



**Education for Sustainable Development in Early Childhood Education in Spain. Evolution, trends and proposals**

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## Education for Sustainable Development in Early Childhood Education in Spain. Evolution, trends and proposals

ABSTRACT: This article analyze how the sustainability culture has evolved in the early childhood education setting within the Spanish education system with official documents and the sustainability training received by teachers who intervene in this stage of education since these teachers' degrees have been adapted to the European Higher Education Area.

Early childhood education in Spain is an individual stage to educate children aged up to 6 years (two main cycles: 0-3 and 3-6 years). It's important to verify if the curricular contents of this stage of education include activities that are designed to develop attitudes, behaviors and lifestyles that are in keeping with sustainability values.

We conclude that it is necessary to include variables that outline sustainable development in early childhood education, to organize preliminary and continuous teacher training, and to inform the complete educational community so it is aware of the need for education to bring about changes towards sustainable development.

RESUMEN: Este artículo analiza la evolución de la cultura de la sostenibilidad en el ámbito de la educación infantil en el sistema educativo español, a través de los documentos oficiales, así como la formación para la sostenibilidad que reciben los profesionales que intervienen en esta etapa educativa dado que las titulaciones de estos profesionales se han adaptado al Espacio Europeo de Educación Superior.

La Educación infantil en España constituye la etapa educativa con identidad propia que atiende alumnos hasta los seis años (en dos ciclos: de 0-3 y de 3-6 años). Es importante comprobar si los contenidos curriculares en esta etapa educativa incluyen actividades tendentes a desarrollar actitudes, comportamientos y estilos de vida acordes con los valores de la sostenibilidad.

Como conclusión apuntamos la necesidad de integrar en la educación infantil las variables que configuran el desarrollo sostenible, realizar acciones previas y continuas de formación de los docentes, e informar a toda la comunidad educativa para concienciar de la necesidad de cambio que requiere una educación para el desarrollo sostenible, y una formación y capacitación para producir ese cambio.

RÉSUMÉ: Cet article discute de l'importance de la sensibilisation au développement durable dans l'éducation de la petite enfance à l'intérieur du système éducatif espagnol en tenant compte des directives officielles et de la formation des enseignants concernés au développement durable depuis la mise en place du processus de Bologne. L'éducation de la petite enfance en Espagne concerne l'éducation des enfants jusque 6 ans avec deux périodes principales, 0-3 et 3-6 ans.

Il est donc crucial de vérifier que le contenu de la formation inclus des activités qui seront susceptibles de développer attitudes, comportements et styles de vie en accord avec les valeurs du développement durable chez ces enfants.

Nous concluons dans cette étude qu'il est nécessaire : d'inclure des aspects qui sensibiliseront l'enfant dès son plus jeune âge au développement durable, d'organiser la formation initiale et continue des enseignants, et d'alerter la communauté éducative sur le rôle primordial de l'éducation pour changer le regard de tous sur le développement durable.

ZUSAMMENFASSUNG: Dieser Artikel analysiert die Entwicklung der Kultur der Nachhaltigkeit im Hinblick auf die Kindererziehung im spanischen Bildungs- und

Schulsystem. Dies erfolgt aufgrund offizieller Dokumente und durch Weiterbildung für Nachhaltigkeit, die jene Kindererzieher erhalten, die sich an dieser pädagogischen Phase beteiligen. Dies ist daher möglich, da die beruflichen Qualifikationen und Hochschulabschlüsse der einzelnen Erzieher bereits den Normen des European Higher Education Area entsprechen.

Die frühkindliche Erziehung in Spanien beinhaltet eine Bildungsbühne mit eigener Identität, die auf Kinder bis zu einem Alter von 6 Jahren ausgerichtet ist. (Sie ist in zwei Etappen unterteilt: die erste von 0- 3 Jahren und die zweite von 3-6 Jahren.

Hierzu ist es wichtig zu überprüfen, ob die Lehrplaninhalte in dieser erzieherischen Phase gezielte Aktivitäten beinhalten, die die Verhaltensweisen des Kindes, sowie die Haltung und die Lebensstile, die im Einklang mit den Werten der Nachhaltigkeit stehen, fördern können.

Abschließend weisen wir auf die Notwendigkeit hin, die Variablen, aus denen sich eine nachhaltige Entwicklung bilden in die frühkindliche Erziehung zu integrieren. Fort- und Weiterbildungen von Lehrkräften sollen gefördert werden und zusätzlich soll die gesamte Schulgemeinschaft darüber informiert werden und zeitgleich sensibilisiert werden, auf die Notwendigkeit einer Veränderung die die Erziehung mit sich bringt, die für die nachhaltige Entwicklung wichtig ist sowie Aus- und Weiterbildung nötig sind, um diesen Wechsel zu ermöglichen.

