

A Framework for Developing Social and Emotional Learning (SEL) in Pre-Primary CLIL

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Abstract

Social and emotional learning (SEL) is the process of acquiring the competences to recognise and manage emotions and develop prosocial skills. Extensive research suggests that effective SEL interventions in pre-primary have a long-term impact on mental health, well-being, and social behaviours. At the same time, with the flourishing trend of introducing foreign languages from an earlier age in a contextualised and supportive setting, Content and Language Integrated Learning (CLIL) in pre-primary has become increasingly common. However, little empirical research exists that explores the depth and nature of social and emotional learning in young children in CLIL learning contexts. Similarly, there is a gap in existing legislative and educational frameworks to support SEL in pre-primary and, specifically, in pre-primary CLIL. In this context, the present chapter discusses the role of social and emotional learning in pre-primary CLIL and explores how the methodologies encouraged in successful CLIL classrooms can support the development of SEL in very young learners. The author proposes how existing SEL frameworks such as SAFE (CASEL, 2015; Durlak et al., 2010, 2011) can be adapted and scaffolded for use in pre-primary CLIL learning environments.

Keywords: Social and emotional learning, SEL, pre-primary, early childhood education, CLIL, bilingual.

This is a preprint of the following chapter:

Mortimore, Louisa. A Framework for Developing Social and Emotional Learning (SEL) in Pre-Primary CLIL. Published in *Handbook of CLIL in Pre-Primary Education*, edited by A. Otto & B. Cortina-Pérez, 2023, Springer International Handbooks of Education, Springer Nature Reference reproduced with permission of Springer International Handbooks of Education. The final authenticated version of the book is available online at: https://doi.org/10.1007/978-3-031-04768-8_6

1. Development of social and emotional learning (SEL)

Social and emotional learning (SEL) is the process of acquiring the competences to recognise and manage emotions, develop caring and concern for others, establish positive relationships and handle challenging situations effectively (Schonert-Reichl et al., 2017). Research suggests that when SEL is developed through school-based interventions, these have yielded significant positive effects on social and emotional competencies (Durlack et al., 2011) such as the promotion of personal strengths, positive values, positive identity, and commitment to learning (Taylor et al., 2017). In point of fact, the National Commission on Social, Emotional, and Academic Development (NCSEAD) describes SEL as “the substance of education itself,” (2019, p. 6). Nowhere is this truer than in pre-primary where the role of early social and emotional competence has been seen to have a long-term impact on mental health, well-being, and social behaviours (Jones et al., 2015; for a meta-analysis, see Taylor et al., 2017).

At the same time, with the flourishing trend of introducing foreign languages from an earlier age, and the growing awareness of the importance of providing language in a contextualised setting, the implementation of the Content and Language Integrated Learning (CLIL) approach in pre-primary has become increasingly common (for a detailed overview, see Pfenninger, 2016). Indeed, the exponential increase of CLIL within all educational stages in recent years (Pérez Cañado, 2016) has created numerous opportunities for research. Large-scale empirical studies on CLIL report the benefits in multiple areas related to learning and development, such as improved language outcomes (e.g. the longitudinal study of 2024 pupils in CLIL and non-CLIL programmes from primary to baccalaureate, conducted by Pérez Cañado, 2018a); the positive attitudes learners develop towards the additional language (e.g. Doiz et al., 2014, of 393 EFL and CLIL students of secondary education); increased motivation in CLIL over EFL (e.g. Pfenninger, 2016); and reduced foreign language anxiety (e.g. De Smet, et al., 2018).

However, to the author’s knowledge, no empirical studies have been conducted on the development of SEL in pre-primary CLIL. This may be as a result of the fact that social and emotional competence in pre-primary is often considered a challenging educational stage to research, with studies, at times, producing seemingly contradictory findings (Wellman et al., 2001). This difficulty is, at least in part, due to the following factors: 1) the complexity of carrying out physiological tests on children in their early childhood, such as fMRI scans to show brain activity and responsiveness to stimuli (e.g. Hanson et al., 2015; Hölzel 2011; Kuhl, 2010) or saliva tests to show the presence of stress hormones (e.g. Oberle & Schonert-Reichl, 2016); 2) the difficulty of interpreting qualitative data in young children with limited capacity to understand, express and explain their feelings and thoughts (see Basset et al., 2019); and 3) the array of variables that may influence a child’s environment, such as school and home environments (Strand et al., 2015). In addition, research in

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pre-primary frequently relies on observation techniques and quantitative data based on scales with a subsequent difficulty in establishing causal relationships.

In this context, and in the absence of existing studies that specifically research SEL in pre-primary CLIL, the present chapter explores how the common features shared by both SEL and CLIL can be mutually beneficial in pre-primary CLIL. To this end, this chapter reviews and brings together research in the three following areas: 1) the features of social and emotional learning, the importance of developing the affective domain in young learners and how studies suggest it affects brain development; 2) the characteristics of CLIL learning environments and the role of language, the teacher and the school setting; and 3) existing frameworks for the development of SEL, such as SAFE (CASEL, 2015; Durlak et al., 2010, 2011). The author proposes how these frameworks can be adapted and scaffolded; thus, enabling the effective development of SEL in very young learners, when much of the learning takes place in an additional language.

