

PROJECT PERFORMANCE ASSESSMENT REPORT

JAMAICA

Early Childhood Development Project

Report No. 171544

JUNE 29, 2022



IEG
INDEPENDENT
EVALUATION GROUP

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**Early Childhood Development Project
(Loan IBRD-75540, IBRD-83340)**

June 29, 2022

Human Development and Economic Management

Independent Evaluation Group

Abbreviations

CHDP	Child Health and Development Passport
DLT	disbursement-linked target
ECC	Early Childhood Commission
ECD	early childhood development
ECDP	Early Childhood Development Project
ECI	early childhood institution
IEG	Independent Evaluation Group
JSRA	Jamaica School Readiness Assessment
M&E	monitoring and evaluation
NSP	National Strategic Plan
PAD	Project Appraisal Document
PATH	Program of Advancement through Health and Education
PDO	project development objective
SWAp	sectorwide approach
TTL	task team leader
UNICEF	United Nations Children’s Fund

All dollar amounts are US dollars unless otherwise indicated.

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Note: IEG = Independent Evaluation Group; PPAR = Project Performance Assessment Report.

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Data

This is a Project Performance Assessment Report by the Independent Evaluation Group of the World Bank Group on the Jamaica Early Childhood Development Project (P095673). This instrument and the methodology for this evaluation are discussed in appendix C. Following standard Independent Evaluation Group procedure, copies of the draft Project Performance Assessment Report were shared with relevant government officials for their review and comment (see appendix G for borrower comments).

Basic Data

Country	Jamaica	World Bank financing commitment	\$27,000,000
Global Practice	Education	Actual project cost	\$27,000,000
Project name	Early Childhood Development	Expected project total cost	\$27,000,000
Project ID	P095673	Actual amount disbursed	\$26,470,581
Financing instrument	Investment project financing (sectorwide approach)	Environmental assessment category	C
Financing source	International Bank for Reconstruction and Development		

Dates

Event	Original Date	Actual Date
Approval	July 10, 2005	May 13, 2008
Effectiveness		February 9, 2009
Restructuring		June 15, 2011
		February 27, 2013
		September 10, 2013
		January 10, 2014
		June 2018
Mid-Term Review		May 21, 2010
Closing	Sept 30, 2013	September 28, 2018

Key Staff Responsible

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Summary

Background and Description

Jamaica has a long history of research into the causes and consequences of shortcomings in early childhood development. With the creation of the Early Childhood Commission (ECC) in 2003 and adoption of its National Strategic Plan (NSP) for early childhood development (ECD) in 2008, the government began an ambitious effort to improve the health, education, and welfare of its children from birth to age 6. To support its cross-sectoral plan, the government sought World Bank financing for the Early Childhood Development Project (ECDP), which aimed to implement key objectives of the NSP. This project was a pioneer of cross-sector implementation for ECD in the World Bank. The project, to be implemented by the ECC, had two main components: a sectorwide approach (SWAp) that targeted seven action areas in the NSP, and financing for relevant technical assistance.

The ECDP's project development objectives (PDOs) were to (i) "improve the monitoring of children's development, screening of household-level risks affecting such development, and early intervention systems of the borrower to promote such development; (ii) enhance the quality of early childhood institutions (ECIs); and (iii) strengthen early childhood organizations and institutions." These PDOs remained consistent throughout the life of the operation, as the objective that was later added—"improve parenting education and support programs"—supported a foundational objective of the NSP. For the purposes of this evaluation, because the first PDO consisted of three distinct objectives, the PDOs were recast as six objectives:

- Improve monitoring of children's development
- Enhance the quality of ECIs
- Improve the early intervention systems to promote children's development
- Screen household-level risk affecting children's development
- Strengthen early childhood organizations and institutions
- Improve parenting education and support

The SWAp was unique in its conditioning of disbursements on meeting key targets and policy reforms using disbursement-linked targets (DLTs). The SWAp financed items in each of the NSP's seven action areas:

- Effective parenting education and support for ECD

- Effective preventive health care for children ages 0–6 years
- Effective early screening, diagnosis, and intervention for at-risk children and households
- Safe, learner-centered, well-maintained early childhood facilities
- Effective curriculum delivery by trained early childhood practitioners
- Sector and sector agencies governed by frameworks that promote achieving results in a consultative environment, and sector institutions achieving targets
- Timely, clear, current, appropriate, and evidence-based information to support ECD

The World Bank Board of Executive Directors approved the SWAp on May 13, 2008, with an effective date of February 9, 2009, and a closing date of September 30, 2013. The Mid-Term Review was conducted as planned in May 2010, but in the ensuing years, five restructurings, including one for additional financing, resulted in a new closing date. The project closed on the new closing date: September 28, 2018.

The technical assistance component supported improved monitoring, screening, and early intervention and development of a national policy on screening, referral, and early intervention. This included design of a screening system for household risks and the development of a public education strategy for childhood risks. Other activities supported enhanced quality of ECIs and daycare facilities and a strategy for reorganizing and strengthening well-child clinics. A grant facility supported the analysis of needs and gaps in ECI service provision and the development of health and safety training for ECI staff. Development of a human resource strategy for ECD was to include revised compensation policies for early childhood practitioners. To support strengthening of early childhood organizations and institutions, technical assistance was to assist in strengthening the legal framework governing ECD, developing a national ECD policy, and elaborating proposals for local governance and ECI management models. The assistance would also support the development of the monitoring and evaluation systems and several evaluations.

The complexity of the ECDP reflected the NSP's ambition and had consequences for the project implementation and for its achievement of results. The project's success hinged on successful implementation of the cross-sectoral approach through ECC coordination. Strong ownership both within the partner ministries and at the highest levels of government provided a firm foundation for project implementation at the start, and the use of DLTs aimed to ensure progress toward achieving the ECDP's objectives.

Results

What Worked

Two of the six PDOs received strong attention during implementation, and some important outputs were attained. First, monitoring of children’s development occurred via child health surveillance offered by health clinics to include child development and to provide annual information on a child’s development status. This expansion required development of a new tool held by parents and shared with teachers: the Child Health and Development Passport (CHDP). Starting in September 2010, all children born in Jamaica received a CHDP. Second, new regulations and accreditation procedures improved the quality of ECIs. Securing quality required interventions related to buildings, environmental safety, public health, and equipment—all supported by a new regulatory framework, certification system, vocational training for practitioners, inspection process, and development support from the ECC. There were issues with these foundational aspects that limited their effectiveness.

What Did Not Work

The cross-sectoral approach, managed by the ECC, fell short of achieving its goals for structural reasons. Budgeting constraints and flaws in the allocation of funds among the partner ministries were foremost among these reasons. Some of the constraint was because of the project’s unfortunate timing—it began just as the global financial crisis struck. By 2011, the International Monetary Fund found that Jamaica was at risk of economic collapse, and in 2013, it intervened with financial support that required stringent controls on government spending. Although these exogenous factors were disruptive, the project also did not allocate funding in a manner that would support the ministries implementing portions of the project. For example, the NSP and ECDP required substantial changes to switch from a health focus to a development focus via the CHDP, and it would require more time and increased capacity from personnel in the health clinics to implement. An accreditation system was also developed for well-child clinics. In both cases, additional resources to meet the additional requirements were not allocated. Another reason the cross-sectoral approach did not work as it could have is that it did not build on lessons learned from earlier World Bank–supported operations such as the Programme of Advancement through Health and Education cash transfer program, which targeted efforts to realize improvements in children’s development and strengthen evaluation and monitoring systems.

Four PDOs received limited attention during project implementation and achieved few of their key outputs. Although DLTs related to these PDOs—improve support for parenting, establish early intervention systems to promote children’s development,

screen household-level risk affecting children’s development, and strengthen early childhood organizations and institutions—were owned by the government, the targets had weaknesses that undermined attention to intended project impacts. For example, the early intervention system was to identify children with neurodevelopmental disabilities and develop the human resource capacity to strengthen early intervention services. Elements of this system were developed with the support of multiple partners, but the system is not fully operational even now. The Family Support Screening Tool, necessary to identify children living in at-risk households or risky situations, was designed to be administered at birth and at least once a year until the child was 5 years old during well-child clinic visits, the Programme of Advancement through Health and Education program visits, or during preschool years. Although the tool was piloted, targets for its completion and implementation were dropped, but the tool will be rolled out later in 2022. The third objective—strengthened ECD organizations and institutions—meant actualizing the framework that promotes achievement of results in a consultative and coordinated approach. However, as of 2022, the cabinet still has not approved the national ECD policy. The community-based service delivery model, which was developed and piloted, has not been implemented and is included in NSP 3 for 2018–23. Although support to parenting occurred through multiple points of contact, its achievement was assessed only based on the number of Parent Places certified. Research in Jamaica highlights the importance of reaching at-risk parents with consistent support to change how they engage with their children, particularly in the first three years of life. The potential of the CHDP to support parenting has never been fully realized. Late in the project, Parent Places were proposed as a neighborhood support concept, which could be attached to public services, faith-based organizations, and community-based organizations. The approach was informed by consultation and strategy and was meant to complement other points of contact.

Achievement of Targets

The ECDP achieved some outputs based on scaled-back targets. An evaluation of the CHDP found low usage of the passport for monitoring children’s development except for the immunization pages. Parents were uncertain about their role in writing in the CHDP, and teachers were unaware of their own importance in the health-education interface. The evaluation also found that neither parents nor health workers were using or discussing the CHDP’s development screening sections, and as children aged, this section was least likely to be completed. In 2019, 676 children received an intervention based on screening and referral data. Six well-child clinics were certified by September 2016 according to standards adapted for Jamaica. No further assessments have been done.

Although considerable effort went into upgrading the ECIs, similar effort was not invested in the teachers; however, some training has been provided. For the 2019/20 academic year, 14,987 children attended public or private ECIs that have permits to operate, which relates to meeting health and safety requirements. In 2019, 271 ECIs met the more rigorous standard of certification, up from 129 previously. As of January 4, 2021, 2,299 ECIs had implemented development plans. However, without attention to critical learning inputs (teachers, ECD practitioners), it was difficult for the project to achieve the desired results. Moreover, private ECIs are hindered by their operating budgets, which are derived from parent fees and are inadequate to ensure quality staffing and a conducive learning environment, particularly those serving lower-income children.

Outputs related to support for parenting were modest at project closure and have remained so subsequently. Fifty-two percent of Parent Places were certified by project close and another 26 have been identified for certification in the future. Parenting engagement was not supported through the ECIs, and staff in ECIs had no clear understanding of how to engage and report to parents on curriculum, according to interviews, even though parent and community engagement is a standard assessed during inspection.

Outcome data are limited, but the most recent Jamaica School Readiness Assessment (JSRA), which measures school readiness among children at age 4, shows no change through the years 2017, 2018, and 2019. This could be a limitation of the screening tools used and so should be interpreted cautiously. The inability to connect available ECC data (that is, teacher qualifications, ECI geocoding data, type of ECI) with JSRA data meant important explanatory variables could not be examined.

Design and Preparation

What Worked

Project preparation was supported by strong high-level ownership in the relevant ministries and by financial support to undertake considerable analytical work. Within the partner ministries, there was solid understanding of the logic and imperative for support of ECD for the long-term achievement of national priorities related to human and economic development. Financial support from the Japan International Cooperation Agency (\$559,000) provided resources to undertake numerous analytical studies during project preparation.

The project design was visionary in its use of the ECC to coordinate across sectors, a model that had been applied elsewhere in Jamaica with some success. The key aspect of the concept was the ECC's role as coordinator among equal partners in the ministries

responsible for supporting development of young children. In this regard, the sector ministries and agencies retained responsibility for management of service delivery in their respective areas and were apprised of their implementation responsibilities via representation on the ECC board, and ministries signed memorandums of understanding in support of this.

A strong, multidisciplinary team from the World Bank's Human Development Sector led preparation of the ECDP. The sector leader was an education specialist; the task team leader (TTL) was a pediatrician and economist; and team members were experienced in human development (including early childhood and youth development programming) and monitoring and evaluation systems. The first project TTL formed a strong relationship with the executive director of the ECC during preparation and supported the development of the NSP. By current standards, preparation was lengthy.

What Did Not Work

Although the funding required (beyond what ECDP provided) to implement the NSP was known from the outset, the ECC did not set priorities, phases, or steps for implementation, nor did it target its efforts. Even though project implementation was extended to 10 years with the additional financing, the ambition exceeded the government's financial and human resource capacity. This was partly caused by the lack of a realistic assessment regarding what Jamaica could do effectively in this subsector. Comments from the chair of the ECC at the time note that before the ECDP no detailed national data were available on ECIs, including for teacher qualifications, and that such baseline data were necessary to inform targeting. She also notes that it took years to develop and operationalize implementation of standards and undertake data analysis, and that targeting is now taking place, though its challenges are recognized. In retrospect, national ECI data collection and analysis might have been undertaken and accomplished through research supported by the Japan International Cooperation Agency.

The design of the ECDP did not fully account for the scope of changes needed to achieve the systems-level transformation envisioned. The need to develop a new health service delivery model that would support child development, parent support and education, and an early intervention system and screening of household risk was embedded in the NSP. Although some design shortcomings were traceable to flaws in the NSP, the ECDP itself did not focus on core areas needed to implement the NSP, such as the role of nurse practitioners in child development and how to raise standards in ECIs.

Monitoring and targeting efforts among interventions for impoverished people were not part of ECDP, despite the evidence of the beneficial impact from early stimulation

interventions for disadvantaged children. A birth cohort study undertaken during ECDP confirmed that ECD outcomes were most influenced by variables of gender, socioeconomic status, ECD resources in the home, maternal education, and school type. Although these findings would not have been available during the development of NSP, they confirmed what Jamaican research had established in prior decades. The implication was the critical need for ECDP to ensure reach among poor families and children to address factors to improve brain development in these early years. But this focus did not materialize within ECDP.

Development of a theory of change, done for this Project Performance Assessment Report, might have exposed some of the flaws in the objectives and gaps in indicators and implementation plans. Although priority was given to regulating safe ECIs and to ensuring trained personnel and use of approved curriculum (for example, the scale of the tasks involved was not quantified), the financing required to retain staff in ECIs on parity of terms and conditions with the public sector was not assessed, nor was the training required to meet new targets and regulations.

Project design and preparation also did not use existing research on ECD in Jamaica sufficiently, particularly regarding effective support to parenting. Studies predating the NSP and ECDP emphasized the need to target poorer parents to have the greatest impact on childhood development, but this was not done in the design of the ECDP. The project also did not seek to develop parental interventions based on what Jamaican evidence showed would be needed to have an impact on parental knowledge, practices, and education.

Implementation and Supervision

What Worked

ECDP financed research and data collection efforts, many of which have continued beyond implementation. Among the implementation achievements was the development of an ECD management information system, strengthening statistics, and ECD data that were limited before the operation. ECDP supported implementation of the child development module for the Survey of Living Conditions and the JSRA pilot. After the pilot, data were collected in 2017, 2018, and 2019. The module for the Survey of Living Conditions was discontinued once project funding ended.

Data from DLTs were analyzed to detect implementation issues. The ECC gained additional insight into the issues affecting the quality of ECIs and made grants and resources available to ECIs to improve safety standards and become learning centered. In addition, with ECC encouragement, the government expanded the workforce of accredited teachers in public infant schools. The focus on standards included support to

help ECIs meet certification standards, with the government providing ECIs with subsidies for qualified teachers once they met the standards.

What Did Not Work

The ECDP intended to create incentives for and increase government financing across multiple sectors with ECD initiatives, but this did not occur. From the start, funding from ECDP did not flow directly to ministries responsible for implementing NSP activities, even when those activities were additions to a ministry's mission, as was the case with inclusion of child development and parenting support. The DLTs, though intended to incentivize government counterpart funding, did not do so, creating additional financial issues. The government did not attempt to address issues with its own allocation process. Moreover, by the Mid-Term Review, it was clear that the project would not be able to achieve its goals in five years. The five restructurings that followed could have addressed the underlying problems, such as inadequacies in financing flows to key ministries and staffing issues. As the Planning Institute of Jamaica suggests, it could also have focused "only on a set of critical issues and manageable targets, giving more attention to sustainability, including institutional strengthening where possible." Instead, the restructurings reduced some targets and canceled others.

By placing implementation responsibility with the same agency that developed the NSP, the government and the World Bank sought to empower and build the capacity of relevant experts and public servants recruited to the agency with the authority needed to execute a complex and highly ambitious project. However, other options that simultaneously built capacity of the ECC and leveraged government expertise (such as the Culture, Health, Arts, Sports, and Education Fund) might have permitted the ECC to focus on technical implementation. The ECC was a young agency, and its staff lacked experience in implementing a project of this type. Implementation was complicated for an entity that was initially a policy and planning agency but, under the project, became a coordinating project implementation unit and a regulator providing inspection and learning support functions. Moreover, the terms of ECC staff were lower than those of similar agencies or units. The ECC has submitted a reclassification proposal to the government.

With government changes, the ECC has become more like a department within the Ministry of Education. According to the 2003 act that created the commission, the ECC reports directly to the Minister of Education (Ministry of Education, Youth, and Information). After the first five years of implementation, with a change in government, the ECC's role emphasized its regulatory functions for ECIs, which did not require a high level of engagement by the Ministry of Health and Wellness (formerly the Ministry of Health) and Ministry of Labour and Social Security. In addition, the ECC's location as

a statutory agency responsible to the Minister of Education gave it less influence within the Ministry of Health and Wellness and Ministry of Labour and Social Security. For example, budget discussions concerning ECD with the Ministry of Finance are now handled directly by the Ministry of Education, and the ECC does not participate in these meetings.

The proliferation of data collection indicators and tools during implementation was disproportionate with the limited capacity (and available financial resources) to monitor and evaluate project activities. Data capacity was less developed than it should have been during the project, so data were not analyzed promptly, and their use in decision-making was limited. Issues with monitoring and evaluation also hindered the project. Among these was that relevant indicators for parenting support were not reflected in activities across sectors, even though all points of contact were intended to support parenting. The Independent Evaluation Group (IEG) with the support of a psychometrician, analyzed JSRA data from 2017, 2018, and 2019. This delay in analyzing JSRA data meant remedial efforts addressing concerns were not implemented in a timely manner. The output focus of project monitoring resulted in a lack of outcome data, making it difficult to confirm project effects.

IEG project ratings are described in appendix A. The evaluation methodology and evidence sources are described in appendix C.

Lessons

This assessment offers the following lessons:

- Collaboration, strong national ownership of the NSP, and financial support are requisite conditions but do not ensure performance and outcomes because the World Bank must also provide rigor and candor in its dialogue and advice. During preparation, the World Bank team needed to be more rigorous in its appraisal of the NSP and act as a “critical friend.” This is a “trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person's work as a friend.”¹ The value of the critical friend would be to challenge the practices and assumptions supporting the NSP—in this case, to help the project improve. The World Bank team could have offered hard truths and frank assessments that counterparts would otherwise tend to avoid if not managed constructively, supportively, and professionally. The lack of a clear assessment from the start about what Jamaica could do realistically and effectively in this subsector indicates that the World Bank team

¹ <https://www.edglossary.org/critical-friend/>

may have deferred to government counterparts and avoided frank discussion during preparation. During implementation, the issues became clearer in relation to support for parenting, the CHDP, the early intervention system, and the scale of the task involved in certifying all ECIs. A critical friend would have used a different lens at the Mid-Term Review or during the additional financing negotiations and asked what Jamaican research showed about the parental interventions needed to have an impact on parental knowledge, practices, and education—particularly in the known contexts of vulnerability and high inequality—rather than canceling and lowering DLTs.

- Country teams need to share and archive lessons and implementation knowledge, including Global Practice knowledge, across projects. The World Bank’s support for the Programme of Advancement through Health and Education and HIV/AIDS project offered rich lessons that were applicable to ECDP. IEG became aware of these lessons during interviews in the 2014 case study of Jamaica: *World Bank Support to Early Childhood Development*. The World Bank support for the two earlier operations left a legacy of institutional structures and procedures that equipped the ministries for expansion and sustainability at the central and community levels. Preparation for these operations included development of delivery mechanisms that were created from study tours and continuous technical support. The World Bank’s ECDP preparation team may or may not have known about these lessons. Moreover, all relevant Global Practices are repositories of experience with cross-sectoral arrangements that the preparation team might also have drawn on to inform project preparation. The Country Management Unit has an important role as a conduit for such tacit knowledge sharing, particularly in cross-sectoral work where relevant learning in one sector may not be readily accessible to another, or a country’s experience with making intersectoral coordination effective may have been forgotten. This may require creating a mechanism that TTLs can mine. It may also imply that the Country Management Unit actively build knowledge synergies among TTLs and teams, which is challenging with staff turnover. A mechanism by which the unit could provide essential learning would allow TTLs to act from a knowledge base built on global evidence and local knowledge from implementation.
- The institutional arrangements for cross-sectoral or cross-ministerial action and coordination are less likely to succeed when authority is centered in one of the involved ministers or ministries. Reporting to one of the ministers has been counter to the vision of equal partnership. After the first five years of implementation, and with a change in government, the ECC’s role emphasized

functions of a regulatory body for ECIs, which did not require a high level of engagement by the Ministry of Health and Wellness and Ministry of Labour and Social Security. Some of the other shortcomings of the ECDP were caused by budgeting issues that were partly imposed by exogenous factors, but the lack of authorities in ministries other than the education ministry contributed to the implementation difficulties. This was manifest in the lack of funding for certain key activities, such as those related to support for parenting, the effectiveness of the CHDP, and other areas that simply never had the funding necessary to execute actions directed from an authority removed from the mainstream of activities in the health and social protection sectors. Perhaps it was inevitable that the ECC, under the direction of its board and answerable to the Minister of Education, would have difficulty delivering on its cross-sectoral mandate without direct influence over the Ministry of Health and Wellness and Ministry of Labour and Social Security. Ensuring that the ECC reported to a higher authority (as is done in some countries) may have prevented or resolved some of the issues that emerged.