**Keywords:** sustainable development; education; early childhood; curriculum; teacher training

## Introduction

It is now widely recognized that humanity faces urgent problems affecting local, regional and global environments, and social and economic development. The Earth's limited natural resources are being consumed more rapidly than they are being replaced, and the effects of global warming upon ecological balance and bio-diversity are well known (Vilches and Gil, 2009). The goals of the United Nations Decade of Education for Sustainable Development (2005-2014), are therefore to integrate the principles, values, and practices of sustainable development into all aspects of education and learning (Delors, 1996; UNESCO, 2005).

Many of the most fundamental values of tomorrow's society are also being formed in early childhood contexts today. Early Childhood Education therefore has a major role to play in achieving sustainable development (Siraj-Blatchford, 2009).

The sustainability culture is not generally established in educational centers despite the relative awareness of its possible contribution by applying sustainable development-related policies and organizing actions that are coherent with sustainability values (Morin, 1999).

According to Davis (2009), international research in early childhood education for sustainability is still very limited but actually, these matters are the object of research by various groups like Aznar et al. (2011) in Spain, that works in education for sustainability of the teachers who train future teachers of early childhood education and Årlemalm-Hagser and Sandberg (2011) that explores Swedish day care attendants' comprehension of the concept of SD and analyses associated pedagogical practices at their place of work in pre-schools.

In recent years there has been progress in this field, as in many other countries, like in Africa (Mbebeb, 2009), China (Chan et al, 2009), Australia (Elliot and Davis, 2009), Sweden (Johansson, 2009; Hägglund and Pramling Samuelsson, 2009) o New Zealand (Prince, 2010)

This article analyzes how the sustainability culture has evolved in the early childhood education setting within the Spanish education system. Spanish education is

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2  
3 currently undergoing reform since the Organic Law on Education (LOE) was approved  
4 in May 2006, which replaced the former LOGSE (former Law on the Spanish Education  
5 System of 1990). Early childhood education with the LOE continues to be a unified  
6 stage of education subdivided into two main cycles (0-3 and 3-6 years), just as the  
7 LOGSE specified, but the LOE includes new connotations, including the importance of  
8 the information and communication technologies (ICT) and teaching English.  
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10 The Spanish Ministry of Education centralizes and presents a basic curriculum  
11 model in Spain, but the different Spanish Autonomous Communities present their own  
12 curriculum with percentages of 65% and 55% of variance depending on whether they  
13 teach their own language or not (Galician, Basque or Catalan) as well as Spanish.  
14 Presently, and since the current Spanish Constitution was approved, the Spanish State is  
15 made up of 17 Autonomous Communities (AC) which share many competences in  
16 educational matters with the State Government itself. At the same time, this law also  
17 modified the training of those professionals who were to work in this particular stage of  
18 education, where there are differences in training and qualifications as far as the 0-3 or  
19 the 3-6 year-old cycle is concerned.  
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22 Regarding sustainability, when it comes to applying the LOE we have to analyze  
23 the law itself, the Royal Decree passed on Minimum Levels of Education and also the  
24 Decrees in curricular terms of each AC. Furthermore, teachers have to get involved in  
25 order to verify if the natural environment and environmental education are reflected in  
26 light of sustainable development. Environmental education has to adapt to these new  
27 sustainability-linked aspects, which involves a fundamental change in the education  
28 concept as the objective of education is extended, not only towards human wellbeing,  
29 but also towards an ecologic balance, and in such a way that the aim of educational acts  
30 are shared between people and nature. In this way, environmental education takes an  
31 ecocentric character and human beings present an ecodependence trait. What this trait  
32 involves including one's environment in one's own identity principle for the common  
33 interest of maintaining life on Earth by commencing with a new ecological paradigm  
34 that includes coherence, stability and compatibility with the ecological balance and  
35 social equity principles by opting for complexity, resilience and resistance (Novo, 2009:  
36 394). "Moreover, as children are the decision-makers of the future, the values of  
37 sustainable living need to be instilled at an early age through an integrated early years  
38 curriculum" (Prince, 2010: 423).  
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### 45 **Early Childhood Education in Spain: Analysis of the Organic Law on Education** 46 **(LOE)**