1.1. Development of social and emotional learning in pre-primary

Within pre-primary, SEL broadly refers to acquiring those skills necessary to understand and regulate one's emotions to control automatic behaviour, for more "acceptable" or socially competent behaviour; to feel empathy and to recognise, and respect emotions in those around us; achieve sustained positive engagement with peers; and develop coping mechanisms and resilience when faced with adverse circumstances (Denham & Basset, 2019; Denham et al., 2012; Ornaghi et al., 2020). These are essential skills in pre-primary for coping with complex situations such as daily parental separation, navigating the challenges of early schooling, forming a positive relationship with the teacher(s), enjoyment of play, sharing toys, playing harmoniously alongside other similarly aged children, and creating and sustaining positive peer relationships (for a detailed overview, see Denham, 2007).

In pre-primary, these skills can be developed as part of specific school-based programmes and interventions, ongoing classroom curricula, or after-school activities (for an overview of class-based programmes see Diamond & Lee, 2011; for research on pre-primary in the U.S. Head Start REDI programme, see Bierman et al., 2008; for a literature review on after-school programmes, see Wallace & Palmer, 2018; for a meta-analysis on i) school-based interventions, see Durlak et al., 2011; and ii) after-school programmes, see Durlak et al., 2010). Effective pre-primary SEL programmes enable children to acquire those skills that are necessary for social behaviour (Bierman et al., 2008), to interact successfully with others and construct peer relationships (Conte et al., 2019; National Scientific Council on the Developing Child, 2004). Young children, for example, typically display lower levels of social and emotional competence and a greater tendency to react rather than pause

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and respond to negative stimuli as compared to adults, due to not yet having developed inhibitory control- the ability to regulate emotions (Wu et al., 2016).

More precisely, Denham and Basset (2019) describe the development of social and emotional competence in pre-primary as a crucial asset of life skills that supports social relationships and school success. Additionally, extensive research suggests that the results of effective SEL interventions in pre-primary are long lasting. Early social and emotional competence in pre-primary children acts as an important predictor of both their ability to manage the difficulties of social and academic challenges of early schooling (see Bassett et al., 2012), and their academic trajectories, such as in Maths and reading skills (McClelland et al., 2006, p. 471). In a longitudinal study that started with children in pre-primary and followed the same children up to first and third grade of school, Laible et al. (2014) correlated lower emotional competence (specifically emotion regulation) with less prosocial, cooperative behaviour and increased anger proneness. Social and emotional competence in pre-primary has also been shown to act as a constant predictor for key long-term outcomes in late adolescence and early adulthood “across multiple domains such as education, employment criminal activity, substance abuse, and mental health” (Jones et al., 2015, p. 2283).

1.2. The brain and social and emotional learning in pre-primary

The importance of including comprehensive SEL programmes for pre-primary children becomes clearer still when we look at neural development in the brain, and specifically at those areas closely linked to social and emotional competence. Emotional development and the architecture of the brain of young children are tightly interlinked-the brain develops in response to the individual personal experiences and the influences of the environment in which that child lives (National Scientific Council on the Developing Child, 2004). Optimal development is favoured by the child’s exposure to a caring environment with a wide array of positive stimuli (for an overview on structural and functional brain development in early childhood, see Gilmore et al., 2018).

With functional magnetic resonance imaging (fMRI) studies becoming increasingly possible in very young children, a growing body of research has revealed that early childhood sees very high levels of neuroplasticity, especially with neurological maturation in the prefrontal cortex, the part of the brain positioned just behind the forehead (Bunge & Wright, 2007; Tsujimoto, 2008; Werchan et al., 2016; among others). The prefrontal cortex is responsible for high seated cognitive functions, termed “executive functions” such as emotion recognition and regulation, inhibitory control, and selective attention (for a theoretical review, see Grossmann, 2013).

In terms of neural development, social and emotional learning occurs through exposure to repeated positive (or negative) emotional stimuli which activate the neurons in the neural circuit, producing

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an electric signal. Repeated neural circuit activation strengthens the synaptic connections within the circuit leading to synaptic growth; hence, learning and development occur (for an overview, see Cantor et al., 2018; Siegal, 2020). This synaptic growth in neural circuits in areas of the brain such as the prefrontal cortex, the amygdala, and the hippocampus, enables, among other critical functions, social and emotional cognition (Mills et al., 2014). The amygdala is often referred to as the emotional centre of the brain and is involved in the so-called “flight-fight” response- the evolutionary response to threat (Panksepp, 2010; for an overview, see Roelofs, 2017). A more reactive amygdala is typically associated with higher reactivity within the individual, while, conversely, a less reactive amygdala, is associated with less reactivity (Hölzel et al., 2010; Wu et al., 2016), favourable to developing higher inhibitory control and self-regulation.