- Intersectoral coordination may more likely be sustained with “light mechanisms” and financial resources that empower ministries and national agencies to focus on achieving a convergence of common policies, actions, and results. The ECC’s leadership of intersectoral coordination, including planning and budgeting, was provided for through interministerial and intersectoral planning processes. The ECC made efforts to enhance coordination among the partner ministries, and memorandums of understanding were signed. There is no evidence that mechanisms were established within the partner ministries to manage ECD implementation and planning based on decisions made by the ECC. Moreover, planning meetings have ceased since the close of ECDP. Lighter mechanisms built in relation to convergence of common policies and actions may be needed. However, without supplementary financial and human resources to implement additional activities, the expectation of accountability to deliver results is not realistic.

Oscar Calvo-Gonzalez
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1. Background, Context, and Design

1.1 Jamaica has a long history of research into the causes and consequences of shortcomings in early childhood development (ECD). With the creation of the Early Childhood Commission (ECC) in 2003 and adoption of its National Strategic Plan (NSP) in 2008, the government launched an ambitious effort to improve the health, education, and welfare of its children from birth to age 6. To support its cross-sectoral plan, the government sought World Bank assistance for the Early Childhood Development Project (ECDP), which aimed to implement key objectives of the NSP. The project had two main components: one that targeted seven action areas in the NSP and another that provided relevant technical assistance. This chapter provides details of the project and its context.

Background and Context

1.2 Jamaica, a lower-middle-income Caribbean Island nation, is characterized by high levels of poverty and inequality. In 2004, Jamaica's Gini index was 45.5, and the top 20 percent of the population of 2.73 million accounted for 52 percent of income. The poverty headcount ratio was showing an improving trend when the ECDP was appraised, reaching a low of 9.9 percent in 2007, but it rose during the project period to 19.9 percent in 2012 (latest data). The country's gross domestic product, stagnant throughout the 1990s, began to accelerate in 2001 and reached 2.5 percent in 2006–07, just before ECDP appraisal. The global financial crisis of 2008 drove gross domestic product to a low of –4.4 percent in 2009, after which it recovered to an average of about 1 percent per year until the coronavirus pandemic resulted in a –10 percent gross domestic product in 2020.

1.3 The government of Jamaica recognized a need for substantial investment in human capital to overcome its human development shortcomings.² This included investment in children's development to improve school readiness, with the goal of building an improved workforce. ECD was a key component of the movement to improve education in Jamaica and predated the World Bank's lending. ECD formally became a national priority with passage of the Early Childhood Commission Act of 2003. At that time, levels of immunization were high, malnutrition was low, and preschool coverage was nearly universal, but the quality of early childhood education services was uneven and often poor (World Bank 2008, 1–2).

1.4 The ECC, created by the 2003 act, was mandated to oversee and coordinate all aspects of ECD. Although the 2003 act noted that ECD “includes the education, health,

² The United Nations Development Programme 2020 Human Development Report ranked Jamaica 101 out of 189 countries on its Human Development Index, placing it in the lower third of the high development category. Its ranking for the education index was also 101 out of 189.

safety, and care of children,” in its early years, the ECC paid particular attention operationally to its responsibilities under the Early Childhood Act 2005 to register early childhood institutions (ECIs; box 1.1) and for developing relevant standards to ensure minimum levels of quality for those institutions (World Bank 2008, 23).³ Yet important problems remained. Among these were education and support for parents, screening and support for at-risk children, preventive health care, program coordination and governance, and ECD funding. In its other important early work, the ECC addressed these challenges with the 2008–13 NSP, with inputs from the Ministry of Education (now the Ministry of Education, Youth, and Information), Ministry of Health and Wellness (formerly the Ministry of Health), Ministry of Labour and Social Security, Ministry of Finance and Public Service, Planning Institute of Jamaica, and Human Employment and Resource Training Trust National Training Agency. The plan sought to improve the quality of ECD services across all relevant sectors. The plan was results-based and provided a comprehensive vision for ECD across seven target areas, defining 45 implementation milestones. These target areas and milestones became the basis for the ECDP.

Box 1.1. The Early Childhood Commission and Its Role in the Early Childhood Development Project

The Early Childhood Commission (ECC) was established to “govern the administration of early childhood care, education, and development in Jamaica, and to make provision for connected matters” (Jamaica 2003, title). Its eight functions are to advise the Minister of Education, plan interventions, monitor and evaluate interventions, provide coordination “to ensure effective streamlining of all activities,” (Jamaica 2003, section 4 [1] [d]), consult stakeholders, analyze resource needs and make budgetary recommendations, identify alternative financing, and supervise and regulate early childhood institutions. It consists of a board of 16–20 commissioners, appointed to represent the permanent secretaries of the key ministries and statutory agencies providing services to children, together with seven early childhood development experts, a member of the opposition party, and a chairperson.

The ECC reports to the Minister of Education, not to the ministry, in accordance with the terms of the ECC Act 2003. Even so, the ECC was given an identity separate from the ministries, including the Ministry of Education, enabling it to “coordinate the promotion and oversight of early childhood development and to prevent the fragmentation and duplication of services relating to early childhood development” (Jamaica 2003, 18). The ECC will facilitate “the integrated delivery of services, ensure that service standards are developed and maintained, and interface with international agencies to facilitate support for national policies and development activities” (Jamaica 2003, 18).

Source: Jamaica 2003.

³ Defined as “settings that provide developmentally appropriate care, stimulation, education and socialization for children under the age of six years.”

Objectives, Design, and Financing

1.5 The ECDP was intended to support implementation of selected objectives of the government's ambitious first NSP for early childhood development 2008–13. This project pioneered cross-sector implementation for ECD in the World Bank. The ECDP's project development objectives (PDOs), as stated in the loan agreement and appraisal document, were to (i) "improve the monitoring of children's development, screening of household-level risks affecting such development, and early intervention systems of the borrower to promote such development; (ii) enhance the quality of early childhood institutions; and (iii) strengthen early childhood organizations and institutions." The PDOs remained consistent throughout the life of the operation. In addition, a foundational objective to "improve parenting education and support programs," already part of NSP, was later added as a PDO but had already contained in a PDO indicator (box 1.2), thus it was considered part of the operation from the outset. For the purposes of this evaluation, because the first objective contained three distinct objectives, the PDOs were recast as six objectives.

1.6 Strong national research in parenting and early childhood development in Jamaica informed the NSP and the ECDP. Jamaica has been a leader in ECD research since the 1980s, when it produced a series of studies on the effects of home visits on child stimulation and nutrition. The country's history of longitudinal studies of children's health, development, and behavior (Coore Desai et al. 2019; McCaw-Binns et al. 2011; Samms-Vaughan 2005), including birth cohort studies dating back to 1986, strongly aligned with international findings that interventions such as early stimulation services for at-risk children and support for their parents have reduced intergenerational poverty (Gertler et al. 2014; Schweinhart 2007; Walker et al. 2005, 2006, 2011). In addition, the most recent study confirms that the results continued for 31 years from the stimulation intervention (Walker et al. 2017) and supports investment in larger-scale programs to promote ECD in disadvantaged children.

1.7 Using a project implementation unit to execute the ECDP was considered contrary to the project's aims. One of the government's aims was to create a permanent, sustainable capacity to support ECD in Jamaica. For that reason, the ECC was to implement the ECDP and would also oversee its other roles outlined in the act and NSP. What the ECC lacked and the ECDP was designed to provide was a budgeting process to manage the project financing and technical assistance to build ECC staff capacity. This meant that the ECC had to simultaneously lead sectorwide coordination of corporate planning and budgeting as provided under the legislation and function as the regulatory body for ECIs while navigating the World Bank's procedures for implementation, monitoring, and safeguards.

Box 1.2. Evolution of the National Strategic Plan

Jamaica's National Strategic Plan (NSP) for Early Childhood Development, operating on a five-year planning cycle, is now in its third iteration. With the first NSP (2008–13), the Early Childhood Commission established an ambitious plan to advance early childhood development with seven aims: (i) effective early childhood parenting, education, and support; (ii) effective preventive health care; (iii) effective screening, early identification, and referral for at-risk children and households; (iv) safe, learner-centered, well-maintained early childhood facilities; (v) effective curriculum delivery by trained early childhood practitioners; (vi) sector agencies achieving targets and governed by a results-oriented framework in a consultative environment; and (vii) timely, current, and appropriate information available to support evidence-based decision-making.

NSP 2 (2013–18) continued with the same focus areas as NSP 1 and added two more aims: (i) public education and (ii) financing and resource mobilization. It focused on developing strategies to secure adequate financing and general resource mobilization for early childhood development, including human resources, at the national and local levels.

NSP 3 (2018–23) is continuing implementation of NSPs 1 and 2 but has narrowed the breadth from its predecessors. It focuses on improving use of the Child Health and Development Passport in clinics after evaluation, developing a screening and early intervention strategy to identify and treat children with developmental delays, reviewing the legal framework for the sector, and increasing the number of certified early childhood institutions; improving curriculum delivery; partnership with technical and vocational training (Human Employment and Resource Training Technical and Vocational Education and Training); and developing sector partnerships at the community level.

Source: Jamaica 2008, 2013, 2018.

1.8 Neither the NSP nor the design of ECDP included a theory of change, though the Implementation Completion and Results Report constructed one based on the original project design. The Independent Evaluation Group (IEG) review of the Implementation Completion and Results Report noted that the theory of change was flawed in several respects. It “did not clearly link NSP areas of emphasis/outcomes to the project’s activities (and outputs and outcomes)” (World Bank 2019b, 22). Furthermore, the report’s efficacy section “did not refer to the theory of change, focused only on selected indicators, and did not mention some key indicators that were dropped or some cases where targets were lowered” (World Bank 2019b, 22). On that basis, IEG undertook its own analysis of the project’s implied theory of change from the goals of the NSP, as follows:

- Effective parenting education and support;
- Effective preventive health care for children ages 0–6 years;
- Early and effective screening, diagnosis, and intervention for at-risk children and households;

- Safe, learner-centered, well-maintained ECI facilities; and
- Effective curriculum delivery by trained ECD practitioners.

1.9 Table 1.1 presents a simplified version of the theory of change that IEG developed based on the five NSP goals divided among the activities supporting access and quality. Table 1.1 illustrates the conceptual gaps in monitoring evaluation present in the plan—in some areas, IEG made suggestions to fill those gaps. There are several unstated but implicit implications for the NSP to realize its intended impacts: parents are informed, educated, involved, and supported in meeting children’s early development needs; and children are critically thinking, socially competent, healthy, and ready for life. The plan had two stated assumptions: that different models were required based on the age of the child and that selected interventions were most effective. The plan also anchored the provision of both parenting education and support for parenting education within all possible points of contact, but two important ones were health clinics and ECIs. Moreover, several critical assumptions were needed for the logical chain to have an effect on longer-term outcomes such as improved children’s development and parental knowledge and behavior: (i) staff in antenatal and well-child clinic services would be sufficient in numbers and also trained and resourced to both consistently implement parenting education and support, and to monitor and support child development; (ii) well-child clinics would be able to meet standards required for accreditation; (iii) human resource capacity would be sourced, trained, managed, and financed (for child development therapists, tertiary-level therapists such as speech therapists, occupational therapists, audiologists, physical therapists) to meet the requirements of the range of diagnostic and intervention services required; (iv) a system for screening and early intervention services would be built to be used by a range of state actors supporting child development (including the ministries of health, education, labor and social security; the Social Development Commission; and the Program of Advancement through Health and Education [PATH] and Early Stimulation Project) and would need to be coordinated to be effective at the level of individual households and children; and (v) development officers and inspectors at the ECC would be recruited and trained in sufficient numbers to provide the level of support needed to improve the quality of ECIs.

Table 1.1. Simplified Theory of Change Related Project Development Objectives and National Strategic Plan Areas

Stage	Access	Quality
Improve parenting support and knowledge		

Stage	Access	Quality
	Offer high-quality parenting education and support in antenatal and well-child clinics (for parents of children 0–3) and in ECIs and nongovernmental organizations (for parents of children 4–6)	Develop and approve parenting strategies and develop relevant public education and awareness campaigns
Outputs (in the plan)	None	[Number of] early childhood parenting education and support services offered that are of high quality
Immediate outcomes (in the plan)	None	None
Immediate outcomes (not in the plan)	Parenting practices benefit from increased access to high-quality parenting education and support	Children’s development benefits from improved parenting
Child health—improve monitoring of children’s development		
	Integrate the Child Health and Development Passport and Infant and Young Child Nutrition Policy into clinic and ECI systems	Develop a new service delivery model for well-child clinics, with accreditation system, staffing, information systems, and equipment to support a focus on parenting and child development
Outputs (in the plan)	[Number of] children whose development status is monitored annually	[Number of] health centers offering high-quality well-child services
Immediate outcomes (in the plan)	None	None
Immediate outcomes (not in the plan)	Child health and development is improved by access to the new service delivery model in well-child clinics	Child health and development strengthened by standards, staffing, equipment, and monitoring systems
Screening and intervention—improve the early intervention systems to promote children’s development and screen household-level risk affecting children’s development		
	Implement an effective screening and intervention system, including a human resources strategy, for children in high-risk households to be used by state agencies	Develop national policy on screening, early identification, and intervention; a system for implementation; and relevant public education Promote inclusion of children with special needs
Outputs (in the plan)	[Number of] regional health authorities with at least one child development therapist per parish to address the needs of children with special needs	[Number of] health centers offering high-quality well-child services, including screening of children and households to identify those at risk and offer appropriate intervention services
Immediate outcomes (in the plan)	None	None
Immediate outcomes (not in the plan)	Households and children at risk benefit from access to multisectoral early identification and treatment for delayed development The development of children with special needs benefits from inclusion in services focused on their development	Children at risk of poor development benefit from access to early screening, diagnosis, and intervention services Enhanced capacity of national screening, diagnostic, and intervention services to meet the range of needs identified Discrimination against children with special needs is reduced

Stage	Access	Quality
ECIs—enhance the quality of ECIs		
	Provide development support program in ECIs to meet standards	Develop standards, conduct inspections, and certify ECIs Develop an equitable system of financial support for ECIs
Outputs (in the plan)	[Number of] ECIs that will be fully registered	None
Immediate outcomes (in the plan)	None	None
Immediate outcomes (not in the plan)	Children’s development is supported through access to safe, well-maintained ECIs	ECIs meet the requirements for certification and maintain standards ECIs guided to improve quality by both inspection and development support processes Quality in ECIs is raised

Source: Independent Evaluation Group.

Note: ECI = early childhood institution.

Project Design

1.10 The project consisted of two components. The first component, using a sectorwide approach (SWAp), was to co-finance implementation of the NSP. The second component used standard financing to pay for technical assistance (selected consultant services).

1.11 Component 1 financed items within each of the NSP’s seven action areas:

- Effective parenting education and support for ECD
- Effective preventive health care for children ages 0–6 years
- Early effective screening, diagnosis, and early intervention for at-risk children and households
- Safe, learner-centered, well-maintained early childhood facilities
- Effective curriculum delivery by trained early childhood practitioners
- Sector and sector agencies governed by frameworks that promote achieving results in a consultative environment, and sector institutions achieving targets
- Timely, clear, current, appropriate, evidence-based information to support ECD

1.12 This project component was unique in its use of a SWAp with a results-based financing mechanism, making it a precursor to the Program-for-Results instrument that the World Bank introduced in 2012. Disbursements under the SWAp were conditional

on the achievement of key results and policy reforms using disbursement-linked targets (DLTs) that were identified in the project's results framework.

1.13 Component 2 financed technical assistance to support the action areas. For example, technical assistance to support improved monitoring, screening, and early intervention included the development of a national policy on screening, referral, and early intervention, including the design of a screening system for household risks and the development of a public education strategy about risks for children. These contributed to the development of strategies for parenting of children ages 0–3 and 4–6 years. Technical assistance activities to support enhanced quality of ECIs and daycare facilities was to support development of service delivery models for nutritional programs that targeted different age groups and a strategy for the reorganization and strengthening of well-child clinics. The component also financed a grant facility supporting the analysis of needs and gaps in ECI service provision and the development of health and safety training for ECI staff. This component also was to finance development of a human resource strategy for ECD that would include revised compensation policies for early childhood practitioners. To support strengthening of early childhood organizations and institutions, the technical assistance was to assist the strengthening of the legal framework governing ECD, the development of a national ECD policy, and the elaboration of proposals for local governance and ECI management models. The assistance would also support the development of the monitoring and evaluation (M&E) system, including the design of the ECD instrument for measuring the development status of children at age 4. In addition, an evaluation of the NSP at midterm and the development of the NSP 2013–18 was planned, though capacity development for the ECC was not.

1.14 The World Bank Board of Executive Directors approved the SWAp on May 13, 2008, with an effective date of February 9, 2009, and a closing date of September 30, 2013. The Mid-Term Review was conducted as planned in May 2010, but in the ensuing years, five restructurings (including one for additional financing) resulted in a new closing date. The project closed according to the new closing date, on September 28, 2018.

1.15 The ECDP was restructured five times during its implementation. The first, in June 2011, adjusted the results framework indicators and targets to align with the pace of implementation, the first of several such adjustments. The second restructuring was in February 2013, which reduced the number of indicators in the results framework, giving priority to those that most vigorously supported the PDOs. The third restructuring, in September 2013, adjusted the closing date to give time to prepare the additional financing, which was the subject of the fourth restructuring in January 2014. This restructuring also added the improvement of parenting education and support to the PDO and adjusted the intermediate results indicators to align with the revision of the NSP. The final restructuring, in June 2018, reprioritized activities and again changed the

results framework indicators. Overall, the number of indicators was reduced from 71 to 67. Four of the original six PDO indicators were deleted, and two indicators were added, for a new total of four PDO indicators. The restructuring did not alter project activities.

Project Financing

1.16 The World Bank financed \$15 million for both the SWAp and the technical assistance. By 2011, the International Monetary Fund (IMF) found that Jamaica was “on the verge of an economic meltdown” (IMF 2019), and in 2013, the IMF intervened with financial support that required stringent controls on government spending. In 2014, the World Bank approved additional financing of \$12 million for the SWAp as part of a restructuring that occurred because of an agreement with the IMF’s 2010 Stand-By Arrangement to help Jamaica recover from the 2008 financial crisis. At project close, of the total planned International Bank for Reconstruction and Development financing of \$27 million, the loan had disbursed \$24.65 million for the SWAp and \$1.67 million for the technical assistance, for total actual International Bank for Reconstruction and Development financing of \$26.32 million.

1.17 The total of government contributions was originally estimated at \$495.87 million. Actual costs contributed by the borrower at project close were \$484.28 million. The shortfall was due to the impact of the 2008 global financial crisis, which led to shortages of counterpart funds that restricted some needed staff increases. Other fiscal constraints also arose during the project.

1.18 The NSP underestimated the amount of government financing needed to implement the full plan. The NSP calculated the cost to implement over five years was an additional investment of \$68.7 million beyond what the government had spent in 2007, which was \$69 million in fiscal years 2007–08 for early childhood from the health, education, and social sectors. A shortfall was expected even with World Bank financing, and the ECC was expected to mobilize additional resources for the ECD sector to support implementation of the NSP. The actual costs of ECDP and borrower contributions far exceeded these estimates, even though the project supported only a portion of the NSP.

2. What Worked, What Didn’t, and Why?

2.1 The NSP’s ambition was reflected in the ECDP’s complexity—a complexity that had consequences for the project’s implementation and results. This chapter examines what worked and what did not regarding the project’s achievement of results, which stemmed from issues in design and preparation, and implementation and supervision.

Results

2.2 The achievement of project results was dependent on successful implementation of the cross-sectoral approach to support parenting knowledge and practices that was embedded in all points of contact. Although that approach benefited from strong ownership and the use of DLTs, it became clear by the Mid-Term Review that the project was not going to achieve its goals in five years. The restructurings that followed might have addressed some of the underlying problems (such as inadequacies in financing flows to key ministries and staffing issues, reaching vulnerable children, prioritizing activities and weak indicators, among others). As the Planning Institute of Jamaica has suggested, they might also have focused “only on a set of critical issues and manageable targets, giving more attention to sustainability, including institutional strengthening where possible.” Instead, the restructurings reduced some targets and canceled indicators.

What Worked

2.3 The design was visionary in its use of the ECC to coordinate across sectors, a model that had been applied elsewhere in Jamaica with some success. The government had substantial experience with intersectoral coordination through the Planning Institute of Jamaica, which provided coordination at several levels, including between donors and development partners and between the state agencies involved in policy and programming. Planning Institute of Jamaica had chaired the ECD Integration Task Force that had developed the ECC concept and brought together the main state actors who would be involved in financing community-based services—the Jamaica Social Investment Fund and Culture, Health, Arts, Sports, and Education Fund—and in delivering accredited programs (National Council on Technical and Vocational Education and Training, and Human Employment and Resource Training Trust National Training Agency). The key aspect of the concept was the ECC’s role as coordinator among equal partners in the ministries responsible for supporting development of young children. In this regard, the sector ministries and agencies retained responsibility for management of service delivery in their respective areas and were apprised of their implementation responsibilities via representation on the ECC board, and ministries signed memorandums of understanding in support of this. Moreover, several of the involved ministries already had successful experiences using multisectoral approaches with HIV/AIDS interventions and the government’s conditional cash transfer program (PATH). But the approach with ECD differed in that a single minister (education) was above the other relevant ministries, which created a challenge to the vision of equality among the three ministries.

2.4 The NSP and the ECDP both benefited from ownership at the highest levels of the involved ministries and enjoyed full ownership at the government's highest levels. High-level ownership gave the ECC and the project the standing necessary to implement the cross-sectoral approach incorporating education, child health, and family and parenting support. The sectorwide coordination envisioned for the project used the interministerial and intersectoral planning process in place in the ECC since 2003. The NSP set out two working environment processes related to the efficiency with which state agencies and other early childhood stakeholders operate. The processes took a coordinated approach to ECD via a framework that promotes the achievement of targets by sector institutions. The ECC sought to deliver on its cross-sectoral mandate even without direct influence over the Ministry of Health and Wellness and Ministry of Labour and Social Security.