47 Early childhood education is a unique, identified stage of education which is arranged  
48 into two main cycles and obliges educational centers to have a specific pedagogic  
49 proposal from the first of the two cycles. This form of education is voluntary, and not  
50 compulsory, as compulsory education in Spain is for minors aged 6 to 16. Both the early  
51 childhood education cycles have to progressively cover affective development, the  
52 movement and habits of body control, signs of communication and language, the  
53 elemental patterns of shared living and social relationships, as well as the discovery of  
54 the physical and social characteristics in the environment where these children live.  
55 Furthermore, children will be helped to form a positive, balanced image of themselves  
56 and to acquire self-autonomy. The intention of the second cycle is to encourage a  
57 preliminary reading-writing approach, start logic-mathematical skills, start learning a  
58 foreign language, use the ICT and learn different artistic expressions.  
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The basic differences between both cycles lie in highlighting that the Education Authorities ensure there are sufficient places in public schools and will make arrangements with private education centers in their educational program to cover family demands for the second early childhood education cycle. This cycle tends to be incorporated into primary education schools, which offer separate facilities to provide the most appropriate teaching. In public education, the teachers of this particular stage of education are also civil servants with the same occupational level and conditions as primary education teachers enjoy, although they have to have acquired the early childhood education qualification to be able to teach this cycle. In private and subsidized private teaching, schools tend to be educational centers that also teach Compulsory Secondary Education and, in some cases, the high school diploma, and teachers are usually contracted by those who run or own these centers.

The second early childhood education cycle is regulated nationally with minimum levels of teaching, which are shared by all the Autonomous Administrations (AA) and which each AA must specify in curricular-related decrees, thus ensuring highly suitable teaching without significant differences. As regards early childhood education teachers, acknowledged due to their training and professionalism, one aspect that needs improving is ratios because there are 25 boys and girls to one teacher who is considered a classroom tutor, although there generally tends to be one support teacher to every three teachers of the same level and with the same qualifications as the tutors.

*The first early childhood education cycle* is neither free nor generalized, and Public Administrations are urged to progressively create sufficient places for this first cycle. This first cycle is normally taught in centers that cover schooling from 0 to 3 years, which have had to adapt progressively to regulations in terms of the conditions of the centers and how they care for children of this age group. Such centers used to be known as “Nurseries” before the LOGSE with an overtone of care. However, nurseries changed to “Infants Schools”, or “Schools for the First Early Childhood Education Cycle” which is how they are currently known. They have had to gradually adapt in terms of the conditions and requirements of both the school and staff alike. Around 1997 and 1998, in order to include the teaching of 3 year-olds in public schools, those students in the 1st and 2nd years of Compulsory Secondary Education were moved to institutes, and then the dependencies of all the educational centers were reorganized. One consequence of this reorganization was that many educational centers taught these children free of charge, so they focused on the first early childhood education cycle (0 to 3 years).

Most of the schools providing teaching at this level are private and not subsidized, which makes it difficult for parents to strike a balance between their working life and caring for their children until the age of three. Nowadays, there are generalized free places since they open from 9 am to 5 pm. In certain places the local administration is involved, and even owns the educational centers and subsidizes them, while other places grant aid to parents, but generally this stage of education (0-3 years) is not completely free.

Another important aspect to highlight is that this stage of education shares no common nationwide pattern with the LOE which it did with the former LOGSE. This is because each Autonomous Community (AC) is allowed to organize this educational cycle; the LOGSE foresaw common patterns in terms of the centers’ requirements, ratios and basic curricular aspects. The LOE establishes basic aspects of the law, but owing to the decentralization process in Spain, each AC determines such aspects. Thus the differences in this stage of education increase according to the different ACs, and this may have an impact on the quality of the education received. We therefore need



wisdom and a professional understanding of the field and the level of policy makers: in the end they set out the conditions that make teachers address the enormous potential than lays in its and every child (Laevers, 2005).

Global and personalized education is fundamental at this stage (Vaca, & Varela, 2009: 34) in all areas (Berdonneau, 2008: 54), (Akoschky et al, 2008: 89) and in all areas of personality (Diez Navarro, 2002: 45); attention to diversity and socialization (Pomar, 2001: 56; Martínez-Agut, 2010a; Oliveira-Formosinho & Barros Araújo, 2011); emotional education (Del Barrio, 2002: 121), incidence with the family, teamwork with other professionals (Antón, 2007: 45) and the social task of early childhood education (Bigas, & Correig, 2001: 56; Ortega et. al, 2009). However, two broad approaches to curriculum and pedagogy can be discerned: the approach adopted in the social pedagogy tradition and the traditional pre-primary school approaches (Bennett, 2005).

