how do we say (L2) brother?

Mary (L2): Brother!

This excerpt allows us to discern that the learner was able to plan, monitor, control, and evaluate her own L2 learning. She had to plan how she would perform the role of the teacher. In order to do that, she had to monitor her own L2 learning and to be very confident in it. Then, when the L2 teacher attempted to confuse her, she took control of her learning and of the task of teaching the L2 teacher. While carrying out all these tasks, the learner was carrying out an implicit evaluation of L2 learning. Therefore, we consider this to be a clarifying example of L2 metacognitive regulation.

5.3. Emotional and Motivational Regulation (Data_Excerpt_3)

Teacher (L1): And, how do you say (L2) star, Miss Anne? ~

Charles (L1): I know!

Teacher (L1): Then, you can say it.

Charles (L2): Star!

Teacher (L2): Star! Very good!

Charles (L1): I said (L2) star!

Anne: (L1) I knew it! The (L2) star (L1) doesn't get out of my little head!!~

The above excerpt might be considered as involving both *emotional* and *motivational* regulation in that the two children are interacting with the L2 teacher. The first example is when a learner to whom the teacher had not requested to participate has enough intrinsic

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motivation to monitor and express her L2 knowledge. The second example comes through the use of the terms "little head" by Anne when referring to the word "star". By resorting to the use of an emotional tone of voice and tender terms to refer to an L2 word, she is actually establishing control of emotions during the learning tasks.

This finding resonates with the conclusions from studies related to affect and language learning. In their study, Burkitt, Barret, and Davis [60] explored the matter of children expressing emotions through their drawings and the colours they use. Thus, if we focus on the colours used in the L2 tasks, the children showed a tendency to use bright colours, therefore expressing positive emotions in relation to the second language. In addition, Pavlenko (2005, 2006), and Bown and White (2010) established clear connections among affect, emotion, and language learning. As such, emotional well-being, motivational regulation, and involvement are terms that appear to be closely related also in this study. As such, these lead us to a deeper analysis of the concept emotional literacy. This, we believe, is related to the key role of enhancing positive emotions, through for example, the teacher and the learner's vocalisations, which has been a recurrent finding throughout the data analysis. The data make us consider that "affect" and emotion have increased value in the second language learning process. Paraphrasing Ogarkova, Borgeaud, and Scherer (2009) [64], there is a fundamental human need to express affect. Therefore, the use of emotional terms (i.e., "my little head") serves as the conceptual glue that ground the acquisition of emotion categories throughout infancy and childhood.

L2 portfolio effects in EFL learning: Another instrument used to analyse children's potentially emergent L2 self-regulatory processes was the analytical model of self-regulation in order to verify if the emergent self-regulatory behaviours in the foreign language match the categories previously outlined by Pino-Pasternak (Table 7), regarding metacognitive knowledge, metacognitive regulation, and emotional and motivational regulation.

As discussed in the Literature Review section, portfolios have been reported as having "positive impacts on students' literacy and self-regulated learning skills when the tool is used regularly and integrated into classroom instruction" [85,86]. In the present study, the fact that children could keep their portfolios and take them home fostered family literacy practices and enhanced their willingness to write, as children are aware that pictures have written representations. As such, the portfolio was a powerful "emergent literacy" enhancer. Children could include all the materials used in the English lessons and were allowed to take them home as long as they would bring them in the following lesson, in order for both the teacher and the learners to be able to establish feedback during the L2 lessons, thus enhancing EFL content recall. The opportunity to take their moments of L2 learning into the privacy of their homes allowed for many joyful moments within their families, as children would apply classroom instructions and greetings such as "sit down, please"; "hello"; "good morning", "good afternoon", and "goodbye", whenever they found it appropriate. These attitudes may also be interpreted as sociodramatic play. As such, added to the fact that the L2 portfolio represented an opportunity for self-reflection, it also prompted L2 spontaneous language use, whether the setting was the preschool classroom, the playground, or the children's homes.

Moreover, the L2 portfolio certainly held a key role not only in developing self-regulatory and metacognitive skills but also in fostering learners' emotional literacy through a portfolio-based philosophy. In addition, it allowed for a unique dynamic between the teachers, the EYFS children, the EYFS practitioner, and the children's parents. This might be closely intertwined with the enhancement of independent, autonomous, self-regulated learning [87] in that the use of portfolios with young children put together the view that knowledge is something socially built and a tool that allows learners to be authentic creators of their own knowledge. Therefore, the use of this pedagogic tool has made it possible to capture L2 learning efforts and learning moments. As such, it represented an opportunity to enhance self-regulatory, metacognitive behaviours, while allowing children to express themselves "freely", for example, in their first attempts in writing.