2.5 The government appreciated the use of DLTs in the project results framework, which was intended to incentivize achievement of the PDO indicators. The NSP indicators also incorporated the 45 DLTs based on the seven areas of the NSP.⁴ By building the DLTs in relation to the NSP, the project hoped to create an incentive for meeting its targets. For example, initial DLTs supported the creation of subsector strategies for parenting support and accreditation of ECIs. The approach (novel at the time) was accepted and owned by ECC and government counterparts. The government appreciated the balance among budget support, investment lending, and technical assistance. However, the DLTs were outputs and weakly aligned with the objectives. (See further discussion of weaknesses in the implementation section.)

2.6 Of the six PDOs for the project, two received particularly strong attention during implementation, and some important outputs were attained. First, monitoring of children's development occurred via child health surveillance offered by health clinics to include child development and to provide annual information on a child's development status. To accomplish this expansion, a new tool (held by parents and shared with teachers) was designed: the Child Health and Development Passport (CHDP). From September 2010 onward, all children born in Jamaica were given a CHDP. Second, the quality of ECIs was improved through new regulations and accreditation. Securing quality was expected to be incremental, with interventions on all fronts (physical plant, environmental safety, public health, equipment) supported by a new regulatory framework, certification system, vocational training for practitioners, inspection process, and development support from the ECC. Though both PDOs were important, there were

⁴ With 45 disbursement-linked targets (DLTs), 9 were to be achieved per year over each of the original 5 years of implementation. During the life of the project, 10 DLTs were deleted, 9 were replaced, and 1 was split into 2 DLTs.

issues that limited their effectiveness, as will be discussed in the What Did Not Work and the implementation sections.

What Didn't Work

2.7 Sectorwide coordination and planning did not establish the envisioned cross-sectoral budgeting process. Interviewees reported that intersectoral planning meetings had declined in frequency since the closure of ECDP. In addition, in recent years, Ministry of Finance and Public Service budget reporting has been tracking ECD in two areas: ECC and expenses related to early childhood education. By contrast, in 2007 (and during ECDP), the government's financial contributions included expenses across related sectors, such as Ministry of Labour and Social Security, Ministry of Health and Wellness, and Ministry of Education (Jamaica 2008). Currently, the Ministry of Education, Youth, and Information, not the ECC, is responsible for budget interactions with the Ministry of Finance and Public Service. This creates an indirect role in budgetary planning for the ECC and may inhibit cross-sectoral budgetary planning.

2.8 The cross-sectoral approach also did not build on lessons learned from earlier World Bank-supported operations for HIV/AIDS (building capacity) and the PATH program (targeting efforts to realize improvements in children's development and strengthening evaluation and monitoring systems). World Bank support for both of those operations left a legacy of institutional structures and procedures that equipped the ministries for expansion and sustainability at the central and community levels. Preparation for those operations included development of delivery mechanisms that were created from study tours and continuous technical support. In addition, data monitoring was critical for the successful implementation of the PATH. In that project, unlike in the ECDP, registration, compliance, and payment data were monitored regularly to assess effectiveness. Adherence to service standards served as an indicator of the quality of services. For example, the PATH project monitored the use of payments, but there was no direct relationship between use of the funds and service standards in the ECDP.

2.9 The use of the CHDP for child development monitoring, as an interface for parent, education, and health providers to engage parents in monitoring the development of their child, has not been fully realized. The central issue was that funding did not flow to line ministries, even though NSP and ECDP required substantial changes to switch from a health focus to a development focus via the CHDP. To implement the CHDP with fidelity (to support and educate parents and monitor development beyond the immunization record and growth chart) would require more time and capacity—and training—from personnel in health clinics to implement. An accreditation system was also developed for well-child clinics but without additional resources to meet accreditation requirements. Ministry of Health and Wellness staff interviewed in 2014 for a case study

on Jamaica for World Bank (2015) cited major problems with sustaining implementation because of IMF stringencies and the government's removal of health user fees, decreasing the opportunity to raise revenues. This led to crowding out the added work scope—child development and parenting support—with existing health issues.

2.10 Elements of the screening, referral, and early intervention system were developed with support from multiple partners, but the system is not yet fully operational (UNICEF 2020b, 4, 128). The purpose of the early intervention system (including screening tools and processes and referral and diagnostic services) was to identify children with neurodevelopmental disabilities and develop the human resource capacity to strengthen early intervention services. The ECDP supported the curriculum development and delivery of training for child development therapists to associate degree level at the University of the West Indies. In interviews for this report, it was noted that eight trained therapists were working in the Ministry of Labour and Social Service Early Stimulation Project. At least seven parishes now have at least one full-time child development therapist or officer on staff in the public sector. Funding to recruit more therapists was not forthcoming, based on interviews. The training program was not continued at the university after the first cohort of 25 students. However, the course is expected to be converted to an online course with support from the United Nations Children's Fund (UNICEF 2020a). Thus, the objective of establishing early intervention systems to promote children's development needed other requisite conditions established (that is, better usage of the development interface with the CHDP to identify children at risk for developmental delay and train many more personnel) to attain the aims of the objective. As a result, a strategy for service delivery of the screening, referral, and early intervention system is included in NSP 3 (2018–23). In 2019, 676 children received an intervention based on screening and referral data, and 763 received an intervention in 2019, both of which exceeded the initially low target (300) and the later revised target (550). Still, without the trained personnel to handle cases and other essential system aspects, it is difficult to anticipate that much greater progress will be made under NSP 3.

2.11 Limited progress was made in screening household-level risk affecting children's development. The Family Support Screening Tool was developed to identify children living in at-risk households or risky situations. It was intended to be administered at birth and at least once a year until the child was 5 years old during well-child clinic visits, PATH program visits, or during preschool years. The tool was piloted (ECC 2019), but targets for its completion and implementation were dropped (Samms-Vaughan 2018). Interviewees noted a need for consensus among all agencies (education, health, PATH, social welfare, and services) on further collaborative use of the tool that is expected to be rolled out later in 2022.

2.12 There was limited attention and fewer outputs in relation to strengthening early childhood organizations and institutions. A framework promoted achievement of results in a consultative and coordinated approach (Jamaica 2008). However, the cabinet has not yet approved the national ECD policy. The community-based service delivery model that was developed and piloted has not been implemented and is included in NSP 3 for 2018–23, which is a missed opportunity within ECDP to promote cross-sector engagement and governance at the parish level.

2.13 Although the government owned DLTs, the targets had weaknesses that undermined attention to intended project impacts. The project intended to develop critically thinking, socially competent, healthy children ready for life, and parents who are informed, educated, involved, and supported in meeting children’s early development needs. The number of DLTs exceeded what existing government systems and monitoring capacity could assess. Seventeen targets (88 percent) were lowered at the Mid-Term Review and included in the restructured loan agreement of 2011 (Samms-Vaughan 2018). Ten DLTs were dropped, including the proportion of well-child clinics that were accredited, the development and piloting of a service delivery model for child nutrition, placement of child development therapists in parishes, and the proportion of PATH household and health centers using the Family Support Screening Tool. Most of these DLTs were dropped because of difficulties finding and engaging trained professionals, and one DLT was dropped because of administrative processes. The DLTs were also encumbered by lack of baseline data, which highlights a preparation weakness. The ECC did not directly control the DLTs and the ministry partners’ efforts to attain the DLTs (because no additional resources flowed to line ministries), although there were memorandums of understanding regarding the DLTs. Finally, although extensive effort was put into monitoring the DLTs, the outputs related to them did not provide accurate information about whether the project was succeeding in its aims. Moreover, some DLTs did not focus on the most critical aspects of program effectiveness (see simplified theory of change), for example, equipping staff with the training and program materials and resources they needed to provide parenting education and support for child development, especially health staff in well-child clinics, education staff in ECIs, and social workers in the PATH and related programs interacting with vulnerable families. Moreover, the DLTs did not measure improvements in quality of ECIs and parenting practices.

2.14 Support for parenting occurred via all points of contact with parents, but did not embrace critical lessons from Jamaican research. The support for parenting was not fully developed in ECDP, despite prior research in Jamaica. For example, NSP 1 and Jamaican research highlight the importance of reaching at-risk parents and providing them with consistent support over time to change how they engage with their children. In

particular, the research demonstrates the effectiveness of the role of health staff in supporting parents of children in the first three years of life (Walker et al. 2005, 2006). However, the focus on supporting child development—beyond screening for problems—was not supported by a tangible program focus in health, education, or social protection agencies. This specifically left a gap among prenatal to age 3 children. Later in the project, Parent Places were proposed as a neighborhood support concept that could be attached to public services, faith-based organizations, and community-based organizations as another point of contact to support parents. Parenting Places were informed via consultation, and the establishment of the National Parenting Support Commission Act 2012 and operationalization of the National Parenting Support Policy 2011. This policy aimed to strengthen home-school relationships and increase access by parents to support services, but they did not address the education of and support for parents of children 0–3 years beyond the use of the CHDP.

Achievement of Targets, Outputs, and Outcomes

2.15 The CHDP is underused for monitoring children’s development (Reece 2018). Evaluation of the CHDP found that the immunization pages were used and discussed more regularly than the CHDP’s development screening sections. As children aged, the development screening section was the least likely to be filled out in the passport. In addition, parents were uncertain about their role in writing in the CHDP, and teachers were unaware of the health-education interface covering two stages: the first when children 2–5 years begin their attendance at ECIs and the second when children 6–11 years transition to primary schooling (Reece 2018, 52–3). Principals interviewed in schools stated that they retained photocopies of the passport’s immunization section for each child and confirmed that they did not contribute to the health-education interface. Six well-child clinics were certified by September 2018 (2 percent of the lowered target of 10 percent) according to standards adapted for Jamaica. No further assessments have been done (see appendix A “Efficacy”).

2.16 Much effort was put into upgrading the ECIs (such as standards), but similar effort was not invested in the teachers and their workforce development, and critical issues remain for ECIs. The ECC was unable to recruit and train enough development officers and inspectors at the ECC to provide the level of assistance needed to support ECIs to improve their quality. For the 2019/20 academic year, 14,987 children attended public or private ECIs holding an operating permit. In 2021, 2,110 out of 2,626 ECIs had a permit to operate, which attests that children attending the ECI are in a safe environment. The more robust requirement—certification—has increased in 2019 to 271 ECIs from 129 (at the close of ECDP). Certification addresses both the learning environment and safety. As of January 4, 2021, 2,299 ECIs had implemented development plans (1,461 out of 2,626, or 52 percent at project closure; World Bank

2019b), which was a requirement to receive a grant. Without attention to critical learning inputs (such as training for early childhood practitioners, and materials and resources that ECIs would need to provide parenting education and support for child development), it was difficult for the project to achieve the desired results. Moreover, critical issues related to private ECIs remain because their operating budgets, derived from parent fees, are inadequate for quality staff and learning environment. ECIs that attend to children from low-income families have even more constraints because teachers are less likely to want to work in ECIs that cannot provide an income commensurate with the public sector. Data were not disaggregated in relation to location of certified ECIs, so the extent of progress made to improve ECIs that serve disadvantaged children is unclear. The ECC has commented that there are now 17 active community early childhood development councils initiated across the country as part of the rollout of the community-based service delivery model. No criteria or data were shared with IEG that indicated that any of these efforts were targeted to the disadvantaged, despite much international and Jamaican evidence showing greater and long-term impact of this model for disadvantaged population (Gertler et al. 2014; Schweinhart 2007; Walker et al. 2005, 2006, 2011; World Bank 2008). However, the government informed IEG that data from ECI inspections are used to inform targeting.

2.17 Outputs related to support for parenting were modest at project closure and subsequently. Parent Places are of three types: one provides information, one provides parenting support training, and one provides specialist referral services on site. Parent Places are guided by a curriculum that includes content tailored to age groups 0–3 years, 4–6 years, and 6–8 years and includes “general parenting, nutrition, growth and development, child behavior, parenting styles, providing structure, fathering and included more challenging situations for parents to manage, such as raising children on limited resources, raising children to resist violence, managing trauma and stress, and child maltreatment” (UNICEF 2020b, 88). In 2018, at the conclusion of the project, 52 percent of Parent Places were certified, with an additional 26 identified for future certification. During the pandemic, the training of parenting facilitators and parent mentors for peer-to-peer support for parents of children 0–6 years has continued with 10 modules provided over 13 weeks online. The approach to Parent Places for parenting education and support was based on consultation and, later, on a strategy.

2.18 A communication strategy to educate parents and to raise awareness about early childhood stimulation, nutrition, and parenting, initially planned for completion in 2014, was completed in 2018. Public education in parenting education and support has continued with the introduction of the 1,000 Days app. The app includes a child development checklist that is aligned with the CHDP: “The App is used in ECC virtual Parents’ Places reaching some 2,000 parents weekly” (UNICEF 2020a), and it is

described as an “intervention for changing negative parenting behaviors to achieve positive outcomes for children.” Parent and community engagement is a standard assessed during inspections. Parenting engagement was not supported through the ECIs, based on interviews conducted with a sample of ECIs.

2.19 Outcome data are limited, but the most recent Jamaica School Readiness Assessment (JSRA), which measures readiness among children aged 4, shows no change between 2016 and 2018. The JSRA is completed by teachers to screen for developmental disabilities, behavioral disorders, and academic readiness (literacy and numeracy). IEG, with the support of a psychometrician, conducted the most recent analysis of the data in 2021 based on data collected in 2017, 2018, and 2019. Assessments were completed for a sample of about 92,918 children in ECIs. Little change occurred over the three years of data examined, but caution should be used in interpreting because this could be a limitation of the screening tools used. The limited differences among scores derived by girls versus boys show that when the JSRA screening forms were used, at least at the preschool level, all genders were performing almost equally. There was also little difference between parishes on all JSRA screening tools, and more refined geographical data may be needed. The analysis points to the value of more expeditious data collection, analysis, and reporting to ECIs (see appendix F for a summary of the analysis). This exercise also highlights weaknesses in M&E capacity within the ECC and assessment unit in the Ministry of Education, Youth, and Information (see implementation section).

2.20 Monitoring and targeting efforts among interventions for poor people was not part of ECDP, despite the evidence of the beneficial impact from early stimulation interventions for disadvantaged children. A birth cohort study undertaken during ECDP confirmed that the variables that most influenced early childhood development outcomes were gender, socioeconomic status, ECD resources in the home, maternal education, and school type. The study also found harsh punishment negatively affected reading and coordination skills necessary for writing. Although these findings would not have benefited the development of NSP 1 and 2, they confirmed what Jamaican research had already established in prior decades. The implication was the critical need for ECDP to ensure reach among poor families and children to address factors to improve brain development in these early years. But, as will be discussed further in the preparation and implementation sections, this aspect needed more emphasis within ECDP. In a forthcoming unpublished report, the Jamaica Educational Transformation Commission echoes similar concerns with the quality of ECI teachers and their equitable

distribution across groups of children and types of ECIs, suggesting a concern that quality may not be reaching vulnerable children.⁵

Design and Preparation

2.21 The ECDP was based on a visionary plan (NSP) to improve the development of children, which was built on strong national research in parenting and ECD. The plan was visionary in three key respects. First, it focused on children's development outcomes, drawing on evidence that had grown exponentially with both international and Jamaican research (Myers 1992). Each of the five goals articulates support for child development as an additional, expanded focus to be delivered in parenting support and education, preventive health care for children, early intervention services, development programming in preschool facilities, and the inclusion of child development as part of practitioner preparation. Second, the plan recognized the essential coordination required between the state and its partners, with parents of young children in support of child development; all five goals required coordination between state agencies and at least one of them in collaboration with parents. Third, the foundations of the NSP were built on the scientific knowledge of child development: optimal development begins with support for parents, before a child's birth, and continues with intensity and frequency of support as required through the first three years of life (Shonkoff and Phillips 2000). The first three of the NSP's five goals focus on building these foundations for children 0–3 years in parenting education and support, preventive health care, and early intervention to identify and treat developmental delay.

2.22 ECDP supported a subset of the NSP goals. Specific areas included: provide parenting education and support via points where parent contact occurs, such as antenatal and well-child clinics (for parents of children 0–3) and in ECIs and nongovernmental organizations (for parents of children 4–6) and awareness campaigns emphasizing their importance and availability; develop and implement the CHDP and monitor and screen children at risk in accredited well-child clinics; enhance the quality of ECIs via certification and regulation, training and curriculum improvement, and human resources management; provide access to early intervention systems and services via development of tools and training for child development therapists; and strengthen ECIs and organizations (see appendix D).

⁵ The Jamaica Education Transformation Commission. Forthcoming. *The Reform of Education in Jamaica, 2021. Abridged Version.* <https://opm.gov.jm/wp-content/uploads/flipbook/jetc-reform-of-education-in-jamaica-2021/>

What Worked

2.23 Preparation of the project was supported by strong high-level ownership in the involved ministries and by financial support to undertake considerable analytical work. There was solid understanding within the ministries of the logic and imperative for support of ECD for long-term achievement of national priorities related to both human and economic development. However, ownership was not broad-based below high level. Financial support from the Japan International Cooperation Agency (\$559,000) provided the resources to undertake numerous analytical studies during project preparation. Respondents noted the utility of the following studies in particular: development and costing NSP 2008–13, which included targets that were linked to future loan disbursements; organization structure for the ECC; assessment of service delivery options to incorporate well-baby clinics; and Public Expenditure Review to inform identification of budget lines for financing under the loan. However, as will be discussed further in the “What Did Not Work” section, analytical work did not operationalize activities sufficiently.

2.24 A multidisciplinary team from the World Bank’s Human Development Sector led the preparation of the ECDP. The sector leader was an education specialist; the task team leader (TTL) was a pediatrician and economist; and team members had experience in human development (and both early childhood programming and youth development programming) and M&E systems. The initial TTL formed a strong relationship with the executive director of the ECC during preparation. Although the World Bank team reviewed the NSP, comments from the team could have been more candid in relation to ambition, sequence, and prioritization. By current standards, preparation was lengthy. For example, World Bank staff supported and guided the work with seven missions in the period from April 2006 to January 2008, which resulted in outputs useful to project design (ECC 2007).

What Didn’t Work

2.25 Although the funding required (beyond what ECDP provided) to implement the NSP was known from the outset, the ECC did not set priorities, phases, or steps for implementation, nor did it target its efforts. Even though the project was extended to 10 years by the additional financing, the ambition exceeded the government’s financial and human resources capacity. This was partly caused by the lack of a realistic assessment regarding what Jamaica could do effectively in this subsector. This might have been undertaken and accomplished through research supported by the Japan International Cooperation Agency. Yet that was just one of several flaws in the ECDP’s design and preparation that affected the project’s success (box 2.1). In addition, simultaneously undertaking monitoring of children’s development, monitoring of household risk, and

developing an early intervention system was not feasible and did not establish the requisite foundation for the system. Little attention was given to how early intervention services would be provided after screening and diagnosis, particularly in the ECIs, and to increasing child therapists. The chair of the ECC at the time reports that the first level of support was to be provided in the classroom with additional attention for the child, followed by a second level of support to be provided by development officers, who would also do a second level of screening to reduce strain on limited intervention resources. She notes that development officers have now been trained to support children with special needs in the classroom. However, the system is yet to be established and these foundational aspects remain within NSP 3. Targeting efforts among poor children could have balanced realism of financial and human resource capacity and worked to improve Jamaica's high inequality.

Box 2.1. National Strategic Plan Issues Contributed to a Flawed Project Design

The government ministries involved in the National Strategic Plan (NSP) were supportive of the need to improve early childhood development in Jamaica and, therefore, of the Early Childhood Development Project. However, the design of the project was hindered by limitations in the development and dissemination of the NSP, lack of clarity about how to achieve the goals of the plan, and shortcomings related to capacity and resources.

Although the NSP was intended to build on the responsibility of the Early Childhood Commission in cross-sectoral cooperation to achieve the anticipated outcomes, communication of the plan was not broad enough to ensure widespread ownership. For example, although consultative meetings were held during development of the NSP, these meetings mainly involved the Early Childhood Commission and senior ministry staff, which contributed to the strong government support. Below that level, however, there was little awareness of the NSP or of the changes that would be required at the working level, and the NSP was not widely disseminated beyond those senior levels, so ownership and awareness were limited. This was particularly the case for the Ministry of Health and Wellness since the changes needed to implement the NSP had resource implications.

The NSP also did not set out clear steps to achieve the goals it envisioned. The plan had a strong emphasis on activities to develop plans, strategies, and policies but was considerably weaker on how to convert that work into effective action in the field. For example, in the first NSP, parenting support and education strategies were to be developed for ages 0–3 through health clinics (with a new service delivery model) and ages 4–6 through early childhood institutions. Yet the plan did not offer any analysis or concept of what would make these effective, despite existing models of effectiveness from local evidence for children ages 0–3. Finally, and critically, activities outlined in the NSP were unrealistic for the level of funding available, the scope of the vision, and the operability of those activities selected to realize the vision. Moreover, though the plan contained indicators across seven target areas, these were not informed by a theory of change. Assumptions and the full range of activities needed were not in place to realize the NSP goals. The chain of reasoning between planned activities and outcomes was weak (missing outputs, intermediate outcomes).

Source: Independent Evaluation Group interviews, observation, and analysis.

2.26 The results chain had weaknesses. Despite a PDO related to institutional strengthening, the design did not adequately support institutional strengthening of the ECC or measure it within NSP or DLTs. The technical assistance component was also designed to build capacity but did not support ECC capacity building, despite the level of responsibility given to the young agency. In addition, the need to develop a new health service delivery model to include interventions that would support child development, parent education and support, and an early intervention system and screening of household risk was embedded in the NSP. Some design shortcomings were traceable to flaws in the NSP (box 2.2) that went uncorrected in the development of the project design. However, the ECDP also did not focus on core areas and the results chain needed to implement the NSP, such as how to expand health services and the role of nurse practitioners to include child development and how to raise standards in ECIs. More

extensive planning with the Ministry of Health and Wellness and Ministry of Labour and Social Security was needed related to the parenting support and well-child components, early intervention system (screening and services), and at-risk household assessments. For example, gaps in coverage emerged in the use of existing health services via CHDP to support children’s development and support to parenting (during periods when immunizations did not require attendance at a clinic). In addition, in some cases, the chain of reasoning between planned activities in the NSP and ECDP and expected outcomes was weak, with DLTs that lacked essential output and outcome indicators (see appendix D).

