

EARLY CHILDHOOD LEARNING GUIDELINES IN LATIN AMERICA AND THE CARIBBEAN



Inter-American Development Bank
Social Protection and Health Division

EARLY CHILDHOOD LEARNING GUIDELINES IN LATIN AMERICA AND THE CARIBBEAN

Christine Harris- Van Keuren and Diana Rodríguez Gómez
Teachers College, Columbia University

Supervision: María Caridad Araujo and Florencia López-Boo, IDB
Research Assistant: Maggie Morrison, Columbia University

scl/sph@iadb.org
www.iadb.org/socialprotection

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Executive Summary

This report details a comparative analysis of early learning guidelines (ELGs) for infants and toddlers less than 3 years of age in Latin America and the Caribbean. The 19 ELGs evaluated are utilized by 12 national and 7 regional programs located in 13 countries in the region. Three types of programs are included in this report: parenting programs (n=3), community centers (n=4) and child development centers (n=12). Two of the twelve child development center programs fall beyond the age range of this research (0-3 years) and are included as case studies. While parenting programs are included in this analysis, caution should be given to directly comparing their results to the results from community center or child development center programs. As described in the paper, parenting programs represent a distinct type of intervention.

Program abbreviations, instead of the document titles, are used throughout the report. However, the use of these program abbreviations does not imply a full program analysis. Instead, only specific sections of each ELG were analyzed. Reference is made to the programs which utilize these ELGs in an effort to make the report more user friendly to readers, especially to early childhood education stakeholders in Latin America and the Caribbean.

Using an adapted Scott-Little et al. (2008) framework, this report has five primary findings. First, programs use a variety of terms to define and promote early childhood development. These differences in terminology can complicate communications between early childhood education stakeholders

and make comparing similar concepts among programs problematic. Furthermore, if a program designed for infants and toddlers younger than 36 months chooses to communicate with a program designed for older children (which is highly recommended), aligning curriculum may be problematic given the variation in structure, conceptualization and terms.

Second, the documents evaluated range in their publication dates, from 1997 to 2011. While all of the documents evaluated were archival and only illustrate the intentions of the ELG authors, the older the document, perhaps the less relevant are these historical intentions on the actual happenings in the learning environment. A significant difference already exists between ELGs intentions and actual implementation, but the age of the document may play a role in widening this gap. In addition, older documents appeared to be less clear in their ELGs and as such, may be more difficult to utilize and implement by early education stakeholders. Furthermore, older documents, in general, have fewer age groupings and thus, use more general content for a wider range of children in their care. It is important to note that some of the ELGs may be inappropriate for infants and toddlers younger than 36 months of age.

Third, the setting in which a program takes place should not, in theory, impact the number or type of childhood development indicators. However, this research found that the ELGs varied by modality. For example, evaluating social-emotional, linguistic, physical

motor and cognitive domains shows that parenting programs, at least on paper, addressed half of the cognitive indicators included in the framework utilized by the authors. Marry this with the fact that the implementation process, complete with training procedures, support materials and intensity of the intervention are also different depending on the program modality hints that children who require the strongest interventions are perhaps receiving them the least.

Fourth, some ELGs noted age in terms of years instead of months. The age structure is important for several reasons. First, it may be confusing to early childhood education stakeholders if ELGs noted for children aged 2 to 3 years are appropriate for children who are 24 to 36 months or 35 to 47 months. Second, wide age ranges, for example, birth to 6 years of age, may not highlight children with learning

differences and may include content which is inappropriate for infants and toddlers younger than 36 months of age. Finally, clarity in age structure is important as programs integrate with those which serve children beyond the age of 36 months.

Finally, the principles and objectives of the programs described in the introduction and wider body of the pedagogical documents may stop at theory. Many of the ELGs include rich details describing the desired impact of the program on the children, the community and the society as a whole. However, often, these intentions appear to stop short of being integrated into the “standards,” “indicators,” “competencies” and/or “development” portions of the pedagogical document thus, limiting a teacher’s ability to identify the desired behaviors of children.

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Table 1. Latin American and the Caribbean Early Childhood Education Program Abbreviations

The following program abbreviations have been used throughout the report.

No.	COUNTRY (CITY)	PROGRAM NAME	PROGRAM ABBREVIATION
1	Argentina (Buenos Aires)	Jardines de Infantes y Maternales, Ciudad de Buenos Aires	JICBA-Buenos Aires
2	Brazil (Fortaleza)	Atenção Educação Infantil	AEI-Fortaleza
3	Brazil (Rio de Janeiro)	Espaços de Desenvolvimento Infantil	EDI-Rio de Janeiro
4	Chile	Jardines Infantiles de la JUNJI	JUNJI-Chile
5	Colombia (Bogota)	Secretaría Distrital de Integración Social	SDIS-Bogota
6	Dominican Republic	Programa de Atención Integral	PAIP -Dominican Republic
7	Ecuador	Centros infantiles del Buen Vivir	CIBV-Ecuador
8	Ecuador	Creciendo con Nuestros Hijos	CNH-Ecuador
9	Guatemala	Programa de Atención Integral a la Niñez	PAI-Guatemala
10	Jamaica	Early Childhood Curriculum	ECC-Jamaica
11	Jamaica	Roving Caregivers	RC-Jamaica
12	Mexico	Programa de Educación Inicial	CONAFE-Mexico
13	Mexico	Programa de Estancias Infantiles	PEI-Mexico
14	Nicaragua	Programa de Atención Integral a la Niñez	PAIPN-Nicaragua
15	Peru	Programa Nacional Wawa Wasi	Wawa Wasi-Peru
16	Uruguay	Plan Centros de Atención Integral Familiar	CAIF-Uruguay
17	Uruguay	Programa Nuestros Niños	Nuestros Niños-Uruguay
Case Study/ 1	Dominican Republic	Espacios de Esperanza	EE-Dominican Republic
Case Study/ 2	Trinidad & Tobago	Early Childhood Care and Education Centers	ECCEC-Trinidad y Tobago



1

Introduction

This report details a comparative analysis of early learning guidelines for infants and toddlers less than 3 years of age in Latin America and the Caribbean.

The first few years of a child's life are the most critical in terms of development as a human being. From birth to 36 months, the foundations for physical, emotional, linguistic and social development are established, and, it is during this time that the first equity gaps emerge. By the time a child is ready to enter formalized primary school, developmental disparity can be significant and difficult, if not impossible, to reverse. Despite the importance of infant and toddler development, especially for the most vulnerable populations, research on programs and the early learning guidelines (ELGs) which serve them are just beginning to surface. Evaluating ELGs and the learning opportunities they provide for infants and toddlers offers insight into the strengths and weaknesses of programs and evidence on the potential impact on children's learning and development outcomes. As important as evaluating the ELGs is considering the types of

programs utilizing them. Programs are held in a child's home or take place within community centers or child development centers. The modality, or program type, must be considered as resources, intensity of the intervention, goals and needs of the population served all vary by modality. To date, this report is perhaps the most comprehensive effort to systematically evaluate ELGs for infants and toddlers under 36 months of age living in the region, and the results have implications for professionals working in the design, implementation and evaluation of public policy at the regional and national levels, and for educators who work every day to improve the learning experience of the children. This analysis compares ELGs across and within program types and seeks to further discussions on strategies to strengthen programs and provide high quality education to children and their families.



2

Description of the Research

2.1. Purpose

This comparative analysis of early childhood learning guidelines for infants and toddlers under 36 months of age had two primary objectives. The first was to evaluate the structure, conceptualization and presence of ELGs that guide educational activities in the 19 programs being implemented in 13 Latin American and Caribbean countries. The second objective was to provide a starting point for early childhood education (ECE) stakeholders on the process of further customizing their curriculum and considering if their values, beliefs and objectives are proportionately reflected in the ELGs.

This comparative analysis of early childhood learning guidelines had two primary objectives.

The purpose of this report is to present the findings for the primary research questions noted below:

- How have Latin American and Caribbean country programs organized their early learning guidelines for infants and toddlers younger than 36 months of age?
 - How are the early childhood guidelines divided by age-range?
 - What titles have programs used to denote their early learning guidelines?
- What content have Latin American and Caribbean country programs addressed in their early childhood learning guidelines?
 - What areas of child learning and development have programs addressed?

- What areas of child learning and development have programs not addressed?
- What are the relative emphases Latin American and Caribbean country programs have placed on the various areas of child learning and development within their early learning guidelines?

To answer these questions, this paper begins by detailing the objectives of the research, recommended uses of this report for policy makers, researchers and practitioners, and a brief review of relevant literature. Next, the conceptual framework is introduced, terms are defined, document sources are described, the methodological approach utilizing an adapted Scott-Little et al. (2008) framework is presented, and limitations are discussed. Then, the paper moves into the findings and details the presence of the early childhood indicators within the program documents evaluated. These findings are parceled out by the different types of programs: those which are implemented at home and those which are implemented in child care centers (child development centers or community centers). The paper concludes with a discussion of implications and recommendations for public policies that promote early childhood development in Latin America and the Caribbean. Situated at the end of the report are “**Program Summaries,**” individual pages which detail the findings for the 17 programs and two case studies.

2.2. Objectives

The objectives of this report align with the broader social strategy of the Inter-American Development Bank (IDB) and with the goals detailed in the forthcoming partner study, “Overview of early childhood development services in Latin America and the Caribbean,” by María Caridad Araujo, Florencia López-Boo and Juan Manuel Puyana, 2013. The IDB social strategy for children aged 0 to 3 years is to “identify policies and interventions to support caregivers and parents in the task of improving the quality of care, ensuring access to comprehensive child development services for vulnerable populations and identifying effective forms of quality service with low dropout rates” (IDB, 2011). The goals of the partner study written by Araujo, López-Boo and Puyana were threefold. The study sought first, to inform early childhood policy reform processes which are currently in use in several countries in the region; second, to highlight critical dimensions of management and design which impact the program quality; and third, to document the operational costs of the programs.

2.3. Use of this Report

The value of this report lies in its practical applicability to early childhood education stakeholders within Latin America and the Caribbean. Designed with policy makers, researchers, ELG authors, national and regional directors of early childhood programs, teachers, teacher trainers, caregivers, and parents in mind, this comparative analysis can be utilized in the following ways:

- To contribute to the design and implementation of public policies and strategies to improve the quality

of early childhood education and care programs;

- To foster a dialogue among early childhood education stakeholders to determine if the intended values and objectives of their program are reflected in the indicators;
- To provide ELG authors and program managers with a variety of indicators to help inform the creation of customized frameworks which can be used to assess their individual program;
- To provide program stakeholders with a starting point for aligning their ELGs with other relevant program components (such as school, teacher and parent standards);
- To consider if the ELGs are aligned with the priorities of the curriculum and, most importantly, the daily implementation in the spaces of learning;
- To provide researchers and all of those interested in strengthening early childhood education with a relevant early childhood guideline framework for future research in the region.

This report was not intended to be used for some specific tasks. Applying this research in the following ways is not recommended:

- Using these indicators to directly evaluate infants and children participating in these or any preschool program;
- Applying the indicators included in these analyses in sum to any program;
- Granting these indicators precedence over others not listed or assuming that these indicators represent a static and final list;

- Inferring that this document includes a system of evaluations such as Early Childhood Environmental Scale (ECERS-R) or Classroom Assessment Scoring System (CLASS) (Pianta et al, 2007);
- Assuming that the inclusion or absence of ELGs mirrors the wider body of the curriculum or reflects the day to day happenings in the learning environment;
- Comparing this research directly to that of Scott-Little, Kagan, Frelow & Reid (2008) or Scott-Little, Kagan & Frelow (2006).

ministries of education, health, and social development, to institutions focusing on women and youth (Umayahara, 2004; Mara, 2009; Araujo & López-Boo, 2010). The strategies for design, finance, implementation, and evaluation of each program also vary across countries. The involvement of the non-governmental and private sector becomes tangible during the service provision process (Umayahara, 2004). Finally, it is worth noting how, as Vegas and Santibañez (2010) state, “Most programs that support early childhood development in the region are independent efforts that vary in scale, services offered, and mode of delivery” (p. 58).

2.4. Literature Review

In Latin America and the Caribbean, the Convention on the Rights of the Child (CRC) (1989), the World Summit for Children (1990), the Millennium Development Goals (2000), and the Dakar Framework for Action, in addition to the Hemispheric Commitment to Early Childhood Education (OAS, 2007) and the Educational Goals 2021 (OEI, 2010) have significantly contributed to the increased emphasis on and strengthening of early childhood policies framed under a human-rights approach. From this perspective, childhood is seen as a critical period of life with inherent value, where children are tacitly recognized as rights-holders able to participate in family, cultural and social life (Bennett, 2008).

In order to comply with international and national binding documents, countries in Latin America and the Caribbean have developed multiple programs to satisfy the developmental needs of young children and the living conditions of their families. Nowadays, early childhood policies are designed and implemented by a broad spectrum of institutions; from

Accordingly, what the term “quality” means for early childhood learning programs across Latin America and the Caribbean also varies greatly. Each program understands “quality” through the lens of its context, opportunities and needs. In 1998, Peralta and Fujimoto proposed seven conditions early childhood learning programs in the region should fulfill: (i) constructive activity of the child, (ii) integrity, (iii) child participation, (iv) flexibility, (v) inter-sectoral articulation, (vi) content relevance, and (vii) cultural relevance (p. 28). In 2006, Elvir and Asensio grouped most of these conditions under three statements. Early Childhood learning programs must: be designed according to children’s development, be responsive to the social context where children are immersed, and implement child-centered pedagogies.

In order to operationalize these general conditions and create practical evaluation and monitoring tools, programs across the region have developed curricula, assessment tools, and teacher guidelines that describe recommended pedagogical practices. These guidelines vary in terms of structure, conceptual framework, and content, particularly in the definitions

used to describe notions related to child development and the role teachers and caregivers are expected to play in the learning environment (Peralta & Fujimoto, 1998). Nevertheless, responding to the demands of higher public accountability, many documents include some type of indicators to measure progress towards goals. As Bennett affirmed, “For governments, improving quality generally means ensuring that necessary programme standards are in place and that children are developing and learning in accordance with government objectives for the sector” (Bennett, 2008, p. 1).

According to Blanco, Almeida, Guadalupe, Louzano, Taccari, and Umayahara (2008), indicators are “signals” that facilitate explaining a particular phenomenon. In the early learning program guidelines, it is easy to identify three types of indicators: service indicators, traditionally associated with the provision of comprehensive care for the very young; teacher indicators; and indicators of child-learning outcomes. Indicators in this context imply a particular worldview of what is desirable for each program, and therefore, what is expected from different actors participating in the early learning programs. Therefore, indicators are deeply embedded in the political, social, economic, and cultural context where they are created and implemented. In brief, “indicators are not statistically neutral” (Blanco et al., 2008, p. 12), to the extent that they simultaneously reflect and reproduce societal views of a particular group, in this case, children younger than 36 months of age.

On the other hand, early childhood literature acknowledges that there are risks implied in using child-learning outcomes, as they can lead to labeling and excluding children from fully participating in learning

environments (Kagan & Scott-Little, 2004; Peralta, 2009). Additionally, the strict implementation of universal child-learning outcomes can neglect the critical importance that culture plays on child development (Shonkoff & Phillips, 2000), especially when those universal outcomes are the product of research studies conducted in limited socio-cultural contexts. For these reasons, it is no surprise that many countries in the region are reluctant to test children younger than 36 months of age (Bennett, 2008) or to use a list of universal or regional indicators to “measure” their development.

Despite recognizing the tendentious character of indicators, it is hard to deny the potential they “have to improve instruction and increase accountability” (Kagan & Scott-Little, 2004, p. 389). To date, there have been empirical studies conducted in Ecuador, Brazil and Mexico that demonstrate the correlation between “shortfalls” in developmental outcomes and socioeconomic level (Gertler & Fernald, 2004; Paxson & Schady, 2007; Vegas & Santibañez, 2010). On the other hand, in a study, Malajovich (n.d.), using a qualitative approach, analyzed the principles, objectives, contents, and pedagogical and assessment strategies of curriculum documents submitted to the Organización de Estados Iberoamericanos (OEI) by the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Nicaragua, Paraguay, Peru, Portugal, Spain, Uruguay and Venezuela. However, the study does not cover a comparative analysis of early childhood learning guidelines.

No study to date has examined the presence of indicators in early childhood learning guidelines in the region. This research builds off of the work conducted by Scott-Little

et al. (2008) and analyzes the early childhood learning guidelines of 19 programs in Latin America and the Caribbean. The Scott-Little et al. (2008) framework is described below.

2.5. Conceptual Framework

The conceptual framework used for this analysis is based on that described in Scott-Little et al. (2008), *Inside the Content of Infant-Toddler Early Learning Guidelines: Results from Analyses, Issues to Consider, and Recommendations*. In this study, the authors researched, drafted and utilized a framework designed to measure the early learning guidelines specifically designed for infants and toddlers from birth to 36 months in the United States. Using a framework composed of 5 “domains” and 75 “indicators”, the authors evaluated the presence of the indicators within 21 ELG documents published by individual states in the country. The ELG documents ranged in their publication dates, from 2002 to 2007. The report included breadth analysis (i.e., the presence of each of the five domains found within the entire sample, represented in percentages) and depth analysis (i.e., the presence of each indicator within each domain for the entire sample, represented by percentages). Breadth and depth analyses were conducted for the entire age range of 0-36 months, and two age ranges (0 to 18 months and 19 to 36 months) were compared.

To adapt this research to the present study, the following modifications were made. First, age is only evaluated in one range (0 to 36 months). Second, three types of programs (i.e.,

parenting programs, community center programs, and child development center programs) were analyzed independently utilizing the breadth and depth analyses; and third, the Scott-Little et al. (2008) framework was adjusted using grounded theory. This process is discussed further in the **Methodology** section below.

2.6. Defining Terms

This report uses several specific terms. These include **domains, indicators, early learning guidelines, and standards**. Domains are the areas of study of child development that individually and collectively contribute to the long-term health and development of a child (Kuhn & Siegler, 1998). For increased specificity, domains can be further divided into sub-domains. While recognizing the limitations implicit in categorizing and fragmenting child development, this paper utilizes four domains, which have been rigorously evaluated in early childhood development research¹. These include: Physical Motor, Social-Emotional, Language, and Cognitive development. Each is briefly described below.

Physical Motor development is defined by physical measures of strength and growth, spatial awareness, sensory development, coordination, balance and gross and fine motor skills. The impact of malnutrition also falls within this domain, as chronic nutritional deficiencies can affect all other development indicators.

Social-Emotional development in infants and toddlers younger than 36 months of age is critical to promote positive notions of self-concept. During this period, children’s feelings

¹ For more information on these four domains tested in Latin America, see “Early Childhood Development- From Measurement to Action” M. Eming Young and L.M. Richardson (eds.), World Bank, 2007.

of self-confidence and their ability to interact with adults and their peers are emerging. For this reason, this domain also includes guidelines for self-regulation, play with others, participation, emotional expression and attachment.

Language development encompasses a child's ability to communicate even before he or she can express words or form signs. This may include non-verbal communication, such as smiling and pointing, and verbal communication, such as babbling, using one- or two-word phrases, and speaking in complete sentences. This domain also includes the ability to initiate and participate in dialogue or activities that promote reading and writing skills. This domain includes the use of the alphabet and print awareness as a means to communicate and make sense of the world.

Cognitive development includes abilities such as recognition, imitation, memory and problem-solving, counting, sorting shapes and colors, stacking blocks, solving simple puzzles, and more. This domain also includes content related to the security of the child and the natural and social sciences, as well as social conventions. It is important to note that exploratory play and symbolic play open possibilities for children to develop skills described in this domain and therefore, they are included in this category.

For the purposes of this report, early learning guidelines (ELGs) refer to the documents provided by each program to guide teachers. These documents primarily detail a program's standards and indicators. Standards, or goals as they are sometimes called, consist of behaviors or knowledge expected

of children at a specific age interval. Indicators are the specific pieces of evidence that need to be observed in order to assess whether or not the child has met a certain goal. When most effective, indicators are aligned with the physical conditions of the learning space, as well as the total content of the ELGs, teacher training program, pedagogical approach and assessment methodology. For example, if the curriculum offers children the ability to demonstrate how to stack blocks (i.e., "logical thinking"), there should be a clear connection in the curriculum which provides the child with the opportunity to participate in and to demonstrate this learning.

A fragment of a table from *Antología de apoyo (CONAFE-Mexico)* is noted below in **Figure 1** as a clear example of how standards, and indicators can be structured. In this example, "competencies" correspond to this report's definition of a standard and indicators are appropriately noted.

2.7. Document Sources

This research is part of a larger study (n=42 programs) conducted by the IDB documenting the current design, management and operating costs with regard to child development services in Latin America and the Caribbean. Detailed in Araujo, López-Boo & Puyana, 2013, the data collection process commenced in April 2011 and concluded in March 2012, and involved following steps: (i) design questionnaires, (ii) develop observation protocols for visits to early learning centers, (iii) collect data in the field, and (iv) analyze the data.² The data used in this paper are

² For a comparative evaluation of the costs associated with early childhood care and education, see Levin, H.M. & Schwartz, H.L. (forthcoming). Comparing Costs of Early Childhood Care and Education Programs: An International Perspective. Hacienda Pública Española/Revista de Economía Pública, 201- (2/2012): 39-65. Instituto de Estudios Fiscales.

Figure 1. Early Learning Guidelines- Example CONAFE-Mexico

COMPETENCIES	CHARACTERISTICS	
Displays the capacity to create mental representations of objects, people and/or everyday situations.	13-18 Months	19-24 Months
	Demonstrates the ability to remember objects, events and people	Demonstrates the ability to recall events and represent them through objects
	Indicators	
	<ul style="list-style-type: none"> Shows that he or she remembers where things go: place your blanket on the bed Shows that he or she remembers songs by doing some related movements: tapping his or her index finger and thumb together to ask for “the chicken song” Recognizes his or her mother in a picture and says “mama” 	<ul style="list-style-type: none"> Looks for an object that got lost while he or she was playing with it, without seeing where it went: he or she looks for a lost ball that went under the furniture and out the another side Recalls sensations and associates them with events or objects: says “hot” when trying to touch an adult’s coffee Recalls familiar events and represents them: he or she pretends to cook by moving a spoon in a toy casserole

Source: Translated from *Antología de apoyo (2008)*, CONAFE-Mexico, (p. 106).

limited to the documents collected in the field by IDB staff from early childhood program managers. Due to missing standards or the inclusion of standards which were not related to children (See **Table 2**), the number of programs evaluated in this report was reduced (from n=42 to n=19). Of the 19 programs, 17 are included in the body of this report while two, Trinidad & Tobago’s “*Early Childhood Care and Education Curriculum Guide*” and the Dominican Republic’s “*Espacios de Esperanza*” are offered as separate case studies. Because the target populations for these two programs, children aged 3-4 years and 3-5 years, respectively, are beyond the scope of this infant and toddler research, the data for these two programs are not included in the breadth and depth portions of this document and instead are evaluated separately with a different and age relevant framework. Furthermore, it is important to note that

these 19 programs range in coverage. The majority of the programs evaluated in this report have national coverage (n=12) while fewer programs have regional coverage (n=7). Throughout the report, reference is made to the programs which use the documents evaluated instead of the document titles. Programs are referenced in an effort to make the report more user-friendly for early childhood education stakeholders associated with each program and does not imply a full program analysis. Instead, specific sections of each ELG were analyzed. (See **Methodology** section. Also see **Appendix A** for a detailed description of the programs included in these analyses and **Case Study 1-EE Dominican Republic** and **Case Study 2- ECCEC-Trinidad & Tobago** at the conclusion of this paper).

In the sample of ELGs analyzed in this report, the majority were written

in Spanish (n=14) while a smaller number were in English (n=3) and Portuguese (n=2). The dates published ranged from 1997 (*Nuestros Niños - Uruguay*) to 2011 (*CIBV-Ecuador*). The documents originated from a variety of governmental and non-governmental institutions including, for example, ministries of education, health, and care services for families and children. These institutions may operate at a local or national level and obtain their funding through centralized or local governments. Only one program was funded through the private sector (See *RC-Jamaica*).

These data include parenting programs (PP) (n=3), which work with parents to improve the quality of early stimulation provided in the home and programs which operate within child care centers (centers) (n=16). Programs situated in centers fall into two categories: those which operate within formalized child development centers (CDC) (n=12) and those which take place within community centers (CC) (n=4). Programs which take place within child development centers can be thought of as providing the most formalized care and initial education, and parenting programs offer more care and, sometimes but not in all situations, initial education. Community-based programs operate in more informal and less structured settings. While these different types of programs vary to a large degree in terms of their duration, resources and personnel training, the common factor is that they all provide early childhood services for children aged 0 to 36 months (Araujo, López-Boo & Puyana, 2013). The total sample of programs evaluated in Araujo, López-Boo & Puyana (2013) (n=42) is over twice that of the sub-sample included in this report (n=19). In the sample utilized by Araujo, López-Boo & Puyana, 83% of the programs were situated within child development centers or community centers. In this report, 82%

of the programs evaluated also take place within child care centers. This proportional alignment is important as readers utilize both documents to inform their practices in early childhood education.

As noted in the descriptions below, parenting programs are different from community center and child development center programs. Readers are urged to keep these fundamental differences in mind when evaluating the results of parenting programs as compared to the two programs which operate within centers. Each type of program is briefly described below.

Parenting Programs (PP): These informal programs provide training to a parent or the primary caregiver who is responsible for the early stimulation of the child (Araujo & López-Boo, 2010). The parenting programs included in the sample have been in existence, on average, for approximately 12 years, with a ratio of one program employee for every 26 children. These programs serve, on average, over 182,000 children in the region, which is about 25% of their total target population. None of the parenting programs were noted as providing “comprehensive care,” which is defined as including childcare, food, a health provision and some type of work with parents (Araujo, López-Boo & Puyana, 2013). The trainings provided to the mother, the father or the primary caregiver can take place in the home or in a donated community space, where one trainer typically instructs 8 to 15 families. Over the course of, on average, 11 months per year, the trainer provides 44 sessions, with each session lasting 2 hours, or 88 hours of instruction on an annual basis. Despite trainings sometimes only taking place for 2 hours a week or 2 hours every other week, in rural areas, attendance rates can be inconsistent due to the varying demands on the person attending the training sessions (i.e. household chores,

agricultural work, transportation costs, etc.). While operationally less expensive than formalized center programs, the inconsistent attendance rates combined with the less frequent and shorter interactions can compromise the effectiveness of parenting programs (Araujo, López-Boo & Puyana, 2013).

Center Programs: In general, center programs provide initial education to a larger degree than more general care services. These programs have, on average, a ratio of one employee for 13 children, or half of the parenting programs. Each program serves, on average, 85,000 children which is about 40% of their total target population. 20% of the programs included in the total sample note that they provide “comprehensive care” (Araujo, López-Boo & Puyana, 2013) and initial education. In contrast to parenting programs, these programs serve mothers who work outside of the home and therefore, they operate more frequently and for longer periods of time. On average, programs in centers operate approximately 11 months out of the year for nearly 8 hours per day. Children do not always receive a full 8 hours of stimulation a day, as some centers may run two shifts—one in the morning and one in the afternoon—and parents may choose to use the child care centers on a part time basis. Data regarding these programs are typically gathered by government agencies and there is generally more legislation for this birth to 36 months age group. This legislation can include teacher credentials, salaries and teacher training institutes. Below are brief descriptions of the two different types of center programs discussed in this paper.

a) Child Development Centers

(CDC): In general, these structured programs are part of the formal education system and take place in special schools or are part of a primary school. The teachers

typically have professional certification (Araujo & López-Boo, 2010).

b) Community Centers (CC):

Community center programs are more formally structured than parenting programs but typically situated in less formal settings than child development centers. The caregivers receive training but may not have professional certification.