### **Organic Law on Education (LOE) and the Natural Environment**

When we analyze the LOE, we come across the following references made to the natural environment and its teaching in the Law (Art. 2): e) Teaching for peace, respecting human rights, shared living, social cohesion, cooperation and solidarity among people, and acquiring values that favour respect to living beings and the natural environment, especially forests and sustainable development.

In Title I (Teachings and their Regulations), Chapter I:

- Early childhood education, Objectives (Art. 13): Early childhood education will contribute to children developing capacities to allow them: b) to observe and explore their family, natural and social environments.

- Pedagogic regulations and principles (Art. 14) 3. In the two early childhood education cycles, attention will be gradually paid to children's affective development, the movement and habits of body control, signs of communication and language, the elemental patterns of shared living and social relationships, *as well as the discovery of the physical and social characteristics in the environment in which these children live*. Furthermore, children will be helped to form a positive, balanced image of themselves and to acquire self-autonomy.

In Title III: Teachers staff, Chapter I:

- Teachers' tasks, Art. 91, among which, we highlight: e) Attention paid to the pupils' *intellectual, affective, psychomotor, social and moral development*, f) Promotion and organization of, and participation in, complementary activities, both inside and outside the educational premises, which the educational centers run, g) Contributions made to ensure that the activities run by the centre are carried out in a climate of *respect, tolerance, participation and freedom to encourage values of democratic citizenship among the pupils*. Chapter III: Teacher training, will be initial (Art. 100) and permanent (Art. 102).

Article 6.2 of the LOE points out that *a minimum level of teaching* has to be provided (Royal Decree 1630/2006) in which basic competences are established, these being a new curricular element. The bases for these early childhood education competences are to be set, which begin in Primary Education, and they should have been acquired by the time the basic level of teaching has been completed. Therefore, they become work and assessment elements in all areas, along with the objectives set out at this stage.

We now go on to specify the eight competences:

1. Competences in linguistic communication.
2. Mathematical competences.

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3 3. *Competences in knowledge of and interaction with the physical world. This is the*  
4 *skill to interrelate with the physical world in terms of its natural aspects and those*  
5 *brought about by human action. It implies the responsible use of natural resources,*  
6 *caring for the natural environment, responsible consumption, and protecting individual*  
7 *and collective health.*

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9 4. Processing information and digital competences.

10 5. *Social and citizenship competences. These imply understanding and facing social*  
11 *reality by employing ethical judgment and by contributing to peace and democracy*  
12 *through attitudes of responsibility and solidarity.*

13 6. Cultural and artistic competences.

14 7. Learning-to-learn competences.

15 8. Self-autonomy and personal initiatives. These refer to acquiring and applying a series  
16 of personal interrelated values and attitudes, and the ability to learn from one's  
17 mistakes.  
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### 20 21 **Early Childhood Education Curriculum in the Valencia Community (as an** 22 **example of a Spanish Autonomous Community)**

23 The minimum level of teaching determines the fundamental curricular aspects in  
24 relation to the objectives set out, the basic competences, the contents and the assessment  
25 criteria to ensure common training to all pupils and to guarantee the validity of the  
26 qualifications that correspond to the Spanish education system. Following the Royal  
27 Decree (RD) on the minimum level of education, Decrees have been published in the  
28 Valencia Community on the curriculum of the two cycles comprising early childhood  
29 education (Decrees 37/2008 and 39/2008).  
30

31 Article 2 sets out the *General principles and purposes* of early childhood  
32 education, and Section 2.3 points out that “the purpose of early childhood education is  
33 to contribute to the physical, affective, social and intellectual development of boys and  
34 girls. Both the early childhood education cycles have to cover the development of  
35 movement and habits of body control, communication and representation through  
36 different languages, the elemental patterns of shared living and social relationships, as  
37 well as the discovery of the physical and social characteristics in the environment in  
38 which these children live. Furthermore, children will be helped to form a positive,  
39 balanced image of themselves, to acquire self-autonomy and to develop affective  
40 capacities”.  
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43 Article 3 states the objectives of the second cycle, which include: Observing and  
44 exploring one's family, natural and social environments; Forming relationships with  
45 others and gradually acquiring fundamental patterns of shared living and social  
46 relationships, as well as exercising pacific resolutions in the face of conflicts; Knowing  
47 and appreciating cultural manifestations in one's environment, showing interest and  
48 respect to them, and discovering and showing respect to other cultures in one's  
49 environment.  
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52 Article 4 indicates the following areas:

53 4.3. Contents will be organized in accordance with the following areas:

- 54 – Knowledge of oneself and self-autonomy.
- 55 – Physical, natural, social and cultural environments.
- 56 – Languages: communication and representation.