2.27 Despite substantial grant funding, analytical gaps remained in the operationalization of the ECDP. In 2006, Japan provided grant funding of \$559,000 to conduct analytical work in preparation for the ECDP. The analytical work did not focus on core areas needed to implement the NSP, such as how to expand the health service to include child development and how to raise standards in ECIs. For example, priority was given to regulating safe ECIs and to ensuring trained personnel and use of approved curriculum; however, the scale of the tasks involved was not quantified. Additionally, the financing required to retain staff in ECIs on parity of terms and conditions with the public sector was not assessed, nor was the training required to meet new targets and regulations. Teacher qualifications were included in the DLTs, but teacher colleges were not considered part of the design, even though a lack of trained personnel to support children’s development and specialized intervention personnel was and remains an impediment to improved outcomes for ECD programs in education to address the quality of teacher education and preparation. Despite some online training available for development officers and teachers in ECIs to teach students with disabilities, more training is still needed.

2.28 Project design and preparation also did not use existing research on ECD in Jamaica sufficiently, particularly regarding effective support to parenting. Studies that predated the NSP and ECDP emphasized that targeting poorer parents would have the greatest potential impact on childhood development, but this was not reflected in the design of the NSP or ECDP. In addition, the project did not seek to develop parental interventions based on what Jamaican evidence showed would be needed to have an impact on parental knowledge, practices, and education. That research also established how progress might be measured in children’s development.

Implementation and Supervision

2.29 ECDP financed a portion of the NSP, but its focus exceeded both the financial and human capacity to implement it. Some project objectives and activities received more attention than others during implementation and supervision (see appendix A “Efficacy”).

The aspect that received the most attention during the ECDP related to regulating and ensuring the quality of ECIs. Moreover, M&E occupied considerable efforts because the number of DLTs exceeded what could be realistically completed in the five-year (or even 10-year) project implementation, and capacity weaknesses persisted.

2.30 To address the implementation delays, bottlenecks, and capacity of the ECC, the World Bank restructured the project five times, reduced the number of DLTs, and lowered targets. The Mid-Term Review, which was relatively early in the implementation period, made the most significant adjustments. It revised targets in the results framework to align them with the pace of NSP implementation; adjusted the technical assistance component to add training activities, support inspection of ECIs, and purchase laptops and software for education officers; and revised disbursement arrangements to ease the flow of funds. Subsequent restructurings also adjusted targets, sometimes replacing them with less ambitious ones. For example, outcome targets were changed to process targets, and targets for policies or strategies to be approved or acted on in parliament became targets for cabinet approval such as the ECD policy, delaying the ability of this policy to affect change and development.

What Worked

2.31 The formal implementation agreement with the ECC helped ensure that process goals were met. This agreement on project implementation detailed “the obligations of both parties in the execution of the Loan including, among other things, articles governing the use of the funds, withdrawal and disbursement mechanisms, and project execution” (World Bank 2008, 12). The agreement also required annual renewal of memorandums of understanding with participating ministries, at least ostensibly ensuring those ministries’ continued involvement in project implementation.

2.32 ECDP financed research and data collection efforts, many of which have continued beyond implementation. Jamaica already had a reputation for its research on ECD, a reputation the project helped perpetuate through the collection of even more data. Among the implementation achievements was the development of an ECD management information system and strengthening of ECD data and statistics that were not present. The ECDP also helped create the child development module for the Survey of Living Conditions and the pilot of the JSRA. After the pilot, data were collected for the JSRA in 2017, 2018, and 2019. IEG, with the support of a psychometrician, analyzed these data for this report because existing staff within the ECC and the assessment unit within the Ministry of Education, Youth, and Information did not have the requisite expertise. The module for the Survey of Living Conditions was discontinued once project funding ended. In addition, multiple partners funded the Jamaican Birth Cohort Study to evaluate the relationship between a child’s early childhood environment and

child development outcomes at age 5, before entry to the primary level at age 6.⁶ This study included all children born in Jamaica between July 1 and September 30, 2011.

2.33 Data from DLTs were analyzed to detect issues in implementation with ECIs. The ECC gained additional insight into the issues affecting the quality of ECIs and made grants and resources available to ECIs to improve safety standards and become learning centered. In addition, with ECC encouragement, the government expanded the workforce of accredited teachers in public infant schools. The focus on standards included support to help ECIs meet certification standards, with the government providing ECIs with subsidies for qualified teachers once they met the standards. The ECC also encouraged further involvement of the private sector in ECIs, forming partnerships with some of these institutions, which has resulted in models of good equipment and design.

What Didn't Work

Financial Issues

2.34 The ECDP intended to create incentives for and increase government financing across multiple sectors with ECD initiatives, but these desired effects did not occur. From the start, funding from ECDP did not flow directly to ministries responsible for implementing NSP activities, even when those activities were additions to a ministry's mission, as was the case with the expansion of clinics to include child development and parenting support. This also occurred with an accreditation system that was developed for well-child clinics but without additional resources for those clinics to support the workload and new requirements. In a 2014 case study of Jamaica for World Bank (2015), the Ministry of Health and Wellness cited major problems with sustaining implementation because of IMF stringencies. Still, the DLTs, though intended to incentivize government counterpart funding, ultimately did not do so, creating additional financial issues. The main reason for this shortcoming was that the incentives did not ensure that the money flowed directly to the line ministries responsible for implementing specific interventions. Moreover, the government did not attempt to compensate for this problem through its own allocation process. Meanwhile, health user fees were abolished, decreasing the opportunity to raise revenues. Child development, which was an additional and new responsibility, became crowded out with the need to address urgent health care issues, which was evident in the attainment of DLTs (see appendix A "Efficacy"). Since ECDP ended, the government has not budgeted for ECD

⁶ Funders of the Jamaican Birth Cohort Study included Inter-American Development Bank; Consortium (Michigan State University; University of Texas, Health Science Center at Houston; Wayne State University); National Health Fund; United Nations Children's Fund; World Bank; Culture, Health, Arts, Sports, and Education Fund; University of Nevada, Las Vegas; Parenting Partners Caribbean; Grace Kennedy Foods; and Mona GeoInformatics Institute.

except for providing a line item for the Ministry of Education—partner ministries have no such line item for ECD.

2.35 In addition, the DLTs may have inadvertently directed attention to supporting clinics or ECIs that were closer to meeting standards rather than those requiring more technical and financial support to meet standards and become certified. In other words, by focusing on low-hanging fruit, those that may have been harder to achieve and could have had a more consequential result were not prioritized. The Implementation Completion and Results Report Review states that “Disbursements were linked to aggregate targets, for example, the percentage of ECIs and health centers with well-child clinics certified. Although grants to these institutions formed the largest share of disbursements, there was little evidence in the project documents that the criteria against which grants were made were examined, revised, and monitored or both throughout the project with an eye toward effects on results and equity. The desire to meet targets related to standards could result in disproportionate resources allocated to facilities that are close to higher standards at the outset, thus serving more advantaged areas.” Interviews conducted for this report did not reveal grant criteria or processes that would have ensured that grants supported equitable outcomes. The Jamaican Birth Cohort Study reinforced the need for interventions reaching poor children during the early years.

2.36 The allocation of government funds to ECD and ECC staff salaries were a concern throughout the ECDP implementation. Aide-mémoire indicate continuous discussion throughout implementation about the level of funding for ECD. The United Nations Children’s Fund noted in 2018 that although Jamaica had a reputation for a high level of education investment, there were disparities in allocation. According to UNICEF and CAPRI (2018) “In 2016/2017, close to 16 percent of the national budget (J\$91.0 billion [Jamaica dollars]) was allocated to the education sector. Yet, the early childhood sector received only 3.3 percent (J\$3.0 billion) of the allocated amount” (31–32). The setting of salaries and position levels within the ECC was lower than similar agencies in the government such as the Culture, Health, Arts, Sports, and Education Fund or units within the Ministry of Education. Attracting senior leadership was difficult, given the terms and conditions offered, and it resulted in challenges in recruiting enough qualified persons as development officers (57 of the 60 recruited had no early childhood experience) or staff with M&E skills. The project executive director changed four times during the project term, and turnover was high for staff at other levels. Terms and conditions of staff employment at the ECC differed from those at the Ministry of Education, Youth, and Information’s Early Childhood Unit before it was disbanded— notably, the salaries were lower, and employment was offered on contract (Jones, Brown, and Brown 2011). The ECC has submitted a reclassification proposal to the government.

Operational Issues

2.37 The use of the ECC to coordinate across relevant ministries while also implementing ECDP was a bold risk. By placing implementation responsibility with the same agency that developed the NSP, the government and the World Bank team sought to empower and build the capacity of relevant experts and public servants recruited to the agency with the authority needed to execute a complex and highly ambitious project. However, other options that simultaneously built the ECC's capacity and leveraged government expertise—such as the Culture, Health, Arts, Sports, and Education Fund—may have permitted the ECC to focus on technical implementation. The ECC was a new agency, and its staff lacked experience in implementing a project of this type. Implementation was complicated for an entity that was initially a policy and planning agency but under the project became a coordinating project implementation unit and regulator providing inspection and learning support functions. In interviews that IEG conducted for its 2014 case study of Jamaica (World Bank 2015), interviewees expressed concerns about the role of the ECC board and the ECC's capacity to implement. The World Bank's solution to mitigate this implementation challenge was altering, decreasing, and lowering DLTs rather than addressing central issues.

2.38 With government changes, the ECC has become more like a department within the Ministry of Education. Under the ECC Act 2003, the ECC reports directly to the Minister of Education. After the first five years of implementation and with a change in government, the ECC's role emphasized functions of a regulatory body for ECIs, which did not require a high level of engagement by the Ministry of Health and Wellness and Ministry of Labour and Social Security. In addition, the ECC's location as a statutory agency responsible to the Minister of Education gave it less influence within the Ministry of Health and Wellness and Ministry of Labour and Social Security. For example, budget discussions concerning ECD with the Ministry of Finance and Public Service are now handled directly by the Ministry of Education, and interviewees reported that the ECC does not participate in these meetings. The ECC's operational role in implementing the NSP regarding the support of development of children 0–3 years differed in emphasis from its role in support of development of children 3–6 years. The role in support of children 0–3 years was primarily to coordinate and encourage implementation of NSP goals by the responsible agencies in the Ministry of Health and Wellness and Ministry of Labour and Social Security, and to manage the partners and consultants engaged in production of tools and systems in support of NSP goals 1, 2, and 3. From 2010 onward, the ECC operational role with respect to supporting development of children 3–6 focused primarily on the regulation of the ECIs, curriculum innovation, and coordination support for vocational accreditation. It also focused on training for early childhood practitioners by the Human Employment and Resource Training National Training Agency. Particularly for the

functions in support of the ECIs, the ECC has always been understaffed compared with the organizational complement, based on interviews.

2.39 ECDP expectations for interventions in health and parenting support were undermined not only by funding limitations but also by weaknesses in situation analytics (that is, how to accomplish effective parenting support). Weaknesses with the CHDP to improve use of the passport as a comprehensive tool for monitoring and resourcing well-child clinics and staff to support parents in child development (see appendix A “Efficacy”) were not addressed. Likewise, the need for people based in communities to follow up with parents with similar or greater frequency than was possible in health clinics was not implemented.

2.40 Since the closure of ECDP (under NSP 3), the ECC has piloted several approaches to support parenting. The ECC focused on expanding the number of Parent Places, developing a strategy for support for children 0–3 to include the First 1,000 Days app with tips and information on child development and wellness; Brain Builder Centers in 126 locations; piloting training for Reach Up and Learn in 14 districts; and rolling out the program What You Do with Baby Really Matters in four health centers (see Chang-Lopez et al. 2020; Walker et al. 2016). Local ECD research informing What You Do with Baby Really Matters and the Reach Up and Learn program approach is effective in many contexts—an approach that could have been adopted within earlier NSPs or the ECDP and is now being piloted.

2.41 The proliferation of data collection indicators and tools was disproportionate to the limited capacity (and available financial resources) to monitor and evaluate project activities. Data capacity was less developed than it should have been during the project. Consequently, data were not analyzed promptly, which limits their use in decision-making (see appendix A “Monitoring and Evaluation”). JSRA data exemplify a complex endeavor constrained by technical capacity and delayed data analysis that affected ECIs and children (box 2.2). M&E capacity was difficult to retain and hire with terms of references. The output focus of project monitoring resulted in a lack of outcome data, making it difficult to confirm project effects.

Box 2.2. Data Capacity Constraints: Example of Jamaica School Readiness Assessment

The Jamaica School Readiness Assessment (JSRA) was designed to screen children for developmental disabilities, behavioral disorders, and readiness for primary school based on teachers' knowledge. The assessment was administered at age 4 (at the end of second year of preschool) to permit use of the following year (at age 5) for any interventions needed before children enter primary school (Grade 1 at 6 years old) because early readiness for school is associated with later school success.

JSRA was developed and adapted from existing measures because the Early Childhood Commission (ECC) wanted to develop a unique instrument that was culturally relevant to Jamaica. Developing a new instrument meant that the process to create, pilot, and norm takes more time and resources (supported by several donors) compared with adapting an existing instrument and determining reliability and validity within Jamaica before large-scale usage.

The process to develop the JSRA used research conducted by the ECC and a review of existing definitions of school readiness; and focus groups with teachers, parents, and early childhood development stakeholders. It resulted in adapting the original instruments and including an additional question on children's behavior. A pilot psychometric evaluation of one parish and several other evaluations of the JSRA were conducted, including an assessment of data quality and the processing of the data (that is, protocol for teachers to refer students to a development officer, movement of booklets from teachers to data entry, reporting procedures). Recommendations made during these evaluations were not fully addressed (among them, data processing and delays in information provided to schools and parents and the need for computerized data collection).

Because some of the earlier assessments of the JSRA were based on a limited sample, the psychometrician who analyzed data for Independent Evaluation Group in 2021 assessed validity and reliability, guided further modification of the structure, and established cut-off values for JSRA (see appendix F for findings and further changes advised). Construct validity was partially associated with the Multidimensional Item Response Theory Factor Analysis conducted, and internal consistency was calculated. Further analysis is needed to confirm that the JSRA scales have appropriate construct validity.

Thus, the aim of the instrument—to allow time to provide interventions to improve readiness before the child enters primary school (grade one)—may not have been realized during the Early Childhood Development Project or in subsequent years. When the ECC staff continue to collect such data in the future, it is important that they try to ensure that teachers complete the JSRA in its entirety. In addition, it is important that the data are collected expeditiously for immediate analyses and that scores for each child are made available to parents and early childhood institutions so that remedial efforts addressing concerns the JSRA raised can be implemented.

Moreover, the inability to connect available data (that is, teacher qualifications, ECI geocoded data, type of ECI) with JSRA data meant that important explanatory variables could not be examined. Such data may help track trends in readiness or risk over time for groups of children.

Source: See appendix F.

2.42 In addition to personnel changes in ECC, counterparts from the World Bank and other donors turned over frequently, which may have inhibited more candid dialogue

with the ECC. Although the project was designed using a multidisciplinary team, education sector specialists provided most of the implementation and supervision for the project. One was based in Jamaica for three years—the only sector specialist to be based in the country—and was succeeded by TTLs based in headquarters. The decision to focus on education may reflect the parent ministry for the ECC. Both education specialists worked across sectors in support of the project and reportedly exchanged findings and concerns with social protection colleagues in headquarters. Interviews confirmed the perception that despite the infusion of resources with the additional financing, implementation should proceed without drastic changes. The additional financing was a missed opportunity to examine what was working (and what was not) and how best to attain the desired impact in the remaining years. The perception of respondents at that time was that changes could not be made, despite the additional resources. In the end, the multiple restructurings were modest.

3. Lessons

3.1 Collaboration, strong national ownership of the NSP, and financial support are requisite conditions but do not ensure performance and outcomes because the World Bank must also provide rigor and candor in its dialogue and advice. During preparation, the World Bank team needed to be more rigorous in its appraisal of the NSP and act as a “critical friend.” This is a “trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person's work as a friend.”⁷ The value of the critical friend would be to challenge the practices and assumptions supporting the NSP—in this case, to help the project improve. The World Bank team could have offered hard truths and frank assessments that counterparts would otherwise tend to avoid if not managed constructively, supportively, and professionally. The lack of a clear-eyed assessment from the start about what Jamaica could do realistically and effectively in this subsector indicates that the World Bank team may have deferred to government counterparts and avoided frank discussion during preparation. During implementation, the issues became clearer in relation to support for parenting, the CHDP, the early intervention system, and the scale of the task involved in certifying all ECIs. A critical friend would have used a different lens at the Mid-Term Review or during the additional financing negotiations and asked what Jamaican research showed about the parental interventions needed to have an impact on parental knowledge, practices, and education—particularly in the known contexts of vulnerability and high inequality—rather than canceling and lowering DLTs.

⁷ <https://www.edglossary.org/critical-friend/>

3.2 Country teams need to share and archive lessons and implementation knowledge, including Global Practice knowledge, across projects. The World Bank's support for the PATH program and HIV/AIDS project offered rich lessons that were applicable to ECDP. IEG became aware of these lessons during interviews in the 2014 case study of Jamaica (World Bank 2015). The World Bank support for the two earlier operations left a legacy of institutional structures and procedures that equipped the ministries for expansion and sustainability at the central and community levels. Preparation for these operations included development of delivery mechanisms that were created from study tours and continuous technical support. The World Bank's ECDP preparation team may or may not have known about these lessons. Moreover, all relevant Global Practices are repositories of experience with cross-sectoral arrangements that the preparation team might also have drawn on to inform project preparation. The Country Management Unit has an important role as a conduit for such tacit knowledge sharing, particularly in cross-sectoral work where relevant learning in one sector may not be readily accessible to another, or a country's experience with making intersectoral coordination effective may have been forgotten. This may require creating a mechanism that TTLs can mine. It may also imply that the Country Management Unit actively build knowledge synergies among TTLs and teams, which is challenging with staff turnover. A mechanism by which the unit could provide essential learning would allow TTLs to act from a knowledge base built on a combination of global evidence and local knowledge gained from implementation.

3.3 The institutional arrangements for cross-sectoral or cross-ministerial action and coordination are less likely to succeed when authority is centered in one of the involved ministers or ministries. Reporting to one of the ministers has been counter to the vision of equal partnership. After the first five years of implementation, and with a change in government, the ECC's role emphasized functions of a regulatory body for ECIs, which did not require a high level of engagement by the Ministry of Health and Wellness and Ministry of Labour and Social Security. Some of the other shortcomings of the ECDP were caused by budgeting issues that were partly imposed by exogenous factors, but the lack of authorities in ministries other than the education ministry contributed to the implementation difficulties. This was manifest in the lack of funding for certain key activities, such as those related to support for parenting, the effectiveness of the CHDP, and others that did not receive the funding necessary to execute directives from an authority removed from the mainstream of activities in the health and social protection sectors. Perhaps it was inevitable that the ECC, under the direction of its board and answerable to the Minister of Education, would have difficulty delivering on its cross-sectoral mandate without direct influence over the Ministry of Health and Wellness and Ministry of Labour and Social Security. Ensuring that the ECC reported to a higher

authority (as is done in some countries) may have prevented or resolved some of the issues that emerged.

3.4 Intersectoral coordination may more likely be sustained with “light mechanisms” and financial resources that empower ministries and national agencies to focus on achieving a convergence of common policies, actions, and results. The ECC’s leadership of intersectoral coordination, including planning and budgeting, was provided through interministerial and intersectoral planning processes. The ECC made efforts to enhance coordination among the partner ministries, and memorandums of understanding were signed. There is no evidence that mechanisms were established within the partner ministries to manage ECD implementation and planning based on decisions made by the ECC. Moreover, planning meetings have ceased since the close of ECDP. Lighter mechanisms built around convergence of common policies and actions may be needed. However, without supplementary financial and human resources to implement additional activities, the expectation of accountability to deliver results is not realistic.

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Appendix A. Ratings

Early Childhood Development Project (Loan IBRD-75540, IBRD-83340)

Table A.1. ICR, ICR Review, and PPAR Ratings

Indicator	ICR	ICR Review	PPAR
Outcome	Satisfactory	Moderately satisfactory	Moderately unsatisfactory
Bank performance	Moderately satisfactory	Moderately satisfactory	Moderately unsatisfactory
Quality of monitoring and evaluation	Substantial	Substantial	Modest

Sources: World Bank 2019a (ICR), World Bank 2019b (ICRR).

Note: The ICR is a self-evaluation by the responsible Global Practice. The ICR Review is an intermediate Independent Evaluation Group product that seeks to independently validate the findings of the ICR. ICR = Implementation Completion and Results Report; PPAR = Project Performance Assessment Report.

1. Relevance of the Objectives

Five project development objectives of the Jamaica Early Childhood Development Project (ECDP; P095673) supported the aims of the first and second National Strategic Plan (NSP). Those objectives were (i) improve the monitoring of children’s development, (ii) improve the screening of household-level risks affecting such development, (iii) improve early intervention systems of the borrower to promote such development, (iv) enhance the quality of early childhood schools and care facilities, and (v) strengthen early childhood organizations and institutions (World Bank 2008). The same objectives were in both the financing agreement and appraisal document, and they remained consistent across the five project restructurings. A sixth objective—improving parenting education and support—was implicitly part of the NSP supported by the ECDP and project development objective indicators. Thus, that objective was also considered to have been in effect across the project’s entire lifetime (World Bank 2019b). Key performance indicators and targets were dropped and revised several times, including with the 2011 and 2014 loan restructurings.