2.8. Methodology

The objective of this research was to conduct an analysis of child development indicators contained in ELGs for children younger than 36 months of age in Latin America and the Caribbean. For this task, given that an early childhood learning guidelines framework for Latin America was unavailable, the Scott-Little et al. (2008) framework was chosen due to the depth of their research on the domains and indicators and the framework’s clear structure. However, at no time did the researchers ignore the limitations and challenges of applying a previously designed analytical model to a broad international context (See **Limitations**).

The methodology utilized in this research follows that used by the Scott-Little et al. (2008) team as closely as possible. Nevertheless, adjustments were required using a “grounded theory” approach (Glaser & Strauss, 1967). The five methodological steps used are illustrated in **Figure 2**. In brief, the first step was to fully read the ELGs provided by the IDB and create “Cover Pages.” Second, the Scott-Little et al. (2008) framework was adjusted and third, comparable ELGs data were identified. Next, the team conducted pilot, primary, and axial coding and finally, the data were analyzed. The next section describes each step in detail.

2.8.1. ELGs Read and Cover Pages Created

The first step was to thoroughly read each ELG. The number of documents provided for each program varied from a single document with less than 20 pages to documents with hundreds of pages each. Next, the team created a cover page for each program. Cover pages allowed the team to capture key concepts and initial impressions of the curricula and allow for a more structured discussion of each program. Cover pages included information such as the structure of the document, publication date, originating institutions and the program setting (i.e., parenting programs or centers). In addition, the wording used by the ELGs when referring to children and teachers was captured. For example, did the ELG use the term “children” or “students”? Was the adult noted as being a “caregiver,” “parent” or “teacher”? (See **Appendix B** for the Cover Page template.) These subtle differences in terms allowed the team to better understand how the ELG authors viewed early childhood education in their own context. After the cover pages were completed, the team then discussed the similarities and differences in structure, terminology and content found across the documents.

2.8.2. Framework Adjusted

After a thorough preliminary reading of the documents and discussions regarding the cover pages, the team then turned to consider the Scott-Little et al. (2008) framework. Before immediately using it as a tool to evaluate the ELGs, the researchers first sought to answer the question, “Is there evidence to suggest that this framework is applicable?” To determine this, documents were analyzed to consider the presence of the Scott-Little et al. (2008) indicators. The criterion for applying this framework was the presence of at least 20% (n=15) of the original 75 indicators. While evidence of these indicators was found within five randomly selected documents, obvious differences were also noted. Therefore, the team determined that adjusting and clarifying the framework was necessary in order to better capture the content in the ELGs.

The first step in adjusting the framework was to reword indicators to reflect the purpose of the study. The original indicators were designed to reflect a focus on measuring *child outcomes*. In contrast, the purpose of this research was to evaluate the presence and content of the *indicators found in very specific parts of the early*

Figure 2. Five Step Research Methodologies



Source: Authors

learning guidelines. Therefore the wording of the original indicators on the framework was adjusted to clarify a document analysis. This provided a subtle, yet significant, change to the overall framework.

Next, relevant literature from multilateral organizations, such as the IDB, the World Bank, UNICEF, and UNESCO, as well as academic articles on early childhood development in Latin America and the Caribbean, were reviewed. This effort was not intended to produce an exhaustive literature review. Instead, it was designed to ensure that the team was working off of the same conceptual base. (See **Publications Cited** and **Publications Reviewed** at the conclusion of this report). This review also allowed the team to clarify any overlap or confusion among the original 75 indicators. After this review of relevant research and an initial reading of the ELGs, the researchers used this knowledge to modify and expand the definitions of the indicators. For example, the indicator “mathematics” was changed to “logical thinking” as related to mathematical concepts. This change placed a less academic emphasis on the indicator and allowed for a broader definition. This also allowed the researchers to create new indicators which responded to the content of the ELGs.

Third, the team considered the fifth domain “Approaches to Learning.” In the initial reading of the ELGs and in the literature review, the researchers noted that there was no mention of this domain. Of the five domains, “Approaches to Learning” is deeply rooted in the United States conceptualization of early childhood learning. Because of its heavily single country focus and the absence of evidence of this domain in any of the curricula, these indicators (n=7) were moved into the “Social-Emotional” domain and “Approaches to Learning”

was deleted. This strategy minimized the presence of the “Approaches to Learning” domain without sacrificing the indicators. Finally, with the framework adjusted, the indicators were then translated into Spanish.

2.8.3. Comparable Data Identified

While all of the documents informed the team’s understanding of early childhood development in Latin America and the Caribbean, not all of the documents fit the criteria for analysis. For example, some of the documents noted standards other than those for early childhood learning. Documents with institutional standards (i.e., operations plans), teacher/caregiver standards, or parental standards were removed from this analysis and if available, replaced with documents which included early learning standards. A total of five programs (or 20%) of the total sample provided was unusable for this study and the remaining 17 plus 2 case studies were evaluated. (See **Table 2** detailing the different types of standards and a definition of each). Each type of standard is important as a stand-alone piece and perhaps even more important, when integrated to deliver a holistic approach to high quality early childhood education. Evaluating these different types of standards and how they support or do not support each other is recommended for later research but beyond the scope of the current study.

After the documents containing standards other than those designed to assess the impact of the programs on the child were removed from the sample, the team then decided which specific section or “level” of the documents was the most comparable. This research established two primary

criteria for selecting data. First, the data had to fall within the 0-36 month parameters and second, in order to give the ELG every opportunity to demonstrate its diversity and depth of content, it needed to be the most specific “level” of data. Some of the ELGs conceptualized their standards using two or more levels. For example, **Figure 1, CONAFE-Mexico** shows three levels- “competencies,” “characteristics,” and “indicators.” For this analysis, “indicators” was used due to its specificity. For all programs the “indicator” level chosen represented the most specific part of the standards, which explicitly and directly described measurable child outcomes. In the analysis, the team found that programs used a variety of names to refer to the same content. For example, the *ECC-Jamaica* utilizes the term “early learning objectives” to discuss more general

abilities of children at a particular age. Conversely, *PEI-Mexico* uses the term “capacities” to articulate very detailed outcomes for children in this program. These types of nuances in language required careful navigation. **Appendix A** includes the complete list of the content coded by term for each program and **Appendix C** lists, by term, the content that was not coded.

2.8.4. Pilot, Primary and Axial Coding

Pilot Coding

Two researchers were responsible for coding all of the documents. One researcher is a native Spanish speaker with a high level of comprehension of English and written Portuguese, and the second is a native English speaker, with

Table 2. Standards within Latin American and Caribbean Early Childhood Curricula

TYPE OF STANDARD	PURPOSE
Professionals	Regulations and procedures established to guide and evaluate institutional employees, including code of conduct, responsibilities and professional expectations. Some documents included specific guidelines or indicators for institutional employees regarding proper child care and developmental support.
Teachers	Guidelines for training of teachers or employees, including training design, schedules, supplemental materials, timelines, information regarding developing participation and evaluating participants.
Children	Expected outcomes, standards and indicators in relation to a wide variety of developmental indicators, related to physical, emotional, linguistic and cognitive development, often provide recommendations for parents and educators.
Schools	Administrative and operational policies and procedures including descriptions of services, institutional objectives, budget, resource allocation, hiring, and in some a evaluation criteria for services provided.
Families	Indicators, guidelines and support information for the active and healthy participation of parents in child development, both at home and in cooperation with the institution or program.

Source: Authors

a high level of comprehension of written Spanish and Portuguese. The qualitative software NVIVO³ and Excel were used to code. (See **Appendix D** for a sample NVIVO screen shot.) Before starting the coding process, rules were designed and synthesized in a codebook (see **Annex 1**). When coding, the researchers were guided first by the definitions on the framework. For example, “fine motor” might have been categorized under the Cognitive domain in the document but within the framework of this research, it was situated within the Physical Motor domain. Therefore, when coding this indicator, it was coded as “fine motor” skills within the Physical Motor domain. The advantage of this process is that it allowed the team to focus on categorizing the primary data, the early learning guidelines, and not become tangled within the vast differences in document structure (see **Domains**). This was critical given that no two documents organized their ELGs in the same way and that indicators can be housed under a number of different domains. The tradeoff, however, is that critical author intention may have been missed (see **Limitations**).

Starting sequentially by age, each researcher individually coded the specific “indicator” sections of the document and then checked for consistency. To contribute to this verification process, NVIVO has the functionality to show a “snapshot” of all of the content coded with the same indicator. This allowed the researcher to easily identify inconsistencies.

In some of the documents, the ELG authors combined very different concepts within the same indicator. If there were two completely different and explicit concepts which matched the framework, each researcher coded each of those concepts. The strict rule for

this process was that the author must be explicit in his or her intention. For example, in **PAIPN-Nicaragua**, one of the indicators stated, “*Llama a niños y adultos con los que desea interactuar,*” or “Call children and adults with whom they want to interact.” Since the author explicitly stated a relationship with children and adults, this indicator was coded as “relationships with adults” and “relationships with peers.” This coding process allowed the researchers to fit all of the data into the four primary domains even if the content in the documents was not categorized as such. In contrast to the methodology of Scott-Little et al. (2008), where each indicator was coded only once, this process allowed the content of the selected indicators to be more fully taken into account.

In order to create a framework of indicators relevant to the region, the researchers added new indicators to the framework when the concept showed a consistent presence throughout the ELGs. The benefit of this method is that it allowed the team to capture important variation within the selected texts. However, the challenge was keeping the coding framework aligned. To mitigate this risk, while coding, each researcher kept track of a new indicator, then informed the other of any changes to the codebook.

Additionally, in some documents, instructions for caregivers were scattered throughout the indicators. This content was omitted from coding by the researchers. Content was coded as “*pregunta*” or “*question*” if the coder was unsure about how to categorize a particular indicator. With this methodology, the team could easily locate content in question and after discussion, code under the most relevant indicator(s).

³ NVIVO is a software program designed for qualitative and mixed methods research. Please see http://www.qsrinternational.com/products_nvivo.aspx for more information.

To test the framework and the coding process, two documents were randomly selected to pilot. After coding these two documents independently, the consistency of coding between the two researchers was measured. The internal reliability exceeded the accepted .80 standard; respectively, each was 81% and 87%.

Primary Coding and Axial Coding

After the pilot coding, the two researchers followed the strict coding rules described in the codebook and moved through the data sequentially, and only coded the content previously identified as being comparable. After all of the documents were coded the first time by each researcher individually, indicators and definitions were compared. Because grounded theory was utilized, the coders found that few of the definitions required adjustment as a result of the content coded in the documents. For example, they found that stacking blocks seemed more applicable under the indicator for “logical thinking” instead of “fine motor” skills. This decision was based upon evidence in the text which noted the exact number of blocks to be stacked and progressive sorting skills associated with this task. Therefore, the definition for “logical thinking” was adjusted to include stacking blocks.

After finalizing the changes in the framework, the coders proceed to axial code, or review each document a second time. At this point, the framework was considered finalized and no additional indicators were added. Axial coding allowed the team to ensure that the first documents coded matched the final framework used for the final documents. After each document was axial coded, all of the indicators were evaluated in a final quality assurance phase. For example, all of the content coded for “fine motor” skills was analyzed to ensure no discrepancies

existed and that changes, such as moving stacking blocks under “logical thinking,” were completed. After primary coding and axial coding, similar indicators were merged to create new, more robust versions. For example, “social relationships with adults” and “relationships with adults” were merged together. Similarly, “social relationships with peers” and “relationships with peers” were also combined. In this way, indicators which had slight differences between them were merged to provide the researchers with a more complete view of the presence of these types of indicators in the ELGs.

Of the 19 documents, six were in formats which were unreadable by the coding software NVIVO. While these documents were coded using Excel, they were put through the same rigorous analysis as those analyzed with NVIVO. The most significant difference was that the number and type of indicator found were logged into Excel spread sheets instead of being digitized in NVIVO. (See **Appendix E** for a sample Excel screen shot.)

Ultimately, eight new indicators (“music”, “participation,” “play,” “personal care routines,” “security,” “ecological awareness,” “conflict resolution” and “interculturalism”) were added to the framework. Included in the final framework (n=71) are the new indicators (n=8) which were added during the coding process. (See **Appendix F** for definitions of these 71 indicators.)

Because the framework had changed from the beginning of the process to the end, a final reliability check was conducted on the total sample for both coders. This yielded a .90 correlation. (See **Indicator** section of this paper for a more detailed description of the new indicators added.)

2.8.5. Data Analyzed

To summarize the breadth and depth percentages, the Scott-Little et al. (2008) process was utilized. The breadth of each domain represents the extent to which these four domains were identified in each of the ELGs. “Breadth percentages” were calculated for the total sample (n=19), for each type of program [i.e., community centers (n=4), child development centers (n=12) and parenting programs (n=3)], and for each ELG by taking the number of indicators coded within each domain and dividing it by the total number of indicators coded. For example, if the sample had a total of 1,000 codes and the Cognitive domain alone retained 250 of those codes, then the breadth percentage for the Cognitive domain would be 25%.

To calculate the “depth percentage,” the number of times an indicator was coded was divided by the total number of indicators coded within that specific domain. For example, if “gross motor” skill was coded 50 times and the total number of codes for the Physical Motor domain was 100, “gross motor” would have a depth percentage of 50%. This provided the team with evidence regarding which indicators were most present throughout the documents for each of the four domains. (Individual findings are compared to the aggregate in the “**Program Summary**” sheets in the **Annexes 3-19** of this paper.)

2.9. Limitations

Despite the potential of this study to inform decisions pertaining to the quality of programs serving early childhood education in the region, there are several notable limitations associated with this analysis. The first has been previously mentioned, applying a foreign single country framework across a diverse international context. While great care

was taken in adjusting the Scott-Little et al. (2008) framework, it was originally designed to evaluate formalized state standards documents in the United States and not home-care and child care center programs within Latin American and Caribbean countries. The research utilized to create the framework and the legislation upon which it was based is situated in the United States. The difference in the intended use of the framework and its application to this research can introduce bias and not fully capture the nuances of each program as compared to a customized framework designed for a range of programs.

Secondly, the authors acknowledge the possibility of missing documents. While an extensive amount of effort was dedicated to data collection, the possibility exists that some program documents were overlooked or unavailable at the time of data collection. These omissions could impact the results of these analyses.

Third, one member of the research team is fluent in Spanish, the other possesses a high level of proficiency in Spanish reading comprehension, and the two of them possess high levels of proficiency in Portuguese reading comprehension, but none are fluent. In order to guarantee the validity, the two documents in Portuguese were fully translated into English and Spanish, and read in the three languages. Because language and culture are embedded, program nuances could have been missed by persons whose first language is not Spanish or Portuguese.

Fourth, the coding process itself may serve as a limitation as it simplifies the interrelated nature of early childhood development. Although the team carefully read each of the documents, they only evaluated specific sections of selected documents, and the structure of the documents may not fully align

with the measurement process. Also, indicators were categorized as best as possible by the researchers. Because of the interrelated nature of early childhood development, it is not uncommon for indicators to fall under one or more domains. While clear definitions for each indicator were created by the researchers and double coding was utilized, these efforts do not mitigate the underlying connected nature of child development and the potentiality of mis-measurement.

Fifth, the age structure of the documents may introduce bias into these analyses. ELGs not specifically written for infants and toddlers between 0 and 36 months of age may include concepts which do not typically emerge until a child is more mature. For example, if the ELGs within a document were written for children from birth to 6 years of age, then the results of these analyses could show the presence of indicators which were not intended for infants and toddlers younger than 36 months of age.

In addition to these, some of the limitations noted by Scott-Little et al. (2008) also apply. First, they note that each domain contains a different number of indicators listed and that some of the indicators include a wider range of skill sets than others. The

“unevenness” of the framework may reflect differences between some of the domains and indicators instead of reflecting differences in the content of the early childhood guidelines. Similarly to Scott-Little et al. (2008), the authors of this report did not weight the domains and indicators in an effort to balance the framework, nor was weighting utilized to prioritize indicators in terms of their importance. Second, the depth of research conducted for each indicator varies⁴. Therefore, as Scott-Little et al. (2008) note, some of the indicators may be more firmly established in the field than others which could be construed as “cutting edge.” This variation may be reflected in the ELGs, as more established indicators may be more pronounced than those which are considered “emerging.”

⁴ The variation in research for each indicator is not detailed in Scott-Little et al. (2008).



3

Findings

3.1. Process of Creating Early Learning Indicators

Before presenting the results of the data analysis, this section begins by reflecting on the process of constructing these ELGs and presents some conceptual thoughts around the use and value of indicators. Most of the ELGs analyzed in this study are explicitly framed under a child rights approach. These documents are conceived as guidelines to promote early childhood development through meaningful actions. It is worth noting how the documents' introductions emphasize their open and flexible character. For instance, *SDIS-Bogota* invites “teachers, fathers, mothers and all adults who participate in early childhood education, as well as teacher training institutions, to take up this guideline and enrich it with their own knowledge and experience[...].” (p. 7-8). It is common to find invitations to parents, caregivers and early childhood education stakeholders to adapt the content of the early childhood learning guidelines according to their needs and context. However, the authors of this study believe these kinds of invitations and clarifications do not replace the need of designing a curriculum that includes and addresses difference and diversity in an explicit manner.

To draft the first version of the documents, the printed sources commonly used by ELGs writers range from official and older versions of the curriculum to national and international reports and academic scholarship. Frequently, the process of writing and validating these documents

is a participative process, where governmental, non-governmental and private institutions, as well as early childhood education stakeholders and members of the civil society, are invited to contribute. Also, academic institutions, parents' associations and multilateral organizations, such as UNICEF, review and discuss the first drafts of the ELGs. The length and frequency of this participatory process vary among programs. While involving a wide range of stakeholders in the document creation process is encouraged, the fact that so many actors participate in different moments of the writing process can affect the internal coherence and clarity of the final document. Therefore, the process of creating these documents must balance critical aspects of democratic participation with the internal coherence of the final document.

CAIF-Uruguay provides a good example of a top-down-top process. In the introduction, this document describes how the Ministry of Education undertook the ELGs writing process. First, a small group of professionals drafted the document; then, in order to problematize and enrich the document, teachers, caregivers, representatives of teacher training institutions, and other national and international early childhood education stakeholders participated in workshops held for six months. Finally, a smaller group of experts composed and edited the official version. *JUNJI-Chile* added another layer to their writing and validation process. *JUNJI-Chile* explicitly describes how the first full version of the document was piloted in different

Most of the ELGs analyzed in this study are explicitly framed under a child rights approach and aim to promote early childhood development through meaningful actions.

regions of Chile and in different modalities before the final version was printed and distributed.

In regards to the role played by the civil society in improving the quality of early childhood programs, *CONAFE-Mexico* recognizes that the last version of the document “*Antología de Apoyo*” responds to the fact that teachers and caregivers required new training materials to improve their pedagogical actions.

It is important to find a balance between the participative character of each document and its internal coherence. Early learning guidelines are more valuable for teachers and caregivers when each of their sections is interconnected and responds to the other components of early childhood education.

3.2. Use of Indicators

In general terms, indicators are useful tools that facilitate the identification of comparable data, and enable measuring “inputs, outputs [...] outcomes or impacts” (Schuh-Moore, Jester-Quijida & Ginsburg, 2011, p. 18). Indicators can assist in making informed decisions and taking corrective actions to improve particular aspects of a program. Additionally, indicators can help in orienting and motivating staff toward achieving results and sharing achievements and information with other national and international stakeholders (Schuh-Moore et al., 2011). The participation of multiple key stakeholders in defining indicators is critical, not only because in the near future they will be able to understand and use them correctly and critically, but because indicators should put in simple and neutral terms the multiple and complex dimensions of a program.

In order to design relevant and reliable indicators, it is important to consider the following:

- Indicators should reflect desired results;
- Indicators should be short and precise;
- In order to implement activities that will allow stakeholders to achieve expected results, all stakeholders should be able to understand the indicators; consequently, indicators must be presented in simple language;
- Each indicator should assess one aspect of the program;
- Indicators should be clear about where change should appear.

In the process of designing indicators, Schuh-Moore et al. (2011) recommend:

- Create an initial list of indicators through internal brainstorming and external consultation.
- Consider other experiences using similar indicators.
- Assess each possible indicator considering the indicator measures “the intended result as closely as possible,” there is no uncertainty about what is being measured, and the indicator “sufficiently measures the result in question.”
- Select the indicators that best reflect desired results.

In addition to the three steps listed above, the following is also recommended:

- Pilot, assess and, if necessary, adjust the indicators before distribution.
- Create a process that includes

regularly revisiting the early learning standards to consider if they continue to accurately reflect the goals and objectives of the program.

- If several sets of guidelines exist, merge these into one set of ELGs as a composite reference. One set of guidelines assists practitioners and mitigates the risk of some guidelines being referred to less often than others.

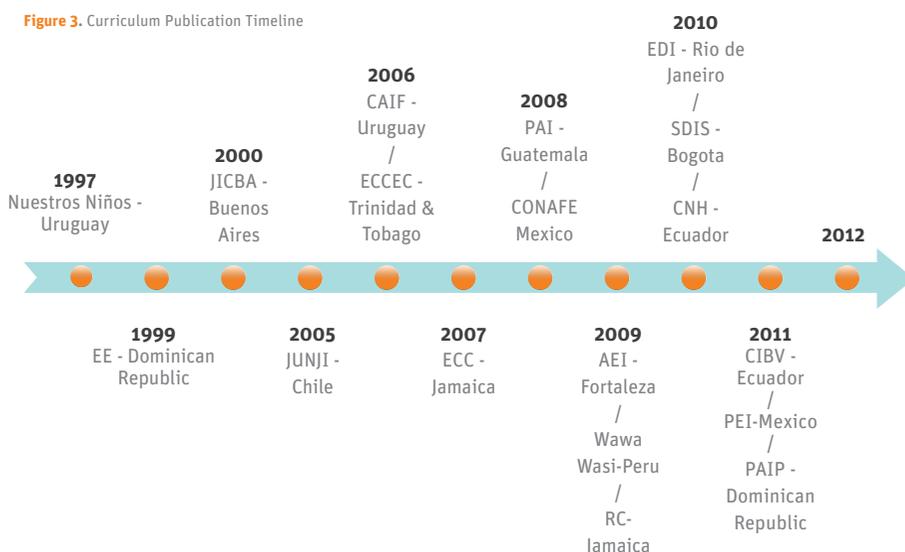
Because early learning standards and the corresponding indicators are most effective when customized for the program in which they are intended, the authors do not recommend a minimum number of indicators. Instead, once the indicators have been designed and tested, each should be reflected throughout the content of the ELG. It is important to keep in mind that while balanced, relevant, specific and accurate indicators may appear in the document, this does not imply that they are being implemented in the learning spaces where children participate or that they are absent from other

sections of the curriculum. The authors encourage early childhood education stakeholders to promote further research regarding the applicability, implementation and uses of indicators in spaces where early childhood learning takes place.

3.3. ELGs Publication Dates

Figure 3 below shows that the publication dates for the curricula spanned a 14-year time period. The oldest document included in these analyses was from *Nuestros Niños -Uruguay*, publication date 1997, and the most current were *CIBV- Ecuador*, *PEI-Mexico* and *PAIP- Dominican Republic*, publication dates 2011. The average publication date of the documents evaluated was 2007. The ELG evaluated from *PAIPN-Nicaragua* did not include a publication date.

Figure 3. Curriculum Publication Timeline



Source: Authors

3.4. Age Intervals within the ELGs

This research found that the ELGs varied by the content structured for each age and the ages covered. Overall, the ELGs spanned 0 to 6 years of age in their coverage and the number of age ranges varied from a single age range to 8 different age ranges. There were three ELGs that covered a single age range for all of the early childhood learning indicators: 0 to 6 years (*PAIP-Dominican Republic*), 0 to 2.5 (*RC-Jamaica*) and 3 to 4 years (*ECCEC-Trinidad & Tobago*). There were four ELGs that covered two age ranges but the age intervals varied. *JICBA- Buenos Aires* covered two age ranges in the following intervals: 3 months to 2 years and 3 to 5 years.⁵ *JUNJI-Chile* also covered two age ranges, but in different intervals: 0 to 3 years and 3 to 5 years, *SDIS-Bogota* addressed ages 1 to 3 years and 3 to 5 years and *PAIPN-Nicaragua* structured its ages from 0 to 3 years and then 3 to 6 years of age.

In addition, there were 13 ELGs that grouped their child outcomes into three or more age ranges. These not only varied by age intervals but they differed by the start date of each interval. For example, *PAIP-Dominican Republic* and *JICBA-Buenos Aires* both note the beginning of their early childhood outcomes at 45 days, while *CONAFE-Mexico* commences at 4 months and Peru's *Wawa Wasi* at 6 months. All others start at birth. Some, like *CAIF-Uruguay*, group their early learning outcomes into 3 months increments. *PEI-Mexico* divides its outcomes into 3 month, 5 month, 9 month and yearly increments. (See **Table 3.**)

The differences in age intervals may provide important clues to child

development expectations within a given a context. Fernald et al. (2009) note that there is “substantial variation in ‘normal’ development among infants in different cultures” (p. 42) and that identifying differences in developmental milestones may “substantially improve the ability to determine whether programs are having desired effects in a particular cultural context” (p. 43). The age groupings demonstrated among these documents in association with later findings in this report may inform stakeholders and researchers on the cultural variation associated with infant development across different contexts.

When drafting the age structure of the ELGs, the authors offer the following considerations. First, ELGs that note ages by years, instead of months, risk being unclear in their intentions. In this sample, for some of the documents, it was unclear if 2 years of age, for example, meant 24 months or 35 months. Given this wide range, programs might consider denoting learning outcomes in months at least to a point. It is possible that this clarification by month for infants and toddlers younger than 36 months of age may prove to be helpful to practitioners in the field to understand which pedagogical approach and content is most appropriate for the children they educate.

