ECCE

childhood

education

early

HOLISTIC ECCE CURRICULUM FRAMEWORK

IBE **ECCE**

UNESCO
United Nations
Educational, Scientific and
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International Bureau
of Education

ECCE SERIES

Covering children from birth to 8 years old, Early Childhood Care and Education, also known as ECCE, "aims at the holistic development of a child's social, emotional, cognitive and physical needs in order to build a solid and broad foundation for lifelong learning and wellbeing" (UNESCO). It is not only at this stage of life that the development of individuals is the most crucial, but also that the environment around them is the most influential. It is therefore necessary to be able to guarantee each and every child a quality and equity access to education, care, health, nutrition and protection.

In line with target 4.2 of the Sustainable Development Goal 4 which stipulates that 'by 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education", IBE-UNESCO, mandated to support Member States in the curriculum development, has elaborated the "ECCE Series". These publications are an agile collection of tools, policies and good practices in ECCE as well as the result of IBE's activities in the field. Thus, the purpose of these series is to share practices as a way to contribute to a thriving environment for children's development while providing them with the necessary tools in becoming good and responsible citizens in the future.

The issues of this ECCE Series are to be considered as working instruments, alive, open, everchanging documents aimed at inspiring policy-makers and professionals of the Early Childhood community, in creating better and better curricula and enabler (tools, curricula, policy documents and training processes) with the final goal of giving children the better opportunities in their early years.

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Index

Introduction by IBE

It is during their early years that children are given the educational keys necessary to acquire the skills that will influence their future lives. This is why the development and education of the youngest are at the heart of IBE's concerns. The development of the Early Childhood Care and Education (ECCE) prototypes, which present the overall ECCE system, reflects the IBE's values, such as respect for curriculum and overall development to ensure quality education for learners of all ages. The ECCE framework is translated into a series of documents including this ECCE Curriculum Prototype. A document at the heart of the IBE's mandate as it develops in detail the components of the ECCE curriculum, making this technical information accessible to the different curriculum stakeholders.

Thus, the ECCE Curriculum Prototype contains the quality criteria for being a curricular reference in the field of ECCE while responding to the pursuit of the Objectives of Sustainable Development, in particular SDG4 for quality education for all, especially target 4.2 on early childhood care and education.

Mr. **Yao Ydo**
Director of IBE

Introduction by Dubai Cares

Early Childhood Care and Education (ECCE) has been an integral part of Dubai Cares' mandate to ensure underserved children and youth have equitable access to quality education and learning opportunities. We strongly believe in the role that ECCE plays in fostering children's holistic social, emotional, physical, and cognitive development. Through our strong programmatic partnerships, support to research, advocacy, and global platforms, we aim to build resilient and sustainable education systems through evidence-based interventions focused on capacity building and systems strengthening.

We are pleased to see the strong and solid outputs produced through our partnership with UNESCO International Bureau of Education (IBE-UNESCO). The significant support that they have extended to the four countries under this partnership (Laos, Rwanda, Cameron and Eswatini) for over four years, has resulted in developing strong and replicable prototypes, guidelines, M&E tools, and delivery mechanisms for ECCE. Additionally, one of the key milestones of this initiative was the development of the Holistic Early Childhood Development Index (HECDI) framework, which provides indicators and targets for more comprehensive monitoring of the child's development, which can be implemented at both country and international levels.

We strongly believe that these series and the tools that were developed would greatly contribute to the existing body of knowledge for ECCE and better inform both practitioners and policy makers; not just in specific countries included in this partnership, but also for countries that are looking to strengthen its existing ECCE frameworks and modalities. We also hope that this initiative will create a space for much needed dialogue, complementarity and collaborations to take place both on the national and international levels and for more partners to converge and work together in ensuring that ECCE is appropriately positioned within policy and practice.

His Excellency Dr. **Tariq Al Gurg**,
Chief Executive Officer at Dubai Cares
and Member of its Board of Directors

PART I
rationale for
an ECCE Curriculum

QUALITY IN EARLY EDUCATION AND THE ECCE CURRICULUM
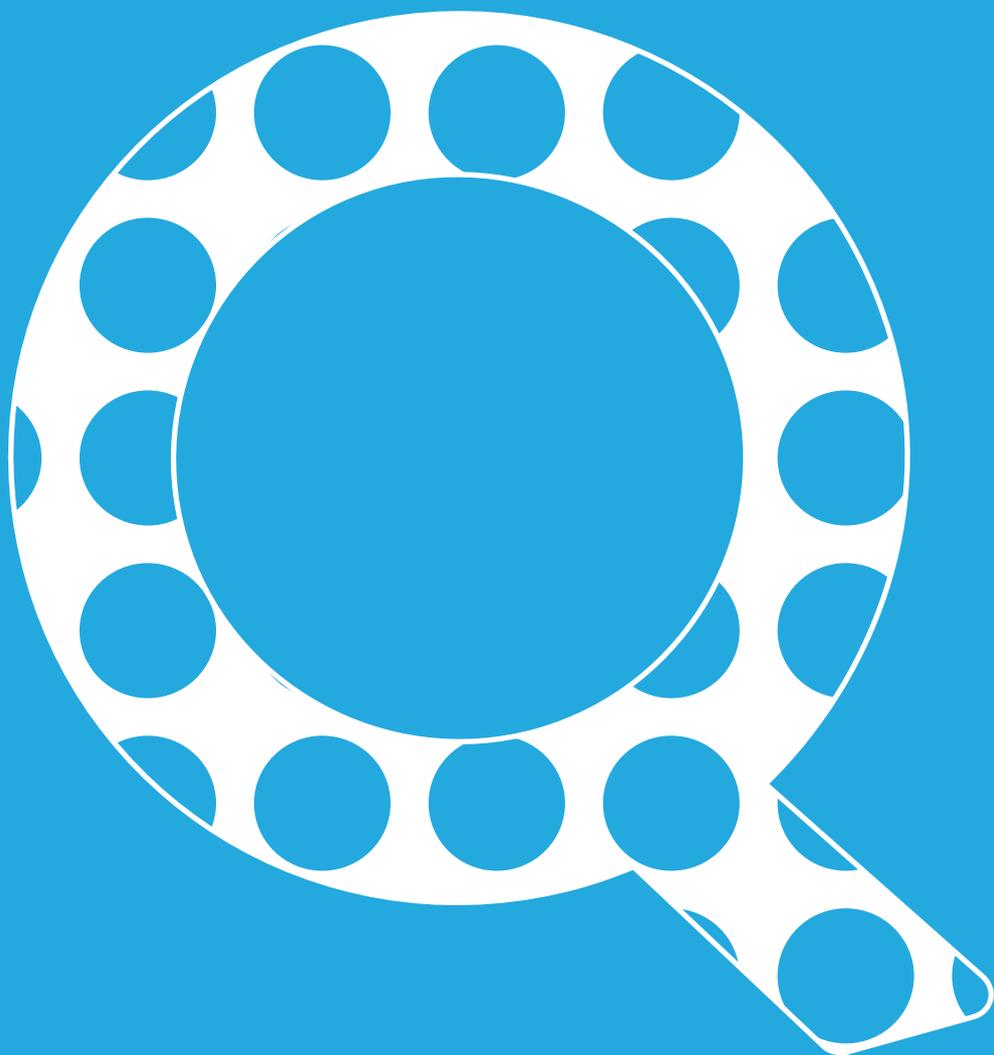
1. Quality in early education and the ECCE Curriculum