57 These areas must be understood as organizational concepts, as areas of action  
58 and learning spaces of which attitudinal, procedural and conceptual contents form part  
59 to contribute to educational development, to facilitate how children interpret their  
60 world, to give it meaning and to help boys and girls participate in it.

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3 Finally, Article 7 refers to the educational centers' pedagogic autonomy:

4 7.2. Educational centers will develop and adapt the established curriculum by this  
5 decree by means of:

6 a) The center's educational project which will consider the center's characteristics, its  
7 social environment, pupils' educational needs, and this center will set the objectives,  
8 educational priorities and action procedures.

9 b) Didactic programs (work projects, didactic units, etc.) which will comprise all the  
10 contents of the various areas and will be carried out by globalized units that must  
11 respect the pupils' paces of work, rest and play.

12 c) The department in charge of educational matters will encourage didactic programs to  
13 cover the curriculum from a perspective of tolerance, solidarity, responsibility  
14 (especially in terms of consumption and behavior on roads), peace, health, sustainability  
15 and gender equality by facilitating children's intellectual, affective and social  
16 development by helping them relate with others and to learn elemental patterns of  
17 shared living.

18 All these points should be in agreement with UNESCO's proposal which is  
19 included in its Decade of Education for Sustainable Development (UNESCO, 2005).  
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### 22 **Professionals who teach this Stage of Education**

23 Those professionals who formally teach these first two cycles are described below:

24 *The first early childhood education cycle (0-3 years) will be taught by:* A  
25 graduate in professional training (a senior technical advisor in early childhood  
26 education) or a qualified teacher or a graduate in early childhood education, both of  
27 which are University degrees with access via a High School Diploma; the former lasts  
28 three years and its latest promotion commences with the 2009-2010 academic year; the  
29 latter lasts four years and corresponds to the university reform undertaken from the  
30 European Higher Education Area, and its first promotions have commenced studies with  
31 academic years 2008-2009 and 2009-2010, depending on the university in question. The  
32 teacher in charge of the cycle will be a teacher or a graduate. Teacher's studies were a  
33 University Diploma and with the European Higher Education Area reform, with which  
34 Diploma and Graduate courses became degrees, this qualification ranks equally with the  
35 rest of educational professionals whose training becomes standardized to 4-year degrees  
36 in all cases (Pedagogy, Psychology, Social Education, etc.).

37 *In the second cycle*, that is, professionals teaching 3-6-year olds: They have to be  
38 teachers of or graduates in early childhood education such as classroom tutors or  
39 support teachers, and they may be supported by teachers of other specialties or fields  
40 (music, especial education, physical education, etc.). It is very important to train these  
41 professionals to teach children aged 0-6 years (Goldsschmied, 2002: 76) in both their  
42 initial and permanent forms of training (Úcar, 2007: 1).  
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44 We now move on to study two other types of professionals according to each  
45 cycle.  
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### 48 **Early Childhood Education Professionals in Professional Training**

49 The first cycle of this stage of education (formal education for 0-3-year olds) is taught  
50 by teachers of or graduates in early childhood or from professional training, specifically  
51 the "Senior Technical Advisor in Early Childhood Education" and have started to be  
52 implemented in the 2009-2010 academic year.  
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54 This legislation contemplates that these senior technical advisors' general  
55 competences consist in devising, implementing and evaluating specific educational  
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3 projects and programs for infants studying the first cycle in a formal setting, in  
4 accordance with the pedagogic proposal put forward by the teacher specialized in early  
5 childhood education, or with the equivalent university degree, and throughout this stage  
6 in an non-formal setting, to create safe environments in collaboration with other  
7 professionals and families:-  
8