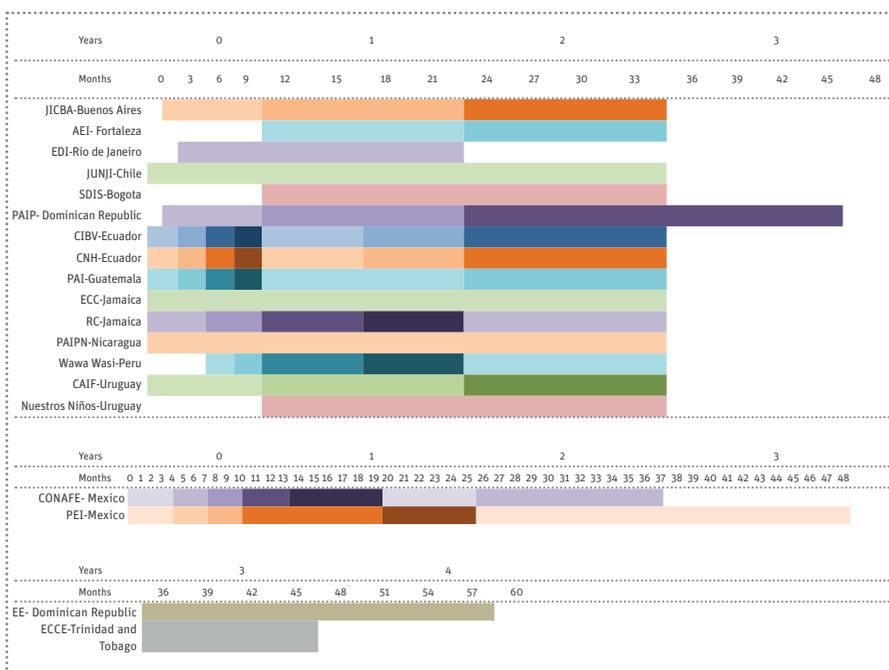
Also, when creating the age intervals, programs which cluster children into fewer groupings may set unrealistic expectations for younger children (Scott-Little et al., 2008). For example, expecting behaviors appropriate for an 18 month old child to manifest in a 12 month old child may not be realistic. Additionally, this wider variation in age-appropriate outcomes might mask children with learning

⁵ It is likely that the curriculum authors were referring to 2 years as 2 years 11 months.

differences. Identifying these children and providing the necessary support are critical in these early stages of growth and development. Equally, as noted by Scott-Little et al. (2008), age intervals should not be so rigid as to not allow for the natural variation in child development. More narrowly defined age ranges may unintentionally motivate practitioners to create more frequent and more rigorous assessments.

Finally, to provide a seamless education, these age ranges should integrate with programs which serve children beyond the age of 36 months. Gaps or misalignment in ages (and the subsequent ELGs) potentially minimize the effectiveness of these early learning programs and hinder the development of the children advancing in one program and moving to another.

Table 3. Number of Age Ranges Utilized in Latin American and Caribbean Early Childhood Documents



Each color represents the age intervals created by each program. Source: Authors



4

Domains

4.1. Conceptualization, Structure and Terms Used

This research confirmed that programs in the region varied not only in their conceptualization, but also in the structure and terms used.

This section illustrates the particular way each program conceptualizes their ELGs and highlights the diversity in terms used in Latin America and the Caribbean. This research confirmed that programs in the region varied not only in their conceptualization, but also in the structure and terms used. Throughout the documents analyzed, the terms used to define this research's conception of "domain" varied by program regardless of language. For example, "area" was used by *AEI-Fortaleza*, *PAI-Guatemala* and both program documents evaluated from Ecuador, *CIBV* and *CNH*. "Dimensions" was the term utilized in *SDIS-Bogota* and in *CAIF-Uruguay*. On the other hand, both program documents analyzed from the two programs in Mexico, *CONAFE* and *PEI*, as well as that from *PAIPN-Nicaragua*, selected the term "field" for their concept of domain. *JICBA-Buenos Aires* used the word "experiences" while *EE-Dominican Republic* and *Nuestros Ninos-Uruguay* used "development." The *ECC-Jamaica* titled its domains "development objectives," and *RC-Jamaica* used "learning outcomes." Finally, *Trinidad & Tobago* termed their domains, "strands."

The number of domains also varied from 3 (*JICBA-Buenos Aires*, *PAIP-Dominican Republic*, *EE-Dominican Republic* and *PAIPN-Nicaragua*) to 10 (*RC-Jamaica*). Interestingly for one program, the structure of the domains varied depending on age. The two documents analyzed from *JICBA-Buenos Aires* noted different domains for

different age groupings. Specifically, indicators for children between the ages of 45 days to 2 years were categorized under headings titled "Experiences for the Construction of Identity and Interaction with Others," "Experiences for Expression and Communication," and "Experiences for Exploring the Environment," while the indicators for children aged 2 to 3 years are categorized under "domains" titled "Experiences for the Construction of Identity and Coexisting with Others," "Experiences for Body Development," "Experiences to Begin to Explore the Environment," and "Experiences for Expression and Communication."

There was evidence that many of the programs include some form of the four domains used in these analyses. For example, 15 of the 19 documents had domains which noted motor skills development in the title. Some examples of the titles included "Movement" (*RC-Jamaica*), "Motor Development" (*ECC-Jamaica*), "Body Dimension" (*SDIS-Bogota*), "Body and Movement" (*EDI-Rio de Janeiro*), "Motor Dimension" (*CAIF-Uruguay*), and "Physical-Motor Development" (*Nuestros Ninos-Uruguay*). Both of Ecuador's programs, *CIBV* and *CNH*, and *Wawa Wasi-Peru* had motor skills divided into two different domains: gross motor skills and fine motor skills. Other domains noted by programs implied physical development but were either not as clearly noted or physical development was combined with some other concept, such as the environment or culture. For example, the *JICBA-Buenos Aires* noted a domain titled "Experiences Exploring the Environment" for children aged 45 days

to 2 years and “Experiences to Begin to Explore the Environment” for children aged 2 to 3 years of age. However, *JUNJI-Chile* only had one domain for this area and it was combined with environmental and cultural concepts in “Relationship with the Environment and Culture.” Mexico’s *CONAFE* joined exploration with an understanding of the environment in “Exploration and Knowledge of the Environment Field.” Those programs whose domains did not make explicit reference to physical development include the documents, *PAIP-Dominican Republic*, *EE-Dominican Republic*, *PAIPN-Nicaragua* and *AEI-Fortaleza*.

With regard to the Language domain, all of the program documents mentioned some form of language development in their domain titles. Many combined the concept of language with communication. For example, both program documents from *JICBA-Buenos Aires* have titled this domain, “Experiences for Expression and Communication.” Titles for the *RC-Jamaica*, *PAI-Guatemala*, *CONAFE-Mexico* and *Nuestros Ninos -Uruguay* are all similarly named. In addition, both *AEI-Fortaleza* and *EDI-Rio de Janeiro* titled their language domains similarly as “The Area of Oral and Written Language in Early Childhood Education” and “Oral and Written Language (Speaking, Reading, Writing).”

In the Cognitive domain, 15 of the 19 documents analyzed clearly listed cognition in the title of one of their domains. Many of these titles listed the term “cognitive” alone and did not merge it with other concepts. Some of these include *Nuestros Ninos-Uruguay*, *CAIF-Uruguay*, *PAIP-Dominican Republic*, *EE-Dominican Republic*, *ECC-Jamaica*, *PAI-Guatemala*, *CNH-Ecuador*, *CIBV-Ecuador* and *SDIS-Bogota*. Others parceled out different indicators from within the Cognitive domain and listed them as their own independent

domains. For example, *RC-Jamaica* notes time, quantity and numbers as domains and *EDI-Rio de Janeiro* parcels out math and natural and social sciences as independent domains. Some of the programs have implied cognition in the titles but the distinction is not so clear. For example, *PEI-Mexico* has a domain titled “Field of Experience: Knowledge and Self-Care” and *JUNJI-Chile* has “Relationship with the Natural Environment and Culture” which includes “Logical Mathematic Relations and Quantification.”

In the Social-Emotional domain, all of the programs noted emotional or social aspects in the titles of one or more of their domains. As with the other domains, verbiage differences and inter-related nature of development was evident. For example, *JUNJI-Chile*, *SDIS-Bogota*, *CIBV-Ecuador*, *CNH-Ecuador*, *ECC-Jamaica*, *RC-Jamaica*, *CONAFE-Mexico*, *PAIPN-Nicaragua*, *Wawa Wasi-Peru* and both program documents from Uruguay, *Plan CAIF* and *Nuestros Ninos*, and both Dominican Republic programs, *EE* and *PAIP*, all have domain titles which related to social and/or emotional development.

Interestingly, *CONAFE-Mexico*, notes one of its four domains as “Care and Child Protection Field.” This was the only program to include child protection as a specific domain.

In addition to these conceptual differences and variation in terminology in domains and domain titles, differences also existed for the terms utilized for “indicators.” The researchers found terms such as “capacities,” “skills,” “evidence of learning,” “contents” and “indicators.” (See **Appendix A** for a list of the terms utilized). These variations in terms used for indicators and domains illustrate how differently programs conceptualize learning outcomes for the children participating in their

programs. The benefit of this variation is that it allows programs to customize and categorize their learning outcomes according to those which best fit their values, objectives and context. Also, it highlights how countries view the inter-related nature of child development for their specific context. For example, an in-depth analysis of how one program conceptualizes and structures language development as compared to another would serve as a strong contribution to existing research. Despite having such a rich view of conceptual diversity, early childhood education stakeholders from different programs may have trouble communicating similar concepts given the wide range of domain titles and indicator terms used. Furthermore, if a program designed for infants and toddlers below the age of 36 months chooses to foster a relationship with a program designed for older children, aligning different domains and indicators may be problematic given the variation in structure, conceptualization and terms. It is for these reasons that this research focused on early learning indicators and organized each within four domains. (See **Table 4** below for a detailed account of the various domains utilized in the documents.)

4.2. Breadth Analysis- Evaluating the Emphasis of Each Domain

Upon initial inspection, the researchers considered how many of the 71 indicators were found in each of the evaluated documents. The number of indicators utilized can measure how “complete” the program intentions are in terms of the presence of child based outcomes within the archival ELGs. This report uses the term “complete” only in as much as the archival ELGs are reflected in this 71 indicator framework. The following analysis suggests some

fundamental methods to evaluate the consistency of goals and objectives for each program.

On average in the sample (n=17), approximately 39 indicators (S.D. = 9.84), or more than half of the 71 indicators, were found in the sections of the analyzed documents. As a whole, center programs (child development center program and community center programs) contained slightly more indicators (n= 40, S.D. = 10.09) than parenting programs (n=38, S.D. =10.44). However, separately analyzing the three types of programs included in this research, child development centers, community centers and parenting programs, revealed interesting findings. Child development centers (n=10) had the greatest number of indicators, on average, at 41 (S.D. = 10.02), while community center programs (n=4) had the lowest average number of indicators found, at 36 (S.D. =10.47). Parenting programs (n=3) fell in between these with an average of 38 (S.D. = 10.44) (See **Table 5** below). In terms of the number of indicators found, programs which take place within child development centers could be considered, on paper, more “complete” than the other two program types. Also, the average parenting program could be considered, on paper, more “complete” than the average community center program.

While child development center programs enjoyed the highest number of indicators, this program type also showed the greatest variation in the total number of indicators found. *PEI-Mexico* had the fewest number of indicators (n=22) while *ECC-Jamaica* contained the highest number (n=55). Parenting programs had the least amount of variation in their range. *RC-Jamaica* had the lowest number of indicators found (n=31) and *CONAFE-Mexico* had the highest (n=50). Programs within community centers

Table 4. Domains by Program Abbreviation and Document Title

PROGRAM ABBREVIATION	DOCUMENT TITLE	DOMAINS
JICBA-Buenos Aires	Diseño Curricular para la Educación Inicial- Niños desde 45 días hasta 2 años	Experiences for the Construction of Identity and Interaction with Others Experiences for Expression and Communication Experiences for Exploring the Environment
JICBA-Buenos Aires	Diseño Curricular para la Educación Inicial- Niños de 2 y 3 años	Experiences for the Construction of Identity and Coexisting with Others Experiences for Body Development Experiences to Begin to Explore the Environment Experiences for Expression and Communication
AEI-Fortaleza	Proposta Pedagógica de Educação Infantil	The Area of Art in Early Childhood Education The Area of Natural and Social Sciences in Early Childhood Education The Area of Oral and Written Language in Early Childhood Education The Area of Mathematics in Early Childhood Education
EDI-Rio de Janeiro	Orientações Curriculares para a Educação Infantil	Oral and Written Language (Speaking, Reading, Writing) Mathematics (Math Skills) Social and Natural Science Body and Movement Artistic Language: Music Artistic Language: Visual Arts
JUNJI-Chile	Bases Curriculares de la Educación Parvularia	Personal and Social Formulation Communication Relationship with the Environment and Culture
SDIS-Bogota	Lineamiento Pedagógico y Curricular para la Educación Inicial en el Distrito	Personal-Social Dimension Body Dimension Communication Dimension Artistic Dimension Cognitive
PAIP-Dominican Republic	Propuesta Curricular del Programa de Atención Integral para la Primera Infancia	Cognitive Linguistic and Expressive Socio-Emocional
CIBV-Ecuador	Guía Operativa para Promotoras y Coordinadores de los Centros Infantiles del Buen Vivir	Cognitive Area Language Area Personal Social Area Fine Motor Area Gross Motor Area

PROGRAM ABBREVIATION	DOCUMENT TITLE	DOMAINS
CNH-Ecuador	Guía Operativa para Promotoras de Creciendo con Nuestros Hijos	Cognitive Area Language Area Personal Social Area Fine Motor Area Gross Motor Area
PAI-Guatemala	Currículo Nacional Base Nivel Inicial	Learning Area Communication and Language Area Knowledge of the World Area Artistic Stimulation Area Motor Area
ECC-Jamaica	The Jamaica Early Childhood Curriculum Guide	Motor Development. Language Development. Cognitive Development. Social/Emotional Development.
RC-Jamaica	The Roving Caregivers Early Childhood Home Visiting Programme - Guide for Training Rovers	Sense of Self. Social Relations. Creative Representation. Movement. Music. Communication and Language. Exploring Objects. Early Quantity and Number. Space. Time.
CONAFE-Mexico	Antología de Apoyo	Care and Child Protection Field Personal and Social Field Language and Communication Field Exploration and Knowledge of the Environment Field
PEI-Mexico	Modelo de Atención Integral del Programa de Estancias Infantiles	Field of Experience : Knowledge and Self-Care Field of Experience: Participatory Interaction with the Social Environment Field of Experience: Interaction and Care of the Physical Environment Field of Experience: Thought, Language and Creativity
PAIPN-Nicaragua	Programa curricular 0-3 años	Personal and Social Formulation Field Communication Field Understanding the World Field

PROGRAM ABBREVIATION	DOCUMENT TITLE	DOMAINS
Wawa Wasi-Peru	Lineamientos técnicos para la promoción del aprendizaje infantil temprano en el programa Nacional Wawa Wasi	Basic Habits Personal Social Gross Motor Fine Motor Object Relationship Time Space Communication
CAIF-Uruguay	Diseño Básico Curricular para niños y niñas de 0-36 meses. Dirección de Educación del Ministerio de Educación y Cultura	Motor Dimension Cognitive Dimension Emotional Dimension Social Dimension Contents: Knowledge of Self Knowledge of Environment Communication Mathematics Activities of Daily Living
Nuestros Niños - Uruguay	Modelo de intervención socio- educativa en el marco de una política de descentralización y participación ciudadana. Programa “Nuestros niños”. I.M.M. UNICEF	Socio-Emotional Development Communication and Expressive Development Physical-Motor Development Cognitive Development
EE-Dominican Republic	Plan decenal de educación en acción	Cognitive (Intellectual) Development Expressive or Language Development Socio-Emocional Development
ECCEC-Trinidad & Tobago	Early Childhood Care and Education Curriculum Guide	Strand: Wellness Strand: Effective Communication Strand: Citizenship/Belonging Strand: Intellectual Empowerment Strand: Aesthetic Expression

Source: Authors

fell in between. *Wawa Wasi-Peru* had, on average, the fewest indicators found (n=22) and *PAI-Guatemala* had, on average, the greatest number (n=46) found within this program type. For the sample (n=17), *PEI-Mexico* and *Wawa Wasi-Peru* had the fewest number of indicators (n=22) and *ECC-Jamaica* had the greatest number (n=55).

The range in the number of indicators found reflects the large variation in the “completeness” of ELGs on paper. For example, child development centers showed the largest variation (minimum of 22, maximum of 55). Therefore, in these analyses, a more formalized location does not necessarily predict a more “complete” program in terms of

Table 5. Breadth Analysis Descriptive Data- All Programs

	NUMBER OF INDICATORS		TOTAL NUMBER OF INDICATORS	TOTAL NUMBER OF INDICATORS
	Mean	Standard Deviation	Range (Min-Max)	Range (Min-Max)
Parenting Programs (n=3)	38	10.44	31-50	129-448
Centers (n=14)	40	10.09	22-55	50-710
Community Centers (n= 4)	36	10.47	22-46	53-710
Child Development Centers (n=10)	41	10.02	22-55	50-459
Sample (n=17)	39	9.84	22-55	50-710

Source: Authors

the number of indicators found in the program’s ELGs. Community center programs, while they yielded a lower number of indicators on average, also were more stable in terms of the “completeness” of their early learning guidelines (minimum of 22, maximum of 46) than child development centers (minimum of 22, maximum of 55). However, parenting programs demonstrated the least amount of variation (minimum of 31, maximum of 50). That being said, the authors contend that what is noted on paper may not accurately reflect the daily practices within the learning spaces. While one program may show a higher number of indicators than another program, the extent to which these indicators are reflected in the training manuals, absorbed by the trainer or teacher, and implemented in the home or classroom on a regularly basis, is a very different analysis. Instead, program managers and ELG authors, especially those whose programs fell below the mean, can use this information to evaluate their curriculum and consider if the richness of their program is accurately reflected in their

ELGs. (See also **Depth Analysis**, which is included later in this paper, for an additional strategy for evaluating the “completeness” of ELGs).

Because indicators can present themselves repeatedly, the researchers also considered how many times the 71 indicators were mentioned within the ELGs. In sum, the 71 indicators were coded 3,519 times in the sample, or approximately 200 times per document. In community center programs, the indicators were found 1,083 times or, on average, approximately 271 per document. On average, this was the greatest number of indicators found per program type. Parenting programs had the second highest number of indicators found, with 250 on average per document, or a total of 749. The fewest number of indicators were found in child development center programs. In these ELGs for child development center programs, the indicators were found 1,687 times, or on average approximately 169 per document.

The range of indicators mentioned also varied considerably. Community center

programs had the widest range, with a minimum of 53 and a maximum of 710; parenting programs showed a minimum of 129 and a maximum of 448; and child development center programs fell in between, with a minimum of 50 and a maximum of 459. This variation is unsurprising given the multiple formats used among the analyzed documents and the absence of an internationally accepted structure.

It is important to note that the repeated presence of indicators does not necessarily signify a more robust program, nor does it imply that the indicators are being implemented in the learning environment. However, they do inform researchers of the overall emphasis given to certain skill sets within the ELGs. For example, the 46 indicators found within *PAI-Guatemala* presented themselves over 700 times in that document compared to *PEI-Mexico* in which the 22 indicators found were noted only 50 times in that document. There is no “ideal” number in terms of the total number of indicators. Too numerous and repetitive indicators may cause confusion and minimize use. Conversely, too few indicators may be incomplete and biased. Instead, the authors define the ideal number of indicators as that which is most effectively represents the ELGs authors’ intended goals and objectives.

4.3 Breadth Analysis

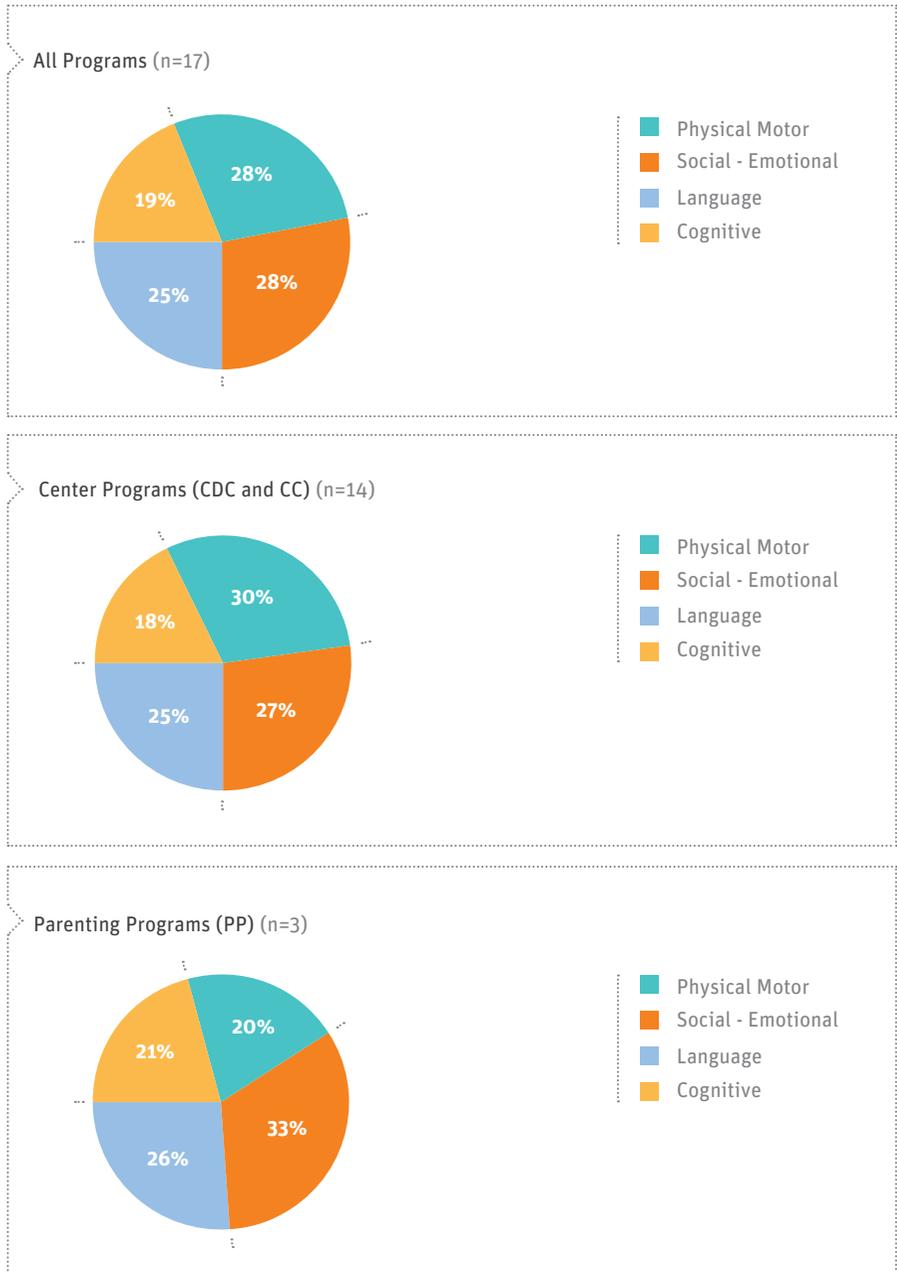
To conduct a breadth analysis, the total number of indicators coded is summed and the percentage for each is calculated. The total of these percentages equals 100%. The framework was composed of 12 indicators in the Physical Motor domain, 22 in Social-Emotional domain, 17 in the Language domain and 20 in the Cognitive domain, for a total of 71 indicators. The analysis below parcels

out this total by domain and program. In analyzing the distribution of these four domains for the different types of programs, as a whole, the 17 programs place the greatest emphasis on indicators related to Physical Motor and Social-Emotional skills. Both domains were emphasized at 28%. Finding a high percentage in the presence of the Social-Emotional domain was unsurprising, since it contains the largest number of indicators. However, because the Physical-Motor domain has the fewest number of indicators and it equaled the breadth percentage for the Social-Emotional domain, this demonstrates that programs place a heavy emphasis on children’s physical skills. Conversely, the Cognitive domain, which was second in terms of the number of indicators, appeared least often in the entire sample, demonstrating a minimized emphasis of these skills sets. These differences will be evaluated in more detail further in the paper (See **Depth Analysis**).

Analyzing the parenting programs and center programs (child development center and community centers together) yielded different results. The findings of this analysis contradict the general idea that center programs place a heavier emphasis on cognitive skill sets. Instead, in this analysis, center programs placed a greater emphasis on Physical Motor skill sets than parenting programs. Overall, parenting programs showed a fairly even distribution between the four domains. The Social-Emotional domain had the greatest presence at 33%, which, as previously noted is not unsurprising, given that this domain has the largest number of indicators. The Language domain was nearly equal between child development center and community center programs. See **Figure 4** below.