The objectives of the ECDP aligned with priorities articulated in several strategic documents developed by the government and the World Bank Group during the life of the project. For example, the Jamaica Country Partnership Strategy (CPS) 2014–17, discussed by the Board of Executive Directors on April 2, 2014, includes social and climate resilience as a thematic area. The project aligns directly with the CPS objectives for this theme, which says, “Building human capital, starting from early childhood, provides the foundations for a more resilient, stronger, and more prosperous society” (World Bank 2014, 20). The project also supports the CPS aim to enhance resilience and reduce socioeconomic vulnerabilities; specifically, it supports two outcomes: outcome 6

("strengthened social protection programs and improved institutional capacity for their management") and outcome 7 ("increased opportunities for the poor and vulnerable"; World Bank 2014, 21). The CPS Performance and Learning Review, discussed by the Board on May 25, 2017, found that the CPS framework remained valid and extended its validity for two years (World Bank 2017, 13). Furthermore, the project directly supported the country's own strategy (NSP).

The Project Performance Assessment Report confirms the finding of the Implementation Completion and Results Report Review (ICRR) that the project was not well aligned with Jamaica's level of development and its capacity at the time of implementation. The objectives were overambitious for the Early Childhood Commission (ECC), which was a relatively young agency with too little authority to ensure the commitment and participation of the leadership in the multiple sectors that needed to cooperate in achieving the project goals. One of the signs of the mismatch with Jamaica's level of ambition and capacity was that the government was unable to provide the level of financial resources required by the ministries involved in implementing the ECDP. Another sign that the project exceeded Jamaica's capacity was the persistence of financing constraints to implementing the NSP and financing inadequacies and salary levels that made staffing the ECC difficult. The objectives were also overambitious for the period and for available human resources. The ICRR notes that "A less complex alternative to supporting the whole NSP (with its seven areas of emphasis, and the project's multiple objectives and 71 indicators) was presented in the Project Appraisal Document, but was not chosen due to 'need' and a reference to compensating capacity in other agencies." Although government commitment was clearly present across strategic documents (such as NSP 1, 2, and 3 and the Early Childhood Act), its implementation actions and limitations negatively affected the sustainability of achievements related to the objectives.

The objectives have continued to be substantially relevant for the World Bank and the government of Jamaica beyond closure. Jamaican research and international evidence continue to show the importance of early childhood development because it has a substantial effect on later outcomes (Gertler et al. 2013; Schweinhart 2007; Walker et al. 2011).

The relevance of the objectives is rated **substantial**, falling short of a higher rating because of the overambition of the objectives and mismatch with government capacity.

2. Efficacy

The Independent Evaluation Group (IEG) assessed all six objectives for efficacy. The sixth objective—improving parenting education and support—was implicitly part of the

NSP supported by the ECDP and project development objective indicators and, thus, considered part of the life of the project. The outcome rating will not be split because the targets and indicators changed several times during the operation, including as late as six months before closure. The practicality of employing a split rating is difficult because four of the original six project development objective indicators were deleted, and two new indicators were added for a new total of four indicators during the life of the project.

Objective 1: Improve the Monitoring of Children’s Development

Improving the monitoring of children’s development is part of NSP goal 2: effective preventive health care for 0–6-year-olds. Preventive health care was considered “most effective in the first three years of life and matched by the frequency of contact with the health services during this period of life” (NSP 1, goal 2; Jamaica 2008).

Improved monitoring of children’s development was expected to expand the child health surveillance offered by health clinics to include child development and to provide information annually on each child’s development status. To that end, the project supported development of a new tool designed to be parent-held and shared with teachers: the Child Health and Development Passport (CHDP). From September 2010 onward, all children born in Jamaica received a CHDP.

The evaluation of the CHDP found low use of the passport as a comprehensive tool for monitoring, except for immunization pages. In addition, parents were uncertain about their role in writing in the CHDP, and teachers were unaware of the health-education interface (Reece 2018, 52–3). The interface occurs at two critical stages: the first when children 2–5 years begin their attendance at early childhood institutions (ECIs) and the second when children ages 6–11 transition to primary schooling. Principals interviewed in schools reported that they kept photocopies of the passport’s immunization section for each child and confirmed that they did not contribute to the health-education interface. The evaluation also found that neither parents nor health workers were using or discussing the development screening sections of the CHDP, and as children aged, this section was least likely to be filled out. In addition, the lack of a monitoring and evaluation (M&E) framework for the CHDP meant that critical baseline data were neither identified nor collected, which makes analysis of the effectiveness of the implementation and use of the CHDP more challenging (Reece 2018, 32). The use of the CHDP for child development monitoring (as an interface for parent, education, and health providers) remains a missed opportunity. The potential of the CHDP to engage parents in monitoring their child’s development is not fully realized.

NSP goal 2 also aimed to improve the quality of well-child care “through new service delivery focused on child development, supported by standards, staffing, equipment

and monitoring systems.” The new service delivery for child development is not in place. Supporting standards and an accreditation system are not fully operational. The relevant indicator for this objective—the percentage of health centers offering well-child clinics that are certified—went through several changes. The original indicator, which required *accreditation* for centers was dropped in 2013, but it was reinstated in 2014 as an indicator for *certification* of centers. By 2018, six well-child clinics (2 percent) were certified according to standards and criteria created for Jamaica based on global standards. Six well-child clinics were certified in 2018, but since then, there have been no further assessment or recertification exercises (Reece 2018). An intermediate indicator measuring the percentage of health centers offering well-child clinics that had been assessed using the well-child clinic assessment system, originally with a target of 50 percent in 2014, achieved only 12 percent by the 2018 project close date. Staffing has not been increased, and the evaluation of the CHDP found that training was insufficient (Reece 2018, 26).

Objective 2: Improve the Screening of Household-Level Risks Affecting Such [Child] Development

Improving the screening of “households at risk (which produce children at risk) and children at risk” is part of the NSP goal 3: early and effective screening, diagnosis, and intervention for at-risk children and households. Like goal 2, identification of children and households at risk was considered “most effective in the first three years of life and matched by the frequency of contact with the health services and other state agencies...during this period of life” (NSP, goal 3).

To reach this goal, the project supported development of a new tool designed for use in health, education, and social welfare settings: the Family Support Screening Tool. According to UNICEF (2020b), “The development of this tool was based on the premise that children at risk arise from households at risk but also that risk situations may change for better or for worse throughout a child’s early life” (86). Thus, the Family Support Screening Tool is designed to be administered at birth and at least once a year until the child is 5 years old, during well-child clinic visits, PATH program visits, or during preschool years. It is to be administered more often if warranted by prescreening results (Squires 2014, 6).

Targets for completion and implementation of the Family Support Screening Tool during the project term were dropped (Samms-Vaughan 2018). Subsequently, the tool has been piloted and normed (ECC 2019) but has not yet been implemented (UNICEF 2020b, 87). Its status is not clear from interviews, but consensus needs to be developed among all agencies (education, health, PATH, social welfare services) collaborating in its use.

Seven hundred and sixty-three children had accessed the Ministry of Labour and Social Security early intervention program by project close (and 676 children in 2019), well exceeding both the initial goal (300 children) and the revised goal (500 children). This suggests sustainability and a low bar for the targets. In addition, the CHDP screening questions were used to identify high-risk children ages 0–6 in PATH beneficiary households.

Objective 3: Improve the Early Intervention Systems of the Borrower to Promote Such [Child] Development

Improving the early intervention systems to promote child development is part of NSP goal 3: early and effective screening, diagnosis, and intervention for at-risk children and households; specifically, goal 3 focuses on “Children’s development, including their social competence, benefits from access to and inclusion in early identification and intervention services” (NSP goal 3). To bring this about, the project aimed to put together all the elements of a system (screening tools and processes, referral and diagnostic services) to identify “unrecognised neurodevelopmental disability in children up to the age of 5–6 years, after which children leave the early childhood sector and transition to primary level” and to provide human resources capacity to strengthen early intervention services through the child development therapy program.

Elements of the screening, referral, and early intervention system have been developed with support of multiple funders. The whole system is not yet fully operational (UNICEF 2020b, 4, 128). A national policy on screening, early identification, and intervention was to be included in the national early childhood development policy (in draft). A strategy for service delivery of the screening, referral, and early intervention system is included in NSP 3 2018–23.

The ECDP supported the curriculum development and delivery of training for child development therapists to associate degree level at the University of the West Indies. In interviews for this report, eight trained therapists were working in the Ministry of Labour and Social Service Early Stimulation Project. The target for placement of other child development therapy graduates in parishes was dropped during the project (Samms-Vaughan 2018). Still, at least seven parishes now have a minimum of one full-time child development therapist or officer on staff in the public sector. In interviews, it was understood that funding to recruit additional therapists was not forthcoming. The training program was not continued at the university after the first cohort of 25 students. However, the course is expected to be converted to online format with support from the United Nations Children’s Fund (UNICEF 2020a).

Objective 4: Enhance the Quality of Early Childhood Institutes

The quality of ECIs is the focus of NSP goal 4: safe, learner-centered, well-maintained ECI facilities. Together with the focus on developmental support for children 0–3 through preventive health (goal 2) and early intervention (goal 3), goal 4 identifies that “addressing early childhood institution (ECI) facilities and teacher quality reflect the early childhood period when these have their greatest impact, three to five years.” Securing quality institutions was expected to be an incremental process with interventions on all fronts (physical plant, environmental safety, public health, equipment) supported by a new regulatory framework, certification system, vocational training for practitioners, inspection process, and development support from the ECC.

Data provided for this report show that 2,110 ECIs have a permit to operate (out of 2,626 ECIs), which is 80 percent of the total. A permit is issued when an ECI meets criteria for health and safety, which are the compulsory standards for operation. By project close, the total number of children attending ECIs with permits was about 92,250, which achieved the target of 75 percent of children enrolled in ECIs. There has been no update on this information since the ICRR.

A total of 271 ECIs were certified (data from 2019/20 academic year)—10 percent of the total—serving 14,987 children ages 3–6 years. Certified is a higher standard based on education quality. NSP 1 had planned for 25 percent by 2013; the current target for 2023 in NSP 3 is 15 percent, suggesting the enormity of the task ahead to improve community-based ECIs operating on whatever fees parents can afford, with only some receiving support for teacher stipends for the ECC.

As of January 2021, 2,299 ECIs were implementing improvement plans. At ECIs visited for this report, principals indicated that the school development plans were essential because they were used by ECC as the mechanism for distribution of available financial assistance. In January 2021, 87 percent of ECIs were implementing improvement plans, an increase over the 52 percent found by the ICRR and well above the original target of 45 percent.

Data for the 271 certified ECIs indicate that of the 821 staff, 415 were trained teachers with bachelor’s degrees, 82 had master’s degrees, 1 had a doctorate, and 323 were diploma trained (pre-degree training level). Data for the ECIs with permits to operate indicated that of 3,011 trained teachers, 1,474 had bachelor’s degrees, 164 had master’s degrees, and 1,373 had diplomas. Data for vocational trained and other practitioners were not available for ECIs with either certification or a permit.

Objective 5: Strengthen Early Childhood Organizations and Institutions

Strengthening early childhood organizations is supported within the NSP Working Environment Process 1: The sector and sector agencies are governed by frameworks that promote achieving results in a consultative environment, and all sector institutions are achieving targets. The goal is “to ensure a co-ordinated approach to ECD [early childhood development].”

The community-based service delivery model was developed, piloted, and approved in 2018. It has not yet been implemented, but it is included in NSP 3 for 2018–23 and the ECC reports that there are now 17 active community early childhood development councils initiated across the country as part of the rollout of the community-based service delivery model.

Interviewees for this report cited several instances of support from the private sector for ECIs. Examples ranged from state-of-the-art buildings fully adapted for access by children with disabilities (with support from industry and tourism) to examples of community-based initiatives to refurbish existing sites with grants from the Jamaica Social Investment Fund and the Culture, Health, Arts, Sports, and Education Fund.

Another key organizational strengthening effort, the Jamaica School Readiness Assessment, was administered in 2017, 2018, and 2019. However, the data and results have not yet been disseminated either for use in planning centrally or for use in the ECIs. The ECC has not analyzed these data, but IEG did so for this report.

The ECC Annual Review Publications for 2014–15 and 2016–19 have been publicly released. The Annual Review for 2020–21 is expected to be completed in December 2022.

The cabinet has not yet approved the national ECD policy.

Objective 6: Improving Parenting Education and Support

Support and education for parenting, an important mechanism to improve children’s development, were operationalized in various ways across the life of the project, noting that interventions beginning before birth, are “most effective in the first three years of [a child’s] life and matched by the frequency of contact with the health services during this period of life” (NSP goal 1). Parents are to be provided with “accessible and high-quality parenting education and support allowing for optimal development of children.” Thus, effective parenting education and support was expected to be accessible in antenatal and well-child clinics (for parents of children 0–3 years), in ECIs and nongovernmental organizations (for parents of children 4–6 years), through public education, and later via Parent Places that provide education (for example, on nutrition for young children) and support.

For parents of children 0–3 years attending well-child clinics, the CHDP was not being used effectively to support parenting. The evaluation found that parents had little interaction with the CHDP and were not prompted to complete developmental screens. Once a child had completed the infant childhood immunization schedule at 2 years, there was no rationale for parents to bring children back to well-child clinics. At most, parents might visit the well-child clinic six times to complete the immunization schedule. The Inter-American Development Bank funded a study to address this by offering parenting programs as a compliance mechanism for the Program of Advancement through Health and Education (PATH), requiring attendance in the year between a child’s second and third birthday. Research in Jamaica had shown that parenting education and support, when required every two weeks, and intense guidance and support from a health professional trained in supporting parenting were both effective. The assessment of standards in a sample of clinics for the proposed certification system for well-child clinics found “the lowest level of performance for the 27 health centres was on Standard 9 (Governance) and Standard 4 (Parent/caregiver education and training in areas essential to child health and development, with emphasis on immunization, infant and young child feeding, and early stimulation)” (Russell-Brown 2018, vi).

Parents were able to access parenting education and support guided by the National Parenting Strategy and Programme Standards. These programs are delivered through a Parent Place, a familiar local place that “welcomes and supports all parents and families to raise their children well...where services can be varied and flexible, and can be attached or linked to a wide range of public or private services, such as health clinics, schools, libraries, social service agencies, churches” (UNICEF 2020b, 88). Parent Places are of three types: one that provides information, one that provides parenting support training, and one that provides specialist referral services on site. Parent Places are guided by a curriculum that includes content tailored to age groups 0–3 years, 4–6 years, and 6–8 years and includes “general parenting, nutrition, growth and development, child behavior, parenting styles, providing structure, fathering, and [also] included more challenging situations for parents to manage, such as raising children on limited resources, raising children to resist violence, managing trauma and stress, and child maltreatment” (UNICEF 2020b, 88). In 2018, at the conclusion of the project, 52 percent of Parent Places were certified. These have been maintained and the ECC has identified 26 Parent Places for future certification. During the pandemic, the training of parenting facilitators and parent mentors for peer-to-peer support for parents of children 0–6 years has continued with 10 modules over 13 weeks provided online. The effectiveness of the Parent Places approach to parenting education and support was based on consultation and, later, on a strategy. In 2014, the project set a target to assess 60 percent of early

childhood parenting education and support programs. By 2018, 66 percent had been assessed.

A communication strategy to educate parents and raise awareness about early childhood stimulation, nutrition, and parenting initially planned for completion in 2014 was completed in 2018. Public education in parenting education and support has continued with the introduction of the 1,000 Days app. It includes a child development checklist that is aligned with the CHDP: “The App is used in ECC virtual Parents’ Places reaching some 2,000 parents weekly” (UNICEF 2020a), and it is described as an “intervention for changing negative parenting behaviors to achieve positive outcomes for children.”

Overall Efficacy

The overall efficacy of the ECDP is rated **modest**. This report has recast the multiple compound objectives (improve the monitoring of children’s development, screening of household-level risks affecting such development, and early intervention systems of the borrower to promote such development) as three separate objectives, which the Implementation Completion and Results Report (ICR) presented as one. This report has also added the objective “to improve parenting education and support,” which was part of the NSP and included in the project even before the objective was added during restructuring. Nonetheless, splitting the objectives into six has no impact on the overall rating—ratings for each objective are **modest**.

3. Efficiency

Efficiency investments in early childhood education and ECD are cost effective. One argument for investing in children from birth to age five is that gains in development lost at this critical period cannot be recouped (Heckman 2008). High-quality programming for early childhood education and development improves children’s cognitive, language, physical, and socioemotional development and increase school readiness (Martinez, Naudeau, and Pereira 2012). Another reason these services are cost effective is that they influence medium and longer-term outcomes, such as learning in school (Belfield et al. 2006; Heckman, Pinto, and Savelyev 2013); enhanced employment prospects, income, and labor productivity; and reduced criminal behavior. For children from poor families, these interventions can help break intergenerational poverty (Gertler et al. 2013; Schweinhart 2007; Walker et al. 2013). The economic justification for the operation lay in the high returns to the individual and society from early childhood education.

Design Efficiency

The project appraisal estimated the internal rate of return (IRR) of the investments under NSP and the distribution of access to ECIs according to socioeconomic characteristics and the impact of NSP investments on recurrent costs after project closing (World Bank 2008, para. 56). The estimated cost of implementing the NSP was \$495.74 million (exclusive of parent fees), \$83.76 million of which was incremental. Of the incremental costs, recurrent costs accounted for 90 percent, and were expected to increase by about 28 percent during implementation. The IRR estimate included all costs, and the World Bank loan financed a portion of both (World Bank 2008, para. 17).

The ICR used a slightly altered form of the same methodology to be more conservative of the calculation of benefit and aligned with international evidence that investment in young children is cost effective (World Bank 2019a, 16). The IRR was estimated at 10.86 percent with a cost-benefit ratio of 2.32. The calculations assumed a work life of 38 years starting at age 22, with a discount rate of 8 percent, and used 2017 gross domestic product per capita as a proxy for average wage. The employment rate assumed was 54.3 percent. The impact of the project was conservatively estimated to last five years beyond the project close.

Implementation Efficiency

The project was originally expected to achieve completion in five years, but that was adjusted to 10 years with additional financing to support NSP 2. The additional financing that accompanied the restructuring was intended to amplify the project's outputs, such as more children attending ECIs with permits to operate or with certification. It is not possible to assess whether institutional arrangements and implementation were at least-cost. Qualitative evidence indicates implementation delays caused by the ECC's inexperience, the ECC's limited authority to effectively coordinate across ministries, and the project's complexity. Exogenous factors also negatively affected implementation and the government's ability to adequately finance ECD sectors due to the global financial crisis. Implementation efficiency was consistent with other multisectoral operations. On balance, project efficiency is rated **substantial**.

4. Outcome

The outcome of the project is rated **moderately unsatisfactory**. The relevance of objectives is rated **substantial**. The objectives were aligned with multiple government strategies and were consistent with the Bank Group's country strategies and partnership framework. Achievement of efficacy is rated **modest**. The outcome is attributable to the government's broader program and policies, of which the World Bank financed a

portion. Efficiency is rated **substantial**. This outcome rating is consistent with shortcomings in both preparation, design, and implementation.

5. Risk to Development Outcome

Financial constraint is the main risk for the sustainability of development outcomes. The government funded most of the expenditures for this project, and at various times during implementation, fiscal strains constrained staffing and implementation. The aide-mémoire document discussion about the level of funding for ECD throughout implementation. The United Nations Children’s Fund noted in 2018 that although Jamaica had a reputation for a high level of education investment, there were disparities in allocation. According to UNICEF and CAPRI (2018), “In 2016/2017, close to 16 percent of the national budget (J\$91.0 billion [Jamaica dollars]) was allocated to the education sector. Yet, the early childhood sector received only 3.3 percent (J\$3.0 billion) of the allocated amount” (31–32). One area where this has had a harmful effect is in the low salary levels for ECC, which have affected staff recruitment and retention. ECC has been charged with mobilizing additional resources from the private sector and donors, which it did during the project and has done since closure. Funding from the government has not matched the NSP’s ambitious vision.

The third NSP, covering 2018–23, is currently being implemented, and though this phase of the plan has a more realistic focus, some activities are still not likely to be achieved by 2023. For example, a strategy for service delivery of the screening, referral, and early intervention system is included in NSP 3, and elements of the screening, referral, and early intervention system have been developed with the support of multiple funders. However, the whole system is not yet fully operational (UNICEF 2020b, 4, 128). There are human resources constraints to support services for neurodivergent children and those with disabilities. In addition, the foundations for standards setting and the inspections systems in ECIs are largely in place, but the workforce development of ECD practitioners remains a risk.

Sustainability of outcomes is unclear for several initiatives started under the ECDP. Notably, health clinics and ECIs are still underutilizing the CHDP, and its intended function in parent engagement on child development has fallen short of expectations. The assessment and certification of well-child clinics has also languished since project close—only 2 percent of the clinics had been certified, and 12 percent had been assessed by project end with no further gains since the project ended. The cross-sectoral aspects of the operation (planning and budgeting meetings) have diminished, and the ECC has narrowed its focus to just regulating ECIs.

Risk to development outcome is therefore rated **substantial**.

6. World Bank Performance

Preparation was led by a multisector team within the World Bank and high-level Jamaican ECD experts with deep knowledge and experience in the sector (World Bank 2019a, para. 42). It had strong ownership in the ministries involved and the support needed for essential analytic work, including support from the Japan International Cooperation Agency of about \$500,000. Groundwork had been laid with earlier assessments of financial and procurement capacity, which the appraisal process used to design conditions of negotiations, effectiveness, and disbursement (World Bank 2019a). The project design, a sectorwide approach with disbursement-linked targets (DLTs), was meant to “mimic an incentive framework similar to performance-based budgeting,” which the government sought to pilot (World Bank 2008, para. 117).