A curriculum framework is defined as an overarching document that fulfills some or all the following:

Places national statements of vision, economic development and education policy in a curriculum context; sets out broad aims and objectives of the curriculum at the various stages of schooling; explains the educational philosophy underlying the curriculum and approaches to teaching, learning and assessment that are fundamental to that philosophy; outlines the curriculum structure, its subjects or learning areas and the rationale for the inclusion of each in the curriculum; allocates time to various subjects and/or learning areas in each grade or stage; provides guidelines to subject curricula developers, teacher trainers and textbook writers; prescribes requirements for curriculum implementation, monitoring and evaluation. (Source: UNESCO IBE 2011)

While a natural, spontaneous curriculum is provided by patterns of daily life, it is important that the curricula of programs introduced to young children around the world complement, rather than replace, curricula provided by family and communities.

The curriculum and its development are at the core of quality in early childhood care and education. A high-quality ECCE (Early Childhood Care and Education) curriculum benefits all children, namely, those most vulnerable and disadvantaged.

As Woodhead (2009, p. 40) comments: 'A huge gulf exists between highly publicized, high-quality programs and the much larger number of less visible, in some cases barely "good enough" programs experienced by millions of children, especially in resource-poor countries'. While quality is a relative concept (Dahlberg et al., 2007; Tobin 2007) without attention to quality in ECCE programmes, '...we will not close the gap in child outcomes between the more and less disadvantaged' (Britto et al., 2011).

Developers of early childhood curriculum are faced with challenging decisions regarding content. Quality curriculum should

strike a delicate balance between being accessible to diverse stakeholders and encompassing a diversity of cultures and contexts while detailed enough to guide teachers of all levels of training and experience. Therefore, it is good practice to develop the curriculum starting with children's curiosities, considering them as partners in the process of their own knowledge construction.

There is no single curriculum which suits to all contexts. At the same time, certain approaches appears as more productive and effective than others.

The histocial and cultural elements of each context, region, situation should be taken into consideration, and at the same time, the linguistic dimension is critical. IBE, in this regards, considers mother-tongue curriculum as more adequate for Early Years and not only. Interctive, play based curriculum appear to be a better choice, compared to academic approaches, in preschools and kindergarten.

Policy-makers, especially those in charge of curriculum development, should take into consideration a diversity of factors, including the ambitions, the desires and the rights (especially those of children) of the context where the early years curriculum is developed, including citizenship goals.

"Alongside increasing policy interventions, there has been a gradual introduction of curriculum goals that reflect both wider social pedagogic and citizenship goals, and the specific aspirations for learning and school readiness. Policy interventions can be seen as necessary and desirable as ECE curriculum frameworks become significant levers for change, particularly where goals for equity and equality are incorporated (Wood and Hedges, 2016)."

The National Association for the Education of Young Children (NAEYC) has also identified the following indicators of effective curriculum (NAEYC and NAECS/SDE, 2003):

» Children are active and engaged

» Goals are clear and shared by all

» Based on current child development research

» Valued content is learned through investigation, play and focused, intentional teaching

» Builds on prior learning and experiences

» Comprehensive

Young children have an enormous capacity for learning and are naturally curious and

enthusiastic about understanding and engaging the world around them. Our task is to support children's healthy development and fullest potential through a well-developed and appropriate curriculum which is built on strong and meaningful foundations including the positive practices of parents and communities. This not only ensures the enhancement of children's learning and potential but also supports parents in becoming a positive and critical part of their children's healthy development.

The Convention on the Rights of the Child encourages adults to support young children's taking of initiative in the learning process:

A new culture of participation and co-determination is now emerging in areas of life important for young children, including life in early childhood centers and the manner in which curriculum is generated and implemented. Young children are being treated with far more respect and knowledge. It is recognized, for example, that for deep and more permanent learning to take place, the child's environment should be constructed "so as to interface the cognitive realm with the realms of relationship and affectivity" (Malaguzzi in Edwards et al. 1993). In other words, young children's learning is grounded in the affective and social domains. Children learn best within positive relationships – with their parents and families, with their peers and with well-trained early childhood educators (UNESCO, 2004).

The results achieved from high quality early childhood education programs are encouraging as can be seen in the pleasure of learning experienced by young children, for instance in the internationally recognized Reggio Emilia ECCE.

An open, negotiated curriculum encourages identity formation, positive attitudes, a sense of global citizenship, communication and negotiation skills in children. Previous defined curriculum are not effective in creating the necessary competences in children, and they represent, sometimes, a colonialist heritage that is necessary to overcome. The often generate a more passive, compliant behavior in children and therefore they represent the opposit of a well focused curriculum aiming at developing the XXI century competences from early years.

Also, training and awareness of teachers is a key driver of success. Since year, strong evindences show that learning achievement is high and permanent in child-centered programmes developed by well-trained teachers (for instance, Leavers, 2003).

1.1 The Concept of Quality

Definitions and instruments for measuring quality differ across stakeholder groups, researchers, and countries in the early childhood field. It is well-known, for example, that parental assessments of quality may diverge significantly from current views among early childhood experts, e.g., with regard to when a child should begin to learn letters and numbers and how educators should approach this task. Many common elements in definitions of quality across economically advanced countries exist, particularly in early education provision for children from the age of 3 years. For example, most countries focus on similar structural inputs to ensure quality: child-staff ratios, group size, facility conditions, staff qualifications, staff certification, and curriculum.

For governments, improving quality means ensuring that necessary program standards are in place and that children are developing and learning in accordance with government objectives for the sector. At the same time, there is general recognition that national quality guidelines need to be broad enough to allow individual settings to respond to the developmental and learning needs of the children present[1].

1.2 Monitoring and Evaluation of the Curriculum

In early childhood, assessment should focus on children's personal development, so that teachers and parents can gain an understanding of children's natural interests, where they are in their development, in order to best support children in meeting their full potential at every stage. It is especially important to ascertain that the foundations for the development of competencies in literacy and numeracy are in place. Through systematic observation and documentation teachers and other staff can determine what the children can achieve, and intentionally plan for further individualized and group learning opportunities and healthy development. Documenting their progress in different forms is essential, both for understanding the learning process and monitoring the outcomes[2].

Monitoring and evaluation can cover many aspects of ECCE and it is important to ensure that activities reflect the quality of services in order to lead to improvement. While evaluating the performance of ECCE settings is important, it is different from focusing on system and provider-level improvement. In this context monitoring and evaluation can

1   Bennet, J., Benchmarks for Early Childhood Services in OECD Countries
2   Seychelles National Curriculum Framework, Government of the Republic of Seychelles, 2013, page 34

easily be focused on structural questions including:

» Are the rules for accreditation and re-accreditation rules being met?