Teasing apart the two different types of center programs, community centers and child development centers,

Figure 4. Breadth of Domains-All Programs

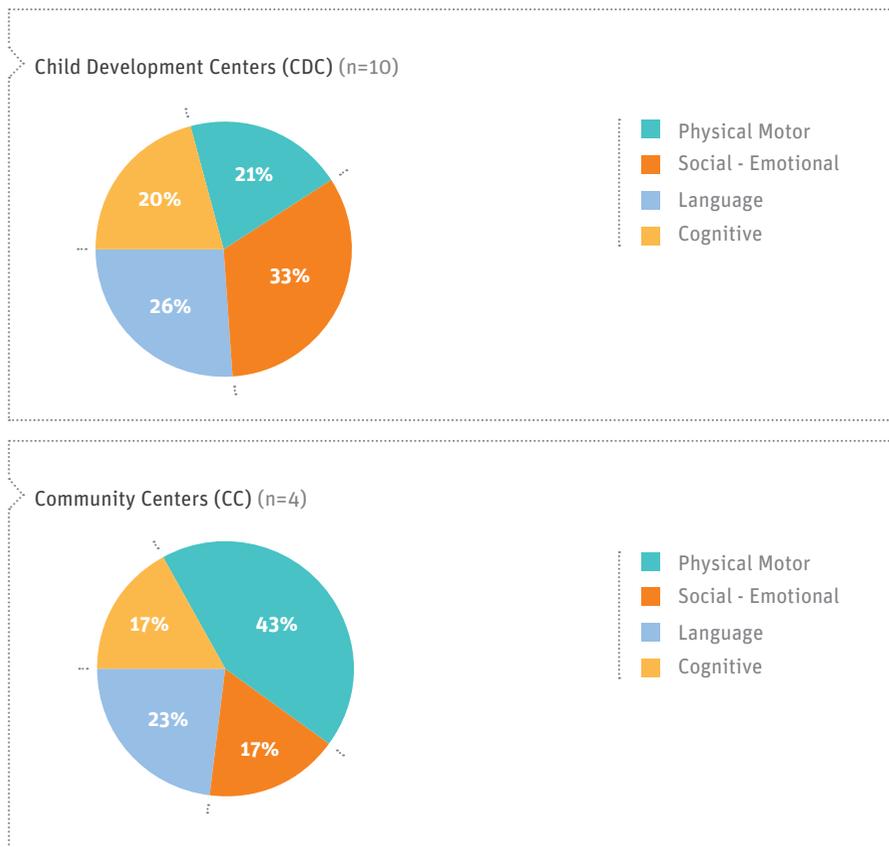


Source: Authors

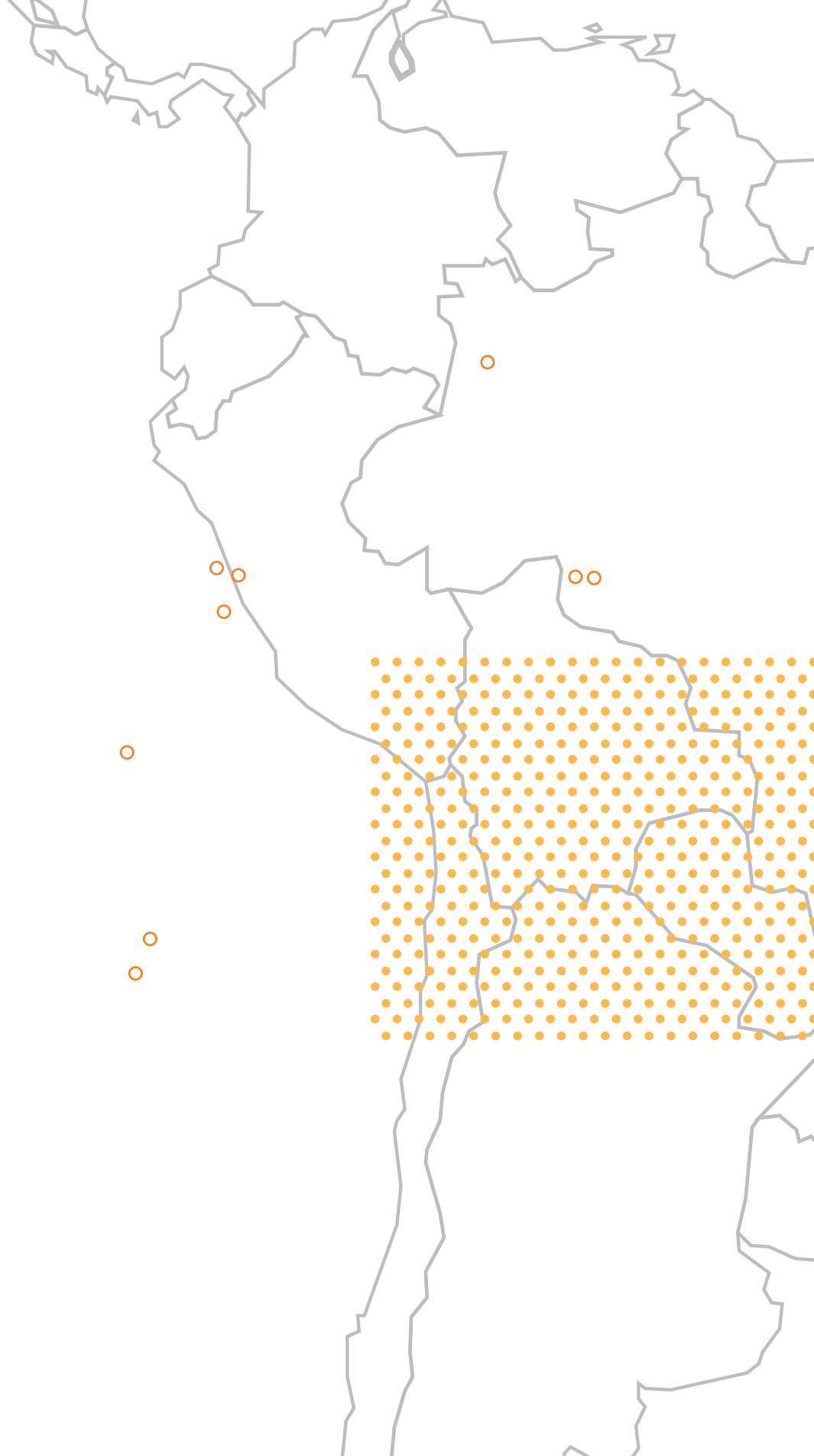
revealed interesting findings. **Figure 5** below illustrates that programs which take place within child development centers are, overall, more balanced than those which take place within community centers. For example, community center programs emphasize Physical Motor skills at 43% as compared to child development centers which emphasized the same domain almost half as much at 21%. Community center programs placed an emphasis on Social-Emotional skills at 17%

while programs in child development centers emphasized them at twice the rate, or 33%. Interestingly, the Cognitive domain, which has only one less indicator than the Physical Motor domain, ranked lower in terms of emphasis for child development centers and community center programs. Similarly to the overall sample, this lower percentage in the presence of the Cognitive domain demonstrates a minimized presence across all programs.

Figure 5. Breadth of Domains- Center Programs (Child Development Centers and Community Centers)



Fuente: Autoras





5

5.1. New Indicators

Eight new indicators were created to respond to the content in the ELGs. These new indicators were added based upon consistent evidence found in the documents analyzed. Prior to evaluating the presence of all of the 71 indicators within the three types of programs and in the sample as a whole, definitions for these new indicators will be briefly discussed. The research (noted below) supporting the inclusion of these new indicators is not intended to be exhaustive. Instead, the descriptions and discussions serve as a starting point for future research on early childhood development in Latin America and the Caribbean.

New indicator framework relevant to the analysis of ELGs produced and applied in Latin America and the Caribbean.

Given the tenuous nature of applying a foreign framework of indicators to an investigation of ELGs produced in the region, the researchers carefully analyzed the context and intention of each set of early learning guidelines and sought to identify “emerging content” which reflect the priorities of local and national governments for the development of children between 0 to 36 months in Latin America and the Caribbean. This methodological approach was designed to capture, to the extent possible, the diversity in the sample. Each of the 8 new indicators is discussed briefly below.

1. Music (Language Skills)- “Exploration and expression of ideas and feelings through the voice, body language (sense of rhythm) and the use of instruments.”

Music maintained a considerable presence within the documents

analyzed. The research supporting the inclusion of music as its own indicator is compelling. For example, Castiblanco (n.d.) stated that music, separately from other verbal forms of communication, supports language, socio-emotional and physical development of children. Specifically, Castiblanco (n.d.) stated that, “Music creates sensory experiences that allow children to recognize their body, its multiple possibilities of movement and develop coordination and balance. It also strengthens language development through rhymes, songs and onomatopoeia, while it becomes a space where children socialize and internalize different concepts that are part of everyday life”. Further research shows that music can be used as a vehicle for children to gain respect and value different cultures. Woodward (2007) states that including music in early childhood programs fosters an environment for “respecting and nurturing each child’s cultural heritage” (p. 35). While music impacts multiple domains in the child development process (Woodward, 2007), based upon the definitions of the four domains of development in this report, “music” was situated in the Language domain.

2. Play (Social-Emotional)- “The capacity to participate in and enjoy individual or collective recreational activities.”

While “exploratory play” and “symbolic play” were each included in the Scott-Little et al. (2008) framework, evidence presented itself which valued play for reasons other than exploration or make-believe. As support for this inclusion, the following research is offered.

Research shows that play, in general, “[...] is essential to the cognitive, physical, social, and emotional well-being of children and youth” (Ginsburg, 2007, p. 182). Play “can be an exceptional way to increase physical activity levels in children, which is one important strategy in the resolution of the obesity epidemic” (Ginsburg, 2007, p. 183). In addition, Bodrova & Leong (2005) had the following to say: “There is a growing body of research that shows a link between play and the development of cognitive and social skills that are prerequisites for learning more complex concepts as children get older. For example, play is linked to growth in memory, self-regulation, oral language, and recognizing symbols. It has been linked to higher levels of school adjustment and increased social development. Furthermore, play has been linked to increased literacy skills and other areas of academic learning” (p. 6). Besides all these reasons, researchers valued the presence of “play” as a space for pleasure and joy, a critical activity during the first years of life. Given that “play” is not defined in these terms within “symbolic play” or “exploratory play”, “play” was added in the Social-Emotional domain as a more general but critical aspect of child development.

3. Participation (Social-Emotional)-

“Interest in being included and taking part in activities that promote one’s membership in a particular group.”

Different from “initiative” and “social play”, “participation” captures a child’s interest and desire to be not only included in social groups and activities, but also heard and recognized as a right-holder. The research on the topic (Jiménez, Londoño & Rintá, 2010; Bennet, 2008; Garzón, Pineda & Acosta, 2004; Amar, 2000; Medina, 2000; Suárez, Negrete & Viveros, 2000) support the conclusion that “early childhood institutions should

be considered not just as centres that supply services to consumers (childcare, early education, preparation for school, etc.), but as children’s spaces, domains of negotiated social practice and relationships within specific communities” (Bennett, 2008, p. 7). This indicator promotes the active participation of children in learning spaces, which is critical in forming responsible and active citizens.

4. Personal Care Routines (Physical Motor)-

“Self-care and hygiene habits, such as washing hands and brushing teeth.”

This indicator highlights specific self-care habits which serve as strong contributors to the overall health of the child. This includes bathing, hand washing, teeth brushing, nail cutting and hair care. While “self-help skills” captures curriculum content that fosters a child’s ability to participate in self-care routines, such as dressing or putting on his or her shoes, “personal care routines” focuses specifically on skills which develop a child’s ability to contribute positively to his or her own health.

5. Security (Cognitive)-

“The ability to develop habits that permit one to provide for one’s own health and personal security.”

This indicator is designed to capture ELG content related to children’s personal safety. This includes habits such as holding hands and looking both ways to make sure a car is not coming before crossing the street. This indicator captures the content referring to “life skills” within the ELGs.

6. Environmental Awareness (Social-Emotional)-

“The capacity to participate in activities that contribute to the care of the environment and the conservation of natural resources.”

This indicator captures ELG content related to environmental awareness. Literature on this topic highlights the importance of fostering this skill set within early childhood education. Specifically, Hagglund and Samuelsson (2009) argue that pre-school education is not immune to the political and economic forces involved in planning and conducting education for sustainability. Moreover, the primary conclusion from the international workshop on “The Role of Early Childhood Education for a Sustainable Society” held at the Goteborg University in 2007 established “a general agreement that early childhood education has all the necessary requirements for contributing to education for sustainability. Its professional competences, cultural experiences, interdisciplinary knowledge base, and personally engaged young and grown up participants were all examples of the arguments that were brought forward.”

7. Interculturalism (Social-Emotional)-

“The ability to relate to expressions of one’s own culture and establish equitable relationships with members of other communities.”

This was, perhaps, one of the most significant contributions to the Scott-Little et al. (2008) framework. The research on this topic is extensive (Nieto, 2004; Banks, 2004; UNESCO, 2006; Palaiologou & Faas, 2012). Different from “self-concept” or “self-awareness,” early learning guidelines on “interculturalism” promote a child’s awareness of the similarities and differences in other cultures and communities but in such a way which sees them as equal to his or her own. UNESCO has conducted extensive

research on this topic and offers resources to aid in the development of intercultural education.⁶ Specifically in the field of early childhood education, Berthelsen & Karuppiyah (2011) state “Since children’s attitudes toward their own and other cultural groups begin to form in the early years, early childhood teachers can influence the development of positive attitudes towards others, as well as incorporating a curriculum focus on tolerance and cross-cultural understanding of others” (p. 38). Further, by toddlerhood, children can differentiate using race and gender labels (Ramsey, 2004), but lack an understanding of what these labels mean and their future social consequences (Sprung, 2007, Ponciano & Shabazian, 2012). As noted by Ponciano & Shabazian (2012), “As a consequence of young children’s growing positive feelings about their in-group, there is a simultaneous increase in negative feelings toward out-groups” (p. 25). The inclusion of this indicator in the analysis framework seeks to promote respect and appreciation for others from an early age, which may contribute to openly challenging racism in the region.⁷

8. Conflict Resolution (Social-Emotional) - “The ability to arrive at an agreement with others through dialogue.”

“Conflict resolution” skills speak to peace education or, more specifically, “about creating conditions that are conducive to lasting peaceful relations among individuals, communities and society at large” (UNICEF, 2011, p. 1). UNICEF (2011) finds that “early childhood development programmes can be instrumental in building peace in several ways” (p. 1) at

⁶ See UNESCO (s.d.) Directrices de la UNESCO sobre la educacion intercultural. Retrieved from <http://unesdoc.unesco.org/images/0014/001478/147878s.pdf>

⁷ See UNHCR. (2012). “Regional Operations Profile- Latin America” for information on refugees in Latin America. Retrieved from <http://www.unhcr.org/pages/49e45be46.html>

both the individual and community levels. Although its inclusion in early childhood curriculum is not a new concept, prior to this research, “conflict resolution” had not been included as a measure of the early childhood learning guidelines. The authors of this report believe that this indicator is especially important for programs that work with parents, caregivers and members of the community as these spaces provide a “significant potential to promote peace and strengthen intra- and inter- community relations” (UNICEF, 2011, p.2). Early childhood development programs have the ability to lay the foundation for a peaceful cohabitation, as they can “reach across political divides and... encourage the differing sides in conflict to develop alternative visions of the future based around the needs of children” (Connolly and Hayden 2007, p. 6). Incorporating this skill set into the curriculum for children, especially those closer to 36 months of age, may be appropriate. At this age, not only do children learn social skills, but also, a key component of these skills is to learn how to reconcile. As said by Tremblay et al., (2008) “Learning how to reconcile after a conflict can greatly reduce potential future aggressive interactions and help to restore cooperation between the antagonists” (p. 11).

5.2. Depth Analysis- Evaluating the Presence of Indicators within Domains

These analyses include an evaluation of the presence of individual indicators within each domain. Complimentary to the earlier breadth analysis, this depth analysis helps inform those responsible for designing, implementing and evaluating public policy related to early

childhood development on the presence of each of the 71 indicators by program type. Program-specific depth analyses are included in the **Program Summaries** located in the **Annexes 3-19** at the conclusion of this report.

5.2.1. Descriptive Statistics

The following **Table 6** provides the descriptive statistics for the depth analysis which follows. This table highlights how many of the indicators were found for each of the four domains in the different types of programs for children younger than 36 months of age. Evaluating the depth of indicators found is another way of analyzing the “completeness” of the ELGs for each type of program. The framework of 71 indicators was composed of Physical Motor (n=12), Social-Emotional (n=22), Language (n=17) and Cognitive (n=20). Analyzing the sample (n=17) revealed that 97% of the 71 indicators were found. There were only two indicators which were not found in any of the ELGs evaluated. These were “communicating in a second language” and “flexibility.” These will be discussed in more detail in the **Language Domain** and **Cognitive Domain** sections further on in this paper.

The different types of programs showed large variation in the number of indicators found. Child development center programs, as a whole, had the highest number of indicators found at 96% (n=68). Community center programs were second with 82% (n=58) of the total number of indicators found and parenting programs were third with 75% (n=53). To be clear, there is no single child development center program which contains 68 indicators, nor is there a community center program which contains these 58

indicators or a parenting program which has all 53 indicators. Similar to the previous evaluation conducted in the descriptive data portion of the breadth analysis, child development center programs are the most complete on paper, in terms of these 71 indicators. However, evaluating the indicators with this method reveals larger gaps among the domains by program type.

In terms of the Cognitive domain, parenting programs utilized only half of the number of indicators included in this section of the framework. The researchers did not find evidence for 9 of the 20 Cognitive indicators in the parenting program's ELGs. Community center programs contained 70% (n=14) of Cognitive indicators or said another way, 30% of the number of indicators were absent in the community center programs. Compare this to child development center programs which, as a whole, were only missing "flexibility" on paper.

The Physical Motor domain showed disparity. Community center and child development center programs, as a whole, included over 90% of the 12 indicators. Parenting programs included 67% of the indicators utilized for this domain. In the Language domain, community center programs noted fewer of these indicators on paper than parenting and child development center programs. Community center programs included over 80% of the indicators and parenting programs and child development center programs each contained 94% of these.

In the Social-Emotional domain, over 80% of the indicators utilized in this framework were found in the ELGs for parenting programs and child development center programs. Child development center programs contained 100% of the indicators for this domain.

The presence of each of the 71 indicators among the 4 domains is parceled out by program in the depth analysis below. The variation in the number of indicators found can be used as another measure of how "complete" a program is in comparison to the 71 indicators used in this framework. In this analysis, parenting programs are much less "complete," especially with regard to cognitive and physical motor skill sets than community center and child development center programs. As previously noted, parenting programs are fundamentally different from programs which operate in centers. Furthermore, within center programs, community center programs are less "complete," especially with regard to cognitive skill sets than child development center programs. Differences also exist between community center programs and child development center programs in social-emotional and language skill sets. In both the Social-Emotional and Language domains, child development center programs were more "complete" on paper than community center programs.

5.2.2. Physical Motor Domain

Evaluating the presence of the individual indicators within the sample, child centers and parenting programs revealed clear similarities and differences. **Table 7** below shows that parenting programs emphasized a more narrow distribution of physical motor skills compared to the overall sample and child center programs. Of the 12 indicators listed in this domain, only 8 (or approximately 67%), were represented in parenting programs. Conversely, 100% of these indicators were noted within the ELGs for programs situated in centers, when child development center and

community center programs are evaluated as a single group. However, teasing apart the two different types of center programs revealed that “personal care routines” was not located within the child development indicators for community center programs and “reflexes” was not found within child development center programs. In short, none of the three different programs types included all 12 indicators from this domain.

One of the most significant findings in this domain is the absence of indicators for “reflexes,” “physical fitness,” “personal care routines” and “nutrition” within the parenting programs. Of the nearly 800 codes logged in for parenting programs, none, according to the definitions used in this analysis, were related to these behaviors and practices. Likewise, for programs located in centers, specifically those in community centers, “nutrition” and “physical fitness” were each emphasized at less than 1%, and “personal care routines” was not represented at all. “Personal care routines” includes skill sets such as hand washing, hair care and teeth

brushing which are emerging skill sets for this age. Center based programs, specifically child development centers, emphasized “nutrition” and “personal care routines” at approximately 4% each. These percentages, despite being larger than those noted in community center and parenting programs, might be increased due to the importance of these preventative care habits.

Overall, in the sample, all programs placed the greatest emphasis on “gross motor” skills. This single indicator comprised well over 30% of the total number of indicators found within this domain for the entire sample, parenting programs and center programs, specifically those which take place in community centers. However, within center programs, child development centers noted a lower emphasis on “gross motor” skills, at 21%. This difference may not be to the disadvantage of child development center programs, as lower percentage on “gross motor” skills is a result of a stronger presence of other indicators. For example, “sensory integration,” “physical state regulation,” “attention,” “physical fitness” and, as previously

Table 6. Depth Analysis Descriptive Data - All Programs

	PHYSICAL MOTOR (N=12)		SOCIAL-EMOTIONAL (N=22)		LANGUAGE (N=17)		COGNITIVE (N=20)		OVERALL (N=71)	
	No	%	No	%	No	%	No	%	No	%
Parenting Programs (n=3)	8	66.67	18	81.82	16	94.12	11	55.00	53	74.65
Centers (n=14)	12	100.00	22	100.00	16	94.12	19	95.00	69	97.18
Community Centers (n=4)	11	91.67	19	86.36	14	82.35	14	70.00	58	81.69
Child Development Center (n=10)	11	91.67	22	100.00	16	94.12	19	95.00	68	95.77
All (n=17)	12	100.00	22	100.00	16	94.12	19	95.00	69	97.18

Source: Authors

mentioned, “nutrition” were more highly represented in child development center programs than community or parenting programs.

The emphasis on “fine motor” skills was in general ranked second or third by the different types of programs. These percentages ranged from 14% (in community center programs) to 23% (in parenting programs). One reason that parenting programs may place a higher emphasis on “fine motor” skills than programs based in child care centers is resource availability. Smaller objects are easier for traveling trainers to carry and for mothers to utilize in the home compared to larger and perhaps more expensive objects or art materials. Conversely, this emphasis may have been unintentional.

“Development of senses” was third in emphasis for the entire sample, as well as in programs within centers. Interestingly, both child development centers and parenting programs emphasized “self-help skills” third-highest within this domain. This indicator includes routines and activities carried out in a group, with the active participation of the child. Noting that “personal care routines” was not included in the parenting programs hints that the child-based indicators include participation in family routines but not those related to health.

It is plausible that the relatively low representation of indicators within the Physical Motor domain can be explained by the existence of guidelines listed in documents that were not included in this sample. Such an explanation points to a missed opportunity for the health and education sectors to coordinate efforts. Conversely, this low emphasis may simply be an oversight in considering health related habits for this age group. Overall, the research on this domain shows programs housed

in child development centers are the most “complete” on paper in terms of their physical motor indicators than parenting programs.

This research cannot conclusively state a relationship among a program’s type, its location (urban vs. rural) and the content of the ELGs. However, future research could identify the location (urban vs. rural) of the three different types of programs in the sample and analyze if the location of the program is contributing to educational inequity in the region.

Again it is worth noting that the realities of daily practice may differ from the intention of the ELGs’ authors. However, incorporating indicators which represent “nutrition,” “personal care routines,” “physical fitness” and “reflexes” into the ELGs for the most at-risk children cared for in parenting programs is a critical first step in assuring such children receive the care they require.

5.2.3. Social-Emotional Domain

All of the indicators (n=22) included in the Social-Emotional domain were found in the ELGs evaluated. However, only programs situated within child development centers included all of the indicators for this domain. Programs which take place in community centers did not include indicators related to concepts such as “cooperative learning,” “willingness to try,” or “conflict resolution.” Four indicators within this domain were not noted within parenting program’s ELGs. These include “conflict resolution,” “invention and creativity,” “environmental awareness” and “interculturalism.”

One the most prominent findings in this domain is the emphasis of “emotional

attachment” in parenting programs compared to programs in centers. As shown in **Table 8**, parenting programs place the largest emphasis on behaviors related to emotional attachment, representing 24% of the total domain. Conversely, this same indicator comprised only 7% in programs based in child development centers. *CONAFE-Mexico* had by far the highest number of references to emotional attachment behaviors in its document. It was mentioned over 50 times, or nearly equal to the total number of times this indicator was mentioned in all of the programs located in child centers combined (n=56). One might expect that the other two indicators related to relationships with adults and peers would be higher for child development centers than parenting programs to compensate for this large difference in emotional attachment behaviors. However, “relationships with adults” and “relationships with peers” for child development center programs and the total sample showed very little variation from the same indicators for parenting programs. The lack of emphasis on child-adult relationships, if they are actually minimized in practice, potentially exacerbates the challenges children naturally face when establishing relationships with elders and peers at home, in school and in other areas in which they participate. Hill & Nichols (2006) identified in children during their early childhood years a “tension in continuity” in their relationships with others, “particularly in terms of the different relationships between the child and significant adults” (p. 154) as children move between home, community and school environments. These “tensions” may be aggravated if the skills to relate to others are not developed and strengthened in early childhood education programs. While this low emphasis on “emotional attachment” in the ELGs may not mirror the actual day-to-day interactions between

educators and children younger than 3 years of age, it is important to note that harmony between ELGs and the everyday practices in the spaces of learning is essential to promoting high quality education in the region. Future investigations which evaluate the connection between theory and daily practices would help identify the strengths and weaknesses of the programs.

Additionally, parenting programs placed a larger emphasis on guidelines which gauge a child’s “self-confidence,” “empathy,” “social play,” “initiative” and “persistence.” However, parenting programs also emphasized “willingness to try,” “cooperative learning” and “emotional regulation” to a lesser extent than child development center programs. Curiously, “self control” was three to four times as high in the ELGs of community programs, with nearly 13%, compared to 4% in center programs and 2% in parenting programs. Furthermore, community center programs placed nearly a 30% emphasis on “self-awareness.” Research including field work, observations and interviews with stakeholders may more accurately explain these findings.

In response to the content of the ELGs analyzed and general knowledge of the challenges faced in this region, five new indicators were added to this domain. These include: “conflict resolution,” “participation,” “interculturalism,” “environmental awareness” and “play.” “Interculturalism” was absent in parenting programs and highest in child development center programs, at 3%. Across the entire sample, there was a low presence of ELGs content which provided children with an opportunity to resolve conflicts peacefully, meaning through reflection, dialogue, reconciliation and forgiveness. This reduced presence may suggest a missed opportunity to promote key skills in children, such as actively participating

Table 7. Physical Motor Depth Percentages (n=12)- All, and by Education Setting

	ALL (17)	PARENTING PROGRAMS (PP) (3)	CENTERS (CDI AND CC) (14)	CHILD DEVELOPMENT CENTERS (CDI) (10)	COMMUNITY CENTERS (CC) (4)
Reflexes	0.62%	0.00%	0.73%	0.00%	1.28%
Physical Fitness	0.92%	0.00%	1.09%	1.40%	0.85%
Personal Care Routines	1.44%	0.00%	1.70%	3.92%	0.00%
Nutrition	1.85%	0.00%	2.18%	3.92%	0.85%
Attention	4.83%	3.36%	5.09%	5.88%	4.49%
Physical State Regulations	5.34%	2.68%	5.82%	7.84%	4.27%
Sensory Integration	6.47%	8.05%	6.18%	10.08%	3.21%
Spatial Awareness	6.78%	3.36%	7.39%	6.72%	7.91%
Self-Help Skills	10.88%	12.75%	10.55%	11.48%	9.83%
Development of Senses	12.11%	8.72%	12.73%	10.08%	14.74%
Fine Motor	16.53%	22.82%	15.39%	17.65%	13.68%
Gross Motor	32.24%	38.26%	31.15%	21.01%	38.89%

Source: Authors

in an inclusive society and respecting differences. “Environmental awareness” was also higher in child development center programs and not at all represented in the parenting programs.

Throughout the process of reading and analyzing the ELGs, “technology” emerged as a theme and was explicitly mentioned in *SDIS-Bogota*, *EDI-Rio de Janeiro*, *PAIPN-Nicaragua* and *JUNJI-Chile*. Given that technology is associated with a child’s ability to explore the world, this content was categorized under the indicator “interest and exploration.” It is important to note that technology used *in lieu* of human interaction, especially during the critical early childhood development stage, is not

advised. Van Scoter & Ellis (2001) state that “technology cannot and should not replace human interaction or relationships, or take the place of activities such as reading stories together or sharing conversations with children. Properly used, some researchers find that computers and software can serve as catalysts for social interaction and conversations related to children’s work” (p. 8). However, this is generally applicable to much older children. The authors of this report suggest the creation of study groups to help monitor and analyze the impact of technology on children younger than 36 months of age.

Scott-Little et al. (2008) note in their research that the low presence of

content related to concepts such as “invention and creativity,” “initiative,” “cooperative learning,” “persistence,” and “willingness to try” may reflect that these indicators are more appropriate for older children. This is a plausible finding for this analysis as well. However, the relative presence of these indicators in this research could also be due to mis-measurement, as some of the documents merged their ELGs for infants and toddlers with children older than 36 months of age.

5.2.4. Language Domain

In the process of designing a framework for analysis, 17 indicators were established in the Language domain. Within the sample as a whole, parenting programs and child development centers included all but one of these 17 in the ELGs. Child care programs located within community centers did not include 3 of the 17 indicators. These will be discussed later in this section.

The content analysis of the ELGs within the Language domain invited serious reflection on inclusion policies being promoted in early childhood education in the region. The first striking finding is the absence of development indicators related to second or third language skills. This is surprising, given the number of programs which included content in the ELGs detailing the importance of recognizing and valuing, from childhood, the diversity of a nation, including language differences. Research on second language acquisition at a young age is extensive and compelling. For example, “studies have shown the extent of a child’s language exposure in the early years has a significant effect on the verbal skills of children by age 3 years. The difference in verbal skills at age 3 years among different socioeconomic groups still held in respect to language

capability and understanding at age 9 years” (Mustard, 2007, p. 49). The absence of indicators related to exploring and understanding a second language, taken together with the low presence of indicators related to “interculturalism” from the Social-Emotional domain, hint that cultural diversity in the region may be a hot topic in theory, but stops short from being integrated into the more wider aspects of the programs.