Although the funding required (beyond what ECDP provided) to implement the NSP was known from the outset, the design did not set priorities, phases, or steps for implementation. Even with the extension of the project to 10 years, the demands of targeting, sequencing, and prioritizing the work required exceeded the government’s financial and human resources capacity. This was partly caused by the lack of a realistic assessment from the beginning regarding what Jamaica could do effectively in this subsector. This might have been undertaken and accomplished through research supported by the Japan International Cooperation Agency.

The design of the ECDP was built on faulty assumptions, particularly regarding the need to expand health services to include interventions that would support parent education, an early intervention system, and health service delivery. Some design shortcomings were traceable to flaws in the NSP itself, which went uncorrected in the development of the project design.

During preparation, lessons from other World Bank–funded operations in Jamaica, including those that supported PATH and HIV/AIDS interventions, were not applied to the ECDP or to ECC. For example, data monitoring was critical for the successful implementation of the PATH. In that project, unlike in the ECDP, registration, compliance, and payment data were monitored regularly to assess effectiveness. Adherence to service standards served as an indicator of the quality of services.

The shortcomings noted in project preparation are considered significant, consistent with a rating of **moderately unsatisfactory**.

Quality of Supervision

The complexity of the project design resulted in some difficulties in supervision.

A notable omission, also reported in the ICRR and based on project team interviews, was the lack of regular monitoring of recurrent costs and the project's fiscal impact on the government. Issues in this area included the lack of budget flowing from ECDP to ministries that were implementing NSP activities. In one notable case, an accreditation system was developed for well-child clinics, but no additional resources were provided for NSP clinic activities, despite additional workload.

The project team tried to identify issues and help the ECC address them, but restructurings were too modest, either canceling or lowering DLTs. Although the borrower's comments on the ICR describe World Bank supervision as prompt and "highly satisfactory," interview respondents for this report noted that there was unevenness in technical knowledge among task team leaders, because some of the leaders were less effective. The ICR also noted that reporting in the Implementation Status Reports was transparent, with risks flagged appropriately. Fiduciary and procurement aspects were supervised, assessed, and reported (ICR, para. 61). The restructuring and additional financing were based on the Mid-Term Review findings, and the restructuring documentation was well prepared. Interviewees for this report believed that they could not make substantial changes, despite the infusion of additional resources and capacity and implementation challenges. Thus, the additional financing was a missed opportunity for the World Bank to make substantial adjustments to attain development impact and address weakness in implementation (see the section "Implementation: What Didn't Work").

Quality of supervision is rated **unsatisfactory**.

7. Quality of Monitoring and Evaluation

Design

M&E was well incorporated into the design of the ECDP, with the intent of using it in evidence-based decision-making throughout the project. Although that was done in practice, the M&E system's overall design contributed to implementation issues.

M&E for the ECDP was complex and not fully aligned with some of the project objectives. As designed, the project supported seven areas of emphasis of the NSP, with five objectives, 71 indicators (some of them overlapping), and DLTs that were under the responsibility of seven different ministries or agencies. The level of complexity involved in managing M&E was a source of significant implementation difficulty.

The Project Performance Assessment Report confirms the finding of the ICRR that "Although broader data collected by the borrower filled some gaps, shortcomings of the project indicators included: (i) an over-reliance on indicators stated in terms of

percentages without including absolute numbers, which hindered measurement of reach or coverage (the total number of beneficiaries in terms of children, households, and ECIs were notable by their absence among key indicators); and (ii) lack of disaggregation by gender or other aspects.” In addition, disbursement-linked indicators and DLTs contained no measures of ECC or capacity building (institutional strengthening) and no breakdown of beneficiaries by socioeconomic status.

The lack of a theory of change for the project also led to shifting priorities and multiple changes in project indicators, often adjusting targets downward because the original targets proved overambitious.

Implementation

Attention to data collection and the proliferation of data collection tools was disproportionate to the limited capacity (and available financial resources) to monitor and evaluate project activities. Data capacity was less developed than it should have been during the project. Consequently, data were not always analyzed promptly. Numerous issues with M&E also hindered the project. The output focus of project monitoring resulted in a lack of outcome data, making it difficult to confirm project effects.

Utilization

The ECC and the World Bank used project M&E data for decision-making, supervision missions, and restructuring. The data were used to adjust targets to realistic levels, ensuring reimbursement of key government expenditures. Data from the Jamaican Birth Cohort Study and the Jamaica School Readiness Assessment had little evident use. The Jamaica School Readiness Assessment was implemented in 2017, 2018, and 2019, but technical capacity led to delays in its further validation and analysis, which had implications for data usage by ECIs. However, data collected to monitor indicators and processes related to NSP 1, 2, and 3 have been regularly collected.

The overall quality of M&E is rated **modest**.

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Appendix B. Fiduciary, Environmental, and Social Aspects

The Project Performance Assessment Report did not gather information on the project's fiduciary, environmental, and social aspects for two reasons: The Project Performance Assessment Report's data collection did not focus on this type of data because the project was classified as category C for environmental safeguards, and the Implementation Completion and Results Report (ICR) did not report major weaknesses in these aspects. The content of this appendix is based on the findings of the ICR and the ICR Review.

Financial Management

The Project Appraisal Document (PAD) relied on financial management and procurement assessments from 2006 and 2007. The weaknesses identified were factored into the risk assessment for the project, and loan conditions also addressed the weaknesses in the country systems. Challenges were discussed at the highest political level, and it was agreed that action plans would be carried out to strengthen financial management and internal auditing (World Bank 2008a, para. 63). The project supported establishment of a financial management system at the Early Childhood Commission (ECC) after a transfer of authority from the Ministry of Education, Youth, and Information; and extra staffing and the establishment of an internal audit unit at ECC (World Bank 2019b, para. 57). At the time of the additional financing, financial management was reported to be "good" because the accounting and audit systems (the latter reported as "highly effective") had been strengthened under the parent project. Close supervision was planned to continue (World Bank 2008b, appendix 2). The ICR reported that financial management arrangements were satisfactory and in compliance with guidelines throughout most of the implementation period (World Bank 2019a, para. 57).

Procurement

As with financial management, assessments in 2006 showed weaknesses in the procurement systems that would affect transparency (World Bank 2008a, para. 158). The procurement system involved a National Contracts Commission, various committees, and a contact point at the Ministry of Finance and Public Service (World Bank 2008a, para. 160). The project design incorporated corrective measures, including (i) recruitment of a full-time procurement specialist for ECC with experience in international procurement procedures, whose terms of reference the World Bank would approve; (ii) submission to the World Bank of a preliminary procurement plan for the

first 18 months of the project (condition of negotiations; World Bank 2008a, para. 165); and (iii) supervision missions every six months, and review of procurement once a year (World Bank 2008a, para. 167). The ICR reported frequent procurement delays (World Bank 2019a, paras. 35, 45, 47). However, the ICR fiduciary section stated that procurement arrangements were mostly satisfactory, with problems surfacing mainly toward the end of the project; specifically, there were persistent delays on a few key contracts (World Bank 2019a, para. 58). Ex post reviews confirmed the ECC's compliance with procurement procedures. The ICR and the borrower's end-of-project review report cited other factors beyond the ECC's control that caused procurement delays (for example, difficulty in finding technical experts, one case of a conflict of interest discovered late [World Bank 2019a, Annex 5, 57] and additional information provided later by the project team).

Environmental and Social Safeguards

The project did not trigger environmental safeguards and was rated environmental assessment category C. The project did not include construction of buildings but did allow for possible minor works financed with counterpart funding. The construction standards were to be based on the operational manual and all requests for proposals. The borrower agreed not to provide health services under the project that would produce medical waste.

A comprehensive social assessment during preparation based on a desk review, community surveys, and stakeholder interviews identified risks of exclusion of children with disabilities and from minority communities including Maroon and Rastafarian (World Bank 2019a, para. 56). The assessment led to design adjustments that would (i) ensure that the curriculum included age-appropriate and culturally sensitive references to diverse groups, and (ii) finance specialized training of early childhood institution staff on identification and support for children with disabilities. The PAD also recommended that the ECC expand its presence in minority communities and provide parent education programs that were sensitive to diverse social groups (World Bank 2008a, paras. 56, 64). Specialists monitored social safeguards periodically and, at one point, identified a potential inequity and reported it to the government. In general, however, the grant distribution equity was not monitored.

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Appendix C. Methods and Evidence

This report is based on methodological guidance of the Independent Evaluation Group (IEG) for Project Performance Assessment Reports (PPARs). More details are described at <https://ieg.worldbankgroup.org/methodology/PPAR>.

The PPAR is a field-based evaluation instrument of the World Bank Group's Independent Evaluation Group (IEG), but this report used a hybrid approach combining virtual and in-person elements supported by a consultant based in Jamaica. This was because data collection occurred when the World Bank suspended missions because of the coronavirus (COVID-19) pandemic. Data were collected over a prolonged period (December 2019 to September 2021) because government counterparts were simultaneously balancing additional work demand during the pandemic (coronavirus pandemic restrictions, school closures, logistics planning, and coronavirus vaccine implementation).

Consistent with IEG's guidelines, this PPAR assessed the Early Childhood Development Project for two purposes: to improve the performance of World Bank projects by identifying lessons from experience, and to ensure the integrity of the World Bank's self-evaluation process and verify that the work supported is producing the expected results. Another purpose was to identify lessons learned from Jamaica (what worked and what did not) for the benefit of other countries embarking on designing and implementing projects in early childhood development. The PPAR was not undertaken to validate the operation, but the report includes an appendix that rates project performance based on project results at the time of the PPAR.

This PPAR drew on several sources of evidence, including new data. The PPAR used a mixed methods approach that triangulated literature, virtual semistructured interviews, in-person visits to early childhood institutions, project documents, government documents, current indicators, and analysis of Jamaica School Readiness Assessment data (appendix F). This PPAR benefited from findings from IEG's case study in 2014, which conducted 26 interviews with government staff (specifically, Early Childhood Commission; Ministry of Health and Wellness; Ministry of Education, Youth, and Information; Ministry of Labour and Social Security; Ministry of Finance and Public Service; Planning Institute of Jamaica; and Jamaica Social Investment Fund) and the World Bank and partners. The PPAR also reviewed 41 reports, documents, and studies and examined design and early implementation.

IEG provided respondents with a list of interview question before the interview. The semistructured interviews followed established interview questions and probes, along with questions and probes to clarify points. Interviews focused on several topics: the

National Strategic Plan and design of the Early Childhood Development Project, governance of early childhood development and role of the Early Childhood Commission, assistance of the World Bank in design and implementation, the World Bank's role with other partners, implementation of the Early Childhood Development Project, outcomes, and lessons. Notes were taken during the interviews, but interviews were not recorded. IEG assured anonymity—no statements would be attributable to any individual, role, or agency—so respondents would feel comfortable and have a frank exchange and lessons could be learned.

After interviews, the consultant based in Jamaica followed up with respondents to receive documents and data noted in interviews. The Early Childhood Commission was very responsive to all inquiries and requests for documents and data.

Appendix D. Results Indicators

Table D.1. Results Indicators in the National Strategic Plans

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
Activities: merged from the five internal processes and two external working environment processes				
1. Parenting	Offer high-quality parenting education and support in antenatal and well-child clinics (for parents of children 0–3) and in ECIs and nongovernmental organizations (for parents of children 4–6)	Develop and approve (high-quality) early childhood parenting strategies for parents of children 0–3 and 4–6 and develop public education and awareness campaigns emphasizing their importance and availability	<p>Outcome 1: improve parenting education and support programs</p> <p>PDO-level achievement: 52% (48/92) Parent Places certified</p> <ul style="list-style-type: none"> • Radio programs, articles, and promotional materials developed • 60% of programs assessed • Strategy approved • Standards/accreditation system developed • Mapping of programs included in Annual Review for the past year (dropped in 2014) <p>Dropped PDO indicator in 2013: percentage of parents/guardians of children 0–6 years old that have ever received any information on parenting, excluding information received from family members and friends. End target: 55%. Dropped in 2013 because “2011 data reported reaching 45%”</p>	<p>PDO indicator (upgraded to PDO indicator in 2014, previously an intermediate one): percentage of early childhood parenting education and support programs certified. Target: 30% in 2008</p> <p>What was revised: Target revised up to 45% in 2014</p> <p>What was achieved (2018): 52%</p> <p>Status (2021): From 2018 to 2021, 12,552 parents were supported by parenting education and support programs. The number of certified Parent Places remains at 48.</p> <p>Intermediate results indicator: Communication strategy to educate parents and raise awareness about ECD, early childhood stimulation, parenting, and nutrition practices is implemented.</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): target in 2014, achieved in 2018</p> <p>Status (2021): no update required</p> <p>Intermediate results indicator: percentage of early childhood parenting education and support programs assessed. Target: 60% in 2014</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 66%</p> <p>Status (2021): Twenty-six Parent Places are awaiting assessment for certification by the National Parenting Support Commission.</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
2. Child health	Integrate the CHDP and Infant and Young Child Nutrition Policy into clinic and ECI systems	Develop a new service delivery model for well-child clinics, with accreditation system, workforce, information systems, and equipment to support the increased focus on parenting and child development	<p>Dropped indicator 2013: Nutrition policy approved by the ECC board</p> <p>Dropped indicator 2013: Percentage of health centers offering well-child clinics that have early childhood play/learn and demonstration centers End target: 60%</p> <p>(Part of) Outcome 2: Improve monitoring, screening, risk mitigation, and early intervention systems</p> <p>100% of well-child clinics use CHDP for monitoring and risk screening</p> <p>(Part of) Outcome 3: enhance the quality of early childhood schools and care facilities</p> <p>PDO-level achievement: 2% (6/317) of health centers with well-child clinics certified</p> <ul style="list-style-type: none"> • Accreditation system approved • 12 well-child clinics assessed <p>Dropped indicator: Preliminary study for service delivery model for nutrition support for children ages 0–3 approved by the board and Ministry of Health. Achieved. Dropped in 2013.</p> <p>Dropped indicator: Pilot [the] service delivery model for nutrition support for children age 0–3 approved by the board of the ECC and Ministry of Health. Dropped in 2014</p>	<p>Intermediate results indicator: National coverage for third dose of diphtheria, pertussis, and tetanus vaccine. Target: 85% in 2008</p> <p>What was revised: Target revised up to 95%</p> <p>What was achieved (2018): 92%</p> <p>Status (2021): no update from MOHW</p> <p>Intermediate results indicator: Transfer of information from the CHDP to the MOH management information system to document child health status</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): original target of 2014 achieved in 2018</p> <p>Status (2021): No update from MOHW</p> <p>Intermediate results indicator: Percentage of children age 0–3 monitored and screened for risks that have child health and development passports. Target: 50% in 2008</p> <p>What was revised: Target revised up to 98% in 2014. It was a PDO indicator previously with a target of 68%.</p> <p>What was achieved (2018): 98%</p> <p>Status (2021): No update from MOHW</p> <p>PDO indicator: Percentage of health centers offering well-child clinics that are certified. Target: 30% in 2008</p> <p>What was revised: Target revised down to 10% in 2014. The original PDO indicator for centers that had been accredited had been dropped in 2013 “to ensure that all aspects of the PDO are being measured consistent with the evolution of the NSP.” Reinstated in 2014 as an indicator for centers being certified</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
3. Screening and intervention	Implement an effective screening and intervention system, including human resource strategy, for children in high-risk households to be used by state agencies including PATH, the Social Development Commission, and MOHW	Develop national policy on screening, early identification, intervention, and the system for implementation; develop public education on child development; highlight the importance of screening, early identification, and intervention; promote inclusion of children with special needs; and reduce negative impact of discrimination	<p>Outcome 2: Improve monitoring, screening, risk mitigation, and early intervention systems</p> <p>PDO-level achievement: 5,068 children accessing the MOLSS early intervention program</p> <ul style="list-style-type: none"> • Monitoring and screening in ECD policy • Child development screening tool developed • 4,743 PATH beneficiaries identified using screening in the CHDP • Child development therapist curriculum and delivery model approved • 16 child development therapists trained • 7 child development officers in 7 parishes <p>Indicator dropped in 2014: Service delivery model for screening, diagnosis, and early intervention for child development risks developed and approved by the ECC board and Ministry of Health dropped in 2011, reinstated in 2013, dropped again in 2014</p>	<p>What was achieved (2018): 6 (2%) well-child clinics were certified according to standards and criteria created for Jamaica according to global standards.</p> <p>Status (2021): No further assessment or recertification exercises have been carried out (Reece 2018).</p> <p>Intermediate results indicator: Percentage of health centers offering well-child clinics that are assessed using the well-child clinic assessment system. Target: 50% in 2014</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 12%</p> <p>Status (2021): No update from MOHW</p> <p>PDO indicator: number of children who access the MOLSS early intervention program. Target: 300 in 2013</p> <p>What was revised: target revised up to 550 in 2014</p> <p>What was achieved (2018): 763</p> <p>Status (2021): No update from Early Stimulation Program/MOLSS</p> <p>Total number of children in 2019 who received an intervention based on data from screening and referral/diagnostic processes is 676. The Early Stimulation Project provided data to the ECC.</p> <p>Intermediate results indicator: Number of PATH beneficiary households with children 0–6 years identified with high risk using the Ten/Eleven Questions in the CHDP. Target: 300 children in 2013</p> <p>What was revised: Target revised to 550 in 2014. “The originally planned screening and documentation model had to be validated and analyzed psychometrically before</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
4. ECIs	Provide development support program in ECIs to meet standards	Develop standards for ECIs, conduct inspections of ECIs, certify ECIs Develop an equitable system of financial support to ECIs	<p>Outcome 3: Enhance the quality of early childhood schools and care facilities</p> <p>PDO-level achievement: 75% (92,250/122,997) of children in ECIs with permits to operate</p> <ul style="list-style-type: none"> • 1,977 of 2,626 ECIs have permits to operate • 1,461 of 2,626 ECIs are implementing improvement plans • 100% of development officers using the COT • Licensing system for ECPs developed and approved by Ministry of Education 	<p>implementation.” Replaced by the CHDP screen deemed to be “more comprehensive, cost effective and sustainable.”</p> <p>What was achieved (2018): 763 children</p> <p>Status (2021): No update from PATH/MOLSS</p> <p>Intermediate results indicator: Number of parishes that have at least one full-time CDT/officer on staff in the public sector. Target: 7 in 2014</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 7</p> <p>Status (2021): No update from MOLSS. Note that the Early Stimulation Program has 8 child development therapists (interview with Early Stimulation Program director) trained during the project.</p> <p>PDO indicator: Percentage of children enrolled in ECIs that have permits to operate. Target: 40% in 2011</p> <p>What was revised: Indicator was changed from “are registered” to “have permits to operate” Target revised to 75% in 2011</p> <p>What was achieved (2018): 75% (total number of children attending ECIs with permits was almost 92,250; World Bank 2019b)</p> <p>Status (2021): Not known how many children are in ECIs with permits to operate or what</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
			<p>Indicator dropped 2013: Percentage of ECPs that receive salary subsidies that are licensed. Target: 50%. Dropped in 2013 because “ECD teachers fell within existing personnel salary levels.”</p> <p>Indicator dropped 2013: ECI costs to parents remain accessible—out-of-pocket fee payments for ECIs for children ages 4–6 (no target)</p> <p>Indicator dropped 2013: Number of development officers recruited, trained, and posted in the field End target: Greater than or equal to 60%</p>	<p>percentage of children this number represents. Check with ECC.</p> <p>Note: Total number of children in ECIs (public and private) that are certified is 14,987 (2019/20 academic year, reported by ECC in 2021)</p> <p>Note: 129 ECIs met the higher standards for “certification” (World Bank 2019b); Status: 271 in 2019/20 academic year were certified (10%). NSP 1 had a target of 25% by 2013; NSP 3 has a target of 15% by 2023.</p> <p>Intermediate results indicator: Percentage of ECIs that are issued a permit to operate. Target: 50 in 2013</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 73.5 (1,977 out of 2,626, or 75%, reported in World Bank 2019b)</p> <p>Status (2021): 80%. The total number of ECIs (public and private) with permits to operate is 2,110 out of 2,626, reported by the ECC in 2021.</p> <p>Intermediate results indicator: Percentage of ECIs that are implementing their improvement plans Target: 45 in 2014</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 52 (1,461 out of 2,626; World Bank 2019b)^a</p> <p>Status (2021): 87%. The number of ECIs implementing improvement plans (development plans) as of January 4, 2021, is 2,299 out of 2,626, reported by ECC in 2021.</p> <p>Intermediate results indicator (new indicator in 2012): Percentage of development officers using the COT. Target: 55% in 2013</p> <p>What was revised: Target revised up to 95% in 2014</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
5. Teachers and curriculum	Ensure each ECI has at least one level IV-trained teacher and an approved early childhood curriculum	Upgrade technical skills of ECPs and provide accreditation	<ul style="list-style-type: none"> • 158/11,381)of ECPs qualified at level III and above • 38% (1,000/2,626) of ECIs delivering curriculum effectively (COT scores) • Human resources strategy for levels II, III, and IV developed and approved by ECC board • Salary scale for ECPs and teachers established by cabinet office <p>Indicator dropped 2013: Percentage of ECPs that are at level I or have no early childhood qualifications End target: 30% (from 60%)</p> <p>Indicators dropped 2013: Number of resource centers that enroll students for early childhood training programs at vocational level II and total number of students enrolled End target: 7 centers enrolling at least 175 students. Target revised in 2012 to 2 centers enrolling 50 students</p> <p>Note: four indicators in total for targets for training and certification at resource centers, all dropped in 2013</p>	<p>What was achieved (2018): 100% Status (2021): 54/70 development officers (77%), February 2022</p> <p>Intermediate results indicator: Percentage of ECIs that have a practitioner at level III or above Target: 53% in 2014</p> <p>What was revised: Indicator was revised in 2013 from "Each ECI has at least one level IV teacher—percentage of ECIs that have at least one level III (academic) or level IV (academic) EC practitioner" End target: 25%</p> <p>What was achieved (2018): 78%. This is corrected to 45% in World Bank 2019b (5,158 out of 11,381). Status (2021): Check with ECC</p> <p>Note: trained teachers in the 271 certified ECIs: Diploma: 323 Bachelor's degree: 415 Master's degree: 82 Doctorate: 1 Total: 821</p> <p>Not known: Total number of practitioner staff in certified ECIs</p> <p>Note: Trained teachers in the number of ECIs with permits to operate: Diploma: 1,373 Bachelor's degree: 1,474 Master's degree: 164 Total: 3,011</p> <p>Not known: Total number of practitioner staff in ECIs with permits to operate</p> <p>Intermediate results indicator: Established an online course for ECD teachers/practitioners and</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
				<p>enrolled students (replaced two indicators for level III competence standards and vocational curriculum to be developed and approved by ECC and HEART/NCTVET)</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): Target (text) for 2014, achieved in 2018</p> <p>Status (2021): The Certificate in Inclusive ECD is a 10-week online course offered to all ECPs from January 2021. 43 completed it in 2021; 62 are enrolled in 2022. At the conclusion of the course, a certificate of participation is awarded.</p> <p>Intermediate results indicator (new indicator in 2013): Percentage of ECD practitioners that are qualified at level III or above. Target: 53% in 2014</p> <p>What was revised: Target was 45% in 2012</p> <p>What was achieved (2018): 42%</p> <p>Status (2021): Check ECC</p> <p>Intermediate results indicator (new indicator in 2013): Percentage of ECIs delivering the standard curriculum effectively (based on COT score)</p> <p>Target: 25% in 2013</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): 36.5%</p> <p>Status (2021): No update, check ECC</p>