The highly reactive amygdala in early childhood (Wu et al., 2016) renders it particularly sensitive to developmental deficits such as early life stress (ELS). ELS is caused by repeated and continued exposure to negative emotional stimuli, such as abuse or early neglect (Pechtel & Pizzagalli, 2011). Fan et al. (2014) identified ELS, specifically emotional abuse, as a major contributing factor in affecting the development of areas of the brain such as amygdala and prefrontal connectivity. Similarly, in a study of 128 children with a mean age of 11 years at the time of study, Hanson et al. (2015) reported structural differences of brain areas involved in emotion processing and regulation (such as the amygdala and hippocampus), in children affected by ELS.

2. Development of social and emotional learning in pre-primary CLIL

Pre-primary is the stage of education where many children have their first close socialisation with their peers, rather than family members. Children are encouraged to learn prosocial behaviours, self-regulation and develop positive peer and teacher relationships (see, for example, Conte et al., 2019; Weimer & Gasquoine, 2016). These are fundamental to developing long term social and emotional cognition and avoid the damaging consequences of peer rejection and victimisation in pre-primary (Godleski et al., 2015). With the significant effects that social and emotional competences have on early childhood development and consequential classroom behaviour, it is not surprising that pre-primary educators and researchers recognise this central role of SEL (see, for example, Denham & Bassett, 2019; Denham et al., 2012; Grant et al., 2017; NCSEAD 2019; Page & Elfer, 2013).

CLIL is compatible with the development of emotional intelligence on many levels, and effective SEL approaches can be closely linked to the core objectives of CLIL (Mortimore, 2017a) which offer opportunities both within and beyond the regular curriculum to enrich learning, skill acquisition and

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development (Coyle et., 2010). Within a pre-primary CLIL classroom, the emphasis is on the integration of learning through play, activities, and tasks, *and* through using the additional language. But, while language may be one of the defining characteristics of CLIL learning contexts, it is not the only one. The very inception of CLIL is founded in creating a supportive learning atmosphere, where the classroom is viewed as a space for discourse (Dalton-Puffer, 2007), and complex content can be assimilated through dialogue, active learning, and scaffolding (Coyle, 2008). In this environment, the integration of social and emotional development of pupils is, arguably, a natural, meaningful, and logical progression.

Alongside the increasing implementation of CLIL, “how-to” manuals on teaching CLIL in different educational stages have flourished (see, for example, Coyle et al., 2010; Mehisto et al., 2008; Ting and Martinez Serrano, 2018). Much of this literature emphasises the importance of creating classroom environments that support learning (as opposed to teaching), pupil autonomy, cooperative learning such as teamwork, and dialogic teaching- a practice that promotes those teacher-child or child-child interactions that might be most beneficial for learning and development (Van Der Veen & Van Oers 2017). As regards pre-primary CLIL, children are encouraged to learn through an active ludic approach involving varied activities such as play, music, singing, dancing, drama, dressing up, drawing and model making. In this authentic learning environment, the use of the L2 for teacher-pupil communication could arguably be viewed as a further step where the learner accepts the use of the language without consciously focusing on that language, much as would happen if the teacher-pupil communication happened in their L1. In point of fact, Coyle et al., 2010, stated that “it is often hard to distinguish CLIL from standard forms of good practice in early language learning” (p.17).

Research in emotional competence and motivation suggests that CLIL and SEL would appear to be compatible in many educational stages, not just in pre-primary, as suggested here. In a large-scale comparative study of 2,710 CLIL to 17,969 non-CLIL secondary school students in Spain (average age of 14), Nieto Moreno De Diezmas concluded that “CLIL students are significantly more emotionally competent than their peers. We can therefore say that there is a connection between CLIL and the development of emotional competence” (2012, p. 66). The author speculates that this may be due to the transferable and multifunctional nature of key competences. However, according to the author, the acquisition of linguistic competences cannot explain the improved emotional competence found in CLIL over non-CLIL students. Therefore, factors such as CLIL classroom language, typically combined with teachers that are aware of the importance of language and dialogic teaching could play a “a capital role in the development of emotional strategies” (Nieto Moreno De Diezmas, 2012, p. 67).

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2.1. The relationship between social and emotional learning and language in school settings

A growing body of research suggests a child's social and emotional competence is tightly interlinked with their language development (see for example, Conte et al., 2019; Ornaghi et al., 2019; Wake et al., 2012). Within the pre-primary CLIL classroom, as opposed to its monolingual counterpart, the use of an additional language is of key importance. In a CLIL context, where much of the learning takes place in the additional language and children potentially have very low levels of that language, language acquisition needs to be supported in a comfortable, encouraging, and non-threatening place. As we have seen, it is essential that a child perceives their environment as *safe* (Pérez Cañado, 2018b). CLIL learning contexts should incorporate the child's L1 and the L2 in a way that supports the development of both- after all, CLIL is not immersion, but a bilingual context (Lasagabaster & Sierra, 2010). For young children in pre-primary CLIL, with minimum L2 skills, the ability to access their whole language repertoire and interact *at their choice* with their teacher and peers in the L1 or L2, considerably reduces the difficulty of communicating and aids the development of social skills and interaction. Research in a pre-primary setting in Poland found that young children who learnt English as a Foreign Language found that children freely attempted to speak English during the intervention, despite i) their higher L1 proficiency and ii) the teacher responding equally to speech in the L1 and L2 (Łockiewicz et al., 2018). Furthermore, they concluded that young children are receptive to a language that is not their mother tongue- being able to differentiate between L1 and L2 discourse while showing no intimidation by the use of the L2 in the classroom.