Additionally, in looking at **Table 9**, the sample as a whole placed the greatest emphasis on skills related to “art.” Over 20% of all of the indicators found for Language skills fell under “art” for programs located in child development centers. However, for programs which cater to providing early stimulation through parenting programs or those which take place in community centers, “art” received a much lower percentage, at nearly 7% and 10% respectively. Furthermore, within parenting programs, “music” was emphasized at a much lower rate, approximately 5%. Child programs located in community centers and child development centers did not appear on paper to be equally unrepresented, as “music” was emphasized at nearly 16% for each. It is possible that the lower emphasis of “music” in parenting programs is associated with the challenges of purchasing and transporting musical equipment.

The percentage of child development indicators encompassing reading, writing and alphabet awareness contrasts sharply with those related to art, music and other forms of communication. This stratification is not surprising given the age range evaluated was from birth to 36 months, and skill sets related to reading and writing generally emerge in older children. However, the authors invite further research to assess if the current ELGs promote sufficient cultivation of

communication/expression/literacy skills which are appropriate for this tender age.

5.2.5. Cognitive Domain

In the Cognitive domain, the distribution of indicators is more evenly spread in programs operating within child development centers than in parenting or community center based programs. In this domain, 45% of the indicators (n=9) related to cognitive development, as defined in this report, were absent within the ELGs for parenting programs. Similarly, programs within community centers did not include 30% of the indicators (n=6) for this domain. This finding, if similar to implementation, is critical, as weak cognitive stimulation for this age range can negatively impact a child over the course of his or her lifetime.

Similarly to the findings on “nutrition”, “physical aptitude” and “health care routines” within the Physical Motor domain, children who obtain their education through parenting programs, usually implemented in rural areas, might not be receiving critical cognitive stimulation, as reflected by the ELGs of parenting programs. Age appropriate cognitive stimulation is essential not only for children’s academic future, but also to help reduce the prevailing equity gap between urban and rural children in the region. The indicators which are absent from parenting programs, but present in centers, include “planning and intentionality,” “meta-cognition,” “formulation of a hypotheses,” “personal data,” “knowledge of places,” “security,” “natural sciences,” and “social sciences.”

“Flexibility” was not included in this list, as the researchers did not find evidence of this indicator in any of the ELGs evaluated. A study on the relevance of this indicator in the region may be informative.

An important note is the relatively low emphasis on “security” across the sample as a whole and different program types. Programs located within child development centers included this content in their ELGs, but community centers and parenting programs did not. It is essential that programs ensure the physical safety of the children they serve.

“Logical thinking,” which includes simple mathematics-related concepts, such as stacking blocks, experienced notable variation. Community center programs emphasized this indicator at approximately 12%, while child development centers did so at more than double the rate, at approximately 28%. “Imitating the actions and/ behaviors of adults” received the highest percentage for community center programs at 16%, and ranked second in terms of emphasis for parenting programs, also at 16%. Conversely, child development center programs emphasized this indicator much less frequently and instead, emphasized “social conventions” and “knowledge of objects” at much higher rates. “Cause and effect,” “object permanence,” “comparisons,” “exploratory play,” and “problem resolution” were all emphasized to a larger degree in parenting programs than center programs as a whole. See **Table 10**.

Table 8. Social-Emotional Depth Percentages (n=22) - All, and by Education Setting

	ALL (N=17)	PARENTING PROGRAMS (PP) (N=3)	CENTERS (CDC AND CC) (N=14)	CHILD DEVELOPMENT CENTERS (CDC) (N=10)	COMMUNITY CENTERS (CC) (N=4)
Conflict Resolutions	0.20%	0.00%	0.27%	0.36%	0.00%
Environmental Awareness	1.11%	0.00%	1.48%	1.62%	1.05%
Persistence	1.21%	1.64%	1.07%	1.08%	1.05%
Willingness to Try	1.21%	0.41%	1.48%	1.98%	0.00%
Emotional Regulation	1.31%	0.41%	1.61%	1.80%	1.05%
Invention and Creativity	1.42%	0.00%	1.88%	1.98%	1.58%
Initiative	1.82%	3.69%	1.21%	1.44%	0.53%
Interculturalism	1.92%	0.00%	2.55%	3.24%	0.53%
Participation	1.92%	0.82%	2.28%	2.70%	1.05%
Cooperative Learning	2.02%	1.64%	2.15%	2.88%	0.00%
Social Play	2.73%	4.10%	2.28%	2.52%	1.58%
Play	2.93%	2.05%	3.22%	4.14%	0.53%
Empathy	3.34%	4.92%	2.82%	3.60%	0.53%
Emotional Expression	4.75%	3.69%	5.10%	5.41%	4.21%
Self-Control	5.46%	2.46%	6.44%	4.32%	12.63%
Self-Confidence	5.76%	8.20%	4.97%	5.41%	3.68%
Relationships with Peers	6.17%	4.10%	6.85%	7.21%	5.79%
Relationships with Adults	6.47%	8.61%	5.77%	4.86%	8.42%
Self-Concept	9.10%	4.51%	10.60%	10.99%	9.47%
Emotional Attachment	11.63%	24.18%	7.52%	7.57%	7.37%
Interest and Exploration	12.44%	12.70%	12.35%	13.33%	9.47%
Self-Awareness	15.07%	11.89%	16.11%	11.53%	29.47%

Source: Authors

Table 9. Language Skills Depth Percentages (n=17)- All and by Education Setting

	ALL (N=17)	PARENTING PROGRAMS (PP) (N=3)	CENTERS (CDC AND CC) (N=14)	CHILD DEVELOPMENT CENTERS (CDC) (N=10)	COMMUNITY CENTERS (CC) (N=4)
Communication in a Second Language	0.00%	0.00%	0.00%	0.00%	0.00%
Alphabet Awareness	0.34%	0.51%	0.29%	0.45%	0.00%
Story Sense	0.79%	0.51%	0.87%	1.35%	0.00%
Book Awareness	1.01%	0.51%	1.16%	0.90%	1.63%
Writing Process	2.03%	2.03%	2.03%	2.25%	1.63%
Comprensión	2.71%	3.55%	2.46%	1.57%	4.08%
Print Awareness	3.16%	1.02%	3.77%	4.72%	2.04%
Pragmatics and Social Language	3.83%	6.09%	3.19%	2.70%	4.08%
Motivation to Read and Write	4.17%	2.54%	4.64%	6.07%	2.04%
Phonological Awareness	4.51%	3.55%	4.78%	4.49%	5.31%
Vocabulary and Meaning of Concepts	6.31%	6.60%	6.23%	6.29%	6.12%
Receptive Verbal Communication	9.81%	16.24%	7.97%	7.19%	9.39%
Expressive Verbal Communication	10.82%	7.11%	11.88%	9.21%	16.73%
Nonverbal Communication	11.16%	21.83%	8.12%	5.62%	12.65%
Speaking	11.27%	16.75%	9.71%	10.34%	8.57%
Music	13.53%	4.57%	16.09%	16.18%	15.92%
Art	14.54%	6.60%	16.81%	20.67%	9.80%

Source: Authors

Table 10. Cognitive Depth Percentages (n=20)- All and by Education Setting

	ALL (N=17)	PARENTING PROGRAMS (PP) (N=3)	CENTERS (CDC AND CC) (N=14)	CHILD DEVELOPMENT CENTERS (CDC) (N=10)	COMMUNITY CENTERS (CC) (N=4)
Flexibility	0.00%	0.00%	0.00%	0.00%	0.00%
Planning and Intentionality	0.15%	0.00%	0.20%	0.30%	0.00%
Meta-cognition	0.45%	0.00%	0.59%	0.91%	0.00%
Formulation of Hypotheses	0.60%	0.00%	0.78%	1.21%	0.00%
Personal Data	0.75%	0.00%	0.98%	1.21%	0.56%
Knowledge of Places	1.05%	0.00%	1.37%	0.30%	3.33%
Exploratory Play	1.20%	3.14%	0.59%	0.91%	0.00%
Security	1.35%	0.00%	1.76%	2.73%	0.00%
Social Sciences	1.64%	0.00%	2.16%	2.73%	1.11%
Natural Sciences	3.59%	0.00%	4.71%	5.45%	3.33%
Problem Resolution	3.59%	5.66%	2.94%	2.73%	3.33%
Comparisons	4.33%	6.29%	3.73%	3.94%	3.33%
Symbolic Play	5.68%	5.66%	5.69%	5.76%	5.56%
Object Permanence	6.13%	8.81%	5.29%	3.94%	7.78%
Cause and Effect	7.47%	9.43%	6.86%	5.76%	8.89%
Social Conventions	7.92%	7.55%	8.04%	9.39%	5.56%
Memory	9.87%	11.32%	9.41%	6.67%	14.44%
Knowledge of Objects	10.76%	7.55%	11.76%	10.00%	15.00%
Imitation	11.96%	16.35%	10.59%	7.58%	16.11%
Logical Thinking	21.52%	18.24%	22.55%	28.48%	11.67%

Source: Authors



6

Conclusion

Recommendations for the design, implementation and evaluation of ELGs in programs for children younger than 36 months of age.

This section summarizes some of the trends found in the ELGs and during the analysis process. More general than the specific findings previously discussed or the recommendations which follow, these trends are intended to provide those working in the design, implementation and evaluation of programs for children younger than 36 months of age with drafting guidelines for improving their ELGs.

6.1. The Clarity of Early Learning Guidelines Matter

Approximately 20% (n=5) of the original sample of ELGs (n=23) were unusable as they did not provide standards oriented toward children. The authors recognize that perhaps this content was situated in papers which were not part of the sample or that they have yet to be documented in a clear and simple manner. Documenting child development indicators can guide and facilitate the pedagogical practices of educators working in the three different learning environments in the region. Therefore, providing written ELGs in a manner which is clear and easy for all early childhood education stakeholders to use is encouraged.

In process of evaluating these programs which operate with a similar purpose (i.e. to provide high quality early education in the region), differences were noted not only in the terms used to describe ELGs but also in the purposes, approaches

and pedagogical strategies of each program. The conceptual differences were highlighted in the terms used. For example, some programs used certain terms more or less interchangeably, such as “early education” or “early childhood education and care;” “child,” “minor” or “student” and “education official,” “professor,” “teacher” or “caregiver.” This *continuum* of close but not identical terms can complicate a productive exchange of ideas and experiences among early childhood education stakeholders in the region. Unlike transnational comparisons where such diversity in terms can be viewed as a source of wealth, it is essential to create within each education system a consistent use of language and vision for programs serving children younger and older than 36 months.

6.2. The 3 Is- Intentions, Integration and Inclusion

There is evidence that the intentions of a program, as described in their values and objectives, may not be fully integrated into a curriculum’s ELGs. The absence of indicators which promote interculturality, teaching a second language or the peaceful resolution of conflicts is concerning given their potential influence in forming citizens who live and participate in a healthy democracy. While including these concepts in child development indicators does not guarantee integration in the learning environment, it does represent an important step toward implementation. The authors of this report acknowledge many

programs included in this study have created different ELGs for children with disabilities, and for indigenous and afro-descendants communities but it is recommended that all ELGs offer equitable and inclusive conditions for early childhood development. Otherwise, early education programs could promote equity gaps in Latin America and the Caribbean.

6.3. The Modality Matter

From a theoretical point of view, the setting in which a program is implemented should not affect the quality of the learning children receive. However, as this research shows, the emphasis between and within each domain evaluated varies considerably among parenting programs, community center programs and child development center programs. The heterogeneity in the structure, the intensity of the intervention, and support materials may, to varying degrees, contribute to the gaps in service quality services and, therefore, inadvertently expand inequality from the beginning of a child's education. With this in mind, it is essential that clear expectations are created for each of the three program types and that policymakers and evaluators consider which programs best serve the most vulnerable children as a means of providing the necessary affirmative action to ensure their rights.

It is hoped that the longer an intervention takes place, given some level of constant quality, the more positive the intended effect on children younger than 36 months of age. This makes the findings for the parenting programs more worrisome. With nearly half of the Cognitive domain indicators absent on paper and the lower intervention dosages, the authors hypothesize that children who are served by parenting programs may,

at least on paper, be missing critical content, and when the indicators are present and implemented, they are receiving them at a much lower dosage than children in community center and child development center programs. The authors of this report recommend a thorough evaluation of the curricula currently being utilized by parenting programs. This evaluation might also include an analysis of pedagogical approaches, practices, priorities and frequency of intervention. Improving the quality of early education in these programs will require greater financial investments by national and local governments and more effective communication, coordination and mobilization of resources between stakeholders involved in educating children younger than 36 months of age.

The heterogeneity in the number of indicators demonstrates that one cannot make assumptions on the “completeness” of the ELGs based upon a program's setting. Consequently, assuming that all child development center programs contain the same number and type of indicators on paper would be inaccurate. Therefore, the results of this study call for additional analyses which consider the needs of the population served, the resources available to each program type and the congruence between theoretical discussions and pedagogical tools provided to early childhood educators.

6.4. Contributing to Social Change

ELG authors, along with those who use these documents to guide their pedagogical practices, have a unique opportunity to incite positive change in families and communities through the various “stress” given in each ELG. For example, indicators addressing a

child's ability to understand, value, and relate to people different from himself (i.e., "interculturality" and "speaking a second language") or a child's ability to overcome conflicts in a peaceful manner (i.e., "conflict resolution") are relevant given larger issues of social discrimination and violence prevalent in rural and urban areas of Latin America and the Caribbean. The earlier such indicators are incorporated into the children's everyday experiences in an age-appropriate and context-appropriate manner, the greater the potential that these skills and attitudes will be developed on solid footing.

6.5. Age Intervals Matters

A critical look at the age intervals utilized in ELGs is important for three reasons. First, guidelines which note age by years, instead of months, risk being unclear in the time period covered. In order to offer increased clarity to all early education stakeholders, ELG authors may wish to be more explicit by structuring age intervals in months and noting this at the beginning of the document. Second, when creating the age intervals, programs which cluster children into fewer groupings may set unrealistic expectations for children (whose age aligns with the younger and older ends of each interval) or conversely,

this wider variation in age groupings might mask children with learning differences. Finally, to provide a seamless education, these age intervals should integrate with programs which serve children older than the age of 36 months.

6.6. The Age of the Document Matters

The age of the document impacted this analysis in three ways. First, it was interesting to find that the older documents appeared to be less clear as other content, such as instructions to teachers, was scattered through their ELGs. It would be important to understand if this feature makes the ELGs more difficult to utilize and implement by teachers. Second, older documents, in general, had fewer age intervals and thus, used more general content for a wider range of children in their care. It is important to note that some ELGs included may be inappropriate for infants and toddlers younger than 36 months of age and ELG authors are urged to examine these. Finally, the age of a document may impact its relevance. A significant gap already exists between curriculum and implementation but document age may play a role in widening this difference.



7

Recommendations

Strengthening and expanding high quality early childhood education programs provides a unique opportunity to positively impact not only children but also their families and their communities.

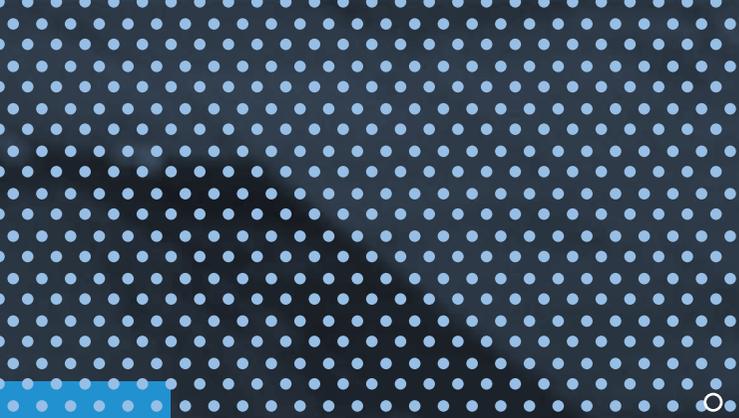
Before launching into the recommendations which arose from this analysis, early learning stakeholders in the region are reminded that the indicators used in this study were not intended to be used as screening tools to measure the developmental “progress” of children. Instead, these indicators were designed to analyze the historical intentions of the ELG authors and are most effective when integrated into broader aspects of the curriculum and implementation processes in light of the three educational settings.

The authors of this report offer the following recommendations.

1. Align ELGs with wider early childhood education policy; goals and objectives of programs designed for children under the age of 36 months; teacher training processes; organizational processes; everyday practices of teaching and learning inclusive of the teaching materials and the monitoring and evaluation system (Dembele 2003).
2. For future researchers, the authors suggest selecting those (few) programs for a comparative study based upon similarity of goals, structure, focus and strength as a means of generating the strongest analysis for a specific population of children. Research questions relevant to a specific context and a framework of analysis which includes fewer indicators can allow researchers to minimize the risk of generalization and contribute to the development of more relevant and unique conclusions for each analysis conducted. Finally, researchers are urged to utilize methodologies that allow for a more in-depth investigation

in the field. Such investigation might involve those who participate in early education programs and evaluating the relevance of the indicators included in the framework. This will allow for a richer research contribution from a local perspective and highlight differences in the region with greater specificity.

This study provides an important foundation to policy makers, curriculum writers, program managers and education stakeholders working in programs which serve children younger than 36 months of age to evaluate the strengths and weaknesses of their ELGs. The authors of this paper are confident that strengthening and expanding high quality early childhood education programs in the region provides a unique opportunity to positively impact not only children at the most critical stages of development, but also their families and the communities in which they live. As said best by Shonkoff & Phillips (2000), “The course of development can be altered in early childhood by effective interventions that change the balance between risk and protection”(p. 32), turning possibilities into realities.



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Annex

Annex

Annex 1. Code Book

Topic	Rules
Comparable Data	Only code those sections of the document pre-determined as the “indicator” levels. These sections correspond to more specific ELG content for children below the age of 36 months.
Sequence	<p>Begin sequentially and code by age in terms of months. Remember to code the information identified as the “indicator” level. If the document authors did not designate the ELGs in terms of months, use the following assumptions:</p> <p>1 year = 12 months 2 years = 24 months 3 years = 36 months</p> <p>If the document authors designated the ELGs in terms of days or months, code each ELG exactly as it appears in the document. For example, if a set of ELGs begin at “45 days” and end at “6 months,” code “45 days-6 months.” If authors of a different document designated the ELGs as “0-6 months,” code exactly as this appears.</p>
Domain and Sub-Domains	Do not directly code domain and sub-domain labels or content. Instead, only code the “indicator” level. See Definitions below.
Definitions	Code ELGs using the definitions created for the purpose of this analysis. While an ELG may fall under a different domain heading in the document, keep the structure of this research’s framework unchanged. For example, if a concept falls under the Cognitive domain in the document but the definition for this ELG is situated in the Social-Emotional domain of this framework, code under Social-Emotional. Do not add new domains to this framework.
Double Coding	Double code only when more than one indicator equivalent is explicitly stated in a single ELG.
Clarity	When unclear, first refer to the definitions created for this research. If still unclear, refer to the domain under which this ELG fell and look at the surrounding data for context. If these steps are do not provide greater clarity, code as “questions” for discussion.

Topic	Rules
New Indicators	If you find a new concept which is repeated and not already captured in the research framework, create a new indicator and draft a definition. Immediately notify the team of this new indicator for inclusion in their framework. This guideline only applies to the INITIAL coding process.

Topic	Technical Considerations
Preparing to Code in NVIVO	Each readable file has been pre-loaded into NVIVO. When NVIVO opens, insert your name and initials upon prompting (each coder must perform this procedure separately and so that percentage agreements can be obtained). Select the document to be coded under “Resources-Internals.” Double click this document to open it and set NVIVO “View” to “Coding Strips: Nodes Recently Coded.” This will provide you with an overview of all of the codes you can use. This will also allow the researcher to double check that each ELG code was noted by NVIVO and none were accidentally overlooked.
Coding in NVIVO	Locate the predetermined section of the document to be coded. Highlight each ELG individually to be coded and under “Code at...” Select the code you want and press “enter.” The name of the indicator coded should appear to the right of the document in “Coding Stripes”, and identify which section of the document was coded. Once the appropriate sections of the document have been coded, switch “view” to “Highlight- Coding for All Nodes” and review that the content was coded as you intended. This allows the researcher to double check that each ELG code was noted by NVIVO.
Saving your coding process in NVIVO	While NVIVO prompts the user to save every 15 minutes, after each session, save the project with a new day and time stamp (so you can track your progress). Locate the last version of your work when beginning of a new session.
Coding in Excel	Title each spreadsheet the name of the document being coded. Design a table in which the columns are commensurate with the total number of indicators you have coded in the ELGs. Read each ELG and mark the appropriate indicator(s) cell in the framework which matches this content. To ensure what content you coded, be sure to mark on the paper with an asterisk each indicator coded. Save each Excel often to avoid losing any data.

Annex 2. Instruction Sheet for Program Summaries

The following **Program Summaries** are designed to provide findings for the ELG analysis for each of the 17 programs included in this study. Created with early childhood education stakeholders in mind, each summary is a snapshot of how the archival intention of ELG authors compared to the entire sample and to similar programs. Early childhood education stakeholders can use these pages in the following ways:

- To compare individual programs across the sample and to other similar programs which serve similar populations;
- To consider which indicators in each of the domains are given the greatest emphasis and consider if this accurately reflects the goals and intentions of the program.

It is important to keep in mind that, while programs may serve similar populations in a similar modality, each program is still unique in its values and goals. Furthermore, the publication dates for each of the ELGs vary to a wide degree. The authors emphasize that the ELGs evaluated in the **Program Summaries** represent the archival intentions and may not reflect the current beliefs and practices of the programs today. Please use caution when interpreting the findings for these individual pages, as this is a document analysis.

Listed below are some suggestions on how to read and use these pages. *PAIPN-Nicaragua* is used as an example to assist readers in interpreting the results of their pages.

Section 1. Basic Information

At the top of each page, basic information about one of the programs is listed. This information includes:

- Name of the program and the city or country in which it operates;
- Name and publication date of the program document evaluated;
- Educational setting or modality in which the program delivers its services;
- Number of indicators found in the early learning guidelines as compared to the average number found for similar programs;
- Total number of indicators found in this program's early learning standards compared to the average number found for similar programs.

For example, **Annex 2 Figure 1** below shows the basic information for *PAIPN-Nicaragua*. The first line simply states the program abbreviation, and the second line in this basic information notes the title of the document evaluated. For *PAIPN-Nicaragua*, the document was titled “*Programa Curricular*” and no publication date was noted. The third line of this basic information denotes the modality of this program. The modality could be a parenting program, a center-community center or a center-child development center. *PAIPN-Nicaragua* operates within centers, specifically community centers, and this is stated in this basic information. In the fourth line, the first number denotes how many indicators were found for a particular program and the second number represents the average number of indicators found for that modality. For example, in *PAIPN-Nicaragua*, 41 of the possible 71 indicators were found. The second

number, 36, is the average number of indicators found for community center programs as a whole. As mentioned in the body of this report, assuming that indicators found on paper are integrated into the wider curriculum and then implemented on a day to day basis in the learning environment is erroneous. To determine this, more applied analyses, such as field visits and focus interview groups, are required.

The last line in the basic information section compares the total number of indicators found as compared to the average for other programs which take place in centers. In *PAIPN-Nicaragua*, for example, the 41 indicators were identified 148 times. Some of these 41 indicators may have only been found once, while others may have arisen repeatedly. (This will be discussed more in **Section 2. Depth Analysis**). The 148 total indicators found for *PAIPN-Nicaragua* is less than the 271 average found for community center programs.

PAIPN-Nicaragua curriculum authors might use this information to start a dialogue with practitioners in the field and inquire if the indicators provide enough detail, or if there are places where additional information can be added to increase the clarity of the ELGs. However, the authors of this report remind readers that “more indicators of child development is not always better.” The ELGs should strike a balance between clarity, practicality and accuracy. Therefore, there is no “minimum” or “maximum” number of indicators required for ELGs to be

deemed “high quality” or “accurate.” Instead, the ELGs should be customized specifically for the program and for the population each program serves.

Section 2. Depth Analysis

The next section of the **Program Summaries** details the most prevalent indicators found for each of the four domains. In most cases, the top five indicators for each domain are listed, along with their corresponding “depth percentage,” or the emphasis each program gives to a specific indicator as measured by their total presence in the program’s ELGs. Some **Program Summaries** will have less than five indicators for a specific domain noted if fewer than five were found. For example, if the team only found four indicators for the Physical Motor domain for a specific program, then only four indicators and their corresponding depth percentage will be shown. Conversely, some **Program Summaries** may have more than five indicators noted for a particular domain. This happens when there is a “tie” in the depth percentages between two or more indicators. This will be discussed below in the case of *PAIPN-Nicaragua*.

In the case of *PAIPN-Nicaragua*, five indicators are noted in the Physical Motor domain. These include “self-help skills” at 40%, “gross motor” at 20%, “development of senses” at 13.33%, and “spatial awareness” and “sensory integration,” both at 10%. These indicators represent the top five, in terms of their depth percentages, for *PAIPN-Nicaragua*’s Physical Motor domain. Readers will notice that these percentages sum to 93.33% and recall that there were a total of 12 indicators for this domain in this framework. This means that the remaining 7 indicators split the residual 6.67% among them. In the Language domain, there are six

Annex 2. Figure 1. Basic Information- Example PAIPN-NICARAGUA

Program: PAIPN-Nicaragua
 Title of Document: Programa Curricular (No Date)
 Modality: Center-Community Centers
 # of distinct indicators/average: 41/36
 # of indicators total/average: 148/271

Source: Authors

indicators noted in *PAIPN-Nicaragua's Program Summary*. These include “expressive verbal communication” at 30.56%, “music” at 19.44%, “non-verbal communication” at 16.67%, “art” at 16.67% and “pragmatics and social language” and “speaking,” both at 11.11%. These six indicators sum to 78.56%. Readers will recall that there were a total of 17 indicators for this domain in this framework. Therefore, the remaining 11 indicators for this domain share the residual 21.44%. ELG designers for *PAIPN-Nicaragua* can use this information to determine if these percentages accurately reflect the values and goals of the program, or if readjusting the program’s indicators are necessary.