9 The most relevant occupations and work posts are as follows:

- 10 - Teacher of the first early childhood education cycle (formal education)  
11 - Teacher in institutions and/or specific work programs for 0-6-year (social risk or as  
12 family support).  
13 - Teacher who participates in free time and entertainment programs or activities for  
14 children aged 0-6 years: toy libraries, cultural centers, libraries, educational centers,  
15 entertainment centers, farm schools, etc.  
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17 This qualification is taught for two years in public institutes or in private teacher  
18 training schools. Regarding references to sustainability, we have checked the Regional  
19 Valencia Ministry of Education's "Order of 29 July, 2009, which establishes the  
20 curriculum in the Valencia Community for the Superior Technical Advisor Training  
21 Course, which corresponds to the Superior Technical Advisor in Early Childhood  
22 Education Qualification". Of the two training modules available, we found references to  
23 sustainability in the Professional Module: "Training and Occupational Guidance",  
24 lasting 96 hours, and in the Professional Module: "Firms and Enterprising Initiatives",  
25 lasting 60 hours, whose contents are linked to sustainability: Contribution of small- and  
26 medium-sized enterprises in the childcare and sustainable development sector; business  
27 ethics and ethical principles for action; corporate social responsibility; labor relations  
28 report and social and ethical responsibility of the firms in the child-teaching sector.  
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30 We consider that the number of references to sustainability made in these  
31 professionals' training is very low, and that this training will depend on the implication  
32 of the teachers who train them in the centers, and also on the firms where they do their  
33 placements. Therefore, it is necessary to insist further on this area of training.  
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### 36 ***Early Childhood Education in Higher Education***

37 The Bologna Process of 19 June, 1999, established the bases for the creation of a  
38 European Higher Education Area (EHEA). Since then, teacher training studies have  
39 been converted into a Degree through the EHEA adaptation process, and the Early  
40 Childhood Education Teacher Degree came about which, in formal education, is linked  
41 to the first cycle of this stage of education as a responsible pedagogue (0-3 years), or to  
42 the second cycle (3-6 years) as a classroom tutor or support teacher.  
43

44 This training consists in 240 European credits and is taught over four academic  
45 courses, and the competences that graduates must acquire are stated in the Teacher  
46 Training Degree's White Book (ANECA, 2005, p. 91). They refer to knowledge of the  
47 objectives, curricular contents and evaluation criteria relating to early childhood  
48 education. Such competences address the following:  
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- 50 a) know the objectives, curriculum content and assessment criteria in early childhood  
51 Education.  
52 b) promote and facilitate learning in early childhood education of the various cognitive,  
53 emotional, psychomotor and volitive dimensions from a globalizing and comprehensive  
54 perspective;  
55 c) design and adapt the areas of learning in diversity contexts to cover students'  
56 educational needs, gender equality, fairness and respect for human rights;  
57 d) encourage shared living both inside and outside the classroom and face conflicts with  
58 pacific resolution;  
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3 e) reflect as a group on accepting rules and on showing respect to others;  
4 f) promote each student's autonomy and special nature as educational factors in terms of  
5 emotions, feelings and values in early childhood education;  
6 g) know how language in early childhood evolves, identify possible dysfunctions and  
7 ensure their correct evolution;  
8 h) face language learning situations efficiently in multicultural and multilingual  
9 contexts;  
10 i) oral and written expressions and mastering the use of different expression techniques;  
11 j) know the educational implications relating to the ICT, particularly those relating to  
12 television, in early childhood;  
13 k) know the basics of diet and hygiene in infants;  
14 l) know the basics of early care, as well as the bases and developments that allow an  
15 understanding of the psychological, learning and personality building processes in early  
16 childhood;  
17 m) know how early childhood schools are organized and know the diversity of the  
18 actions behind their operation.  
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22 In order to access the labour market, a contract is drawn up by means of a work  
23 interview and curriculum *vitae* in the private teaching system, while access to the labour  
24 market in the public teaching system is obtained by sitting a public competitive  
25 examination (Martínez-Agut, 2010b). Working conditions tend to be good and present  
26 professional acknowledgment (Lebrero, 2007: 275).  
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28 The legal framework for all the new degrees is RD 1393/2007, which states that  
29 Organic Law 4/2007, of 12 April, establishes the exact bases to bring about a profound  
30 modernization of Spanish Universities (Title VI) and, with regards sustainability, this  
31 RD points out:  
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33 - In the Preamble: "It must be borne in mind that the training of any professional  
34 activity must contribute to the knowledge about and the development of *Human Rights,*  
35 *democratic principles, as well as principles of equality between men and women, of*  
36 *solidarity, of environmental protection, of universal accessibility and of design for*  
37 *everyone, and of encouraging the peace culture*".  
38