There are many variables and factors affecting the attitude a learner has towards the foreign language. Dewaele and MacIntyre (2014) found that gender, age, the number of languages known, educational level and the participants' relative perception of their own level, all affected whether students felt more foreign language enjoyment or anxiety in the classroom. In terms of methodology, it is notable that the authors concluded that activities that empowered student choice (being allowed to have a sense of autonomy and to use their imagination) shaped and promoted the development of enjoyment in the foreign language. This is in line with the logical reasoning that increased enjoyment in foreign language learning is linked to reduced foreign language anxiety (see, for example Liu and Wang, 2021). This, furthermore, potentially supports both the development of SEL and language in a pre-primary CLIL context where children are exposed to the language through ludic activities, scaffolding and dialogic teaching. This is consistent with the growing body of research over the last decade on foreign language learning in CLIL contexts (Dafouz & Hieber, 2013; Dalton-Puffer et al., 2018; Llinares & Dalton-Puffer, 2015). Findings generally support the theory that, when compared to non-CLIL, CLIL students report lower anxiety (see, for example, the longitudinal study of 896 pupils by De Smet, et al., 2018). In addition, in an empirical study that

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compared 100 participants learning in a CLIL environment to 100 participants learning in a non-CLIL environment, Pfenninger reports a bi-directional causal link between CLIL and motivation and CLIL and learner outcomes and argues that learning in the L2 “boosts motivation” (2016, p.137).

As we have seen, the need for a constructive and encouraging atmosphere which supports language growth, such as that found in successful CLIL classrooms, is essential to support young learners. In terms of positive affect, intrinsic motivation (where behaviour is a result of internal satisfaction felt by the individual) acts as a powerful accelerator of learning. Moreover, increased interaction and scaffolding, such as that encouraged in CLIL classrooms, may prime and extend this motivation (National Research Council, 2012). Such features are also associated with SEL programmes- the successful implementation which is clearly dependent on the provision of a high-quality care setting. This setting is described by Schonert-Reichl (2017) as one that is safe, caring, supportive, participatory, and well-managed.

2.2. The central role of the teacher in social and emotional learning in pre-primary CLIL

The teacher, their attitude, experience, and training are fundamental in providing caring and supportive class environments. Specifically for pre-primary, and equally applicable to pre-primary CLIL, Schacter (2017) highlights the central role of a teacher’s awareness and knowledge of their pupils to engage and help individual pupils during moment-to-moment instruction according to each pupil’s needs. Similarly, Ornaghi et al. (2020) found a clear link between 320 toddlers’ (mean age of 28 months) ability to regulate their emotions and the caregivers' sensitive and contingent responsiveness. In addition, Williams and Berthelsen (2017) evidenced the role of quality early parenting of children and self-regulation to children’s later prosocial behaviour. In contrast, teachers who minimise emotional language; that is, use language that purposefully distances them from a young child’s emotions and discourages expression of their emotions, negatively affect their social emotional competence (King & La Paro, 2018).

In this vein, studies suggest a significant link between the social and emotional competence of the *caregiver* and that of the child. For instance, Schonert-Reichl (2017) emphasises the “crucial role” of the teachers’ own well-being and calls for SEL to be recognised and promoted as a necessary part of teacher training. Affect contagion (how the emotionally aroused state of one person can influence the emotions of those around them) is a powerful driver for group affect. This is particularly noticeable with negative affect, for example, with stress. In a study of 406 pupils with a mean age of 11.5 years, Oberle and Schonert-Reichl (2016) documented how stress contagion (in this case “teacher burnout”), increased the morning cortisol levels (commonly known as the “stress hormone”) of the pupils. In this highly stressed context, teaching and learning would clearly begin

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to break down at all educational stages, and no less so in pre-primary CLIL. To this effect, Pegalajar Palomino and López Hernández (2015) suggest that pre-service pre-primary teachers should receive courses for their own emotional development, such as in mindfulness.

However, for teachers to effectively develop SEL in pre-primary CLIL, the challenge is more complex as these teachers arguably require more extensive training than many teachers may receive as standard. Pre-primary CLIL teachers, that are equipped to develop SEL effectively in their class, need: i) pre-primary teacher training and qualifications, ii) specialised training in CLIL (Sanz Trigueros & Guillén Díaz, 2021); and iii) knowledge and some degree of training in SEL (Schonert-Reichl et al., 2017).

Regarding the first point of teacher training, it appears that some pre-primary teachers have minimum qualifications. The U.S. Head Start REDI programme, referred to as the nation’s “premier” federally sponsored early childhood education programme (U.S. Department of Health and Human Services [USDHHS], 2005 as cited by Bierman et al., 2008, p.1802), showed considerable diversity in the training and qualifications of the teachers in the programme. The final report concluded that inconsistencies in findings could be due to the quality of interventions in different schools, with approximately 40 percent of the children having pre-primary teachers without a postsecondary degree (U.S. Department of Health and Human Services [USDHHS] 2010, p. xxii).