» Are the regulations for organizations that provide ECCE services being met?

» Are the requirements for inspection which determine the organizations that are eligible to receive state/local/national funding being met?

Monitoring for quality also includes a focus on the processes and outcomes of ECCE including:

» Pedagogy

» Curriculum

» The quality of the relationships between staff and children

The availability of relevant, timely and accurate data/information can help the managers and leaders of ECCE services to make the right decisions on how best to improve the quality of ECCE provision (European Commission Thematic Group on ECCE Quality, 2014).

1.3 Cultural areas or Contents of the curriculum

The curriculum should define the preschool, early education learning and teaching practices in a systematic and intentional way, based on a holistic perspective. Furthermore, it should guide the activity of educators, caregivers and all the professionals involved in early childhood care and education.

It is important that the curricula of programs introduced to children in the early years compliment, rather than replace, curricula provided by family and community.

ECCE curriculum should:

» Start with a concrete reflection upon the development of children, defining the fundamental paramount of education for each age from 0 to 6+ (or to 8).

» Include a section outlining the early childhood curriculum vision for that particular country.

1.4 Logic and reasons for an ECCE curriculum

The need for a formal curriculum finds its roots in the demand for a formalized and more readable document guiding the teaching/learning process in preschools, kindergarten, daycares, nurseries and in the diverse ECCE services, programs and initiatives.

A holistic, intentional, and inclusive curriculum brings benefits in different areas of work:

»   Educational projects

»   Authentic Assessment through Observation and Documentation

»   Participation of families and community

»   Teacher training

»   Organization

»   Education/learning environments (spaces and materials)

The curriculum, and its implementation, should harmonize modern visions of childhood in daily practice, supporting the role of educating adults in the learning processes of children, offering contexts rich in experience, in supporting the development of autonomy and cooperation through a holistic approach that has, at its center, the human being[3].

1.5 What is a competence?

Competence is defined here as the ability of interactive development to ethically mobilize and use information, data, knowledge, skills, values, attitudes, and technologies[4] to engage effectively and act in diverse ways, to achieve the individual, collective, and global good.

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3   The holistic approach involves the cognitive, relational, emotional, social components, developed in a systemic way rather than individually
4   Ethics understood as a system of shared values in a democratic society

This definition recognizes that it is no longer enough to support children to acquire knowledge, skills, and values.

It is critical that children can intelligently establish connections through the elements of competence or multiple skills, integrate and apply them interactively to respond to contextual requests, as well as to address change in their meaningful contexts.

A "list" approach to skills that needs to be learned is no longer crucial. What is decisive is how learning can be applied through rapid and unpredictable changes. In short, the curriculum must reflect the skills that prepare children for an unknown future.

VALUES UNDERPINNING THE ECCE CURRICULUM

2. Values underpinning the ECCE Curriculum

2.1 Contextual bases

A skills-based curriculum must start from an understanding of the context in which children are developing, an analysis of the context is an indispensable first step in the development of the necessary skills.

The context is usually complex, multidimensional, and diverse. Each context poses diverse needs of an individual and collective nature. The 21st century and in particular industry 4.0 (i.e., the digital world) imposes challenges and opportunities for which children must be prepared. The curriculum needs to provide them with the skills to effectively address these challenges. It must seize and create opportunities, thus producing individual, collective, and global benefits.

Unlike thematic/disciplinary ones, skills-based curricula are based on understanding (and not acquisition). Skills-based curricula encourage children to know and gain a deep understanding of knowledge. Their application is often geared towards real-life situations (learning by doing) that children can encounter later in life, offering them the opportunity to apply what they have learned.

It is therefore fundamental to contextualize the curriculum in order to ensure learning outcomes are relevant, useful, and support the child's healthy development.

2.2 Centrality of the child and the child

A contemporary pedagogy is built on the centrality of children and their processes of learning. It is a political as well as a pedagogical

concept, as it is inspired by the Convention on the Rights of Children[1]. We know that putting children at the center of pedagogical reflections leads to a different structuring of learning, educational spaces, of the role of adults, aimed at motivating children to acquire, develop, and use diverse skills. This type of pedagogy challenges us to create a variety of intentional environments and learning opportunities meant as realistic contexts in which children can gain useful experience and develop skills for successful outcomes.

2.3 Emphasis on the usefulness of learning

A skill-based curriculum emphasizes the ability to use what is learned, in which the acquisition of knowledge is important but not sufficient. Equally important is what children are able to do with what they have acquired. Curriculum based on subjects and disciplines do not always place the same emphasis on the usefulness of learning. Competency-based curriculum and pedagogy is co-constructed by children and adults together in a way that enables and encourages children to use what is learned in everyday situations.

2.4 Emphasis on relevance and significance

Application of and putting competencies into action is not the ultimate goal of the learning process. The real purpose of learning is to understand different ways of knowing and knowing how to think critically within a learning framework.

Another goal of learning is to understand how to interpret and support different ways of knowing, through which the value of learning itself can be understood, communicated and

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1   CRC, Article 29
"1. States Parties agree that the education of the child shall be directed to:
(a) The development of the child's personality, talents and mental and physical abilities to their fullest potential;
(b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the United Nations;
(c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilizations different from his or her own;
(d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin"

provide a platform for learning to reach the next level.

2.5 Emphasis on transdisciplinarity

A curriculum based on individual subjects, in which disciplines and/or fields of experiences are taught individually assumes that knowledge can be acquired through several disciplines or subjects (i.e.- logic, ethics, science, mathematics, politics, etc.). A competence-based curriculum, however, is necessarily transdisciplinary and requires hands on experience and exploration of all subjects, oftentimes simultaneously, as they naturally overlap and work together in real life experiences and scenarios.

PART II
components
of the Curriculum

INTRODUCTION
TO CURRICULUM COMPONENTS
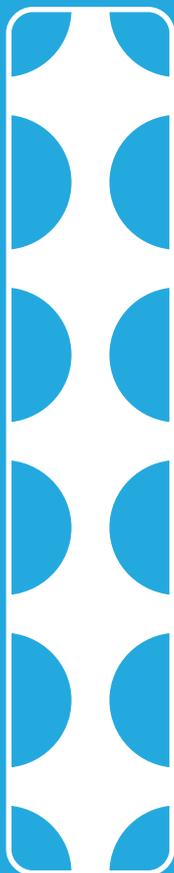
3. Introduction to Curriculum Components

This curriculum is divided into five macro-competencies that the ECCE system aims to develop during the six years of attendance starting from nursery and going through Kindergarten[1].

The skills are then followed by what are the learnings that we expect to see emerge, and that is the subject of evaluation, understood in the sense of giving value, through educational documentation.