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Furthermore, the children felt that the L2 portfolio was something "unique", where they could see their L2 learning progressing, thus providing them a sense of pleasantness and achievement.

Pleasantness has been one of the dimensions listed by Scherer [45] and has also been observed during English lessons and especially when learners shared their learning with their peers and families. This dimension is also linked directly with Portuguese preschool key curriculum themes in terms of "highlighting the pleasure of learning", therefore providing conditions for children's language learning success [Portuguese Ministry of Education, 1997]. Further, Scherer listed other dimensions in which appraisal of motivation can be made, including "novelty/familiarity", "goal relevance", "coping potential", and "self and social image". In our study, the "novelty" might be the new language young learners are being exposed to. At the same time, the "familiarity" reaches learners through the EYFS key curriculum themes chosen for the L2 cross-curricular pedagogic approach such as mathematics or social studies.

As for "goal relevance", it relates to learners' ability to express the purpose of learning a second language, which in turn triggers their own motivation. Thus, learners are aware that attending English lessons is important because they will learn "how to speak like the British do". Therefore, children are making their first attempts to communicate in a second language.

Regarding the fifth dimension, "coping potential, self and social image", the experience with a new language provided learners with more self-confidence and a better social image, when for example, one of the learners was even able to improve his mother tongue learning after being exposed to the second language. So, if we bear in mind these dimensions proposed by Scherer, the L2 pedagogic activities implemented in the EYFS setting mainly targeted the provision of a lively L2 oral interaction and language play, thus providing "pleasantness" and a wish to share their learning.

Within the positive outcomes emerging from this study, we consider that the specific case of "Charlie" is of an illustrative character, considering that at the beginning of the study, he was a very shy 5-year-old boy with pronunciation difficulties in his native language. As can be observed in Table 8, the following actions were somehow surprising:

- (a) He started competing with his peers, wanting to show that he was equally able to perform well (effect on self- and social image);
- (b) His parents told the English teacher that he took his language portfolio home to study what he had learnt; thus, if there was something he could not recall, he would ask his parents and become very annoyed by their inability to help him (goal relevance/pleasantness);
- (c) His early years teacher reported that he had made remarkable progress in his native language development after he started attending English lessons (positive effect on native language development).

Table 8. L2 portfolio as a pedagogic tool for self-regulation and spontaneous language use.

Data Excerpts from Reseacher's Diary ("Charlie Example")

(1) Direct influence of the L2 portfolio

Parent: "we have noticed at home that Charlie is much engaged in learning English. He goes through his English portfolio and starts doing his 'self-study'. And, you know, he wants to remember everything he learns in English. Then, he goes through his portfolio and starts hing me".

(2) Influence on learning of other subjects and native language development Early years practitioner: "Charlie has improved a lot in all academic subjects since he started attending English. He's much faster in doing tasks, in thinking. And his pronunciation in his native language has improved too".

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This specific case and others we have used across this paper might be considered linked to affective bonding with the English language, in line with "emotional literacy" theories. It is also worth considering that the EFL pedagogic approach proposed might have worked well as a representative of the language being taught, as well as of that culture.

In addition, the teacher herself was perceived by learners as representative of "English" and of "the English time". Every time the teacher appeared; learners would comment "look! English has already arrived!" or "It's English time". If the teacher had to go to the preschool at any other day of the week, they would think it was "English time" again and expressed sadness when they were told that "it was not English day".

5.4. Language Play, Language Learning

In line with the theoretical framework of "language play, language learning", proposed by Cook [34], the English language curriculum paralleled the L1 curriculum with a focus on meaning-making, using the National Guidelines for the Early Years Foundation Stage Curriculum [Portuguese Ministry of Education, 1997, 2016] as a starting point for exposing children to English. For instance, if children were learning shapes within mathematics, they would learn shapes in English. As can be seen in Figure 3, children were presented with an activity that consisted of a maze where the condition to progress was to orally pronounce the name of the mathematical shapes correctly. Therefore, by helping a cartoon to recall the names of some mathematical shapes, "regarding that he could not recall them all" (pretend play), a deep learning level was enhanced.