Table 1 Qualifications of teachers in the Head Start Programme (adapted from U.S. Department of Health and Human Services [USDHHS], 2010, p. xxii).

Qualifications of teachers in the Head Start Programme, 2005-2010	%
BA degree	30%
Associate degree	30%
No post-secondary degree	40%

Secondly, in the case of training in specialised CLIL methodologies, pre-primary CLIL teachers need to be well-informed, close to their pupils and aware of the psychological development of pre-primary children (Andúgar & Cortina-Pérez, 2018). To take the example of Spain where bilingual education is an integral part of the educational scene, CLIL pre-service teacher training is often lacking (Pérez Cañado, 2020; Porcedda, & González-Martínez, 2020). Standard teacher training courses often fail to include specific CLIL modules, despite those teachers often having to teach subjects such as Music or Physical Education through CLIL in school and, indeed, even those qualifications for foreign language teaching only include a very reduced number of (often optional) modules of teacher training in CLIL practices (Vinuesa, 2021). Specific teacher training in CLIL is often obtained after the standard teaching qualification through a specialised postgraduate or master’s

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degree programme in bilingual education (Lasagabaster & Sierra, 2010). Teachers may be offered short CLIL courses run by the local educational authorities, taken as a matter of personal choice and professional development, but not as a legal requirement.

Finally, in the case of teacher knowledge of SEL competencies and instruction, training is also vital for its successful implementation in the classroom. In fact, instructional practices are one of the three fundamental pillars, along with explicit SEL instruction and integration with the academic curriculum, for successful SEL (CASEL, 2015). Similarly, Bierman et al. (2008) highlighted the need for developmentally informed teacher practices to aid self-regulation development. Despite this importance of including a solid training in social and emotional competences, according to Bisquerra Alzina, it is often absent in teaching degrees in Spain (2005). In contrast, within the U.S., in a study of four states, 85,01% of programmes reported training on “knowledge about children’s development and learning” (Cox et al., 2015, p.120). However, it is worth highlighting that SEL, explicitly, was not mentioned. In recent years, there have been clear advances - SEL is now being included to some degree within the teaching certification requirements by 50 U.S. states (see Schonert-Reichl et al., 2017, for a full report).

3. Framework for developing social and emotional learning in pre-primary CLIL

As we have seen, a school setting and the informed teacher can provide children with an opportunity to interact interpersonally and learn how to cooperate and resolve conflicts (Jones et al., 2015). However, as Mortimore (2017a) underscored, cognitive development (aptitude, intelligence, learning strategies, content knowledge) has been favoured in education over affective development (motivation, attitudes, anxiety, self-regulation, and intrapersonal and emotional knowledge). Furthermore, and as highlighted by the National Scientific Council on the Developing Child (2004), policies that address children’s emotional and behavioural needs have been the exception, not the rule. Therefore, in 3.1, we will look at the scope of existing legislation and its provision for SEL. We will consider the current reality of SEL in pre-primary CLIL in Spain, the policies aimed at developing SEL in the U.S. and U.K. In 3.2, we will consider existing SEL educational frameworks and materials and how these can be adapted for use in pre-primary CLIL through scaffolding.

3.1. Legislative framework for social and emotional learning in pre-primary CLIL

In the case of Spain, education is devolved and the responsibility of each autonomous community. This has, at times, resulted in a lack of a coherent, centralised educational policy. For instance, with the exponential growth of CLIL in Spain, each of the 17 autonomous regions implements language policy in pre-primary as they see fit (Andúgar et al., 2019). However, despite their differences, all

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regional laws remain subject to national laws. The Royal Decree of 2006 (Decreto Real 1630/2006) which regulates pre-primary teaching for ages 3-6 is the common point upon which all regional law governing pre-primary is based. While no specific provision is made for CLIL learning contexts, it does broadly state the necessity of developing positive attitudes to both the first and foreign languages and increasing proximity of the language to known communicative contexts, fundamentally the classroom routines. This could be interpreted as encompassing the contextualised learning found in pre-primary CLIL.

Far less attention of the regional policy makers has been paid to SEL. Consequently, educational policy is less dynamic, with differences between regions, less marked. However, in this regard, the Royal Decree of 2006 does make express provision for SEL. In the objectives of article 3, there is explicit mention of the need for pre-primary to contribute to developing affective capacities, autonomy, and prosocial skills. The more recently passed Organic Law Amending the Organic Law of Education from 2020, (*Ley Orgánica 3/2020, por la que se modifica la Ley Orgánica 2/2006 [LOMLOE]*) also makes specific reference to the need for affective and emotional development and emotionally positive learning experiences in pre-primary education (2020, article 14). However, despite these provisions and mentions, Spanish educational laws have not generally provided a detailed framework within which SEL can be effectively developed in the different stages of schooling, including pre-primary and pre-primary CLIL.

Spain is not alone in this. Other countries have often faced a lack of a clear framework in which to develop SEL. In the U.S., education is generally regulated by each state, however, there are a few national initiatives, such as the Head Start programme. Two major reports, after one year and five years of intervention, analysed long term key outcomes and the circumstances that would lead to the greatest impact (i.e., benefit) on 4,667 3–4-year-old pre-primary children, who were randomly assigned to test or control groups (U.S. Department of Health and Human Services [USDHHS], 2005, 2010). Parent reported findings included better social skills, positive and closer child-parent relationships, and reduced hyperactivity (chapter 5, pp. 12-13).