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
6. Working environment 1	Develop national ECD policy	Develop and implement a comprehensive	Outcome 4: strengthen early childhood organizations and institutions	PDO indicator (new PDO indicator in 2014):
7. Working environment 2	Coordinate sectorwide planning and budgetary processes in ECD	management information system that incorporates key sector information	PDO-level achievement: 6 parishes implementing the community-service delivery model for comprehensive ECD services	Number of parishes implementing community-based integrated service delivery model for comprehensive delivery of ECD services. Target: 6 in 2014
	Strengthen governance and service delivery at ECC, parish, and ECI levels	Monitor national ECD status through population-based household survey methods and school readiness assessments	<ul style="list-style-type: none"> • JSRA implemented twice • Annual Review published 	What was revised: n.a.
	Implement sectorwide resource mobilization for ECD		Indicator dropped: ECC established and staffed at various levels (including with development officers and inspectors in the field)	What was achieved (2018): 6
			End target: 65 development officers and 45 inspectors	Status (2021): Not implemented yet but included in NSP 3, 2018–23
			In 2014, indicator achieved and dropped. “With coordination mechanisms established at the national level, project focus shifted to strengthening community level.”	Intermediate results indicator: Community-based service delivery model for comprehensive ECD services approved by the ECC board
			Indicator dropped 2014: Software that captures all key elements of the management information system at the ECC is developed and kept up to date	What was revised: n.a.
			Indicator dropped 2014: ECC reports on human resource training status for the early childhood sector	What was achieved (2018): Target in 2014, achieved in 2018
			<ul style="list-style-type: none"> • Outcome 4 (continued): Strengthen early childhood organizations and institutions • Community-based service delivery model for comprehensive ECD services approved • National ECD policy approved • Resource mobilization strategy approved 	Status (2021): No update required
			Not reflected in intermediate results—why?	Intermediate results indicator: ECC has implemented the age 4 School Readiness Assessment and disseminated results.
			6.1. Sectorwide coordination of corporate planning and budgeting process improved	What was revised: n.a.
				What was achieved (2018): Target in 2014, achieved in 2018
				Status (2021): JSRA has been run three times (2017, 2018, 2019), but results have not been disseminated (source: ECC, interview)
				Intermediate results indicator: ECC Annual Review Publication for past fiscal year reports
				Comprehensively on performance of the early childhood sector and ECD outcomes, including school readiness, nutrition status, and growth ratio
				What was revised: n.a.
				What was achieved (2018): target in 2014, published for 2014/15 academic year

NSP 1	Access	Quality	Key Outputs and Indicators by Component (World Bank 2019a, Annex 1)	ICR Results Indicators, Revisions, Achievements (World Bank 2019a, Annex 7), and Status
			<p>6.1.1. Ministry of Finance and Public Service reports on expenditures on early childhood, based on national budget structure that allows monitoring of expenditures on early childhood. Achieved 2011</p> <p>6.1.2. ECC board establishes priorities for preparation of the corporate plans and budgets as it relates to the NSP for early childhood. Achieved in 2013</p> <p>6.3. Financial, accountability, and governance arrangements are strengthened</p> <p>6.3.1. Spatial analysis of early childhood education services is completed. Achieved 2011</p> <p>6.3.2–6.3.5 not reflected</p>	<p>Status (2021): No subsequent publications of the Annual Review (source: ECC, interview).</p> <p>Intermediate results indicator: ECD policy approved the Board of Commissioners of the ECC and the Ministry of Education, Youth, and Information</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): Target in 2014, achieved 2018</p> <p>Status (2021): Not yet approved by cabinet</p> <p>Intermediate results indicator: Resource mobilization strategy for financing of ECD is approved by the relevant authority</p> <p>What was revised: n.a.</p> <p>What was achieved (2018): Target in 2014, achieved in 2018</p> <p>Status (2021): The strategy has not been updated. The ECC continues to seek partnerships and write proposals for funding ECD activities and programs.</p>

Source: World Bank 2019a and World Bank 2019b, ECC interviews, and Independent Evaluation Group analysis.

Note: CDT = child development therapist; CHDP = Child Health and Development Passport; COT = classroom observation tool; ECC = Early Childhood Commission; ECI = early childhood institution; ECP = early childhood practitioner; HEART/NCTVET = Human Employment and Resource Training/National Council for Technical and Vocational Education and Training; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; JSRA = Jamaica School Readiness Assessment; MOHW = Ministry of Health and Wellness; MOLSS = Ministry of Labour and Social Security; NSP = National Strategic Plan; PATH = Program of Advancement through Health and Education; PDO = project development objective.

a. “52% implemented their improvement plans, exceeding the original target of 45%. Presumably, these plans were financed by the revamped grant system; no information was given in the ICR on the criteria for making grants, or the content, quality, or distribution of grants awarded. Examples of improvement plans were not provided in the ICR” (ICRR).

References

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Appendix E. Theory of Change

Table E.1.Theory of Change

National Strategic Plan 1	Access	Quality
Activities ^a		
1. Parenting	Offer high-quality parenting education and support in antenatal and well-child clinics (for parents of children 0–3) and in ECI and nongovernmental organizations (for parents of children 4–6)	Develop and approve parenting strategies and develop relevant public education and awareness campaigns
2. Child health	Integrate the Child Health and Development Passport and Infant and Young Child Nutrition Policy into clinic and ECI systems	Develop a new service delivery model for well-child clinics, with accreditation system, staffing, information systems, and equipment to support a focus on parenting and child development
3. Screening and intervention	Implement an effective screening and intervention system, including human resource strategy, for children in high-risk households to be used by state agencies	Develop national policy on screening, early identification, and intervention; a system for implementation; and relevant public education Promote inclusion of children with special needs
4. ECIs	Provide development support program in ECIs to meet standards	Develop standards, conduct inspections, and certify ECIs Develop an equitable system of financial support for ECIs
5. Teachers and curriculum	Ensure each ECI has at least one level IV-trained teacher and an approved early childhood curriculum	Upgrade practitioners' technical skills and provide accreditation
6. Working environments	Process 1: Develop national ECD policy Coordinate sectorwide planning and budgetary processes in ECD Strengthen governance and service delivery at ECC, parish, and ECI levels Implement sectorwide resource mobilization for ECD	Process 2: Develop and implement a comprehensive information system that incorporates key sector information Monitor national ECD status through population-based household survey methods and school readiness assessments
Outputs (in the plan)	[Number of] children whose development status is monitored annually [Number of] regional health authorities with at least one child development therapist per parish to address the needs of children with special needs [Number of] early childhood institutions that will be fully registered [Number of] ECIs with children aged 3 years and above with at least one level III or level IV teacher	[Number of] early childhood parenting education and support services offered that are of high quality [Number of] health centers offering high-quality well-child services—high quality as measured by outputs 3, 4, 5, and 6 ... including screening of children and households to identify those at risk and offer appropriate intervention services [Number of] licensed ECPs at levels II and III and [number of] ECPs receiving subsidies at level II and above
Outputs for working environment processes	Process 1:	Process 2: [Number of] ECD services producing timely, current, and appropriate information on sector

National Strategic Plan 1		
	Access	Quality
(not in the plan)	[Number of] ECD services delivered through the effective coordination and collaboration of multisectoral partners [Number of] ECD services supported by the sector resource and finance mobilization strategy	quality and child outcomes that is supporting evidence-based decision-making
Immediate outcomes (in the plan)	None	
Immediate outcomes (not in the plan)	Parenting practices benefit from increased access to high-quality parenting education and support Child health and development is improved by access to the new service delivery model in well-child clinics Households and children at risk benefit from access to multisectoral early identification and treatment for delayed development The development of children with special needs benefits from inclusion in services specifically focused on their development Children's development is supported through access to safe, well-maintained ECIs Children's development is supported by access to trained early childhood education teachers able to implement the approved curriculum	Children's development benefits from improved parenting Child health and development strengthened by standards, staffing, equipment, and monitoring systems Children at risk of poor development benefit from access to early screening, diagnosis, and intervention services Enhanced capacity of national screening, diagnostic, and intervention services to meet the range of needs identified Discrimination against children with special needs is reduced ECIs meet the requirements for certification and maintain standards ECIs guided to improve quality by both inspection and development support processes Public expectations of quality in ECIs are raised Children's development is supported by well-trained ECPs able to support the implementation of the approved curriculum Teachers and ECPs have improved skills through regular support in a professional development program Teachers and ECPs both understand and are confident in implementing the EC Curriculum Public expectations of quality in ECIs will be raised
National impact (in the plan)	Critically thinking, socially competent, healthy children ready for life Parents who are informed, educated, involved, and supported in meeting the early development needs of children	

Source: Independent Evaluation Group analysis

Note: ECC = Early Childhood Commission; ECD = early childhood development; ECP = early childhood practitioner.

a. Merged from the five internal processes and two external working environment processes.

Appendix F. Key Findings from Assessment of the Jamaica School Readiness Assessment Data

This appendix is based on the 2022 background report “Analysis of the Jamaica School Readiness Assessment Data,” prepared by Michael Canute Lambert. The full report is available on request.

The readiness of children for primary school is known to be a predictor of their success. Modern concepts of readiness recognize that the child's innate capabilities and the home and school environment are important contributors to readiness. Additionally, readiness is not limited to academic skills but also includes socioemotional and behavioral skills.

Readiness assessments of preschool children are now common in high-income countries, primarily to identify children who may have developmental delays or disabilities and need additional health or educational services. Fewer assessments are done to monitor and evaluate the teaching environment.

Objective of the Jamaica School Readiness Assessment

With the knowledge of the importance of readiness assessments of preschool children, the Early Childhood Commission (ECC)—the government agency with legal responsibility for the early childhood sector—included the development and implementation of a readiness assessment, the Jamaica School Readiness Assessment (JSRA), in its National Strategic Plan for Early Childhood Development.

The JSRA was designed to screen children for developmental disability, behavior disorders, and readiness for primary school to determine whether additional developmental evaluation was necessary and to assist in curriculum planning to support children's readiness for primary school. Research on readiness for primary school identified behavior, readiness to learn, social and emotional skills, early literacy, and early numeracy as important skills to include on a school readiness tool and as skills with the most predictive validity for later school success.

Administration of the Jamaica School Readiness Assessment

The JSRA is designed to be completed by preschool teachers at the end of the second year of preschool, when children are 4 years old. The age of administration was chosen to allow a year for any required interventions before children transition to grade 1 at age 6 (personal communication to Michael Lambert from Maureen Samms-Vaughan). The age of administration was also comparable with administration of readiness evaluations in North America and would allow for international comparison.

A scoring system is included that indicates one of three outcomes:

- **No specific action:** This occurs when a child's score is developmentally appropriate.
- **Child to be supported and monitored during the next academic year (the final academic year before transitioning to grade 1):** This action is to be taken when a child has a borderline score, that is, a score that is just below developmentally appropriate levels.
- **Referral to the ECC development officer:** This action is to be taken when a child's scores fall below developmentally appropriate levels. The development officer is expected to meet with the child's parents and complete a more detailed secondary developmental screening tool, the Ages and Stages Questionnaire-Jamaica, adapted from the Ages and Stages Questionnaire (Squires and Bricker 2009).

Components of the Jamaica School Readiness Assessment

The school readiness tool has three components:

- **Part 1: Developmental Disability Screen.** This uses a local adaptation of the Ten Question Screen (TQS) instrument, known as the Eleven Question Screen (EQS).
- **Part 2: Child Behavior Screen.** This uses the Child Behavior Rating Scale (CBRS).
- **Part 3: Assessment of Academic Readiness Skills.** This uses a measure of the Approach to Learning and early literacy and numeracy skills.

Instruments to measure these aspects of readiness were adapted to be culturally relevant for use in Jamaica. The components are described in the full JSRA report on which this appendix is based.

Previous Evaluations of the Jamaica School Readiness Assessment

Four previous analyses of the JSRA were of different types:

- Evaluation of preliminary psychometric properties during the development phase (Squires 2014)
- Evaluation of a pilot of the JSRA in one parish in Jamaica (Samms-Vaughan 2015)
- Validation of the JSRA instruments using the pilot population (Samms-Vaughan, Reece, and Coore-Desai 2015)

- Evaluation of Data from the JSRA for Four-Year-Olds (EduConnect Jamaica 2020)

The results of these evaluations are described in the full version of the JSRA report.

Norming the Jamaica School Readiness Assessment Tools

Important next steps to build on the previous four evaluations involve norming the JSRA. Note that norming any assessment tool is an iterative process—that is, although the tools are usable, continued studies are necessary for their refinement. In addition, the JSRA is a set of screening tools; professionals should use them in conjunction with other sources of information and good professional judgment. This means these tools should not be the only source of information for identifying school readiness. Indeed, the JSRA screening tools are not meant to be diagnostic. Hence, other educationally useful tools, such as diagnostic tests and educational interviews with preschool teachers who complete the JSRA subscales on children, may be necessary. It might also be necessary to gather information on children’s functioning in both the home and the school.

The full report on the JSRA includes information on research that supports the JSRA psychometric strengths and limitations. It also includes information for the professional on administering and scoring the JSRA. Refer to that report for the technical psychometric details.

Method

Sample

The overarching goal of documenting the psychometric properties on the JSRA was to scaffold psychometric studies on research the ECC conducted from 2017 to 2019—that is, to use empirical data to test whether scores from the JSRA screening tools in their current or modified state meet rigorous psychometric standards. To norm the tools to satisfy standards of scientific rigor, the next step was to use psychometric statistical procedures to guide modification of its structure to ensure that the tools have adequate reliability and validity. This process required a large sample of 92,918 children from preschools across Jamaica. ECC staff nationwide collected data on preschool children over age 3 in 2017, 2018, and 2019.

In 2017, data were collected on 33,544 children. Of this number, 15,058 were female, and 15,148 were male. Gender data were missing for 3,338 children. No gender data were missing for the 2018 data. Of the 29,868 children in the 2018 database, 15,002 were female, and 14,866 were male. Data were collected on 29,506 children in 2019. Gender data were missing for 4,155 children. For children with gender data, 14,282 were female, and 14,407 were male. Data across the three years were combined for the psychometric analyses to provide sufficient variance for estimating the JSRA’s psychometric

properties (see Embretson and Reise 2000). Establishing the psychometric soundness of any psychometric tool is an iterative process. Yet the psychometrician's goal was to use research to document that JSRA scores professionals derived from administering such tools satisfy some of the necessary criteria for psychometric soundness. Thus, professionals who use the JSRA in the future can have confidence that its scores are accurate and that inferences they draw from such scores are plausible.

Jamaica School Readiness Assessment Screening Tools

Samms-Vaughan (2015) noted that the JSRA measures were designed to identify children with developmental, behavioral, and learning problems that might negatively affect their readiness for primary school and who might warrant further assessment. Samms-Vaughan (2015) further noted that the JSRA forms are completed during the last two to three weeks of the last term of school. Teachers complete the form based on the knowledge derived from teaching each child for at least a year. The next section briefly describes each JSRA measure. For more detailed descriptions, please see Samms-Vaughan (2015).

The EQS. The EQS emerged from the TQS. The TQS and EQS are fully described elsewhere (Samms-Vaughan 2015) and are presented here only briefly. The TQS was designed to be used as part of the 1984 International Pilot Study of Severe Childhood Disability. This measure is publicly available and aims to identify children with severe cognitive disabilities. It was designed for settings with poor resources. The TQS is short and administered easily. Samms-Vaughan (2015) stated that the TQS is culturally neutral because it excludes culture-specific skills. The TQS was adapted for Jamaica and includes 11 questions on whether teachers or parents consider their student or child as having problems in domains of gross motor skills, fine motor skills, vision, hearing, language comprehension, expressive language, socioemotional development, or interpersonal skills, and problems learning in school domains. It also includes an open-ended question inquiring about concerns in the areas of learning, development, or behavior. Jamaican researchers added one question pertaining to whether the adult completing the form had concerns about the child's behavior. The TQS was renamed the EQS. Researchers who used the TQS in Jamaica found that it had excellent sensitivity for serious motor, seizure, speech, vision, and hearing disabilities (Thorburn et al. 1992). Both the TQS and the EQS are rated on a dichotomous scale, where the adult completing either tool rates the child as "Yes" for the presence of the concern and "No" for its absence. Each yes is scored as 1, and each no is scored as 0.

The CBRS. The CBRS is an open-source measure that assesses for children's behavior (Bronson et al. 1990). It is a 17-item measure that assesses children's self-regulatory skills, behavior with other adults and children in classroom settings, and socioemotional development. The CBRS has 17 items rated on a five-point Likert Scale, where 0 = Never

has the behavior, 1 = Rarely or almost never has the behavior, 2 = Sometimes or occasionally has the behavior, 3 = Frequently or usually has the behavior most of the time, and 4 = Has the behavior all the time. Of the 17 questions, 15 measure appropriate behavior. Questions 12 and 13 reflect inappropriate behavior (threatens to hurt other children and physically hurts other children). For analyses of the CBRS scales, these items were reverse scored.

Early Learning Scales. The Early Learning Scales were developed in 2012 by a team from the University of Oregon. They used a literature review of existing scales of school readiness tools, other assessment measures, existing definitions of school readiness, and the expectations for Jamaican children, based on the Jamaica Early Childhood Curriculum and input from Jamaican parents and teachers via focus groups (Samms-Vaughan 2015). The Early Learning Scales consist of three subscales, labeled Approach to Learning/Socioemotional Skills, Early Literacy Skills, and Early Numeracy Skills. Approach to Learning/Socioemotional Skills tests for behavioral and socioemotional skills that children need to promote learning. Early Literacy Skills and Early Numeracy Skills identify literacy and numeracy skills necessary for learning in the primary school environment. The Approach to Learning/Socioemotional Skills and Early Literacy Skills subscales consist of 10 items, and the Early Numeracy Skills has 8 items. Items on all three subscales are rated on a three-point Likert scale, where 0 = Not yet, where the child is unable to demonstrate the skill; 1 = Sometimes, where the child shows the skills occasionally but inconsistently; and 2 = Often/always, where the child displays the skill consistently on their own.

Psychometric Results

Factor Analyses

Item loadings on factors range from -1 to 1. An item is considered as loading on a factor if its loading is 0.30 or higher. In a factor analysis where two or more factors are retained and rotated, it is expected that the factor solution will reflect a simple structure—that is, where an item loads on one factor and not others. Therefore, if an item loads 0.30 or higher on more than one factor, the simple structure assumption is violated.

TQS. Notably, the EQS was reduced by dropping one item (Are you concerned about any aspect of your child’s learning, development, or behavior?). This item asks the teacher to state their concern. This item is nonspecific. Furthermore, the database did not contain teachers’ explanations that could permit coding. Exploratory multidimensional item response theory (MIRT) factor analyses were therefore conducted on the TQS. Several factor solutions were retained ranging from one to six factor solutions. For solutions with two or more factors, the factors were rotated according to the oblique quartimax criteria that permitted correlations among factors. The theoretical reasoning

supporting oblique rotations is that most dimensions in the behavioral sciences are correlated. Nonetheless, orthogonal varimax rotations that do not allow correlations across factors were also conducted for the sake of comparison. It is noteworthy that for the TQS and other subscales, both oblique and orthogonal factor solutions were virtually identical. Hence, only the oblique results are presented here.

A single-factor solution emerged for the TQS—that is, other factor solutions made little theoretical sense. Furthermore, they failed to demonstrate a simple structure, where items loaded on a single factor and not others. In addition, table F.1 shows that all 10 questions have very high loadings on the single-factor solution.

Table F.1. Item Loadings for the Ten Questions Screen Factor

Item Description	Health and Development
1. Problems sitting, standing, walking, or moving around?	1.00
2. Child has problems using hands or fingers to do things?	1.00
3. Do you think your child has problems seeing?	1.00
4. Do you think your child has problems hearing?	1.00
5. When told to do things the child understands what you say?	0.09
6. Do you think this child has problems speaking?	0.99
7. Are you concerned about any aspect of this child’s behavior?	0.98
8. Concerned about how this child gets along with other people?	0.99
9. Child has problems doing things for self?	0.99
10. Do you think this child has learning problems?	0.97

Source: Independent Evaluation Group analysis

CBRS. The five-point scale for item 12, “tease, threaten, hurt other children” and item 13, “physically hurts other children” were reverse scored before conducting analyses on the CBRS because they reflected inappropriate behavior while all other items on CBRS reflected appropriate behavior.