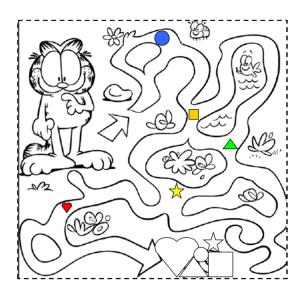
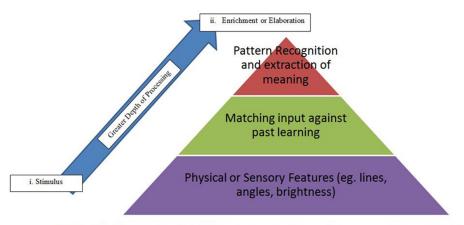


Figure 3. Approaching mathematical shapes through a maze.

By doing so, when helping a cartoon to remember, children were not only resorting to pretend play but also were using cognitive strategies to recall content, thus increasing children's involvement with the task and, at the same time, carrying out metacognitive regulation. This is in line with a previous study by Lucas, Hood, and Coyle in their paper on emergent literacy (2020) [17] and studies by Craik and Lockhart (1972) [52] regarding the ability to recall content for long periods of time. This ability, also known as the "depth of processing hypothesis", advocates "levels of processing effect". These describe the memory recall of stimuli as a function of the depth of mental processing, which is emergent data from the present study. On the other hand, "shallow or surface processing" provides only a fragile memory trace, susceptible to rapid decay (Figures 3 and 4). However, preschool children's portfolios proved otherwise, and the developmental pattern was according to the model proposed by the authors.

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Based on: Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. Journal of Verbal Learning and Verbal Behavior, 11, 671-684.

Figure 4. Source: Craik & Lockhart (1972) [57]. The depth-of-processing hypothesis.

The Depth of Processing Hypothesis

To the best of our understanding, the English portfolio was certainly the pedagogic tool that allowed children to move from shallow processing to deep processing and to "encoding" (Figure 5), which helps explain why the EYFS children remembered what had been taught session after session.

Encoding: Levels of Processing

- · Encoding occurs on a continuum...
 - shallow processing (amygdala)
 - intermediate processing
 - deep processing (prefrontal cortex)

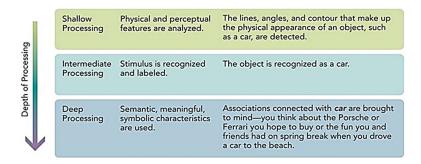


Figure 5. Levels of processing (Craik & Lockhart, 1972) [57].

6. Conclusions

The present study firstly set out to investigate the following:

- (a) To what extent can an "innovative", cross-curricular EFL pedagogic approach be effective in enhancing English language learning and self-regulation within an early years setting?
- (b) How can previous international research and the present study contribute to early years teachers of English/practitioners' continuous professional development but counteract the "uninformed" view that children "are too young to learn English"?

Although much previous international research has analysed early years foundation stage children's literacy development and self-regulatory behaviours, few studies have addressed the role of a second language pedagogic approach in developing children's self-regulated behaviours at a national context (Portugal).

This paper has reviewed some of this evidence and related theories as well as presented the authors' own research study, focusing on children's involvement in L2 language play

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in supporting the development of self-regulatory skills. Therefore, carefully listening to children in order to understand how their self-regulatory processes evolve can significantly help early years foundation English language teachers to interact more productively in L2 playful contexts.

Therefore, the present study intends to be a valuable contribution to how to teach English within the early years foundation stage while being used as a continuous professional development pedagogic tool for English language teachers, thus filling a research gap in a setting where there is currently an absence of foreign language education programmes as well as of continuous professional development opportunities. In addition, the present study also sheds light on the potential of such young children to learn a foreign language, on top of the development of less evident skills, namely self-regulatory behaviours, thus demonstrating that children "are not too young to learn English".

Similarly, it can be argued that it is possible to enhance self-regulatory behaviours in preschool children through EFL oral performance, resorting to L2 playful learning environments and L2 portfolios. The positive effects observed throughout the academic year led us to consider that the EFL pedagogic approach, CLIL-aligned, holds the potential of being an extremely positive experience for monolingual preschool children, even when bilingual education does not exist in the school educational system, as in the case of Hungary [66] and Portugal.