In 2015, the federal law, Every Student Succeeds Act (ESSA) (Public Law 114-95, 2015) amended the previous 1965 Elementary and Secondary Education Act (ESEA). ESSA does not expressly mention social and emotional competencies and uses broader and more conventional terms such as providing “all students with access to a well-rounded education” (Section 4101) and fostering “safe, healthy, supportive, and drug-free environments that support student academic achievement” (section 4104). ESSA policy requires the use of evidence-based interventions for programme funding. This has, however, provided opportunities for local education authorities and school districts to incorporate SEL in schools (Grant et al., 2017). The bill for the Academic, Social, and Emotional Learning Act, proposed to include teacher training in practices that addresses the social

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and emotional development of the students, was not enacted into law (114th Congress, 2015-2016). More recently, The American Rescue Plan Act (ARP) represents a critical opportunity for state and local policymakers to ensure the implementation of SEL translates to intended outcomes (CASEL, 2021).

Other countries have faced a similar lack of explicit legislation, even though more recent policies are aiming to bridge that gap. In the UK, where education is also devolved, each home country has its own policy. In England, The Character Education Policy (Department for Education, 2019) provides non-statutory guidance which emphasises the development of positive character traits, e.g., respect (p.5), honesty and courage (p.7); behavioural skills such as good manners and courtesy (p.7); and emotional skills, as in social confidence, self-regulation, and good coping skills (p.7). In contrast, Scotland and Wales have gone a step further and developed curricula that integrate these skills across all curricular areas (Nesta, 2020).

As can be seen, and taking into account that Spain, the US and the UK represent just a glimpse into the myriad of educational laws across the globe, all three have developed very different approaches regarding the incorporation of SEL into education.

3.2 Educational framework for social and emotional learning in pre-primary CLIL

While a gap may exist within legislative frameworks, implementation of SEL at a grassroots level - the classroom- often faces challenges too. Antisocial, disruptive behaviours and low emotion regulation displayed by pre-primary children take their toll on their peers and the teacher, to the point that expulsion from the school may be proposed as the last resort. One national study of over 40,000 pre-primary children in the U.S found that 10.4% of pre-primary teachers reported expelling at least one child in the last 12-month period (Gilliam, 2005). A follow-up study of 119 randomly selected pre-primary teachers in Massachusetts found that 39% reported expelling at least one child in the last 12-month period, with children at the age of 5-6 at greatest risk (Gilliam & Shahar, 2006). In this context, the need for quality and evidence-based interventions that pre-emptively develop social and emotional competences in pre-primary is clear, and equally so in pre-primary CLIL in those countries where CLIL classrooms form a significant chunk of the educational scene.

However, there are no universal SEL frameworks or programmes. Nor are there set characteristics that these programmes should incorporate. According to NCSEAD (2019), the most effective interventions should be integrative- encompassing an “ecosystem” from policy makers, school heads, teachers, pupils, and parents. The scope and focus of interventions differ from programme to programme, with some centring on one set of skills, such as recognising and expressing emotions, while others are broader (Jones et al., 2021). The Collaborative for Academic, Social and Emotional

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Learning, CASEL (2015) has defined a conceptual framework which includes five processes through which social and emotional competencies can be developed (see Schonert-Reichl et al., 2017 for a detailed report). These include self-awareness, self-management, responsible decision making, relationship skills, social awareness, as can be seen in table 2:

Table 2 Framework of the five processes to develop social and emotional learning (Collaborative for Academic, Social and Emotional Learning, CASEL 2015, 2021; Schonert-Reichl et al., 2017).

Self-awareness	The ability to accurately recognize one's emotions and thoughts and their influence on behaviour.
Self-management	The ability to regulate one's emotions, thoughts, and behaviours effectively in different situations.
Responsible decision making	The ability to make constructive and respectful choices about personal behaviour and social interactions based on consideration of ethical standards, safety concerns, and social norms, the realistic evaluation of various actions, and the well-being of self and others.
Relationship skills	The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups.
Social awareness	The ability to take the perspective of and empathise with others from diverse backgrounds and cultures, to understand social and ethical norms for behaviour, and to recognize family, school, and community resources and support.