Seven main challenges for the construction of the curriculum have been identified and are as follows:

1   **Lack of a common language and concepts**:

› Here is a general agreement on the fact that a competence is complex to build. A competence is a multifaceted concept that includes acquaintance, skills, attitudes, values as well as desires. Despite this general agreement on the overall meaning of competence, there is a lack of common language and concepts. Indeed, terms such as competencies, skills and abilities tend to be interchangeably used about different constructs.

2   **Lack of a common starting point**:

› Lists of different competencies are generated with reference to different starting points. What is lacking is a generic picture of present and future skills that countries can use as a reference point in order to easily adapt to their specific contexts.

3   **Miscellaneous taxonomies**:

› The categorization of skills is truly diverse, with reference to pedagogy and therefore to political approaches to education.

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1   According to the Curriculum of the XXIst century, promoted by the International Bureau of Education, Geneva, 2018

4   **Lack of consensus on the structure of curricula**:

› While there is consensus on the need to move towards skills-based learning pathways, opinions on the structure of curricula tend to diverge between the maintenance of traditional subjects/disciplines/fields of learning and a more radical vision of a redefinition of curricula around skills.

5   **Risk of divergent technical advice**:

› The pedagogies are many and varied. This is also the case for training courses with different pedagogical counselors. The risk is that everyone will propose their own idea of learning and this plurality (a value in itself) will become chaotic, resulting in a lack of common language which is needed for meaningful dialogue.

6   **Feasibility of implementation**:

› There are curricula that are internally coherent, science-supported, and interesting to read, but their implementation would be impossible due to shortage of teaching resources and competencies. Without sound implementation, a curriculum becomes unsustainable and unreliable.

7   **Weak impact monitoring & evaluation systems**:

› Oftentimes, education systems are resistant to change and/or meta-reflection. It is necessary to build a credible system of evaluation and self-evaluation (namely through observation and documentation of learning processes) which is concretely useful for the healthy development and evolution of the entire system.

In summary, there is no comprehensive regulatory instrument that can be used as a reference point for curriculum transformation. For this reason, the development of curricula based on participation and co-construction, starting from consolidated experience, is a path that we consider potentially virtuous.

COMPETENCIES
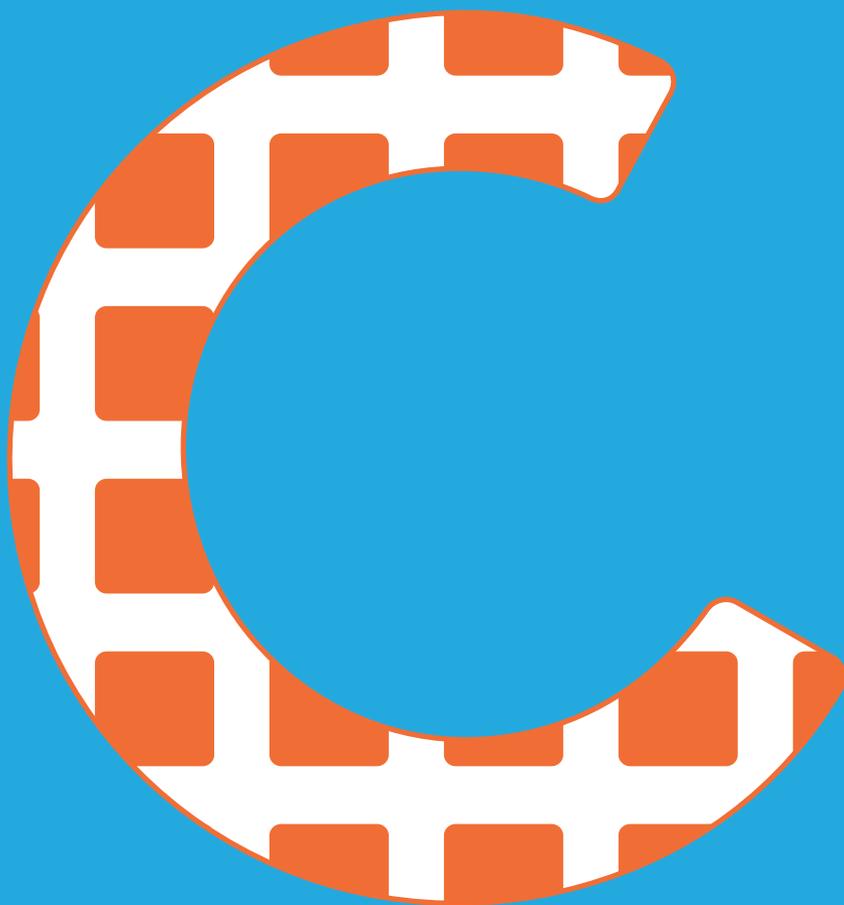
4. Competencies

Given the premises of this document, a quality ECCE curriculum should include competencies across the following areas of development:

» Critical thinking, problem-solving, meta-cognition

» Creativity and expression in different languages

» Self-awareness, emotional development, initiative, risk-management, perseverance

» Logical, digital, technological, scientific and mathematical skills

» Sustainability, global citizenship education and awareness, gender sensitivity

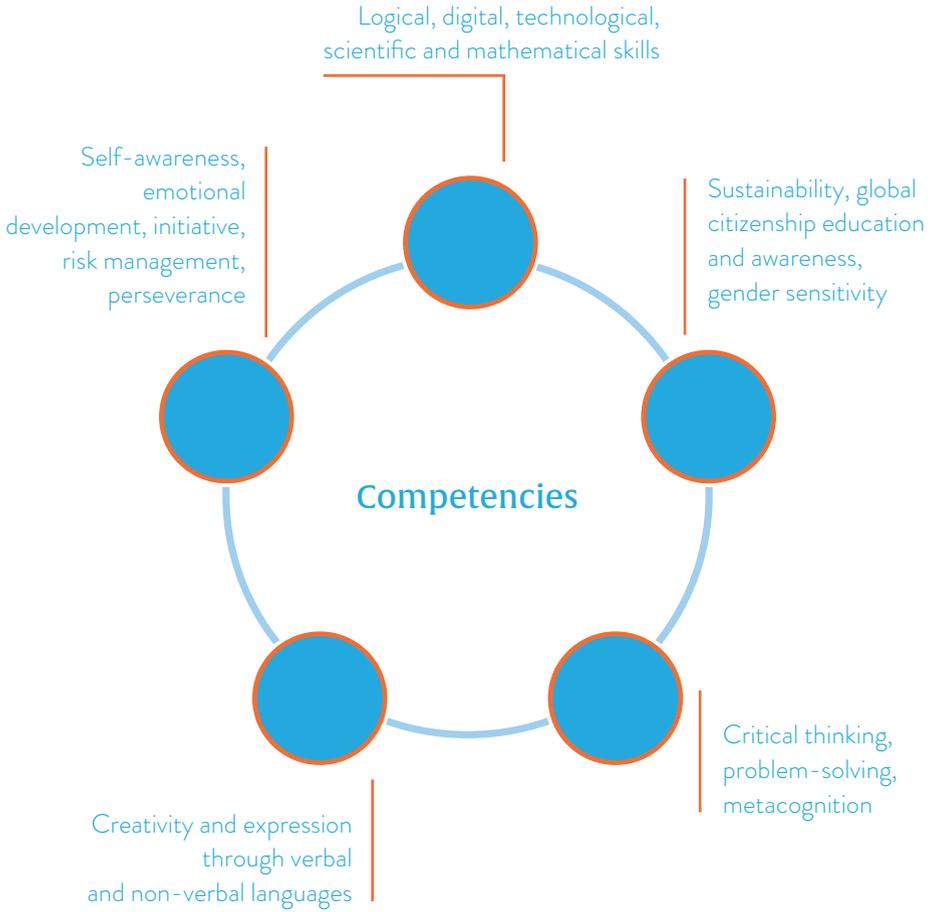## 4.1 Critical thinking, problem-solving, metacognition