Section 3. Breadth Analysis

The final section of the **Program Summary** illustrates the distribution of the domains for a particular program as compared to the averages in the sample and similar programs. For example, the distribution of domains for the *PAIPN-Nicaragua* is as follows: Physical Motor at 20%, Social-Emotional at 24%, Language at 31% and Cognitive at 25%. The authors remind readers that breadth percentages are not weighted based upon the number of indicators included in each domain. ELG authors for *PAIPN-Nicaragua* can see that the breadth percentages for their program are more equally balanced in terms of their percentages per domain as

Annex 2. Figure 2. Depth Analysis- Example PAIPN-NICARAGUA

Depth Analysis				
Physical Motor				
Self Help Skills	Gross Motor	Development of Senses	Spatial Awareness	Sensory Integration
40.00%	20.00%	13.33%	10.00%	10.00%
Social-Emotional				
Emotional Attachment	Concept of Self	Interest and Exploration	Invention and Creativity	Relationships with Adults
25.00%	11.11%	11.11%	8.33%	8.33%
Language				
Expressive Verbal Communication	Music	Non-verbal Communication	Art	Prag. & Soc. Lang. /Speaking
30.56%	19.44%	16.67%	16.67%	11.11%
Cognitive				
Problem Resolution	Memory	Cause and Effect	Imitation	Logical Thinking
16.22%	13.51%	13.51%	10.81%	10.81%

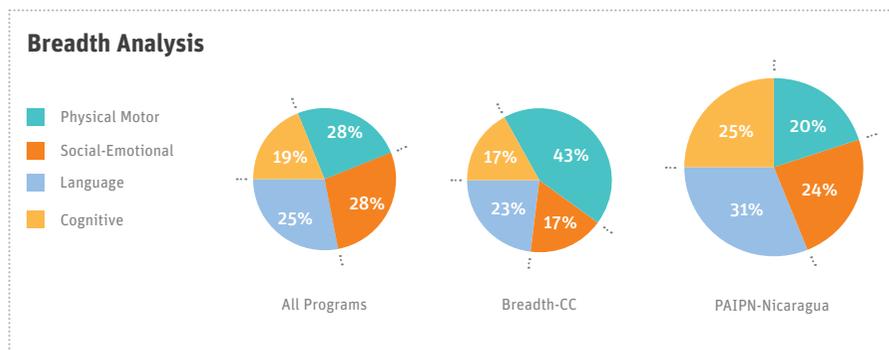
Source: Authors

compared to other programs, which operate within community centers. PAIPN-Nicaragua places a greater emphasis on cognitive and language skills sets and a lesser emphasis on physical-motor and social-emotional skill sets as compared to the sample. ELG designers may consider if these archival emphases accurately reflect the current values and goals of the program and the population it serves.

The authors of this report hope that these **Program Summaries**, combined with the overall report, provides early childhood education stakeholders with a first step in evaluating their programs.

In addition to the suggestions listed above, in order to produce guidelines which are easy to use, the authors encourage stakeholders to gather and merge, if possible, early learning guidelines from other state institutions involved in the comprehensive care of the very young. For example, even if two different institutions are providing ELGs targeting the same population, it is suggested to merge these documents into a single composite listing, thus providing practitioners and other stakeholders with a single, easy to use, early childhood education reference document.

Annex 2. Figure 3. Infant and Toddler Breadth Analysis- Example PAIPN-NICARAGUA



Source: Authors

Annex 3. PAIPN- Nicaragua Program Summary

Program: PAIPN-Nicaragua
 Title of Document: Programa Curricular (No Date)
 Modality: Center- Community Centers
 # of indicators/average: 41/36
 # of indicators total/average: 148/271

Depth Analysis

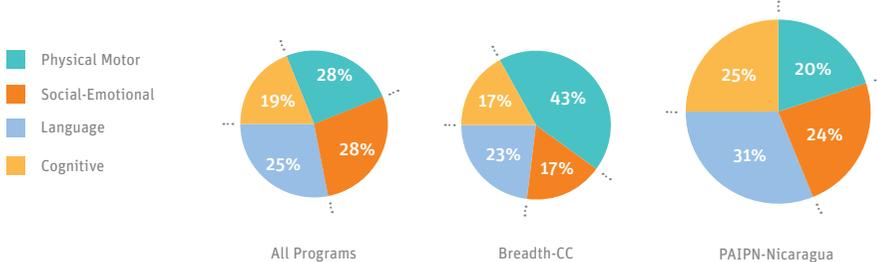
Physical Motor				
Self Help Skills	Gross Motor	Development of Senses	Spatial Awareness	Sensory Integration
40.00%	20.00%	13.33%	10.00%	10.00%

Social-Emotional				
Emotional Attachment	Concept of Self	Interest and Exploration	Invention and Creativity	Relationships with Adults
25.00%	11.11%	11.11%	8.33%	8.33%

Language				
Expressive Verbal Communication	Music	Non-verbal Communication	Art	Prag. & Soc. Lang. /Speaking
30.56%	19.44%	16.67%	16.67%	11.11%

Cognitive				
Problem Resolution	Memory	Cause and Effect	Imitation	Logical Thinking
16.22%	13.51%	13.51%	10.81%	10.81%

Breadth Analysis



Annex 4. CIBV-Ecuador Program Summary

Program: CIBV-Ecuador
 Title of Document: Guía Operativa para Promotoras y Coordinadores de los Centros Infantiles del Buen Vivir (2011)
 Modality: Center- Community Centers
 # of indicators/average: 33/36
 # of indicators total/average: 172/271

Depth Analysis

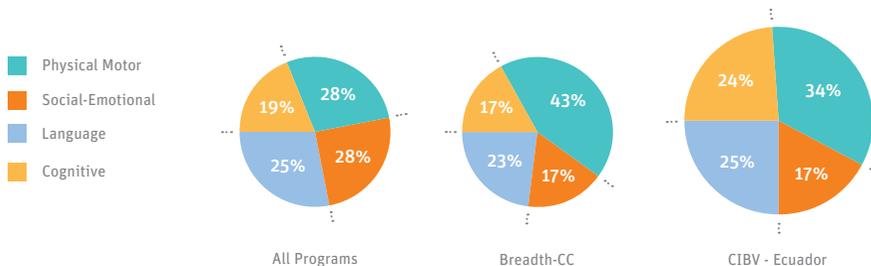
Physical Motor				
Gross Motor	Fine Motor	Development of Senses	Spatial Awareness	Attention
42.37%	33.90%	11.86%	5.08%	5.08%

Social-Emotional				
Concept of Self	Self Confidence	Interest and Exploration	Self Control	Relationships with Adults
31.03%	17.24%	17.24%	13.79%	6.90%

Language				
Speaking	Receptive Verbal Comm.	Pragmatic and Social Language	Expressive Verbal Comm.	Non-Verbal Comm.
18.37%	12.24%	12.24%	10.20%	10.20%

Cognitive				
Knowledge of Objects	Logical Thinking	Imitation	Cause and Effect	Symbolic Play
21.43%	19.05%	14.29%	11.90%	9.52%

Breadth Analysis



Annex 5. PAI-Guatemala Program Summary

Program: PAI-Guatemala
 Title of Document: Currículo Nacional Base Nivel Inicial (2008)
 Modality: Centers- Community Centers
 # de indicadores/promedio: 46/36
 # of indicators: 710/271

Depth Analysis

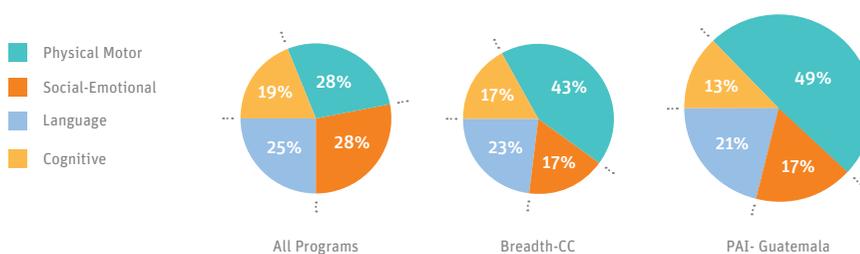
Physical Motor				
Development of Senses	Fine Motor	Physical State Regulation	Attention	Multiple Indicators
16.57%	11.14%	5.71%	4.86%	1.14%

Social-Emotional				
Self Awareness	Self Control	Self Concept	Relationships with Adults	Relationships w/ Peers Interest and Exploration
35.29%	15.97%	11.76%	9.24%	6.72%

Language				
Music	Expressive Verbal Comm.	Non-verbal Comm.	Art	Phonological Awareness
20.55%	16.44%	13.70%	10.96%	8.90%

Cognitive				
Imitation	Memory	Knowledge of Objects	Logical Thinking	Object Permanence
20.00%	18.95%	14.74%	9.47%	7.37%

Breadth Analysis



Annex 6. WaWa Wasi-Peru Program Summary

Program: WAWA WASI-Peru
 Title of Document: Lineamientos Técnicos para la Promoción del Aprendizaje Infantil Temprano en el Programa Nacional Wawa Wasi (2009)
 Modality: Centers- Community Centers
 # of indicators/average: 22/36
 # of indicators total/average: 53/271

Depth Analysis

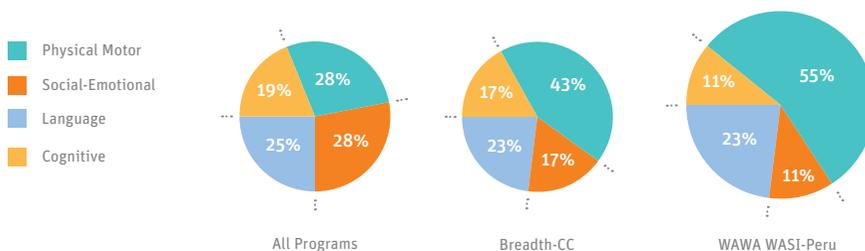
Physical Motor				
Self Help Skills	Gross Motor	Fine Motor	Nutrition	Sensory Integration
31.03%	31.03%	17.24%	10.34%	6.90%

Social-Emotional				
Self Awareness	Emotional Attachment	Interest and Exploration		
66.67%	16.67%	16.67%		

Language				
Receptive Verbal Communication	Speaking	Music	Vocabulary	Multiple Indicators
16.67%	16.67%	16.67%	16.67%	8.33%

Cognitive				
Object Permanence	Memory	Knowledge of Objects	Symbolic Play	Personal Information
33.33%	16.67%	16.67%	16.67%	16.67%

Breadth Analysis



Annex 7. SDIS-Bogota Program Summary

Program: SDIS-Bogota

Title of Document: Lineamiento Pedagógico y Curricular para la Educación Inicial en el Distrito (2010)

Modality: Center- Child Development Centers

of indicators/average: 47/41

of indicators total/average: 182/169

Depth Analysis

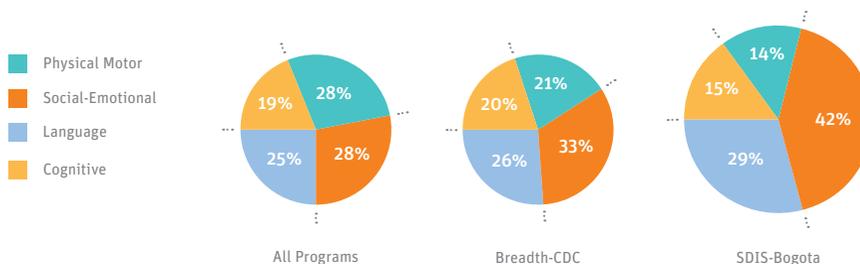
Physical Motor				
Gross Motor	Development of Senses	Attention	Fine Motor	Spatial Awareness
24.00%	24.00%	16.00%	12.00%	8.00%

Social-Emotional				
Interest and Exploration	Self Concept	Relationships with Peers	Emotional Expression	Multiple Indicators
18.18%	14.29%	10.39%	9.09%	6.49%

Language				
Music	Art	Phonological Aware	Expressive Verbal Communication	Motivation to Read
28.30%	20.75%	13.21%	7.55%	7.55%

Cognitive				
Imitation	Social Conventions	Cause and Effect	Formulation of Hypothesis	Logical Thinking
22.22%	14.81%	22.22%	11.11%	11.11%

Breadth Analysis



Annex 8. ECC-Jamaica Program Summary

Program: ECC-Jamaica
 Title of Document: The Jamaica Early Childhood Curriculum Guide (2007)
 Modality: Center-Child Development Centers
 # of indicators/average: 55/41
 # of indicators total/average: 459/169

Depth Analysis

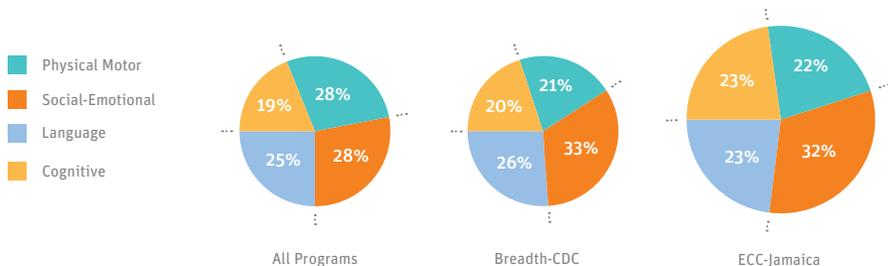
Physical Motor				
Fine Motor	Gross Motor	Integration of Senses	Development of Senses	Self Help /Care Routines
22.00%	20.00%	20.00%	13.00%	8.00%

Social-Emotional				
Self Concept	Interest and Exploration	Emotional Attachment	Self Awareness	Empathy
15.86%	13.10%	10.34%	8.97%	7.59%

Language				
Speaking	Receptive Verbal Comm.	Vocabulary	Multiple Indicators	
14.02%	12.15%	10.28%	9.35%	

Cognitive				
Object Knowledge	Imitation	Logical Thinking	Memory	Object Perm./ Sym. Play
25.00%	19.64%	16.07%	8.93%	7.14%

Breadth Analysis



Annex 9. PAIP-Dominican Republic Program Summary

Program: PAIP-Dominican Republic
 Title of Document: Propuesta Curricular del Programa de Atención Integral para la Primera Infancia (2011)
 Modality: Center-Child Development Centers
 # of indicators/average: 36/41
 # of indicators total/average: 108/169

Depth Analysis

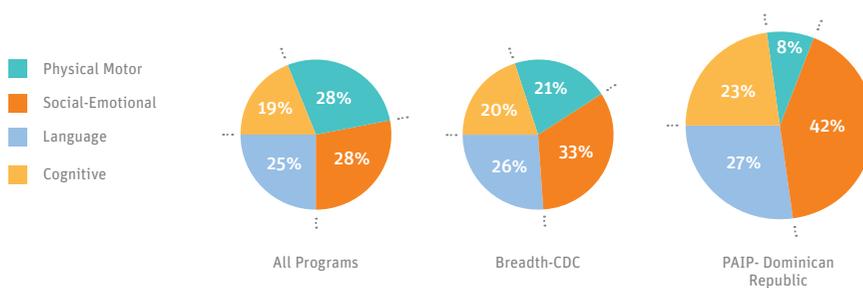
Physical Motor				
Self Help Skills	Gross Motor	Development of Senses	Spatial Awareness	Sensory Integration
33.33%	22.22%	22.22%	11.11%	11.11%

Social-Emotional				
Self Concept	Self Awareness	Interest and Exploration	Environmental Awareness	Inv. and Creativity/ Coop. Learning
20.00%	15.56%	15.56%	11.11%	8.33%

Language				
Art	Expressive Verbal Comm.	Multiple Indicators		
66.52%	19.44%	3.54%		

Cognitive				
Logical Thinking	Natural Sciences	Social Sciences	Object knowledge	Security
28.00%	24.00%	16.00%	8.00%	8.00%

Breadth Analysis



Annex 10. AEI- Fortaleza Program Summary

Program: AEI-Fortaleza
 Title of Document: Proposta Pedagógica de Educação Infantil (2009)
 Modality: Center- Child Development Centers
 # of indicators/average: 31/41
 # of indicators total/average: 57/169

Depth Analysis

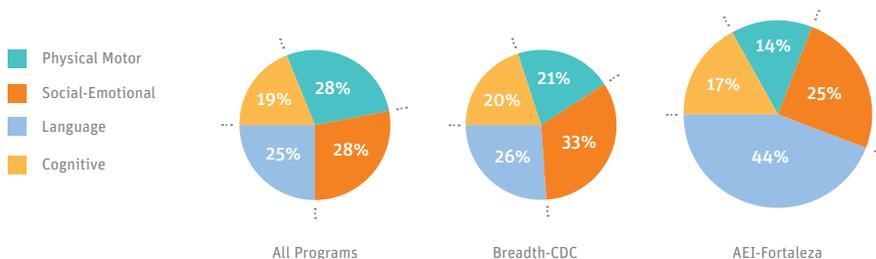
Physical Motor				
Fine Motor	Gross Motor	Development of Senses	Spatial Awareness	
37.50%	25.00%	25.00%	12.50%	

Social-Emotional				
Self Awareness	Emotional Expression	Interest and Exploration	Emotional Attachment	Multiple Indicators
21.43%	14.29%	14.29%	14.29%	7.14%

Language				
Music	Art	Speaking	Expressive Verbal Comm.	Receptive Verbal Comm.
20.00%	16.00%	16.00%	12.00%	12.00%

Cognitive				
Object knowledge	Logical Thinking	Multiple Indicators		
20.00%	20.00%	10.00%		

Breadth Analysis



Annex 11. EDI-Rio de Janeiro Program Summary

Program: EDI-Rio de Janeiro
 Title of Document: Orientações Curriculares para a Educação Infantil (2010)
 Modality: Center-Child Development Centers
 # of indicators/average: 41/41
 # of indicators total/average: 150/169

Depth Analysis

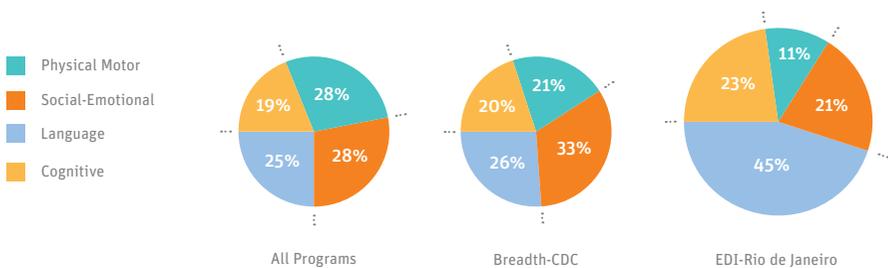
Physical Motor				
Spatial Awareness	Development of Senses	Fine Motor	Gross Motor	Attention/Physical State Reg.
47.06%	17.65%	11.76%	11.76%	5.88%

Social-Emotional				
Interest and Exploration	Self Awareness	Interculturalism	Cooperative Learning	Self Confidence/ Play
25.81%	16.13%	12.90%	9.68%	9.68%

Language				
Art	Music	Speaking	Writing Process	Story Sense
34.33%	22.39%	10.45%	5.97%	4.48%

Cognitive				
Logical Thinking	Social Conventions	Memory	Object Knowledge	Multiple Indicators
51.43%	14.29%	8.57%	5.71%	2.86%

Breadth Analysis



Annex 12. JUNJI- Chile Program Summary

Program: JUNJI-Chile
 Title of Document: Bases Curriculares de la Educación Parvularia (2005)
 Modality: Center-Child Development Centers
 # of indicators/average: 47/41
 # of indicators total/average: 131/169

Depth Analysis

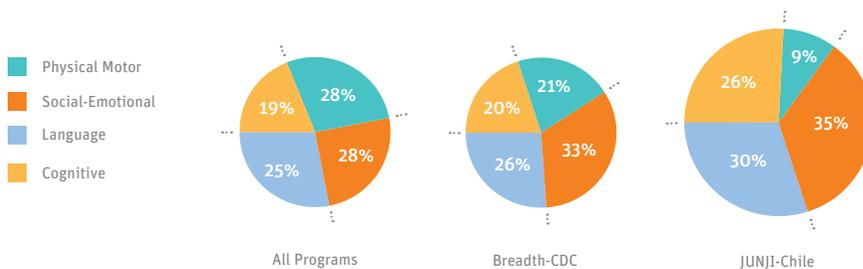
Physical Motor				
Gross Motor	Fine Motor	Personal Care Routines	Spatial Awareness	Self Help Skills/ Nutrition
25.00%	16.67%	16.67%	16.67%	8.33%

Social-Emotional				
Self Concept	Relationships with Peers	Interest and Exploration	Self Awareness	Multiple Indicators
21.74%	10.87%	10.87%	8.70%	6.52%

Language				
Expressive Verbal Comm.	Art	Non-verbal Comm.	Music	Multiple Indicators
23.08%	17.95%	12.82%	10.26%	7.69%

Cognitive				
Natural Sciences	Cause and Effect	Logical Thinking	Memory	Object Knowledge
20.59%	14.71%	14.71%	8.82%	8.82%

Breadth Analysis



Annex 13. PEI-Mexico Program Summary

Program: PEI-Mexico
 Title of Document: Antología de Apoyo (2008)
 Modality: Center-Child Development Centers
 # of indicators/average: 22/41
 # of indicators total/average: 50/169

Depth Analysis

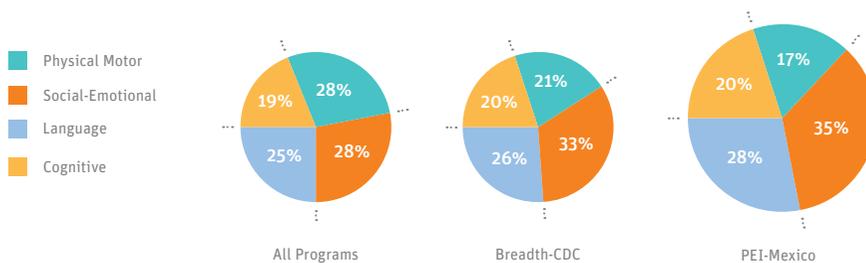
Physical Motor				
Gross Motor	Fine Motor	Sensory Integration	Self Help Skills	Development of the senses
41.67%	20.83%	12.50%	8.33%	8.33%

Social-Emotional				
Self Concept	Emotional Attachment	Interest and Exploration	Coop. Learning/Self Awareness	Emo. Exp/Inv. And Creativity
22.22%	22.22%	11.11%	11.11%	11.11%

Language				
Receptive Verbal Comm.	Speaking	Book Aware.	Print Aware.	Motivation to Read/ Vocabulary
33.33%	33.33%	8.33%	8.33%	8.33%

Cognitive				
Logical Thinking	Object Knowledge			
60.00%	40.00%			

Breadth Analysis



Annex 14. CAIF-Uruguay Program Summary

Program: CAIF-Uruguay
 Title of Document: Diseño Básico Curricular (2006)
 Modality: Center-Child Development Centers
 # of indicators/average: 46/41
 # of indicators total/average: 186/169

Depth Analysis

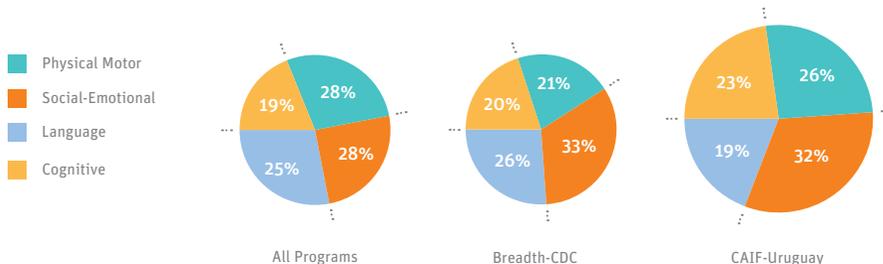
Physical Motor				
Fine Motor	Gross Motor	Spatial Awareness	Self Help Skills	Dev. of Senses/ Sen. Integration
20.83%	14.58%	14.58%	12.50%	10.42%

Social-Emotional				
Self Awareness	Interest and Exploration	Emotional Expression	Self Conf./Rel. w/Peers	Relationships with Adults
28.81%	15.25%	10.17%	6.78%	6.78%

Language				
Music	Art	Motivation to Read	Non-Verbal Comm.	Speaking
28.57%	20.00%	11.43%	8.57%	8.57%

Cognitive				
Logical Thinking	Object Permanence	Comparison	Object Knowledge	Multiple Indicators
38.64%	11.36%	9.09%	9.09%	4.55%

Breadth Analysis



Annex 15. Nuestros Niños-Uruguay Program Summary

Program: Nuestros Niños-Uruguay
 Title of Document: Modelo de Intervención Socio- Educativa en el Marco de una Política de Descentralización y Participación Ciudadana (1997)
 Modality: Center-Child Development Centers
 # of indicators/average: 36/41
 # de indicadores total/promedio: 126/169

Depth Analysis

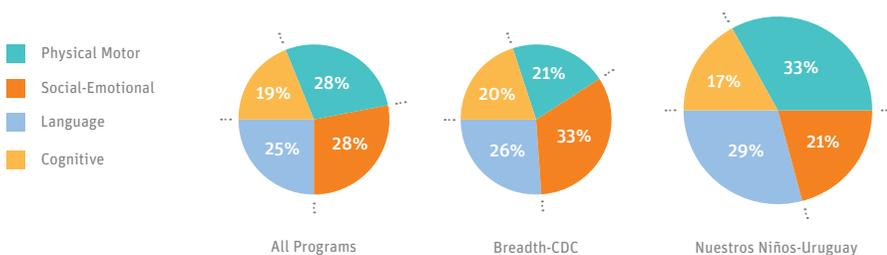
Physical Motor				
Fine Motor	Gross Motor	Physical State Regulation	Self Help Skills	Development of Senses/ Attention
29.27%	17.07%	17.07%	17.07%	7.32%

Social-Emotional				
Self Concept	Relationships with Peers	Relationships with Adults	Self Confidence	Social Play
22.22%	18.52%	11.11%	7.41%	7.41%

Language				
Art	Expressive Verbal Comm.	Speaking	Vocabulary	Music/ Receptive Verbal Comm.
27.78%	13.89%	13.89%	11.11%	8.33%

Cognitive				
Symbolic Play	Logical Thinking	Object Knowledge	Social Conventions	Memory
31.82%	31.82%	9.09%	9.09%	9.09%

Breadth Analysis



Annex 16. JICBA-Buenos Aires Program Summary

Program: JICBA - Buenos Aires
 Title of Document: Diseño Curricular para la Educación Inicial (2000)
 Modality: Center-Child Development Centers
 # of indicators/average: 51/41
 # of indicators total/average: 238/169

Depth Analysis

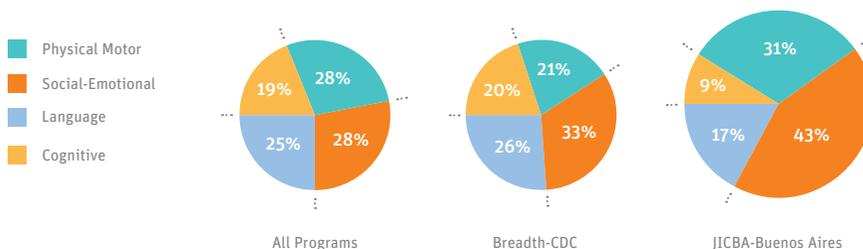
Physical Motor				
Self Help Skills	Gross Motor	Physical State Regulation	Spatial Awareness	Sensory Integration
23.29%	21.92%	20.55%	9.59%	5.48%

Social-Emotional				
Self Control	Relationships with Peers	Emotional Attachment	Interest and Exploration	Relationships with Adults
12.75%	11.76%	9.80%	8.82%	8.82%

Language				
Music	Expressive Verbal Comm.	Vocabulary	Art	Speaking
28.57%	16.67%	11.90%	9.52%	9.52%

Cognitive				
Social Conventions	Memory	Object Knowledge	Logical Think/Symbolic Play	Problem Resolution
19.05%	19.05%	9.52%	9.52%	9.52%

Breadth Analysis



Annex 17. CNH-Ecuador Program Summary

Program: CNH-Ecuador
 Title of Document: Guía Operativa para Promotoras de Creciendo con Nuestros Hijos (2010)
 Modality: Parenting Program
 # of indicators/average: 33/38
 # of indicators total/average: 172/250