Furthermore, Durlak et al. (2010, 2011) carried out two studies on SEL school-based programmes. Specifically, the former analysed 69 after-school programs of which 46% were aimed at elementary pupils, while the latter analysed 213 school-based programmes involving 270,000 pupils from kindergarten to high-school. In both studies, the authors concluded that SEL is most effectively developed when it forms part of a comprehensive school programme that includes certain features, named under the acronym SAFE (Sequenced, Active, Focused and Explicit). The characteristics of SAFE are highly adaptable to many educational contexts and can be applied to classrooms across the educational spectrum and this arguably could include pre-primary CLIL contexts. The characteristics of SAFE have since been included in a report published by Jones et al. (2021) which analysed 33 leading SEL programmes in pre-primary in the U.S. The report furthermore suggests that effective SEL programmes in pre-primary should include the following essential characteristics:

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- Incorporate SAFE elements (Sequenced, Active, Focused and Explicit)
- Occur within supportive contexts
- Build adult competencies
- Be equitable, culturally responsive, trauma sensitive and socially just
- Set reasonable goals

Mortimore (2017a) suggested how SEL could be taught in primary CLIL classrooms through adapting SAFE and using methodologies promoted in CLIL such as active learning, and applying the 4C's of CLIL: Culture, Cognition, Communication and Content (Coyle et al., 2010). Likewise, the author believes that SAFE is highly compatible with pre-primary CLIL. Specifically, in a pre-primary CLIL context, SAFE can be applied as a framework similarly as it can be in any pre-primary setting, with additional scaffolding to support learning in the L2.

As a framework adapted for pre-primary CLIL, SAFE can be developed through:

- I. **Sequenced, coordinated, scaffolded activities** (Coyle, 2010);
- II. **Active learning through ludic activities** such as play, music, dressing up, puppets, drawing, stories...; the extensive use of toys, visuals and manipulatives (Andúgar & Cortina-Pérez, 2018);
- III. **Focused on the holistic growth of the whole child** (see Bland, 2015); dialogic teaching (Nieto Moreno de Diezmas, 2012) with the development of tasks through group and teamwork (Coyle, 2010); and individual learning needs developed through scaffolding, feedback, teachers' diagnostic expertise and repertoire (Meyer et al., 2018); and
- IV. **Explicit SEL content to promote social and emotional competences** (Jones et al., 2021) adapted to pre-primary CLIL.

In table 3, we can see the high compatibility of SAFE and its possible application as a framework in the pre-primary CLIL classroom:

Table 3 Four elements of effective in-school and after-school SEL programmes (compiled from Durlak et al., 2011; Durlak et al., 2010; and how they may be adapted within a framework for pre-primary CLIL, by author, 2021).

S.A.F.E. as compiled from Durlak et al., 2011; Durlak et al., 2010)		The possible application of S.A.F.E. for use in pre-primary CLIL (as proposed by Author, 2021)	
S	SEQUENCED	Activities are connected and coordinated to foster skills development	→ -Supports use of sequenced, coordinated and connected activities based on existing knowledge (schema) towards the growth of new knowledge that support both content (SEL) and language (L2), (Coyle, 2010).
A	ACTIVE	Uses active forms of learning to help students strengthen new skills	→ -Promotes active learning as an integral part of pre-primary CLIL: learning through play, music, singing, dancing, drama, puppets, dressing up, drawing, model making, stories.

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			-Encourages extensive use of toys, visuals, and manipulatives (Andúgar & Cortina-Pérez, 2018).
F	FOCUSED	Dedicates time and attention to developing personal and social skills →	-Aims at the holistic development of the whole child (see Bland, 2015). -Uses recommended CLIL practices such as dialogic teaching (Nieto Moreno de Diezmas, 2012), group work, peer interaction (Coyle, 2010), -Develops individual learning needs through appropriate communication, scaffolding, feedback, teachers' diagnostic expertise and repertoire (Meyer et al., 2018).
E	EXPLICIT	Targets specific social and emotional skills →	-Incorporates specific content to develop social and emotional competences such as those described by Jones et al. (2021).

Within this framework, teaching materials should focus on the development of specific SEL concepts and skills. For younger children, Farrer (2010) reports how one pre-primary school in England uses animals to represent values; thus, thoughtfulness is an owl; respect, a tiger; responsibility, a monkey recycling his banana skin; and cooperation a group of ants carrying rainbow coloured cloth between them. Mindfulness techniques can be adapted for young children, for example, mindful breathing can incorporate a favourite cuddly toy on the stomach to emphasise the movements of breathing in and out and listening to the noises around us in our classroom, and recognising, identifying and accepting as normal the emotions we feel (Mortimore, 2017a, 2017b). Jones et al. (2021, pp. 20-21) suggested that SEL can be taught through activities such as class discussion, books and stories, specific SEL tools, drawing and videos (table 4; see the full report for a more detailed description). Picturebooks enable abstract notions and other nuances to become accessible through the use of illustrations (Pérez & Vázquez, forthcoming). These, therefore, can be a particularly useful medium when working with young children (see, for example, Aparicio & Pérez, 2020). All the previously mentioned activities can be adapted and scaffolded for pre-primary CLIL. In fact, CLIL materials are often an adapted, scaffolded version of materials used in L1 classrooms that provide more support, through the use of visuals and manipulatives, for use with the additional language as can be seen in the following table.

Table 4 Instructional methods for developing SEL skills and competencies in pre-primary CLIL (Jones et al., 2021, pp. 20-21, adapted by author for use in pre-primary CLIL).

Instructional Method	Description
Discussion	Whole class, peer discussion. Brainstorming, activity debrief.
Storytelling and Picturebooks	Teacher reads aloud a book or short story, such as a picture book. In some instances, this may be a story developed by the programmers to illustrate a particular theme. In pre-primary CLIL picturebooks with reduced text can be especially useful.