39 - Furthermore in Art. 3.5. Among the general principles that the design of the new  
40 degrees should be inspired by, studies plans should take into account that any  
41 professional activity must be carried out: a) by respecting the *fundamental rights and*  
42 *equality* between men and women, and that the corresponding studies plans must  
43 include the teaching practices relating to these rights; b) respect and encouragement of  
44 Human Rights, as well as principles and designs towards universal accessibility for  
45 everyone in agreement with that set out in Final Provision, no. 10, of Law 51/2003, of 2  
46 December, on Equal Opportunities, no discrimination and universal accessibility for the  
47 disabled, and the corresponding studies plans must include teachings related to such  
48 rights and principles; c) be in agreement with the values of the *peace culture and*  
49 *democratic values*, and the corresponding studies plans must include teachings related  
50 to such values".  
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53 More specifically, the Early Childhood Education Degree is mentioned in  
54 Resolution dated 17 December, 2007, which led to the publication of the Board of  
55 Ministers Agreement on 14 December, 2007, which establishes the conditions to which  
56 the studies plans that lead to students obtaining degrees must adapt to so they are able to  
57 exercise the regulated profession known as Early Childhood Education Teacher.  
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59 In Order ECI/3854/2007, of 27 December, which establishes the requirements  
60 needed to verify the official university degrees that qualify subjects to exercise the Early  
Childhood Education Teacher profession, Annex I considers that the studies plan should

1  
2  
3 include, at least, the following modules, among which we find: “society, family and  
4 schooling” with 100 credits. The competences that ought to be acquired in this module  
5 are: Creating and maintaining communication links with families towards an efficient  
6 impact on the educational process. Learning and knowing how to carry out tutor/guide  
7 tasks in relation to family education. Promote and collaborate in actions inside and  
8 outside the school premises, organized by families, city/town halls and other institutions  
9 which influence citizen learning. *Critically analyze and incorporate the most relevant*  
10 *questions for today’s society which affect education in the family and at school: the*  
11 *social and educational impact that audiovisual languages and screens have; changes in*  
12 *gender and intergenerational relations; multiculturalism and interculturalism;*  
13 *discrimination and social inclusion and sustainable development.* Knowing how the  
14 family has evolved in history, the different types of families, lifestyles and education in  
15 the family context.

16  
17  
18  
19 Therefore, we have found references to sustainability in the general rules that  
20 regulate the Early Childhood Education Degree studies plan. Thus, universities must  
21 specify these competences in their teaching guidelines and course subjects.

### 22 23 **Pedagogic Proposal and sustainability in this Educational Stage**

24 The area known as “the physical, natural, social and cultural environments” in the  
25 curriculum of the education stage for 0-6 year-olds has a general objective, that of  
26 facilitating knowledge and understanding of everything that makes up what reality  
27 actually is for boys and girls, particularly what they may experience; we must bear in  
28 mind that the discovery of physical, natural, social and cultural environments also  
29 implies a specific determination of what the world represents, the existence of feelings  
30 of belonging, respect, interest and an assessment of all the elements that make up their  
31 world.

32  
33  
34 The different systems or organizations that boys and girls form part of become a  
35 suitable vehicle to reach the environment, in such a way that they continue building  
36 their own personal identity while, in parallel, they perceive themselves as members of  
37 society. Studying one’s surroundings through small investigation works and work  
38 projects favors interaction and the establishment of relations with others, and  
39 encourages debate and the discussion of meanings. Early Education Centers must  
40 encourage interpersonal processes by solving the conflicts that shared daily living  
41 generates. What links all these activities to each other is the attempt to form a relation  
42 that makes us feel, experience and appreciate the effects of human behavior on nature  
43 and on oneself. This “projects” approach is an educational strategy that addresses  
44 children’s intellectual predispositions, and allows them to analyze the bases of their own  
45 opinions, ideas or assumptions. This method helps children analyze behaviors within  
46 their own culture and those of other cultures, and their implications for sustainable  
47 development.

48  
49  
50  
51 Early childhood education has to stress the role it plays in diffusing values,  
52 attitudes, behaviors, customs and lifestyles that favor sustainability. Early childhood  
53 education can help shape a sustainability culture if it is framed in sustainable  
54 development terms, if the curriculum and the pedagogic lines address education for  
55 sustainability, if the training of the teachers who work in this area improves, and if  
56 parents and the community get involved in this process.

57  
58 Of the objectives included in this area of “physical, natural, social and cultural  
59 environments”, the following relate with sustainability and are worthy of mention:

60  
5. Explore and observe their family, social and natural setting to plan and order their  
form of action in terms of the information they receive and perceive.