Depth Analysis

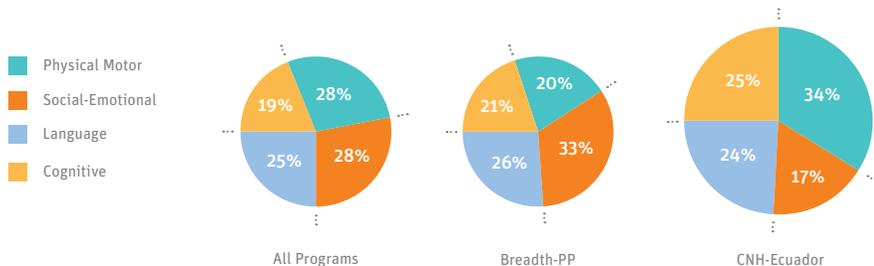
Physical Motor				
Gross Motor	Fine Motor	Development of Senses	Spatial Awareness	Attention
43.10%	32.76%	12.07%	5.17%	5.17%

Social-Emotional				
Self Awareness	Self Confidence	Interest and Exploration	Self Control	Relationships with Adults
31.03%	17.24%	17.24%	13.79%	6.90%

Language				
Speaking	Pragmatic and Social Lang.	Receptive Verbal Comm.	Non-Verbal Comm.	Expressive Verbal Comm.
21.43%	14.29%	14.29%	11.90%	11.90%

Cognitive				
Object Knowledge	Logical Thinking	Imitation	Cause and Effect	Symbolic Play
21.43%	19.05%	14.29%	11.90%	9.52%

Breadth Analysis



Annex 18. RC-Jamaica Program Summary

Program: RC-Jamaica
 Title of Document: The Roving Caregivers Early Childhood Home Visiting Programme - Guide for Training Rovers (2007)
 Modality: Parenting Program
 # of indicators/average: 31/38
 # of indicators total/average: 129/250

Depth Analysis

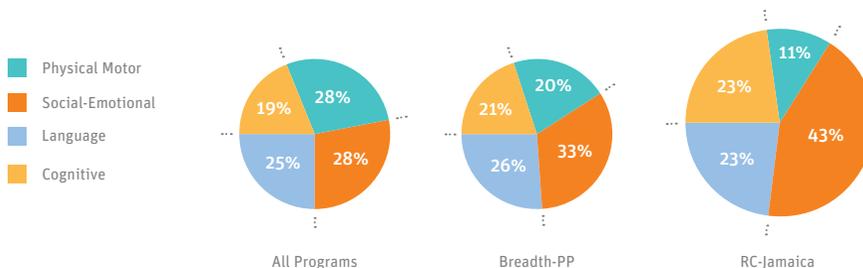
Physical Motor				
Gross Motor	Spatial Awareness	Development of Senses		
78.57%	14.29%	7.14%		

Social-Emotional				
Interest and Exploration	Empathy	Self Confidence	Emotional Attachment	Relationships with Adults
17.86%	14.29%	12.50%	10.71%	10.71%

Language				
Expressive Verbal Comm.	Receptive Verbal Comm.	Non-verbal Comm.	Music	Pragmatic and Social Lang.
23.33%	16.67%	13.33%	10.00%	10.00%

Cognitive				
Logical Thinking	Problem Resolution	Comparison	Cause and Effect	Memory/Symbolic Play
27.59%	20.69%	17.24%	13.79%	6.90%

Breadth Analysis



Annex 19. CONAFE-Mexico Program Summary

Program: CONAFE-Mexico
 Title of Document: Modelo de Atención Integral del Programa de Estancias Infantiles (2011)
 Modality: Parenting Program
 # of indicators/average: 50/38
 # of indicators total/average: 448/250

Depth Analysis

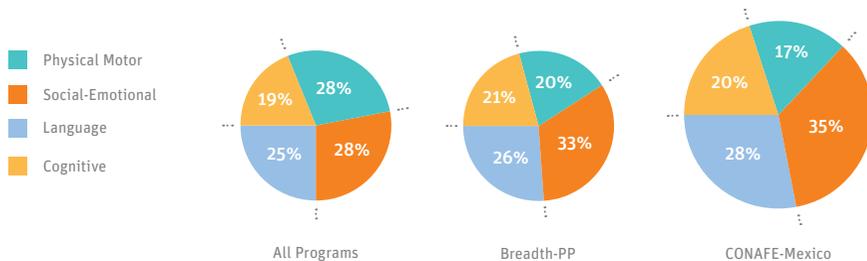
Physical Motor				
Self Help Skills	Gross Motor	Development of Senses	Spatial Awareness	Sensory Integration
27.63%	25.00%	18.42%	14.47%	6.58%

Social-Emotional				
Emotional Attachment	Self Awareness	Interest and Exploration	Relationships with Adults	Self Concept
33.33%	10.06%	10.06%	8.18%	6.29%

Language				
Non-verbal Comm.	Speaking	Expressive Verbal Comm.	Art	Vocabulary
27.20%	19.20%	16.80%	9.60%	7.20%

Cognitive				
Imitation	Memory	Logical Thinking	Object Permanence	Social Convention
22.73%	15.91%	14.77%	11.36%	11.36%

Breadth Analysis





Case Studies

Case Studies

Introduction

Two case studies were created for the purpose of this research. Both utilized an adjusted Scott-Little, Kagan & Frelow (2006) framework which was designed for children aged 36-60 months. This framework includes 46 early learning indicators. This framework is rooted in solid scientific research and sustained by multiple studies (See **Methodology** section of this report). The objectives, purposes and use of these case studies correspond to those for the report as a whole (See **Objectives, Purpose and Use of this Report**).

Data

The first case study highlights the program *Espacios de Esperanza* in the Dominican Republic, or *EE-Dominican Republic*. The ELGs being utilized by *EE-Dominican Republic* were created for children aged 0-6 years of age. For this reason, both Scott-Little et al. (2008) framework, designed for the content analysis of curriculum serving children aged 0-36 months, and the Scott-Little, Kagan & Frelow (2006) framework, designed for the content analysis of curriculum serving children aged 36 to 60 months, are appropriate for analyzing the ELGs in *EE-Dominican Republic*. However, since they are only using the ELGs as an intervention for children aged 3-5 years of age, the Scott-Little, Kagan & Frelow (2006) framework was most suitable to analyze the content of its ELGs.

The second case study, *ECCEC-Trinidad & Tobago*, serves children aged 3-4 years and utilizes a curriculum specifically designed for this age group. Similar to *EE-Dominican Republic*, the Scott-Little, Kagan & Frelow (2006) framework was most appropriate for the content analysis of these ELGs.

While both programs highlighted in these case studies are implemented in centers, specifically child development centers as opposed to community centers, the ages of the document utilized in each program vary. The document which contains the *EE-Dominican Republic's* ELGs, "*Plan Decenal de Educación en Acción*," was written in 1999 and the *ECCEC-Trinidad & Tobago's* document, "*Early Childhood Care and Education Curriculum Guide*," which contains its ELGs, was written in 2006.

Methodology and Coding Process

The methodology utilized for evaluating these two documents varied slightly from that used in the rest of this study. The original Scott-Little, Kagan & Frelow (2006) framework included 5 domains and 46 early learning guidelines. Similar to the methodology used in the body of this report, the indicators housed under the domain "Approaches to Learning" were parceled into the remaining 4 domains. For example, "exploration and experiment," "initiative, task persistence and attentiveness," and "invention and imagination" were moved to the Social-

Emotional domain and “reflection and interpretation” was moved to the Cognitive domain.

The same 8 new indicators (“music,” “play,” “participation,” “personal care routines,” “security,” “environmental awareness,” “interculturalism,” and “conflict resolution”) included in the 0-36 month framework were added to Scott-Little, Kagan & Frelow (2006) framework to evaluate if these “emerging indicators” were evident in the ELGs for older children or if they only presented themselves in the ELGs for younger children. “Communicating in a second language” was also included in the 0-36 month framework as a companion to “interculturalism” and to evaluate the ability for ELGs to adapt to minority and indigenous populations. In addition, grounded theory was utilized to add new indicators to the framework as they presented themselves. For example, “cooperative learning,” an indicator utilized in Scott-Little et al. (2008), was found in the ELGs designed for 3-5 year old children. It was then added to the framework. “Technology” was also found in the 0-36 month ELGs but was housed under “interest and exploration” in that framework. In the framework designed for curriculum appropriate for children aged 3-5 years of age, the role of technology was much more pronounced. For this reason it was parceled out and included as its own indicator within the Language domain.

Similar to the frameworks utilized for children between 0 and 36 months, several of the original Scott-Little, Kagan & Frelow (2006) indicators were merged. For example, “ability to have relationships with adults” was merged with “relationships with adults” and “ability to form and sustain reciprocal friendships with peers” was merged with “relationships with peers.” With regard to the 8 new indicators added

from the 0 to 36 month analysis, “personal care routines” was merged into “functional performance.”

Similar to the indicators designed for children younger than 36 months of age, the wording of this framework for older children was adjusted to reflect a document analysis and not an evaluation of the child. Finally, the indicators were translated into Spanish. The final framework used in this analysis includes four domains: Physical Motor (n=4), Social-Emotional (n=15), Language (n=19), Cognitive (n=6), together consisting a total of 44 indicators. The document for the *EE-Dominican Republic* program was written in Spanish and the *ECCEC-Trinidad & Tobago* document was written in English. Each document was coded in the original language using NVIVO.

Case Study 1: EE- Dominican Republic

Program Abbreviation: *Espacios de Esperanza (EE)*

Document Name: *Plan Decenal de Educación en Acción (1999)*

Modality: Centers- Child Development Centers

Description

Written in 1999, the document analyzed for the *EE-Dominican Republic* program was *Plan Decenal de Educación en Acción*. The curriculum utilized by the *EE-Dominican Republic* was designed for children aged 0-6 years and the program is using it specifically for children 3-5 years of age. This case study captures some of the challenges associated with using a single curriculum for a wide age range. In this program, the ELGs are clustered into a single age interval- 0-6 years of age. Providing only one age interval

is beneficial as it allows teachers the freedom to design classroom content with greater flexibility. However, the challenge with this structure is that it may be difficult to identify which indicators, and their corresponding pedagogical practices, are appropriate for children at very different ages.

This curriculum includes only three domains: “Cognitive Development,” “Expression or Language Development,” and “Socio-Emotional Development.” The indicators within these three domains were re-categorized under the four domains included in the framework for this analysis: Physical Motor, Social-Emotional, Language and Cognitive. The descriptive data and depth and breadth findings for each domain are described below.

Descriptive Data

The adjusted Scott-Little, Kagan & Frelow (2006) framework utilized for evaluating this program contained a total of 44 indicators divided among four domains: Physical Motor (n=4), Social-Emotional (n=15), Language (n=19) and Cognitive (n=6). (See **Appendix G** for a description of the indicators utilized.) In the document evaluated for the *EE-Dominican Republic* program, 32 of the 44 indicators were found. **Case Study 1- Table 1** below shows that Physical Motor included

all of the indicators (n=4) within this domain. Conversely, the Social-Emotional domain included the lowest percentage of indicators possible for this domain, with 53% (n=8). The Language domain included 79% (n=15) of the possible indicators available for this domain and the Cognitive domain contained 83% (n=5). In all, the 32 indicators found in these ELGs presented themselves 238 times. The percentage breakdown of each is illustrated below in the breadth analysis.

Breadth Analysis

The indicators in the document evaluated for the *EE-Dominican Republic* showed an overwhelming emphasis on the Cognitive domain at 44%. Physical Motor and Social-Emotional domains were nearly equal at 14% and 13% respectively. The Language domain had a 29% emphasis. (See **Case Study 1-Figure 1** below). The breakdown of each domain is highlighted graphically in the breadth analysis below.

Depth Analysis

As shown in **Case Study 1- Table 2** below, all four of the indicators in the Physical Motor domain were located within the *EE-Dominican Republic* document. The greatest emphasis in the Physical Motor domain is

Case Study 1- Table 1. Breadth and Depth Analysis Descriptive Data

	PHYSICAL MOTOR (N=4)	SOCIAL-EMOTIONAL (N=15)	LANGUAGE (N=19)	COGNITIVE (N=6)	TOTAL NUMBER OF INDICATORS (N=44)
Indicators	4 100%	8 53.33%	15 78.94%	5 83.33%	32 72.72%
Total Indicators Coded	33	31	69	105	238

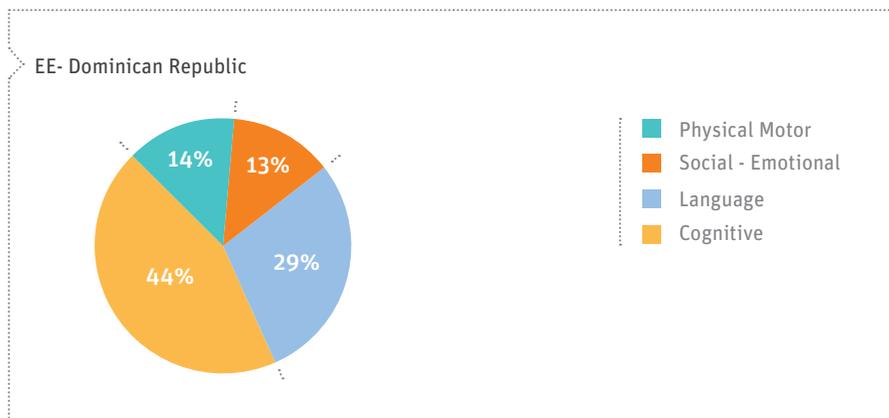
Source: Authors

given to “motor skills” at 60%. The indicators for the *EE-Dominican Republic* program placed a large emphasis on “nutrition” at 30%. “Physical aptitude” and “functional performance” were emphasized less, at 6% and 3% respectively.

Only slightly more than half of the indicators in the Social-Emotional domain were located. “Conflict resolution,” “cooperative learning,” “emotional regulation,” “initiative, task, persistence and attentiveness,” “participation,” and “self-efficacy”

“communication in a second language.” Similar to the other programs evaluated, this hints that the intention of the ELG authors may have stopped short at theory and were not integrated into other components of the curriculum. In addition to “communication in a second language,” “listening,” “questioning,” and “story sense” were not found in the ELGs. There was minimal emphasis on “alphabet awareness,” “comprehension,” “literature awareness,” “non-verbal communication” and “technology.” All

Case Study 1-Figure 1. Breadth Analysis- EE- Dominican Republic



Source: Authors

were absent in the ELGs utilized by this program. “Empathy,” “relationships with adults,” and “relationships with peers” were each emphasized at 3%, while “exploration and experiment” and “interculturalism” received twice as much emphasis, at 6% each. The greatest concentration was in the indicator “self-concept,” at approximately 39%, and a new indicator, “environmental awareness” at 29%.

Nearly 80% of the indicators for the Language domain were located in the *EE-Dominican Republic* document. While a heavy emphasis was placed on “interculturalism,” there was an absence of emphasis on

of these indicators were emphasized at less than 2% each. “Book awareness,” “creative uses of language” and “vocabulary” were emphasized at less than 3% each, and “phonemic and phonological awareness,” “speaking” and “writing process” were found at approximately 7% each. “Pragmatics and social language” was emphasized at approximately 10% and “music” at 11%. The two ELGs that had the greatest emphasis were “print awareness” at nearly 16% and “creative expression (non-language)” at approximately 25%.

All but one of the Cognitive indicators were found (n=6), or slightly over 80%. By far the largest emphasis was placed on science and math skills. “Social

knowledge” was emphasized at over 50% and “logical thinking” at 33%. “Security” was emphasized to a lesser extent, at not quite 3%.

Findings

The ELGs evaluated for this program were the second oldest included in this report. Created over a decade ago, the current program managers may wish to consider if these older ELGs accurately reflect the values and intentions of current stakeholders. Further, the curriculum utilized by this program is designed for children aged 0 to 6 years of age, and the program specifically serves children aged 3 to 5 years of age. The ELGs are not parceled by age and therefore, curriculum skill sets designed for younger children are integrated with those for the oldest children. Providing greater clarity on the appropriate ELGs and integrating these with the curriculum, training and implementation could positively impact the overall quality of the program. The authors of this report strongly believe that teachers in the region are eager to receive tools which facilitate their daily work with children and their families. ELGs which link early childhood education policies with practical pedagogical practices in a clear, precise and orderly manner can help meet this need.

Similar to other programs evaluated, the *EE-Dominican Republic* showed less emphasis in the Language domain on the indicators “communication in a second language,” “alphabet

awareness” and “story sense.” However, considering this program is aimed at children between 3 to 5 years old, program managers may wish to consider the presence of these indicators in a more current document and evaluate if these indicators are not only minimized on paper but also in the current daily implementation of the curriculum. In the Social-Emotional domain, the new indicators “interculturalism” and “environmental awareness” had a stronger than average presence, which hints that the ELG authors were considering these skill sets long before others in the region.

Recommendations

The *EE-Dominican Republic* document was one of the older curricula included in this analysis. The authors may wish to revisit this document and consider if the archival intentions of the ELG authors are current with the objectives of the program. This exercise can ensure that the guidance of the ELGs are updated and aligned with current education practices. Further, the ELG stakeholders may consider if the low presence of such indicators as “conflict resolution,” “cooperative learning,” “emotional regulation,” “initiative, persistence and attentiveness,” “participation,” and “self-efficacy,” as well as “alphabet awareness,” “communication in a second language,” “listening” and “questioning” are representative with the program goals and the realities of what is being implemented in the learning environment.

Case Study 1-Table 2. Depth Analysis- EE-Dominican Republic

PHYSICAL MOTOR (N=4)	DEPTH (%)	SOCIAL-EMOTIONAL (N=15)	DEPTH (%)	LANGUAGE (N=19)	DEPTH (%)	COGNITIVE (N=6)	DEPTH (%)
Physical aptitude	3.03%	Conflict resolution	0.00%	Comm. in a second language	0.00%	Reflection and interpretation	0.00%
Functional performance	6.06%	Cooperative learning	0.00%	Listening	0.00%	Represent. thought	0.95%
Nutrition	30.30%	Emotional regulation	0.00%	Questioning	0.00%	Security	2.86%
Motor skills	60.61%	Initiative, task persistence and attentiveness	0.00%	Story sense	0.00%	Social conventions	6.67%
		Invention and imagination	0.00%	Alphabet awareness	1.45%	Logical thinking	33.33%
		Participation	0.00%	Comprehension	1.45%	Social knowledge	56.19%
		Self efficacy	0.00%	Literature awareness	1.45%		
		Empathy	3.23%	Non verbal communication	1.45%		
		Relationships with adults	3.23%	Technology	1.45%		
		Relationships with peers	3.23%	Book awareness	2.90%		
		Exploration and experiment	6.45%	Creative uses of language	2.90%		
		Interculturalism	6.45%	Vocabulary and meaning	2.90%		
		Play	9.68%	Phonemic and phonological awareness	7.25%		
		Environmental awareness	29.03%	Speaking	7.25%		
		Self-concept	38.71%	Writing process	7.25%		
				Pragmatic and social language	10.14%		
				Music	11.59%		
		Print awareness	15.94%				
		Creative expression (non-language)	24.64%				

Source: Authors

Case Study 2: ECCEC- Trinidad & Tobago

Program Abbreviation: *Early Childhood Care and Education Centers (ECCEC)*

Document Name: Early Childhood Care and Education Curriculum Guide (2006)

Modality: Centers- Child Development Centers

Description

The draft document, “Early Childhood Care and Education Curriculum Guide,” submitted to the IDB was written in 2006 as a collaborative effort between the Ministry of Education and international and regional partners for Early Childhood Care and Education Centers. In the acknowledgements, the authors thank educators, caregivers, parents and mothers for their contribution to the content of the document through questionnaires and participation in discussion meetings. The introduction explains that the document includes the first ELGs to be utilized in Trinidad and Tobago for children ages 3 to 4 years of age. In addition to the childhood development indicators, which refer to physical, cognitive, creative, social and linguistic development and capacities of the children, the ELGs also contain indicators relating to the moral and spiritual development of the population it serves. The authors of this document place a strong emphasis on concepts such as empathy, spirituality and fairness. It is one of the few ELGs that mentions HIV/AIDS and physical and emotional abuse in the curriculum and includes early childhood development indicators addressing resiliency, empathy and security measures. In this document, security is presented not only as a condition that child development centers must ensure, but also to highlight the expectation that each child cannot cause physical

or emotional harm to his or her companions. Furthermore, the ELGs highlight a respect for human life and the importance of harmonious living. This document also specifically discusses the use of technology as a developmental tool for children between 3 and 4 years of age.

The ELGs for this program utilize five different domains, or as the curriculum calls them, “strands.” These strands include Wellness, Effective Communication, Citizenship/Belonging, Intellectual Empowerment and Aesthetic Expression. In keeping with the methodology, the indicators for these domains were re-categorized under the Physical Motor, Social-Emotional, Language and Cognitive domains. The emphasis of each domain is described below in the breadth analysis.

Descriptive Data

The adjusted Scott-Little, Kagan & Frelow (2006) framework utilized for evaluating this program contained a total of 44 indicators divided among four domains: Physical Motor (n=4), Social-Emotional (n=15), Language (n=19) and Cognitive (n=6). (See **Appendix G** for a description of the indicators utilized). The researchers found 36 of the 44 indicators, or 82%. Of the programs (n=19) evaluated in this report, this represents the largest percentage of either framework found in a single program. (See **Case Study 2-Table 1**). These 36 indicators presented themselves 216 times. The number of times the indicators present themselves is not a measure of quality. Instead, it is simply one way of describing the scope of the ELGs.

Breadth Analysis

While this program included a large percentage of indicators found, there were sizable differences in the

distribution of indicators among each of the four domains. The Physical Motor domain only received a 4% emphasis, while the Social-Emotional domain accounted for nearly 40%. Part of this disparity can be attributed to the difference in the number of indicators located within each domain. The Social-Emotional domain has approximately four times the number of indicators as the Physical Motor domain. However, even accounting for this numeric difference, there remains a large disparity in the emphasis between the two domains. The Cognitive domain and Language domain were emphasized at 25% and 33% respectively. Given the 6 indicators for the Cognitive domain presented themselves over 50 times, the 25% represents a strong emphasis on cognitive skill sets. (See **Case Study 2-Figure 1** below).

these two indicators are very different and represent different capacities. “Motor skills” in this context is defined as “fine, gross, oral and sensory skills” in contrast to “physical fitness,” which involves “the development the physical condition (endurance and strength) and behaviors (interest and participation) that contributes to a good physical state.” Those who design and implement these ELGs may wish to revisit these indicators to rectify these health development differences on paper and potentially, in practice.

In the Social-Emotional domain, all of the 15 indicators, or 93%, were found except for one, “invention and creativity.” The strongest emphasis was placed on “self-concept” (n=23%), which includes social roles and how children see themselves. As

Case Study 2- Table 1. Breadth and Depth Analysis Descriptive Data

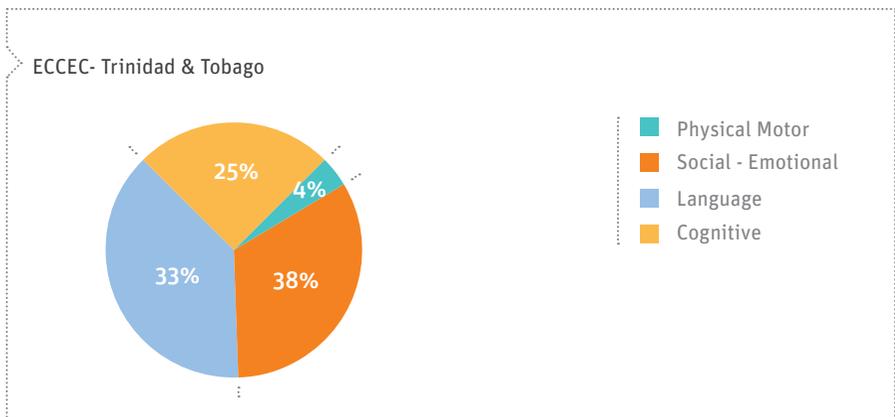
	PHYSICAL MOTOR (N=4)		SOCIAL-EMOTIONAL (N=15)		LANGUAGE (N=19)		COGNITIVE (N=6)		TOTAL NUMBER OF INDICATORS (N=44)	
Indicators	2	50%	14	93.33%	13	68.42%	6	100%	36	81.82%
Total Indicators Coded	8		83		72		53		216	

Source: Authors

Depth Analysis

In the Physical Motor domain, 50% (or 2 out of 4) of the indicators were identified. There was an absence of emphasis on “nutrition” and “physical aptitude.” The absence of these indicators may be due to the existence of other guidelines which cover health and nutrition content. The ELGs for this program emphasized “functional performance” (n=25%) and “motor skills” (n=50%). Some might argue that the heavy presence of “motor skills” assumes an emphasis on “physical aptitude.” However, the definitions for

previously mentioned, the authors of this document note concepts such as fairness and a respect for human life; these values are represented clearly in such indicators as “interculturalism,” a new indicator in the framework, which constituted a 15% of this domain; “empathy,” which garnered a 7% emphasis; and “relationship with peers,” which had a 6% emphasis. “Cooperative learning,” another new indicator, also received a fairly large emphasis at 6%. The authors believe this indicator aligns with the program’s stated values.

Case Study 2-Figure 1. Breadth Analysis- ECCEC-Trinidad & Tobago

Source: Authors

The Language domain contained a total of 19 indicators. 12 ELGs, or 63%, were identified. Seven were absent from the *ECCEC-Trinidad & Tobago* program curriculum. These included “alphabet awareness,” “comprehension,” “communication in a second language,” “questioning,” “speaking,” “story sense” and “writing process.” It is worth considering the absence of these indicators and evaluating if they are represented, and, if so, to what extent, in other aspects of the curriculum. Conversely, “creative expression (non-language)” and “music” together accounted for over 50% of the total domain, thus representing a large emphasis on artistic and musical expression. “Technology” in the body of this document was categorized under “interest and exploration.” However, in this framework, “technology” is parceled out as a stand-alone indicator, given the heavy emphasis on this concept in the body of the document. In the *ECCEC-Trinidad & Tobago* early learning guidelines, “technology” was shown to have approximately a 12% emphasis. ELG authors and stakeholders of this program may wish to create study groups with other program managers in the region who specifically note technological content in their ELGs. These include *SDIS-Bogota*, *EDI-Rio de Janeiro*, *PAIPN-Nicaragua* y *JUNJI-Chile*.

“Print awareness,” “phonemic and phonological awareness,” “vocabulary and meaning,” and “literature awareness” received 6%, 6%, 4% and 3% emphasis, respectively. A balanced presentation of these indicators in one area of domain has the potential to generate pedagogical practices which more fully cover the complexity of child development.

All six Cognitive indicators, or 100%, were identified within the ELGs for *ECCEC-Trinidad & Tobago*. “Social knowledge” and “social conventions” were equally emphasized, at 26% each. “Security” received a strong emphasis, at 23%, despite being a new indicator. (See **Case Study 2- Table 2** below). Particularly striking is the gap between “reflection and interpretation” (3.77%) and “representational thought” (1.89%).