Critical thinking is the analysis of events and facts useful to form a judgment. The topic is complex and there are several definitions, which include rational analysis and evaluation of factual evidence. Critical thinking is self-directed, self-regulated and involves effective analysis, interpretation, problem-solving and communication skills, as well as a commitment to overcome ego-centricity and sociocentrism.

To promote critical thinking, it is necessary to continually question and remain curious about the world around us. Nurturing critical thinking, especially in early childhood, requires a strong accreditation of skills, an attitude that characterizes the pedagogy of effective kindergarten, preschools, nurseries, and childcare centers.

The development of critical thinking relates to the awareness of the impossibility of control over the world around us and the acceptance of the vertigo of non-knowledge. At the same time, it allows the development of inner epistemological research. This path, which can be summarized as the general curiosity of the children for the world, feeds the formation of ideas, hypotheses, and the genesis of theories. Therefore, children, being inherently curious about the world around them, are constantly coming up with ways to explore their ideas and surroundings and through skillful guidance, intentional question asking and curriculum development they can be supported to not only reach their maximum potential within that stage of their development, but to develop a lifelong love for the process learning itself.

Metacognition was originally intended as knowledge and regulation of one's cognitive processes. This definition suggests two important components of metacognition: declarative knowledge and executive operation.

While the school has traditionally avoided putting in the time and effort to create a curriculum that encourages critical thinking, we are seeing (globally) a growing focus on and need for critical thinking skills as foundational for the future generations' healthy developmental, successful learning outcomes and lucrative future prospects.

Logical, digital, technological, scientific and mathematical skills

Self-awareness, emotional development, initiative, risk management, perseverance

Sustainability, global citizenship education and awareness, gender sensitivity

Competencies

Creativity and expression through verbal and non-verbal languages

Critical thinking, problem-solving, metacognition

Critical thinking, problem-solving, metacognition	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions

Support dialogue and communication
 	
Share values
 	
Support each unique perspective and way of knowing to be heard
 	
Support children in sharing what they know
 	
» a form of self-assessment that allows teachers to gain understanding of
  › where each child is developmentally and be able to know
  › how to best support children individually and as a group
	Conversations should be used as opportunities to:
	» Support an ongoing dialogue between children through open-ended question asking
	» Collect/Record the opinions and ideas of children
	  › These become a starting point for the relaunch and deepening the reflection on learning through the dialogue in small and large groups around the areas of interest that arise naturally from within the group
	
	Morning Assembly is an opportunity to:
	» Converse and share about everyday life
	» Discuss projects and the learning achievements
	
	Small group (3-5 children) is an opportunity to:
	» Work even more thoroughly.
	» Each group collaborates and brings unique perspectives together in order to deepen different aspects of the project

Critical thinking, problem-solving, metacognition	
Exemplary pedagogical steps	
Educational intentionality	**Contextualization and Actions**
Meta-reflection on individual and collective learning processes Critical thinking Active participation in the construction of meaning	*Re-reading* of the documentation (or the evidence of learning processes): » Children can re-read the experiences after the event and grasp aspects that did not emerge during the events. This leads to a conscious re-reading and therefore to a re-meaning of experience (critical thinking). *Recollection* of documented experiences and events. *Predicting* moments when children report what they have accomplished in the small group - exchange of knowledge.
Legitimization and enhancement of points of view	Emphasis on using open-ended questions. Other elements are: » Value of the "conversation notebook" › Documented conversations, recording children's words to understand their questions and ways of understanding » Documentation highlighting individual and collective products » Opportunities for children to choose agenda items and take part in making choices for their learning
Ability to identify creative and innovative forms to solve new and known problems	*Play with construction* and *Atelier*: » expose many traces, both material and photographic, of the construction productions of the children: possibility to have ideas, to change the known and to enhance the many possibilities

4.2 Creativity and expression through verbal and non-verbal languages

Creativity in the general sense, in adults as well as in children, is highly valued in our society. Personal creativity contributes to inventiveness, innovation, social and cultural change, political development, and economic progress. A creative person is considered to be an innovator, a problem solver and an artist. Creative people have quick and effective responses which help them achieve their life goals.

Creativity is both a set of skills and an inherent, unique and individual characteristics of all human beings. One that is nurtured during childhood, developing and evolving into adolescence and adulthood. Education plays a vital role in the development of creativity.

It's imperative for every stage of the educational journey to provide positive experiences, stimulating creativity and inventiveness. This is especially important in the foundational years of early childhood, as is described by research out of Harvard University's Center on the Developing Child (National Scientific Council on the Developing Child, 2007):

Just as in the construction of a house, certain parts of the formative structure of the brain need to happen in a sequence and need to be adequate to support the long-term developmental blueprint...Thus building more advanced cognitive, social, and emotional skills on a weak initial foundation if brain architecture is far more difficult and less effective than getting things right from the beginning. (pg.1)

Creativity in the early years develops through a wide spectrum of games, artistic experiences, relations and activities. Since all progressive learning in the early years is centered on play as a means of learning, the foundations of the development of creativity also originate in playfulness.

However, games are not the only element in the development of creativity. There can be different and fundamental experiences based on the proposition of creative languages and ateliers.

Aesthetics is a highly appreciated component because it relates to a sense of respect and unity. The languages that children use in their learning process reflect these aspects and challenges are to be considered ideas for reflection. Actions and creative processes must be valued as an experience, and as an element that feeds the desire of learning through research, boosted by the sense of wonder of children.

The atelier or the laboratory of arts (or art-related activities) are the places of multiple points of view, which create synergies rich in opportunity. Listening, asking questions,

reflecting, annotating, experimenting, working by trial and error and new beginnings are phases that open to knowledge. Amazement and curiosity are the authentic foundations that feed the pleasure of learning, together with the logic of exchange and sharing.

Loris Malaguzzi[1] understood and saw before others the enormous potential of children and knew that this had to be made visible, to enhance the pedagogical capacity, globally. He passionately believed in democracy as a "system of government of the entire population or all eligible members of a State, typically through elected representatives. (Oxford Dictionary, 2017)". The members he is talking about are the children, school staff, parents, families, the entire community.