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Poem	Reading a poem out loud, composing a simple poem/phrase as class with close teacher scaffolding.
Vocabulary Exercise	Activities used to teach language, words, or terms related to an SEL concept. In CLIL, this should be combined with visual scaffolding such as flashcards, facial gestures, body language, emojis etc.
SEL Tool	Use of a tool or object that reinforces SEL concepts and strategies by helping students understand and visualise them in a concrete way. In pre-primary CLIL these can be colouring happy/ sad faces etc, using “emotionometers”, thermometers or emoticons, thumbs up/down etc
Meditation/ visualisation	Mindfulness techniques like guided meditation and mindful listening to calm the body and focus the mind. Visualisation of a place that makes the children feel happy and secure.
Drawing	Pupils draw a picture of something that makes them happy (rather than drawing about a specific time they felt happy).
Songs	Songs, music videos, dance and bodily expression can reinforce a SEL theme and scaffold techniques such as calm breathing techniques.
Kinaesthetic	Activities involving student movement and physical activity and games like Freeze Dance
Role-play	Teacher acts out a scene and/or uses puppets to demonstrate/practise emotion regulation strategies, problem solving processes or conflict management.
Art/ Creative Project	Art or creative project related to an SEL theme. May be an individual project, such as using modelling clay/plasticine to make faces that show different emotions, or a collaborative project.
Visual Display	Charts, posters, or other visual displays. Examples include classroom posters that break down emotion regulation strategies, a class rules chart, or recording brainstorming ideas on poster paper. Often used as a way to establish or reinforce routines in the classroom.
Games	To reinforce a SEL theme/ concept and transition in/out of the lesson. Charades with emotion and social cues, Simon says to practice cognition regulation etc.
Computer/ App	Technology like computer games, phones, tablets, internet to teach/reinforce a SEL concept or skill.
Video	Cartoons or videos typically depict children in challenging classroom or playground situations and are often used to prompt discussion around emotions, conflict resolution, and appropriate behaviours

As we can see, these are activities that are commonly found in the pre-primary classroom that specifically focus on developing SEL. These same activities and materials can be further adapted and scaffolded for CLIL. It is worth highlighting, however, that an established framework may be necessary as the use of isolated activities aimed at developing SEL may be insufficient. As Page and Elfer (2013) point out, work on SEL at pre-primary level is vulnerable to discontinuity and disturbance with much of the work based on intuitive actions. This is, arguably, equally pertinent to pre-primary CLIL. A school wide policy of developing SEL, and the application of a coherent framework is likely to promote the effectiveness of the programme.

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4. Conclusion

In this chapter, we have reviewed research which highlights the far-reaching and long-term implications of SEL in pre-primary which directly affects the neural development within the highly plastic brain of the young child. A caring and supportive learning environment, a trained and informed teacher that provides a wide array of positive stimuli are key to the successful implementation of both SEL and CLIL in pre-primary. Despite the apparent difficulties of teaching complex and abstract notions to young children through the L2, the use of instructional strategies typically associated with pre-primary CLIL learning appears to make this possible. CLIL learning environments promote techniques such as extensive scaffolding, dialogic teaching and ludic activities. These, when combined with the use of adapted materials specifically aimed at developing social and emotional skills, suggest that SEL can be effectively developed in the pre-primary CLIL classroom. Likewise, the interactive and supportive atmosphere of existing CLIL classrooms potentially aid the subsequent implementation of SEL. However, individual teacher initiatives appear insufficient- a school wide policy of developing SEL, and the application of a coherent educational framework, in tune with the needs of pre-primary CLIL learners, is likely to promote the effectiveness of school programmes and their benefits.

This chapter contributes to the existing literature by bridging the gap between CLIL and SEL and highlighting the compatibility of both. The coexistence of CLIL and SEL appears not only possible within the pre-primary classroom, but mutually beneficial. Nonetheless, there are significant challenges to be faced. While the central role of the teacher is essential for the successful implementation of both CLIL and SEL programmes, teacher training in CLIL and SEL is an issue that has yet to be addressed satisfactorily. Similarly, the development of explicit legislative and educational frameworks is needed in which SEL can be effectively developed in pre-primary CLIL. There is a clear need for SEL specific policy on a regional and/or national scale. Furthermore, this policy needs to take into consideration the reality of the current educational scene and be developed hand in hand with existing educational policy which promotes the establishment of widespread CLIL learning environments. This is essential to ensure homogeneity across pre-primary contexts.

There are many areas for future research. Studies need to centre on the provision of SEL within pre-primary CLIL, research the characteristics of successful pre-primary CLIL SEL programmes, and the role of teacher training, CLIL and SEL. Furthermore, research is needed to determine the extent that SEL can be effectively developed in an additional language and determine how SEL can be optimised in this setting.

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To cite this chapter:

- Mortimore, L. (2023). A Framework for Developing Social and Emotional Learning (SEL) in Pre-Primary CLIL. In A. Otto & B. Cortina-Pérez (Eds). *Handbook of CLIL in Pre-Primary Education* (pp. 79-100). Springer. https://doi.org/10.1007/978-3-031-04768-8_6

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