1  
2  
3 7. Value the importance of the physical, natural, social and cultural environments by  
4 showing attitudes of respect and intervene in caring for them in accordance with their  
5 own possibilities.

6  
7 9. Show interest and curiosity in the changes that the surrounding elements are  
8 undergoing in order to identify some factors that may affect them.

9  
10 10. Discover those physical, natural, social and cultural elements which, through the  
11 ITC, extend the knowledge of the world he/she belongs to.

12 As for the contents of this area, they are grouped into the following blocks:  
13 Physical environment: Elements, relations and measurements. Introduction to nature,  
14 culture and life in society. The Introduction to Nature block includes all the contents  
15 that are related with sustainability:

16 a) Knowledge of living beings' and inert material's general characteristics: likenesses  
17 and differences.

18 b) Observing atmospheric phenomena: causes and consequences.

19 c) Observing and exploring the plants and animals in our surroundings.

20 d) Becoming aware of the changes taking place in living beings. Introduction to the life  
21 cycle.

22 e) Showing curiosity, care and respect to plants and animals as preliminary attitudes  
23 towards environmental conservation.

24 f) Identifying different landscapes: rural and urban landscapes.

25 g) Experimenting and discovering the usefulness and benefits of plants, animals and  
26 natural resources for society, and for the boys and girls themselves.

27 h) Exploring and learning about the interactions and relationships among animal  
28 species, between plants and animals, and between living beings and their environment.

29 i) Enjoying activities which allow us to come into contact with nature.

30  
31 It is important to ensure that the aims and content of the early childhood  
32 education curriculum have been adapted to education for sustainability. Early childhood  
33 education could follow the 7 R: reduce, reuse, recycle, respect, reflect, repair and be  
34 responsible. The more opportunities children have to face challenges, to make mistakes  
35 and to enjoy searching for possible answers, the better prepared they will be to face  
36 complex questions that sustainable development implies (Pramling Samuelsson &  
37 Kaga, 2010, pages 128-129).

38  
39 Undoubtedly, the family acts as the first school for children: it is of great  
40 influence on a small child when he or she learns attitudes, values, conducts, habits and  
41 capacities. Thus the important of the family's implication, not just parents, but also  
42 grand-parents, in education for sustainability in this stage of education. Early childhood  
43 education can help shape a sustainability culture if it is based on sustainable  
44 development terms, and if both the curriculum and the pedagogic lines address  
45 education for sustainability, if the training of the teachers who work in this domain  
46 improves, and if parents and communities get involved in this process. Early childhood  
47 education should be considered the first step towards learning to live in a sustainable  
48 fashion. For this to come about, more funds must be invested, greater priority must be  
49 given to policymaking, and more interdisciplinary support and collaboration must be  
50 made available.

51  
52 Other areas and other levels of education still have a great deal to learn about the  
53 pedagogic strong points in early childhood education as a practical focus point: the use  
54 of free outdoor areas as an educational tool (Waler et al, 2010; Waters & Maynard,  
55 2010; Canning, 2010), interdisciplinarity, the whole-projects approach, encouraging  
56 children's initiatives and interests, and connecting with parents and communities  
57 (Pramling Samuelsson & Kaga, 2010, 61)



## Final Considerations

Our aim has been to reflect on the importance of training those professionals who are to teach children aged 0-6 years. Basically, and at the same time, reforms have been made to the degrees studied by the two types of professionals who are to directly intervene in this stage of education in both the formal and non-formal domains: Senior Technical Advisors in Early Childhood Education and Early Childhood Education Graduates.

We believe that the recognition of the initial training and professionalization of both technical advisors and teachers of this important stage in education has been generally accomplished at a social time when education for this age group is essential. However, these professionals must continue with permanent training in order to adapt to the requirements that arise, which include training for sustainability.

The accomplishment of students acquiring these training elements must be a joint task of the educational institution, teachers, parents and society in general for this task to have a greater impact in order to improve the environment by means of education for sustainability (Aznar & Ull, 2009, UNESCO, 2009, Pramling Samuelsson & Kaga, 2010; Morin, 2011: 148).

As we have seen, education for sustainability appears only too subtly in the legislation and in those competences that these professionals must acquire. So now the challenge is, therefore, to implement these competences in the various course subjects and in students' practice, which requires the cognitive, procedural and attitudinal aspects of each competence to be developed. This is achieved by not only specifying the activities and methodologies required to help acquire them, but also by establishing the criteria to assess them.

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