Creativity has become a political act of collaboration. The atelier (or the laboratory of arts) is a place for the search for children's motivations and theories, a place to explore the various tools, techniques and materials, a place that favors children's logical and creative itineraries, a place to familiarize yourself with similarities and differences.

Creativity and expression in different languages	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Value and legitimacy of singularities and individualities from an inclusive and intersubjective perspective	Allowing multiple modalities of expression aimed at enhancing each child's potential Documentation: » Visibility of different expressions, ways of knowing and learning, and languages Individualized spaces or cubbies: » For each child to collect individual and collective processes
Respect for various times and ways of learning, processing, and consolidating experiences	Opportunities to repeat, try again or reinterpret experiences

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1   Loris Malaguzzi (1920, 1994), Educator, author, visionary pedagogical consultant, was the founder of the Reggio Emilia approach to Early Childhood Education

Creativity and expression in different languages	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Access to and development of one multiple language and multiple forms of expression (perception of freedom of expression)	Languages: » Art and support for creativity are forms through which different, lateral, new ways of thinking are built » Offer of contexts with diverse materials tools, organized according to an intentional approach
Literacy to multiple expressive languages	Graduality and re-proposal over time with distinctive characteristics of similar experiences…

4.3 Self-awareness, emotional development, initiative, risk management, perseverance

The first years of a child's life represent a unique opportunity to promote healthy development, and the research underlined the importance of the first five years of life, both for positive and negative experiences, in shaping children's cognitive abilities, behavioral, social, and emotional development. Science has revealed that, "The exceptionally strong influence of early experience on brain architecture makes the early years of life a period of both great opportunity and great vulnerability for brain development." (National Scientific Council on the Developing Child, 2007).

Concerning the curriculum, the practices to be supported can be included in the contexts of conversations where everyone's ideas are heard, gathered and recorded. It is necessary to promote listening to each child as well as to the collective ideas that emerge in order to generate a common idea that leads to joint action.

Children able to conduct and develop self-regulation (which relates both to risk management and perseverance) are metacognitively, emotionally, motivationally, and behaviorally active within their learning process. Thus, self-regulation could be considered a generic term that includes metacognition (Zimmerman, 1986). Metacognition was originally intended as knowledge and regulation of one's cognitive processes. This definition suggests two important components of metacognition: declarative knowledge and executive operation.

Metacognition and self-regulation are divided into three main components: (1) metacognitive knowledge, (2) metacognitive regulation and (3) emotional and motivational regulation.

The work of this area of competence must necessarily take place around this type of cognitive development, bringing experiences and experiments that allow the development of metacognition in the different areas of work in early childhood and kindergarten settings.

Self-awareness, emotional development, initiative, risk management, perseverance	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Creating conditions to be able to deal with conditions of change and adaptability	*Experimentation*: » It is critical to offer children opportunities for experimentation. › Offering the opportunity to work on the link between a phenomenon and its consequence, with it's causal connection
Development of Emotional Skills	*Expressive languages* are an opportunity to: » Develop emotional skills » Provide a socio-emotional opportunity to engage in a continuous dialogue between children on their inner states of mind *Emotional awareness*: » Name emotions through games, readings, dialogue » help children develop self-awareness *Literature*: » Stories and storytelling are also important as it is the place where you learn about love, emotions, relations, inner states, in all their facets

Self-awareness, emotional development, initiative, risk management, perseverance	
Exemplary pedagogical steps	
Educational intentionality	**Contextualization and Actions**
Development of healthy lifestyles and eating habits Body knowledge	*Self-awareness* and *body awareness*: » Children should become progressively aware of their bodies » Children take care of their bodies through daily experiences and through awareness activities. » This path has become even more critical during the COVID-19 pandemic. *Adequate nutrition and pysical activities*: » Children's development is critically supported by adequate nutrition. » Therefore, adults should be aware of the necessary nutrition » Children should learn how important it is to eat correctly and properly. » Activities, experiences and simulations should be aimed at supporting children's awareness of proper, healthy lifestyles. » Sporting activities on a weekly basis is necessary for children's normal growth and good development of neuro-muscular-skeletal systems.
Recognition of one's own and others' identities Self-assessment: self-assessment of resources, limits, interests, skills	*Biographies* and *autobiographies*: » Both verbal and with different languages (mostly through graphics) help children become aware of themselves and of their backgrounds *Choice*: » Of roles and skills (make-believe game and role-play) *Movement and games*: » Both outside and inside the venue allow children to experiment with limits and capabilities.

Self-awareness, emotional development, initiative, risk management, perseverance	
Exemplary pedagogical steps	
Educational intentionality	**Contextualization and Actions**
Create conditions for the development of perseverance	Attitude of the adult who supports the *importance of completing* the activities started, assuming responsibility for them Offer *provocative and problem-making spaces*, materials and contexts that allow children to gain experience, take responsibility, persevere in research and achievements, take initiatives and above all evaluate and face risks
Value of the game as a learning context in which to gain valuable experience in relation to self and with others.	Sharing opportunities for playful activities: » Provide children with a variety of activities and contexts » Children experiment with new and enriched contexts in order to extend learning while gaining insight through collaboration and sharing idea exchanges with peers » Importance of the organization of both indoor and outdoor spaces and the toys and materials offered
Acceptance of errors as a possibility of growth, reflection and advancement	Children's questions and "incorrect" answers are viewed as opportunities to explore deeper Adults support children in exploring their questions as opposed to giving them the "correct" answer, which cuts off a learning opportunity Helping children understand that mistakes are a natural and necessary part of the learning process Support children in persevering through challenges related to the learning process

Self-awareness, emotional development, initiative, risk management, perseverance	
Exemplary pedagogical steps	
Educational intentionality	**Contextualization and Actions**
Spirit of initiative	The freedom to make mistakes without being judged encourages everyone to take initiative and explore questions and problems in order to maximize the learning opportunity.
Value and legitimacy of singularities and individualities from an inclusive and intersubjective perspective.	Individualized spaces (cubbies, section boxes): » Customized with a photo or children's art to help children in feeling and taking ownership of their own educational environment. » This ownership provides children with a sense of ownership of their learning environment.
Relationship as an opportunity for growth and as a premise for learning	Sharing of moments of the day, spaces and materials with children and adults offer the children the possibility to understand the potential of being together with others, and to extend their capacity for dialogue.

4.4 Logical, digital, technological, scientific and mathematical skills

Knowledge as the engine of transformation requires us to reflect on culture as a tool to interpret reality and to question ourselves about our future and the shape it is taking.

This future is built by the collective with the support of science, and to make it happen, technology and science must become accessible to all. More than ever in this moment, science, and technology, also in the medical field, are the undisputed protagonists of the current scenario. Technology is supporting social and economic relations therefore universal access to this knowledge is necessary.

It is essential to plan the future together. In fact, in thinking about the future it is critical to define the role of technology, also considering the concern on human centrality, privacy and freedom.