Findings

Although this program included over 80% of the total number of indicators (36 out of 44), there was large variability in the type of indicators found. Of the indicators found, 50% (2 out of 4) were found in the Physical Motor domain, 63% (12 out of 19) were identified in the Language domain, 93% (15 out of 16) were located in

the Social-Emotional domain and 100% (6 out of 6) were situated in the Cognitive domain. There two ways to view this disparity. The first is that this program is addressing the social-emotional and cognitive needs in the ELGs. The program describes, in the introduction to its curriculum, the value of human life, the importance of living harmoniously and need to understand mathematical concepts and the sciences. The other lens through which to view these findings is that the heavy emphasis on socially and emotionally preparing children to be effective Trinidad & Tobago citizens and pushing cognitive concepts may have taken a toll on other developmental benchmarks, such as health and language skills.

Further, there were some interesting dichotomies evident within and between domains. For example, in the Language domain, in which only 63% of the indicators were found, one might discuss if a 50% emphasis on “music” and a 26% emphasis on “creative expression (non-language)” and 12% emphasis on “technology” is intentional given the absence of emphasis on the “alphabet awareness,” “story sense” and “writing process.” Another tension identified was a 15% emphasis

on “interculturalism” in the Social-Emotional domain, but an absence of representation of “communicating in a second language” in the Language domain. Similarly, in the Physical Motor domain, there is a 50% emphasis on “motor skills,” but an absence of representation of “physical aptitude.” As previously mentioned in the body of this report, the authors recommend comparing the practices that occur in educational spaces with the emphasis given to the ELGs on paper to understand if there is a gap between the conceptualizations and applications.

Recommendations

The ELGs utilized by *ECCEC-Trinidad & Tobago* appear to be some of the most clear and concise the sample. Despite the presence of indicators such as “security,” and “interculturalism,” which were not noted in many of the other ELGs in the sample, the authors may wish to consider if the presence and absence of other indicators are limiting learning opportunities for the children currently being served by the program.

Case Study 2- Table 2. Depth Analysis- ECCEC- Trinidad & Tobago

PHYSICAL MOTOR (N=4)	DEPTH (%)	SOCIAL-EMOTIONAL (N=15)	DEPTH (%)	LANGUAGE (N=19)	DEPTH (%)	COGNITIVE (N=6)	DEPTH (%)
Nutrition	0.00%	Invention and imagination	0.00%	Alphabet awareness	0.00%	Represent. Thought	1.89%
Physical aptitude	0.00%	Participation	1.20%	Comprehension	0.00%	Reflection and interpretation	3.77%
Functional performance	25.00%	Play	1.20%	Communication in a second language	0.00%	Logical thinking	18.87%
Motor skills	50.00%	Self-efficacy	2.41%	Speaking	0.00%	Security	22.64%
		Relationships with adults	3.61%	Story sense	0.00%	Social conventions	26.42%
		Conflict resolution	4.82%	Writing process	0.00%	Social knowledge	26.42%
		Emotional regulation	4.82%	Book awareness	1.39%		
		Initiative, task persistence and attentiveness	4.82%	Creative uses of language	1.39%		
		Cooperative learning	6.02%	Listening	1.39%		
		Relationships with peers	6.02%	Non-verbal communication	1.39%		
		Empathy	7.23%	Questioning	1.39%		
		Environmental awareness	7.23%	Literature awareness	2.78%		
		Explore and experiment	13.25%	Vocabulary and meaning	4.17%		
		Interculturalism	14.46%	Phonemic and phonological awareness	5.56%		
		Self-concept	22.89%	Print awareness	6.94%		
				Pragmatics and social language	9.72%		
				Technology	12.50%		
				Music	25.00%		
				Creative expression (Non-language)	26.39%		

Source: Authors





Appendix

Appendix A. Program Names and Document Information

No.	PROGRAM NAME	PROGRAM ABBREVIATION	PROGRAM COVERAGE	PUBLICATION YEAR	DOCUMENT TITLE	"INDICATOR" LEVEL CONTENT CODED	INSTITUTION NAME	SECTOR OF ORIGIN	MODALITY
1	Centros de Protección Infantil, Jardines de Infantes de la Ciudad de Buenos Aires, Jardines de Infantes de Entre Ríos	JICBA- Buenos Aires	Regional	2000	Diseño Curricular para la Educación Inicial	Evaluation of children	Gobierno de la Ciudad Autónoma de Buenos Aires, Secretaría de Educación	Education	Child Development Center
2	Atención en Educación Infantil	AEI- Fortaleza	Regional	2009	Proposta Pedagógica de Educação Infantil	Capacities	Prefeitura de Fortaleza	Education	Child Development Center
3	Espacio de Desarrollo Infantil	EDI- Rio de Janeiro	Regional	2010	Orientações Curriculares ara a Educação Infantil	Skills	Prefeitura da cidade do Rio de Janeiro, Secretaria Municipal de Educação	Education	Child Development Center
4	Jardines Infantiles de la JUNJI	JUNJI- Chile	National	2005	Bases Curriculares de la Educación Parvularia	Expected learning	Ministerio de Educación	Education	Child Development Center

5	Infancia y Adolescencia Feliz y Protegida Integralmente de la Secretaría Distrital de Integración Social de Bogotá	SDIS- Bogotá	Regional	2010	Lineamiento Pedagógico y Curricular para la Educación Inicial en el Distrito	Development to strengthen	Alcaldía Mayor de Bogotá, Secretaría Distrital de Integración Social, Secretaría de Educación del Distrito	Education	Child Development Center
6	Programa de Atención Integral a la Primera Infancia	PAIP –Dominican Republic	National	2011	Propuesta Curricular del Programa de Atención Integral para la Primera Infancia	Development	Consejo Nacional para la Niñez y la Adolescencia Departamento de Educación	Education	Child Development Center
7	Centros Infantiles del Buen Vivir	CIBV- Ecuador	National	2011	Guía Operativa para Promotoras y Coordinadores de los Centros Infantiles del Buen Vivir	Development Characteristics	Centros Infantiles de Buen Vivir, Instituto de los Niños y la Familia	Social	Community Center
8	Creciendo con Nuestros Hijos	CNH- Ecuador	National	2010	Guía Operativa para Promotoras de Creciendo con Nuestros Hijos	Development Characteristics	Ministerio de Inclusión Económica y Social, Instituto de los Niños y la Familia	Economic	Parenting programs

	Proyecto de Atención Integral a la Niñez	PAI- Guatemala	National	2008	Curriculo Nacional Base Nivel Inicial	Contents	Ministerio de Educación	Education	Community Center
9	Roving Caregivers	RC- Jamaica	Regional	2009	The Roving Caregivers Early Childhood Home Visiting Programme - Guide for Training Rovers	Early Learning Outcomes	Rural Family Support Organization, The Caribbean Centre for Development Administration	Intersectorial	Parenting programs
11	Early Childhood Commission	ECC- Jamaica	National	2007	The Jamaica Early Childhood Curriculum Guide	Developmental Objectives	Ministry of Education Early Childhood Commission	Education	Child Development Center
12	Programa de Educación Inicial	CONAFE- Mexico	National	2008	Antología de Apoyo	Capacities	Consejo Nacional de Fomento Educativo (CONAFE)	Education	Parenting programs
13	Programa de Estancias Infantiles	PEI- Mexico	National	2011	Modelo de Atención Integral del Programa de Estancias Infantiles	Indicators	Secretaría de Desarrollo Social, Sistema Nacional para el Desarrollo Integral de la Familia	Education	Child Development Center

	Programa de Atención Integral a la Niñez	PAIPN-Nicaragua	Regional		Programa Curricular	Evidence of learning	Ministerio de la Familia	Education	Community Center
14				--					
15	Programa Nacional Wawa Wasi	Wawa Wasi-Peru	National	2009	Lineamientos Técnicos para la Promoción del Aprendizaje Infantil Temprano en el Programa Nacional Wawa Wasi	Indicators	Ministerio de la Mujer y Desarrollo Social Programa Nacional Wawa Wasi	Intersectorial	Community Center
16	Plan Centros de Atención Integral Familiar	CAIF-Uruguay	National	2006	Diseño Básico Curricular	Profile	Ministerio de Educación y Cultura	Education	Child Development Center
17	Programa Nuestros Niños	Nuestros Niños-Uruguay	Regional	1997	Modelo de Intervención Socio Educativa en el Marco de una Política de Descentralización y Participación Ciudadana	Development	Intendencia Municipal de Montevideo United Nations Children's Fund	Intersectorial	Child Development Center

Case Study 1	Espacios de Esperanza Early	EE-Dominican Republic	National	1999	Plan Decenal de Educación en Acción	Processes	Secretaría de Estado de Educación, Despacho de la primera Dama	Education	Child Development Center
Case Study 2	Childhood Care and Education Centers	ECCEC-Trinidad & Tobago	National	2006	Early Childhood Care and Education Curriculum Guide	Learning Outcomes	Ministry of Education	Education	Child Development Center

Appendix B. Cover Page Template

CURRICULUM COVER PAGE	
Country	
Authors	
Title	
Publication Year	
Ages Included	
Format/Layout/Design	
Regional or National	
Targeted Audience	
Overall Purpose of the Document	
Language on Education	
education or care	
child or student	
child development	
teacher or educator or caregiver	
curriculum	
domains or indicators	
Missing Documents	
Questions	
Other	

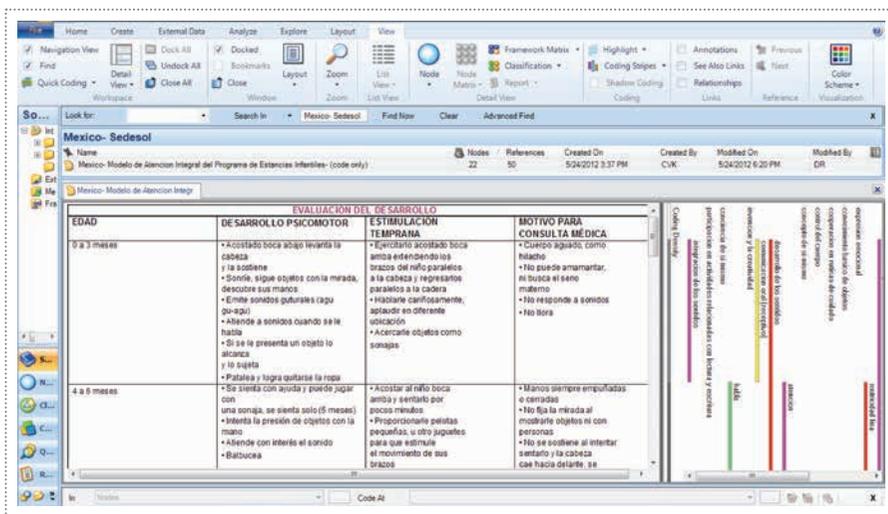
Appendix C. Content Excluded From Coding

CONTENTS

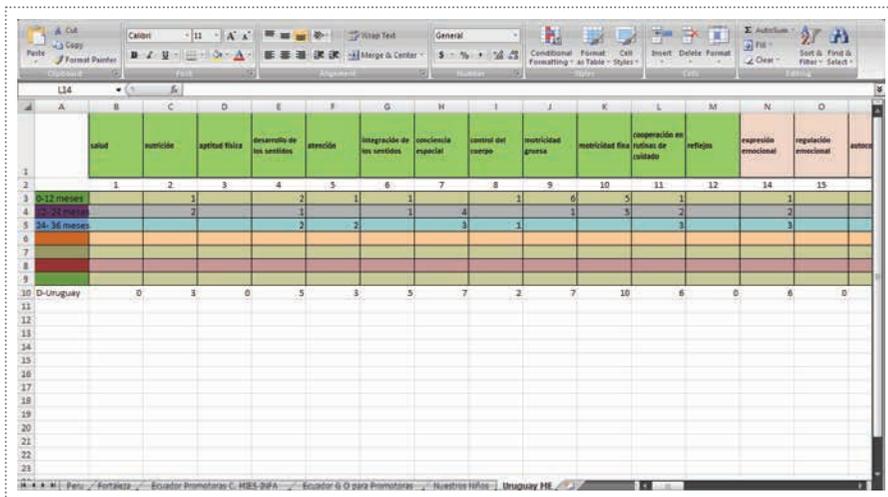
Alumni profiles
Boxes
Descriptions of parents and caregivers' role
Description of the program history
Discussions about the importance of early childhood education
Domain definitions
Early education principles
Examples of educational planning meetings
Footnotes
Guidelines for adaptation children to the programs
Guidelines for breastfeeding areas
Guidelines for children with disabilities
Guidelines for teachers
Guidelines for the interviews between teachers and parents or caregivers
Guiding principles
Images
Introduction
Material suggestions
Pedagogical projects
Program purposes or objectives (general and specific)
Recommended topics
Registration, planning or evaluation forms
Sections titled "developmental stages: (except CNH-Ecuador and CIVB-Ecuador since these are related to program activities)
Teacher profiles
Technical guidelines for infrastructure or buying materials
Theoretical discussions on early childhood development
Timetables and schedules

Source: Authors

Appendix D. NVIVO Screen Shot- (2011), PEI-Mexico.



Appendix E. Excel Screen Shot- CAIF-Uruguay



Appendix F. Domains and Indicators for Infants and Toddlers between 0 to 36 Months of Age

Physical Motor Domain

The ELGs promote in the child:	
1. Attention	Increasing interest in a stimulus from the outside world perceived through the senses.
2. Development of Senses	The ability to perceive information from the outside world via the senses, of touch, smell, taste, vision and/or hearing. Includes experimentation with materials, flavors and sounds.
3. Fine Motor	The development of precise movements with the hands, including grasping, transferring objects from one hand to the other.
4. Gross Motor	Actions that involving physical control, coordination and balance of the body and/or extremities. Including holding the head up, rolling over, sitting, standing, jumping, etc.
5. Nutrition	Knowledge of balanced nutrition and the identification, enjoyment and consumption of nutritious foods. Creating conditions for children to understand the importance of eating nutritious foods.
6. Personal Care Routines	Personal care and hygiene habits, such as washing hands and brushing teeth.
7. Physical Fitness	The development of physical fitness (stamina, strength, etc.) and the behaviors (interest and participation) that contribute to physical fitness.
8. Physical State Regulation	The recognition and regulation of sleep, feeding and elimination cycles.
9. Reflexes	The development of innate motor/behavioral responses to stimulus, including sucking, palmer grasp, etc.
10. Spatial Awareness	The ability to comprehend spatial relationships between one's own body and the surrounding environment
11. Self-Help Skills	The ability to participate in self-care activities.
12. Sensory Integration	The ability to perceive information from the outside world through the senses, and integrate it with knowledge and/or experiences.

Social Emotional Domain

The ELGs promote in the child:

13. Conflict Resolution	The ability to arrive at an agreement with others through dialog.
14. Cooperative Learning	Willingness to initiate and participate in learning activities with peers and adults. Includes asking caregivers for help.
15. Emotional Attachment	Behaviors typically associated with attachment with care takers. Includes differentiating between primary and secondary caregivers, seeking proximity to caregivers and experiencing pleasure when with caregiver. It also involves the ability to separate from attachment figures with relative ease, and using an attachment figure's response to decide how to respond to a situation
16. Emotional Expression	The ability to identify, name and/or express feelings and emotions.
17. Emotional Regulation	The ability to regulate feelings and emotions related to internal and external stimulation.
18. Empathy	The capacity to recognize, understand and show interest in the feelings and necessities of others. Expression of affection and concern for others, Includes behaviors such as comforting others.
19. Environmental Awareness	The capacity to participate in activities that contribute to the care of the environment and the conservation of natural resources.
20. Initiative	The desire and ability to begin a routine or learning task.
21. Interculturalism	The ability to relate to expressions of one's own culture and establish equitable relationships with members of other communities.
22. Interest and Exploration	General interest and curiosity regarding situations and materials in their environment.
23. Invention and Creativity	The ability to generate ideas and approach activities creatively.
24. Participation	Interest in being included and taking part in activities that promotes one's membership in a particular group.
25. Persistence	Continued interest in an activity in the face of difficulties. Implies the desire and the ability to complete and activity or learning task as well as overcome feelings of frustration.
26. Play	The capacity to participate in and enjoy individual or collective recreational activities.
27. Relationships with Adults	The development of behaviors and attitudes that indicate a relationship with adults.
28. Relationships with Peers	The development of behaviors and attitudes that indicate a relationship with other children. Includes sharing, collaborating, initiating interaction, etc.

29. Self-Awareness	Awareness of one's self as a unique individual. Including recognition of one's self in the mirror, use of the words "me" and "mine" and recognition of characteristics and possibilities of one's own body.
30. Self-Concept	Knowledge of one's own self such as age, name, gender, preference for objects and/or activities. Includes the concept of one's self as part of a family, community or cultural group.
31. Self-Confidence	The ability and desire to begin, continue and successfully complete activities individually or as part of a group. Includes recognition and strengthening of one's autonomy.
32. Self-Control	The ability to accept change, control one's behavior, and act in an appropriate manner when upset. Includes impulse control and the ability of adapt behaviors to new situations, routines and environments.
33. Social Play	Participation in activities or play with other children.
34. Willingness to Try	The ability to accept challenges. Includes the willingness to try out ideas or behaviors in situations that are new or where the answer or solution to a problem is unclear.

Language Domain

The ELGs promote in the child:

35. Alphabet Awareness	The ability to identify the letters of the alphabet.
36. Arts	The exploration and use of materials and techniques in the production of visual representations and/or objects that permit the expression of ideas and feelings. Includes the appreciation of one's own artwork, as well as that of others.
37. Book Awareness	The ability to use books in conventional ways. Includes holding a book in hands and turning pages.
38. Communication in a Second Language	The ability to communicate thoughts, feelings and/or necessities in a second language.
39. Comprehension	The ability to understand, communicate ideas and respond to questions related to the content of stories that one has heard or read.
40. Expressive Verbal Communication	The ability to communicate thoughts, ideas and/or needs through spoken language. Includes the use of babbling and words to transmit messages to family and care takers.
41. Motivation to Read and Write	The interest in and exploration of diverse forms of oral and written language. Includes listening to and reading stories, play with words, asking an adult to read a particular story and/or the manipulation of kinds of print material.
42. Music	The ability to communicate thoughts, feelings and/or necessities through body language and gestures.
43. Nonverbal Communication	The ability to communicate thoughts, feelings and/or necessities through body language and gestures.
44. Phonological Awareness	Ability to manipulate sounds, understand that words are made up of sounds and associate sounds with letters. Includes the reproduction of sounds made by animals and phonics.
45. Pragmatics and Social Language	The ability to use language as an effective communication tool. Implies using the language with a purpose, starting conversations with peers and adults, recognizing that differences in communication exist between formal and non formal settings, taking turns when speaking, and utilizing various communication strategies when communication is not working.
46. Print Awareness	The ability to identify images and symbols. Includes an understanding that symbols and pictures can be used to communicate thoughts, feelings and necessities.
47. Receptive Verbal Communication	The ability to identify and understand verbal expressions and sounds. Includes understanding the communicative intentions of others, the ability to listen to others and follow instructions.

48. Speaking

Ability to use language in accordance with generally accepted patterns of speech. Includes the proper use of syntax, the progression from cooing to babbling to using words and the progression from short/one word sentences to more complex sentences.

49. Story Sense

The ability to understand the sequence (beginning, middle, end) of a story and to retell a story. Includes the ability to identify the characteristics of a story.

50. Vocabulary and meaning of concepts

The ability to comprehend the meaning of words and identify objects through verbal and nonverbal language. Includes the use of concepts such as high-low and big-small.

51. Writing Process

The ability to express one's self through written language. Includes the progression from scribbling to writing letters and words.

Cognitive Domain

The ELGs promote in the child:

52. Cause and Effect	The ability to establish relationships of cause and effect. Includes the ability to describe transformations that occur one's environment and recognize the consequences of their actions of the people and objects that surround them.
53. Comparisons	The ability to make comparisons between characteristics of people, objects and activities. Includes the ability to establish relationships of similarity and difference.
54. Exploratory Play	The ability to interact and demonstrate enjoyment with new objects and materials, to explore a particular situation.
55. Flexibility	The emerging ability to change or adapt thought processes, skills and knowledge to new situations.
56. Formulation of Hypotheses	The ability to process information, formulate questions and anticipate the effects of an action. Includes the ability to make an educated guess about something that is not necessarily a pattern.
57. Imitation	The ability to reproduce sounds, movements, gestures and behaviors that have been observed.
58. Knowledge of Objects	The understanding of the properties (weight, shape, color, size) and functions of objects found in one's environment. This includes naming the use and function of some tools and establishing relationships between images and objects.
59. Knowledge of Places	The identification and location of spaces important to one's self or the community.
60. Logical Thinking	Experimentation with mathematic concepts, such as numbers, geometric forms, patterns, proportions, grouping, sorting, telling time, measurement and quantities.
61. Memory	The ability to recognize and recall voices, people, events or information. Includes anticipating routines, or other previously experienced activities and retelling stories one has heard.
62. Meta-cognition	The awareness of or the ability to reflect on one's own thought processes.
63. Natural Sciences	The understanding of concepts and processes related to the environment. This includes the development of interest in topics related to characteristics of living and non living things, different ecosystems, the universe, etc.
64. Object Permanence	The ability to understand that an object or person exists even when not in sight.

65. Personal Data	The ability to transmit information related to one's personal history. Including information about the size of family, the names of family members, close caretakers, address etc.
66. Planning and Intentionality	The ability to develop and carry out plans for goal-directed activities. Includes the ability to anticipate actions.
67. Problem Resolution	The ability to identify a problem and propose strategies to solve it. Includes trial and error.
68. Security	The ability to develop habits that permit one to provide for one's own health and personal security.
69. Social Conventions	The ability to follow norms of social behavior respected and shared by the community. This includes understanding and accepting limits, following procedures and making appropriate use of shared spaces.
70. Social Sciences	The understanding of the roles that different members of the family and other community groups play in one's environment. This includes the development and knowledge of the past and present and their community and country.
71. Symbolic Play	The ability to pretend or make-believe, including taking on roles and the imaginative use of objects.

Appendix G. Domains and Indicators for Children between 36 to 60 Months of Age

Physical Motor Domain

The ELGs promote in the child:	
1. Functional Performance	These include physical competencies and self-help skills such as the ability to carry out routines and activities related to care, both individually and as part of a group. Includes: self-care and hygiene habits, such as washing hands and brushing teeth.
2. Motor Skills	This includes fine, gross, oral and sensory skills.
3. Nutrition	Knowledge of balanced nutrition and the identification, enjoyment and consumption of nutritious foods. Creating conditions for children to understand the importance of eating nutritious foods.
4. Physical Fitness	The development of physical fitness (stamina, strength, etc.) and the behaviors (interest and participation) that contribute to physical fitness.

Social-Emotional Domain

The ELGs promote in the child:

5. Conflict Resolution	The ability to arrive at an agreement with others through dialog.
6. Cooperative Learning	Willingness to initiate and participate in learning activities with peers and adults. Includes asking caregivers for help.
7. Emotional Regulation	Regulates and expresses emotions appropriately (communicate one's attitudes/feelings verbally and nonverbally).
8. Empathy	The capacity to recognize, understand and show interest in the feelings and necessities of others. Expression of affection and concern for others, Includes behaviors such as comforting others.
9. Environmental Awareness	The capacity to participate in activities that contribute to the care of the environment and the conservation of natural resources.
10. Exploration and Experiment	Openness to and curiosity about new tasks and challenges.
11. Initiative, Persistence and Attentiveness	Continued interest in an activity in the face of difficulties. Implies the desire and the ability to complete an activity or learning task as well as overcome feelings of frustration.
12. Interculturalism	The ability to relate to expressions of one's own culture and establish equitable relationships with members of other communities.
13. Invention and Imagination	The capacity to use innovation and imagination as a approach toward learning.
14. Participation	Interest in being included and taking part in activities that promotes one's membership in a particular group.
15. Play	The capacity to participation in and enjoy individual or collective ludic activities.
16. Relationships with Adults	The development of behaviors and attitudes that indicate a relationship with adults.
17. Relationships with Peers	This includes social skills necessary to cooperate with peers and the ability to form and sustain reciprocal friendships with peers.
18. Self-Concept	Knowledge of one's own self such as age, name, gender, preference for objects and/or activities. Includes the concept of one's self as part of a family, community or cultural group.
19. Self-Efficacy	Belief that one can successfully accomplish what one sets out to do.

Language Domain

The ELGs promote in the child:	
20. Alphabet Awareness	The ability to recognize the letters of the alphabet.
21. Book Awareness	Reads from left to right; holds book and turns pages appropriately.
22. Communication in a Second Language	The ability to communicate thoughts, feelings and/or necessities in a second language.
23. Comprehension	Awareness of the basic content of literacy-related materials.
24. Creative Expression (non-language)	The exploration and use of materials and techniques in the production of visual representations and/or objects that permit the expression of ideas and feelings. Includes the appreciation of one's own artwork, as well as that of others.
25. Creative Uses of Language (non-language)	Listens attentively to stories, songs, rhyming sounds and words; storytelling.
26. Listening	Includes the ability to follow oral directions.
27. Literature Awareness	Interest in various forms of literature; also includes recalling and telling familiar stories.
28. Music	Exploration and expression of ideas and feelings through the voice, body (sense of rhythm) and the use of instruments.
29. Nonverbal Communication	The ability to communicate thoughts, feelings and/or necessities through body language and gestures.
30. Phonemic and Phonological Awareness	The ability to discriminate and identify sounds and formulate words.
31. Pragmatics and Social Language	The ability to use language as an effective communication tool. Implies using the language with a purpose, starting conversations with peers and adults, recognizing that differences in communication exist between formal and non formal settings, taking turns when speaking, and utilizing various communication strategies when communication is not working.
32. Print Awareness	Recognizes own name in writing, aware of connection between text, storytelling, symbols.
33. Questioning	The ability to ask questions and seek answers through active exploration.
34. Speaking	The ability to communicate verbally. Focuses on the mechanics of speaking and not what it communicates.
35. Story Sense	The capacity to comprehend the sequence of a story.
36. Technology	The ability to use and/or explore technology.

37. Vocabulary and Meaning of Concepts	The ability to comprehend the meaning of words and identify objects through verbal and nonverbal language. Includes the use of concepts such as high-low and big-small.
38. Writing Process	Produces ordered scribbling.

Cognitive Domain

The ELGs promote in the child:	
39. Logical Thinking	Knowledge constructed within the mind of the individual that establishes similarities, differences, and associations between objects, events or people.
40. Reflection and Interpretation	The ability to learn from past experiences and use this knowledge to new situations; generate ideas, suggestion and/or make predictions.
41. Representational Thought	Knowledge of objects in external reality learned by observations and experience with the objects. The ability to think about things not present.
42. Security	The ability to develop habits that permit one to provide for one's own (and other's) health and personal security.
43. Social Conventions	Awareness of the agreed upon conventions of society and the school-learning knowledge of conventions.
44. Social Knowledge	Aware of self, family and community; aware of physical environment and natural world.





Social Protection and Health Division
Interamerican Development Bank
1300 New York Avenue N.W.
Washington, D.C. 20577, USA

scl-sph@iadb.org
www.iadb.org/Health
www.iadb.org/SocialProtection
blogs.iadb.org/desarrolloinfantil_en