In addition, in agreement with European premises, this study presented an opportunity for children to develop L2 "learning how to learn" skills, thus self-regulating their learning strategies, simultaneously preparing them with L2 background skills to achieve academic success throughout the primary school years ahead. Although the small size of the sample can limit the generalisation of the findings, we believe that these results have strong implications for early years foundation stage settings, childhood education practitioners, as well as policy makers in terms of introducing foreign/second language opportunities in early childhood education settings. Further, children from socioeconomic disadvantaged settings could benefit from such early EFL approaches in that it could diminish children's self-regulatory difficulties and thus improve children's English language learning and L2 social skills, while enhancing democracy in childhood education.

7. Limitations of the Study

This study has certainly set out a viable path for English language learning within an EYFS monolingual setting, where the official language is Portuguese, simultaneously advancing EFL innovative practice, inspired by language play, and fostering self-regulation, but some limitations need to be acknowledged.

The first is the small size of the sample, which can limit the generalisation of the findings. Nonetheless, the current results are encouraging and create a course for future research. As such, future research studies could be carried out with the following conditions:

- (1) A similar study with a control group who learned English since preschool should be started, the children should be followed-up with throughout primary school (until the end of Year 2, when the children are 7 years old), and their intended learning outcomes should be measured at specific times throughout their schooling, with midterm and end-of-term assessments;
- (2) A second group, monitored since preschool and not exposed to an English language curriculum should be followed-up with, and their outcomes should be monitored when they formally start learning English (until the end of Year 2, when the children are 7 years old).

It is certainly encouraging to see the present qualitative findings and that it is actually a European tendency to provide good-quality (and in many cases, free) EFL education to children in the years before they enter formal education at the primary level. It is also heartening to see that many countries across Europe have in mind the aim to provide foreign language learning experiences as one of the key elements of a pre-primary curriculum.

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What is less positive, however, is the lack of "consistently" available English pedagogic approaches at the national level, how the existing approaches in Europe are being implemented, what the curricula being offered entail, the success of FL (English) programmes, and the nature of teacher education for teachers of English at pre-primary levels. This absence of general information creates a number of potential problems in this area.

Therefore, this study represents an attempt to address that "gap" by contributing with some principles and practices, which put into evidence that it is certainly worthwhile and viable to provide EYFS-stage children with the entitlement to learn English as a foreign language.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study; in this particular case, children's parents and school managers.

Data Availability Statement: There is more data available, but it is restricted due to ethical concerns, as the study included human beings.

Conflicts of Interest: The author declares no conflict of interest.

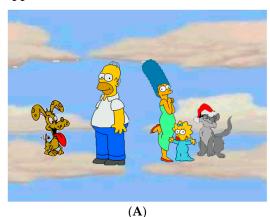
Abbreviations

EFL English as a Foreign Language

L2 Second Language

CLIL Content and Language Integrated Learning
LIS-IC Leuven Involvement Scale for Young Children

Appendix A



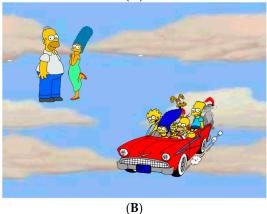


Figure A1. Cont.

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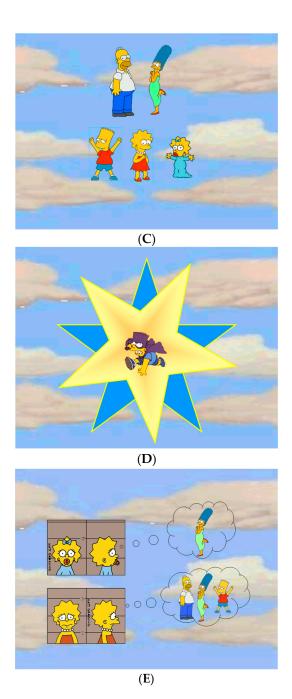


Figure A1. Interactive *PowerPoint* related to preschool curriculum themes: "family"; "pets", "transport", and "colours". (**A**) Slide 1: mother, father, baby sister + dog, cat; (**B**) slide 2: mother, father, sister, brother, baby sister + dog, cat + car + red; (**C**) slide 3: mother, father, brother, sister, baby sister; (**D**) slide 4—superhero is going to save the family; (**E**) slide 5: baby sister is thinking of her... (mother); sister is sad, thinking of her... (father), (mother), and (brother). But, superhero is going to save them all as long as you [learners] call out their names in English.

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