How to equip everyone with technology and the necessary capacity? Knowledge and capacity must be provided, and awareness on transformation processes shared.

The use of technologies in ECCE everyday life could be supported by the setting up of digital spaces intended as a resource, as enrichment and as a tool for transforming the context.

With the arrival of the COVID-19 pandemic, we faced new challenges. Indeed, both in school and in the workplace, the use of digital communications has become crucial and thanks to these tools, we are experiencing a new "normality" in a sea of uncertainties. A communication tool such as the mobile phone, sometimes viewed with suspicion by educators, has now become central to keeping teaching alive. This awareness will lead us to use technology increasingly not to replace traditional systems but to integrate them. As is often the case, when events quickly precipitate, we find ourselves inadequate as a society, with slow networks and with unprepared citizens, leaving us to reflect on how we can equip ourselves for the future.

Logical, digital, technological, scientific and mathematical skills	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Support the development of logical skills and curiosities related to logical and mathematical thinking	*Logic activities*: » Proposal of combinations, series, construction games, associations, experimentations of volumes, spaces, and symbolic aggregations. » Proposal of open-ended, recycled materials which allow endless experimentation
Encourage encounter with codes and symbols, their problematization and attribution of meanings	*Messaging* (paper-based, with drawings and letters). » Exchanging communications and messages in individual mailboxes

Logical, digital, technological, scientific and mathematical skills	
Exemplary pedagogical steps	
Educational intentionality	**Contextualization and Actions**
Offering opportunities for reflection and experimentation around natural phenomena and science	*Visits in nature*: » Experimentation through various languages and using some specific instruments. » Reasoning of cause and effect, hypothesis and thesis, count
Support the approach to contemporary digital languages as a tool of knowledge, that foster connection between learning	*Propose the use of digital tools*: » I.e.- PCs, tablets with programs that can rework and recontextualize children's games and experiences. » Cameras, video projectors, voice recorders that support the many moments of creativity and research. Science as public and accessible, which, thanks to technology, allows the participation of/in knowledge beyond territorial distances
Promoting children's experimental and research approach	*Scientifically reflect on different phenomena*: » Based on addresses themes, what hypotheses are made by the children? How to search for solutions, offer more languages and tools?

4.5 Sustainability, global citizenship education and awareness, gender sensitivity

Children's thinking develops through interactions, knowledge in reciprocity, exchanges, dialogues, and co-constructions. Children have an innate, natural awareness and competence towards collaboration that is gradually tipping over to individualistic and technocratic logic as reflected in the significantly competitive context we are living in today.

From this point of view, ecological thinking represents a strong and viable alternative for rebalancing. Children have innate and boundless complicity with the natural element and build their knowledge much more effectively when they can intertwine them with greenery, with the environment, with ecology.

We must consider that the natural elements do not contrast with the human element. In this competence, we consciously want to include global citizenship competencies, widely understood, as the basis of harmony with our human essence.

"Citizenship" has also become a foundational part of early childhood education, which has meanings ranging from politics to the care and education of young children. This term appears in policies, curriculum documents, behavior management discourses, and code of ethics documents, in various contexts and meanings. 'Citizenship', as a concept used in speeches concerning children, is neither a new idea nor a new strategy. The turning point of the twentieth century saw its use in involving children in the exercise of nation-building around the world. The recent use of the concept of 'citizenship' in relation to children has appeared in conjunction with various discussions concerning democratic prospects in wide-ranging fields, such as school, public discourse, and political discourse. The Convention on the Rights of the Child (UN, 1989) and its appropriation in social policy and childcare services have also fueled the use of this concept and operated on the assumption that there was a political and legal linkage between citizenship and rights. The assumption that one could not exist without the other has contributed to the spread of the use of the concept of 'citizenship' regarding children.

By granting them participatory rights, children are considered as active and contributing members of the family, society, and the community they live in (Kosher et al., 2016). These rights refer to the principle of self-determination and are considered equivalent to adult's civil rights (Thomas, 2011). Thus, children's participation is not simply a right in itself but also a gateway to other rights (Livingstone et al., 2017).

The use of the concept of 'citizenship' of children does not seem to be particularly problematic; however, it's use is anything but neutral. The concept itself is rarely questioned or explained, and the assumption of it's neutrality serves to cover several problems.

The sensibility of young children is receptive to the concept of gender equality. Being a victim of inequality or witnessing it will be internalized by the child who will reproduce this pattern later (reproductive mechanism). To change this dynamic of gender inequality, which is visible in many aspects but also invisible, curricula and learning programs have the potential to implement educational actions that promote respect for gender equality via educational tools even in cases in which the child perceives or experiences gender inequality in the family environment.

For example, gender inequality can result in: teachers and educators valuing a certain gender over another, a valuation of certain games for a particular gender reduced access for

one gender or an over-emphasis on another, etc. Educational programs should not transmit any of these values in order to ensure an inclusivity that serves the child's development.

Sustainability, global citizenship education and awareness, gender sensitivity	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Perception of the personal point of view and reference to the group's point of view, and to the democracy of relations (acceptance of different points of view)	Morning *Assembly*: » Small group work, enhancement of subjectivity within the group are a pool of democratic exercise. » Participating in these daily activities allows the children opportunities to cope with diversities and differences of opinion and ideas.
Ability to collaborate and negotiate. Ability to build shared choices and reach consensus around complex choices	The work in a small group is an opportunity to: » Develop and exchange skills and ideas. » Request/proposal to design and work commonly on a joint task in small group occasions
Feeling part of the school as a relationship system	Provide intersection (inter-classroom) opportunities for meeting. Involve children in the care of common spaces and materials. Participating in joint initiatives
Feeling part of the wider community as a relationship oriented ecosystem	The relationship with the environment as an opportunity: » To develop wider awareness » To develop ideas for new projects
Supporting experiences that bring a universal message of ecology and sustainability	Develop sensitivity towards the ecological system: » Through visits and reflections on the delicacy and importance of nature

Sustainability, global citizenship education and awareness, gender sensitivity	
Exemplary pedagogical steps	
Educational intentionality	Contextualization and Actions
Gender sensitivity development	Create an environment whereby gender biases are eliminated: » Offering both boys and girls the same, inclusive opportunities
Support the improvement for the school accessibility for girls and create conditions to welcome girls in school	Accept children without gender distinction Inclusion measures of gender-specific criteria (facilities, etc.)
Explore the concept of gender equality	Developmentally appropriate discussions are the first steps towards exploring this concept, children's books on the topic are often an effective way to open dialogue about concepts such as this one
Support the concept of gender equality	Choose books which promote gender equality and avoid stereotypes
Possibility of deconstruction of stereotypes with the games and educational tools	Provide games, songs, books, and other materials that promote gender equality Respect children's play choices irrespective of gender
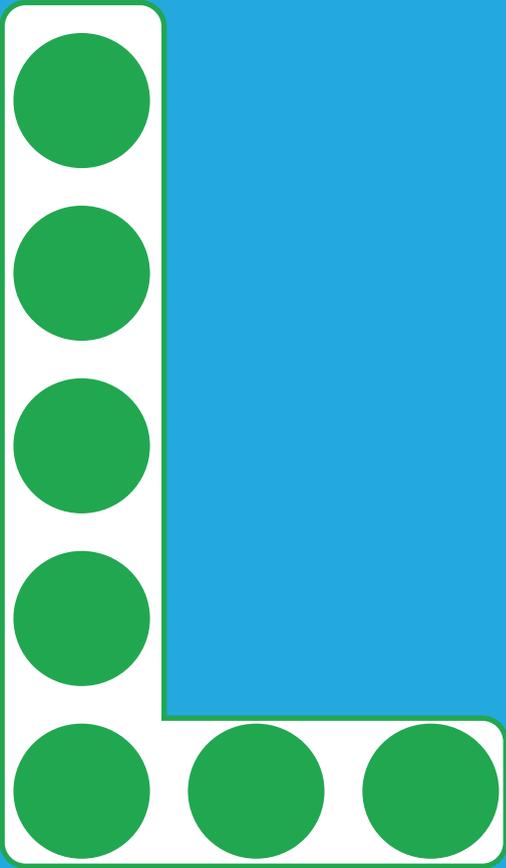
5. Learning achievements
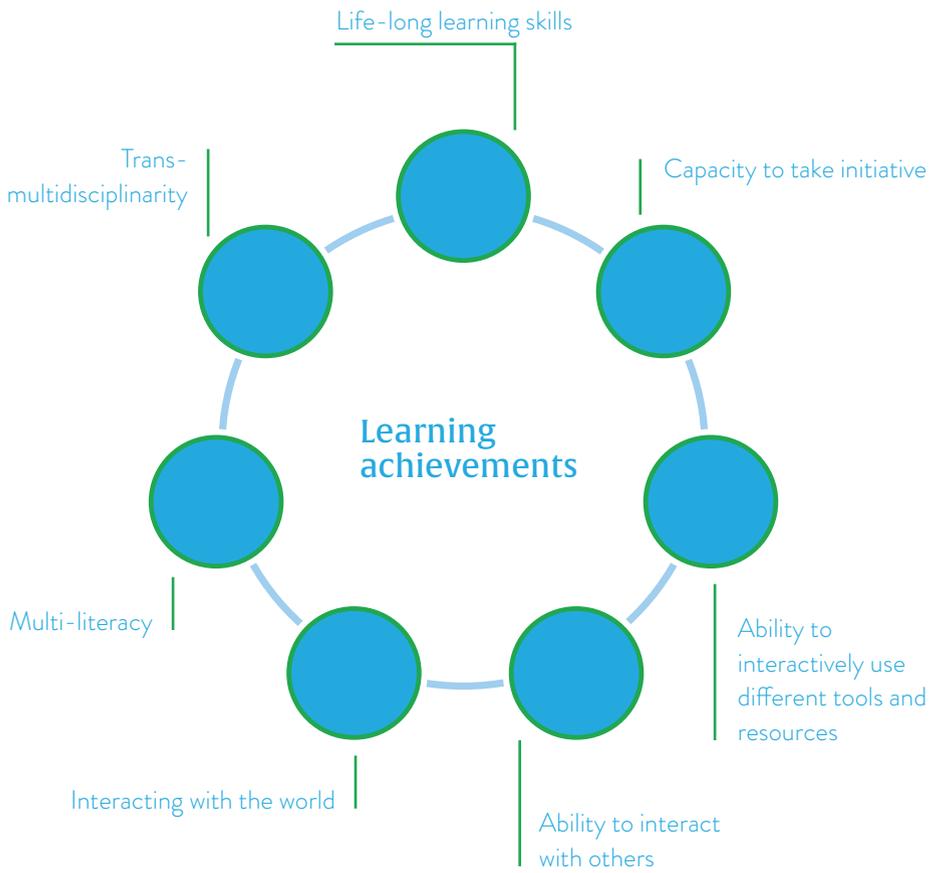
5.1 Life-long learning skills

Learning how to learn is the most important competency for the future. The continuous and rapid evolution of contexts is rapidly shifting what education should look like and the importance of "content learned" is diminishing. Learning offers people the regenerative ability to reinvent themselves as contextual needs change, while maintaining strong inner coherence.

Children can be supported to incorporate more stimuli, to support the mind's flexibility to welcome changes, using knowledge for continuous acquisition and innovation.

5.2 Capacity to take initiative

A quality ECCE curriculum nurtures the child's ability to take initiative, ability to do so in a relevant way, starting from an analysis of the needs of one's environment or situation and applying all the resources at hand (knowledge, skills, technologies, etc.) to make appropriate decisions or to take necessary action.

The ability to take initiative also concerns the trust and ease with which a person manages to face the unknown with confidence in order to move forward towards positive outcomes.

Life-long learning skills

Trans-
multidisciplinarity

Capacity to take initiative

Learning
achievements

Multi-literacy

Ability to
interactively use
different tools and
resources

Interacting with the world

Ability to interact
with others

5.3 Ability to interactively use different tools and resources

Increasing complexity requires effective, efficient, and interactive use of a range of tools and resources relevant to thoughts and actions. These tools and resources include intellectual, cultural, spiritual, linguistic, material, technical, physical, and virtual skills, interface with intelligent machines, use of multiple technologies, ability to manage time and emotions.

It also provides for the responsible use of tools and resources with a view to responsible consumption and sustainable lifestyles.

5.4 Ability to Interact with others

Increasing complexity requires children to be able to interact effectively with others. It requires collaboration to solve complex problems and create integrated solutions in all contexts. It is also a key competence for social interaction, social cohesion, global citizenship, harmony, justice and a peaceful and democratic future.

Emphasis and importance is given to the process in which learning takes place and the acquisition of skills (based on experiences, which are varied and repeated). Importance of the adult in proposing and leaving time to experiment and therefore acquire, but also in the trust we place without replacing but accompanying it.

The creation of democracy is important in order to be able to respect the other and minimize gender differences.

5.5 Interacting with the world

Learning how to interact with the world allows people to live local and global. It allows awareness, sensitivity and skills for individual and collective challenges and opportunities at local, national, regional, and global levels. It implies the ability to be in multicultural, multi-religious contexts, with multilingual perspectives that embrace diversity as an enriching resource.

5.6 Multi-literacy

The 21st century requires that people be competent in different languages and with multiple skills and literacy. Basic alphabetization ("read, write and count") is no longer sufficient.

Going beyond the three basic skills is necessary to include micro-skills such as digital, cultural, financial, health and media literacy. Different contexts will require diverse types of skills.

5.7 Trans-multidisciplinarity

Increasing complexity requires increasingly sophisticated solutions that integrate the knowledge of multiple disciplines and domains and requires moving from fragmented specializations to a more holistic perspective in order to successfully grow and develop in harmony with the changing world.

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