Table F.2 shows a two-factor solution for the CBRS. The single-factor solution had several items that failed to load on it. In addition, for factor solutions where two or more factors were retained and rotated, only the two-factor solution met the criteria for being a simple structure (items loading on a single factor). Furthermore, factor solutions with three or more factors were uninterpretable because they did not make theoretical sense. Table F.2 shows that the first factor was labeled “Initiative” because items loading on this factor reflected children using their own initiative in achieving classroom-related goals. The second factor was labeled “Socioemotional Control” because they reflect behavior representing appropriate social interactions with others and emotional control necessary for such interactions.

Table F.2. Item Loadings for Child Behavior Rating Scale Factors

Item Description	Initiative	Socioemotional Control
1. Observes rules/follows directions	0.78	0.00
2. Can organize and do two tasks	0.83	0.00
3. Completes tasks given	0.90	0.00
4. Tries new tasks, even if hard	0.88	0.00
5. Focuses and concentrates on tasks	0.83	0.00
6. Listens to instructions then starts task	0.89	0.00
7. Takes the time to do best on a task	0.88	0.00
8. Finds right materials and place	0.83	0.00
9. Recognizes mistakes and self-correct	0.79	0.00
10. Completes a task after interruption	0.83	0.00
11. Willing to share with other children	0.00	0.76
12. Tease, threaten, hurt other children	0.00	0.55
13. Physically hurts other children	0.00	0.57
14. Cooperative with other children	0.00	0.81
15. Takes turn without being told to	0.00	0.82
16. Listens, follows teacher's instructions	0.00	0.81
17. Waits to get attention from teacher	0.00	0.80

Source: Independent Evaluation Group analysis

Approach to Learning/Socioemotional Skills. A single-factor solution emerged for the Approach to Learning/Socioemotional Skills. Table F.3 shows that only item 7 (separates easily from parent/caregiver) failed to load on this factor. Other factor solutions failed to reveal a simple structure and were theoretically uninterpretable. Furthermore, the table shows that all items that load on this factor had relatively high loadings.

Table F.3. Item Loadings for Approach to Learning/Socioemotional Skills Factor

Item Description	Socioemotional Skills
1. Interested and enjoys class activities	0.81
2. Uses different ways to learn	0.84
3. Able to pay attention to teacher during a group activity	0.64
4. Knows when and how to ask the teacher for help/guidance	0.78
5. Starts classroom activities by self	0.77
6. Curious, wants to learn new things in class	0.82
7. Separates easily from parent/caregiver	0.29
8. Knows different ways to solve problems with other children	0.65
9. Expresses feelings and needs appropriately	0.62
10. Able to transition from one classroom activity to the other	0.53

Source: Independent Evaluation Group analysis

Approach to Learning/Early Literacy Skills

Table F.4 shows that a single-factor model emerged for Approach to Learning/Early Literacy Skills. Indeed, all items loaded highly on this factor. Other factor solutions failed to meet the criteria of a simple structure and were theoretically uninterpretable.

Table F.4. Item Loadings for Approach to Learning/Early Literacy Skills Factor

Item Description	Early Literacy Skills
1. Knows how to use a book properly	0.69
2. Pays attention and follows a story being read	0.57
3. Uses shapes, symbols or letters for words; writes from left to right	0.73
4. Able to recognize his/her most used name from others in print	0.75
5. Can identify 10 of the 26 letters of the alphabet	0.88
6. Can say letter sounds of 5 of 8 letters: s, t, k, m, p, c, f, j	0.89
7. Can tell you the beginning and ending sounds of three-letter words	0.91
8. Can tell you all the sounds in three-letter words with vowel in middle	0.93
9. Can tell a story in own words in the correct sequence	0.58
10. Can correctly spell 3-letter words with vowels in the middle	0.84

Source: Independent Evaluation Group analysis

Approach to Learning/Early Numeracy Skills. Like Approach to Learning/Early Literacy Skills, a one-factor solution emerged for Early Numeracy Skills. Table F.5 shows very high loadings for all items on this factor. All other factor solutions were uninterpretable and failed to meet the criteria for a simple structure.

Table F.5. Item Loadings for Approach to Learning/Early Numeracy Skills Factor

Item Description	Early Numeracy
1. Count at least 5 objects correctly	0.81
2. Identifies six basic shapes	0.66
3. Identifies bigger and smaller	0.74
4. Identifies numbers from 1 to 10	0.79
5. Can count up to 20	0.76
6. Identifies “less” and “more”	0.73
7. Subtracts two numbers less than 10	0.87
8. Adds two numbers less than 10.	0.89

Source: Independent Evaluation Group analysis

Reliability Studies

Table F.6. Internal Consistency for Dimensions on Jamaica School Readiness Assessment

Item Description	Column One
Ten Question Screen	0.97 ^a
CBRS Initiative	0.94
CBRS Socioemotional Control	0.49
Approach to Learning/Socioemotional Skills	0.83
Approach to Learning/Early Literacy Skills	0.89
Approach to Learning/Early Numeracy Skills	0.85

Source: Independent Evaluation Group analysis

Note: CBRS = Child Behavior Rating Scale.

a. Represents Kudar-Richardson-20 since the items for this measure are dichotomous. All other values are Cronbach’s alphas.

The database did not permit test-retest reliability—that is, it does not have teachers of a subset of children who completed items on the JSRA subscales twice over a short period. Had this been done, it would permit the correlation of subscale scores across time and thus provide indexes of test-retest reliability. Calculating cross-informant reliability indexes was also not possible because two teacher informants did not independently complete the JSRA subscales on a subset of children. If they had done so, it would have permitted the correlation of scores across informants to provide indexes of cross-informant reliability for the JSRA. Because these reliability data were absent, the only reliability indexes that could be calculated were internal consistency for each subscale. Table F.6 lists the Cronbach’s alphas for all subscales except the TQS, which was dichotomously scored. The Kudar-Richardson-20 index was calculated for this subscale. The table also shows that except for the alpha for the CBRS Socioemotional Control subscales, both the alphas and the Kudar-Richardson-20 for all other subscales were high and reflect good internal consistency. It is not surprising that the alpha for

Socioemotional Control was lower because it has fewer items than most other subscales, and Cronbach's alphas are usually higher when the number of items is also higher.

Validity Studies

Convergent validity data were not available in the database. Achieving this goal would require that the ECC collect teacher-report data on a subset of children on both the JSRA subscales and previously existing screening measures that measure similar constructs that the JSRA subscales assess. Correlations among such measures would demonstrate whether convergent validity exists (Nunnally and Bernstein 1994). Divergent validity information was also missing from the database. It would require the administration of the JSRA subscales and instruments measuring constructs, which are different from those measured by the JSRA. If these procedures are followed, the expectation is that the JSRA subscales would be uncorrelated or very weakly correlated with subscales of such a measure. Criterion-related validity data were also absent from the database. An effective way of testing for criterion-related validity would be to compare the JSRA scale scores with achievement test scores obtained in primary schools.

MIRT factor analyses began to establish construct validity of JSRA subscales. MIRT factor analyses have shown that except for the CBRS, all dimensions met the criteria for a unidimensional factor. The CBRS showed two distinct unidimensional factors. It is essential to note that the MIRT factor analyses are just the beginning steps to address construct validity. All other forms of validity mentioned are essential to begin confirming that the JSRA scales have appropriate construct validity.

Testing for Statistical Differences Across Gender, Year of Assessment Parish, and Teacher Education

MIRT methods are robust to missing data, but missing data bias can affect other statistical methods such as those used next. To address this concern, missing data were addressed via imputation.

Missing Data Imputation

The database of 92,915 had significant missing data. For example, for teacher education, 52 percent had missing data. No gender data were available for 5 percent of the sample. Year of assessment and parish had no missing data. Missing data were also evident for the scores on each measure. The total score for the TQS had 3 percent missing data. On the CBRS, the missing data for Initiative and Socioemotional Control was 5 percent and 6 percent, respectively. For total scores on Approach to Learning/Socioemotional Skills, Early Literary Skills, and Early Numeracy Skills, the missing data was 3 percent, 33 percent, and 33 percent, respectively. Because the missing data cannot be considered as missing completely at random, the maximum likelihood approach was used to

impute missing data (Alison 2003). This method is also considered robust to data that are not normally distributed. We therefore used the maximum likelihood approach in IBM SPSS Statistics Version 28 to conduct maximum likelihood data imputation. All data analyses reported next used imputed data sets.

Gender X Year of Assessment X Parish Analyses with Teacher Education as a Covariate

To address whether significant differences in JSRA subscale scores emerged across Gender and Year of Assessment, Parish, and Teacher Education, IBM SPSS Statistics 28 was used in testing a 2 (Gender) X 3 (Year of Assessment) 14 (Parish), analysis of covariance (ANCOVAs) with Teacher Education as a covariate in the model and each of the six subscales as dependent variables considered separately. Because no teacher had education below National Council for Technical and Vocational Education and Training (NCTVET) level 2, education was coded where NCTVET level 2 was coded as 1, NCTVET level 3 was coded as 2, bachelor’s degree was coded as 3, and master’s degree was coded as 4. To adjust for chance effects emerging from the number of analyses conducted, the Bonferroni alpha correction was employed, which adjusted the alphas for significant effects at ≤ 0.008 . Because of the power provided by the large sample size, it is possible to find significant effects even when mean differences are negligible. The effect size (ES) was therefore calculated for each significant effect in SPSS using partial eta squared (η^2), where η^2 from 0.01 to 0.06 reflects a small ES, η^2 from 0.06 to 0.14 is a medium ES, and $\eta^2 \geq 0.14$ is large in ES.

Table F.7. TQS Mean Score by Parish

Parish	Mean	Standard Deviation	N
Clarendon	3.2588	4.1221	9,237
St. James	3.2456	4.1054	7,679
St. Mary	3.3578	4.2268	4,027
St. Thomas	3.4838	4.1725	3,205
Trelawny	3.3317	4.0624	2,982
Westmoreland	3.1784	4.1033	6,002
Hanover	3.1010	4.0935	2,677
Kingston	3.7393	4.1468	3,129
Manchester	3.2398	4.0724	6,614
Portland	3.6848	4.1244	2,207
St. Andrew	3.3041	4.0552	15,261
St. Ann	3.4939	4.1217	5,986
St. Catherine	3.1877	4.0823	17,166
St. Elizabeth	3.4136	4.1038	5,088
Total	3.3754	4.1136	92,918

Source: Independent Evaluation Group analysis
 Note: N = number.

TQS. For the TQS, a significant effect emerged for Gender, $F(1, 85,898) = 14.87, p = .001, \eta^2 = .000$ ($M = 3.18, SD = 4.11$ for females; $M = 3.20, SD = 4.10$ for males) and Year of Assessment $F(2, 85,898) = 101,5920, \eta^2 = 0.95, p = 0.000$ ($M = 8.69, SD = 1.08$ for 2017; $M = 0.49, SD = 0.81$ for 2018, and $M = 0.25, SD = 0.81$ for 2019). The ES for Year of Assessment was large. Because there are three different levels for Year of Assessment, the Tukey's honestly significant difference test was performed to test for differences between each possible pair of years. Significant differences emerged for each pair of years. A significant effect emerged for Parish $F(1, 85,898) = 14.0, p < .001$. With an $\eta^2 = .002$, the ES for Parish was less than even that is considered small. This is not surprising because table F.7 reveals that the means for parish are virtually identical. No significant effect emerged for the teacher qualification variable.

The Gender and Year of Assessment main effects were moderated by a Gender X Year interaction, $F(2, 85,898) = 360.98, p < 0.001, \eta^2 = 0.000$. The size of the effect for this interaction was lower than even that required for a small ES and virtually nonexistent. Hence, disentangling this Gender X Year of Assessment interaction was skipped.

The CBRS. Shifting focus to the Initiative subscale of the CBRS revealed a significant effect for Gender $F(1, 88,672) = 632.21, p < .001$ ($M = 51.58, SD = 7.74$ for females; $M = 47.29, SD = 10.07$ for boys). Although females had slightly higher scores on the Initiative subscale than boys, with $\eta^2 = 0.007$, this ES was too tiny to be considered as even small. Significant differences emerged for Year of Assessment $F(2, 88,672)$, but with $\eta^2 = 0.000$, this ES was nonexistent. This is not surprising because with $M = 49.37, SD = 10.21$ for 2017; $M = 49.71, SD = 10.23$ for 2018; and $M = 50.02, SD = 9.77$ for 2019; this finding revealed that there were virtually no mean differences among years of assessment. The teacher qualification covariate was significant $F(1, 88,672) = 106.80$, but with $\eta^2 = 0.001$, it was too infinitesimal to be considered as even a small ES. Nonetheless, correlating Teacher Qualification with Initiative revealed a positive association between the two variables ($r = 0.046, p < .001$). A Parish X Year of Assessment interaction emerged $F(28, 88,672)$, but with $\eta^2 = 0.001$, the ES was virtually nonexistent and therefore does not meet the criteria for even a small ES. Further analyses to disentangle this interaction was not warranted. No Parish X Gender or Gender X Year of Assessment effect emerged (table F.8).

Table F.8. Means and Standard Deviations for Initiative for Parish on Socioemotional Control

Parish	Mean	Standard Deviation	N
Clarendon	49.3773	10.04129	9,237
St. James	48.4413	9.89148	7,679
St. Mary	49.4302	10.12796	4,027

St. Thomas	48.7407	9.72390	3,205
Trelawny	48.3392	9.87277	2,982
Westmoreland	48.7168	10.46492	6,002
Hanover	49.7063	10.47359	2,677
Kingston	49.4355	10.39275	3,129
Manchester	50.9757	10.43090	6,614
Portland	48.2431	9.51196	2,207
St. Andrew	51.0056	10.07731	15,261
St. Ann	48.9344	9.90160	5,986
St. Catherine	50.2797	9.67576	17,166
St. Elizabeth	49.3962	10.42717	5,088
Total	49.6862	10.08385	92,918

Source: Independent Evaluation Group analysis

Note: N = number.

Like Initiative, a significant effect emerged for Socioemotional Control on the CBRS for Gender, $F(1, 88,672) = 246.64$, $p = 0.001$ showing that males had slightly higher scores than females ($M = 15.92$, $SD = 3.68$ for males; $M = 15.23$, $SD = 3.88$ for females). Although this gender effect is highly significant, with $\eta^2 = 0.003$, the ES was not large enough to be considered as small. No significant effects emerged for Year of Assessment, but a significant effect emerged for Parish $F(14, 88,672) = 25.41$, but with $\eta^2 = 0.004$, this effect was too negligible to be considered as even a small ES. This is not surprising because table F.7 shows virtually no differences among parishes. Teacher Qualification was also significant for Socioemotional Control, $F(1, 88,672) = 34.14$, $p < .001$ showing that as teacher qualification increases, Socioemotional Control decreases ($r = -0.21$, $p < .001$). With $\eta^2 = 0.000$, the ES was nonexistent, making it difficult to take this finding seriously. Significant interactions emerged across Gender and Year of Assessment $F(2, 88,672) = 9.36$, $p < .001$; Parish and Year of Assessment $F(1, 88,672) = 3.62$. $\eta^2 = 0.000$ and 0.001 , respectively, ES for these interactions were far lower than that required for even a small effect size. No significance emerged for Gender X Parish interaction and for a three-way interaction among Gender, Year of Assessment, and Parish.

Table F.9. Means and Standard Deviation for Parish on Socioemotional Skills

Parish	Mean	Standard Deviation	N
Clarendon	12.9721	3.44187	9,237
St. James	12.4961	3.65028	7,679
St. Mary	12.9173	3.52689	4,027
St. Thomas	12.6808	3.56186	3,205
Trelawny	12.5997	3.66464	2,982
Westmoreland	12.5165	3.69025	6,002
Hanover	12.8151	3.59311	2,677
Kingston	12.8668	3.66962	3,129

Manchester	13.1837	3.65773	6,614
Portland	12.4366	3.52269	2,207
St. Andrew	13.3420	3.51746	15,261
St. Ann	12.7892	3.51677	5,986
St. Catherine	13.2664	3.37820	17,166
St. Elizabeth	12.9942	3.56542	5,088
Total	12.9711	3.54482	92,918

Source: Independent Evaluation Group analysis

Note: N = number.

Approach to Learning Socioemotional Skills. For Approach to Learning/Socioemotional Skills, significant main effects emerged for Gender $F(1, 86,672) = 840.80, p < .001$ ($M = 13.62, SD = 3.31$ for females; $M = 12.34, SD = 3.65$ for males). With $\eta^2 = 0.01$, the ES for Gender was small. A significant effect also emerged for Year of Assessment $F(2, 86,672) = 619.09, p < 0.001$ ($M = 12.84, SD = 3.56$ for 2017; $M = 12.98, SD = 3.54$ for 2018; and $M = 13.11, SD = 3.50$ for 2019). Tukey's honestly significant difference test showed significant differences between each potential pairs of years, but with $\eta^2 = 0.001$, the significant effect was far less than what would be considered as a small ES. A significant effect emerged for Parish $F(14, 88,672) = 46.76$, but with $\eta^2 = 0.01$, this effect was small. Table F.9 shows the means for parishes with limited differences between them. The teacher qualification covariate was also significant $F(1, 86,672) = 56.09$, showing that as teacher qualification increases, total score for Approach to Learning/Socioemotional Skills decreases ($r = -.025$). With $\eta^2 = 0.001$, this significant effect would be considered as too minute to even meet the criteria of a small ES.

No interaction emerged for Gender X Year of Assessment or for Gender X Parish. A Parish X Year of Assessment interaction emerged, $F(1, 86,672) = 458.90$. With $\eta^2 = 0.001$, this effect was too tiny to be considered as even a small ES. Hence, further analyses to disentangle this interaction were unwarranted. A significant three-way interaction did not emerge.

Table F.10. Early Literacy Skills Total Score by Parish

Parish	Mean	Standard Deviation	N
Clarendon	13.08	4.517	9,237
St. James	12.86	4.530	7,679
St. Mary	13.23	4.551	4,027
St. Thomas	13.05	4.607	3,205
Trelawny	12.54	4.567	2,982
Westmoreland	12.82	4.559	6,002
Hanover	13.19	4.395	2,677
Kingston	13.37	4.474	3,129
Manchester	13.52	4.718	6,614
Portland	13.03	4.639	2,207
St. Andrew	13.98	4.410	15,261
St. Ann	13.04	4.623	5,986
St. Catherine	13.50	4.316	17,166
St. Elizabeth	13.47	4.611	5,088
Total	13.31	4.515	92,918

Source: Independent Evaluation Group analysis

Note: N = number.

Early Literary Skills. A significant main effect emerged for Gender with total Early Literacy as the dependent variable $F(1, 86,672) = 458.90, p < .001$. Female scores ($M = 13.99, SD = 4.25$) were significantly higher than those for males ($M = 12.65, SD = 4.50$). With $\eta^2 = 0.005$, this significant gender effect was too tiny to be even considered small in ES. Significant effects emerged for Year of Assessment, ($M = 13.17, SD = 4.89$ for 2017; $M = 13.40, SD = 3.71$ for 2018; and $M = 13.31, SD = 4.51$ for 2019). With $\eta^2 = 0.000$, the ES was nonexistent. A significant effect also emerged for Parish $F(14, 86,672) = 47.03$. With $\eta^2 = 0.007$; this significant gender effect was too infinitesimal to be considered as even small in ES. Table F.10 lists the Early Literacy score by Parish. A significant effect emerged for the Gender X Year of Assessment, $F(2, 86,672) = 4.92$. With $\eta^2 = 0.000$, this effect was that the ES is nonexistent. A Gender X Parish interaction emerged, $F(14, 86,672) = 3.42$. The η^2 was 0.001, which was well beneath the level to be even considered as a small effect. A significant Parish X Year of Assessment $F(28, 86,672) = 3.42, P < .001$ emerged, but with $\eta^2 = 0.001$, this effect was too tiny to be considered as even a small ES. The extremely low ES for these interactions makes disentangling them impractical. No significant three-way interaction emerged for Gender, Year of Assessment, and Parish.

Early Numeracy Skills. For Early Numeracy Skills, a significant effect emerged for Gender $F(1, 86,672) = 217.60, p < .001$ and showed that females' scores ($M = 11.84, SD = 2.84$) were significantly higher than those for males ($M = 11.26, SD = 2.99$). Since $\eta^2 = 0.002$, the ES for this significant effect was too tiny to be even considered as a small ES. The ANCOVA revealed that Year of Assessment was significant $F(1, 86,672) = 10.01 (M$

= 11.48 and SD = 3.18 for 2017, M = 11.56 and SD = 0.15 for 2018, and M = 11.58 for 2019). The η^2 for this effect was 0.000, indicating that ES was nonexistent. Significant effects also emerged for Parish $F(1, 86,672) = 18.83, p < .001$. The means for Parish are listed in table F.11, which shows that there are virtually no differences across parishes. Not surprisingly, $\eta^2 = 0.003$, showing that the ES is far too infinitesimal to be considered as even small. The teacher qualification covariate was also significant $F(1, 86,672) = 617.94, p < .001$. With $\eta^2 = 0.003$, the ES is far too minuscule to be considered as even small. A Pearson correlation of -0.083 showed that as teacher education increased, Early Numeracy Skills decreased. Two-way interactions emerged for Gender X Year of Assessment, Parish X Gender Year of Assessment, and Parish. A three-way interaction emerged with Gender X Year of Assessment X Parish. All two-way and the three-way interactions had $\eta^2 \leq 0.003$, making them too minute to be considered as small in ES. Therefore, disentangling these interactions was skipped.

Table F.11. Early Numeracy Skills Total Score by Parish

Parish	Mean	Standard Deviation	N
Clarendon	11.43	3.016	9,237
St. James	11.43	3.004	7,679
St. Mary	11.58	2.957	4,027
St. Thomas	11.46	2.995	3,205
Trelawny	11.21	3.000	2,982
Westmoreland	11.46	3.108	6,002
Hanover	11.62	2.936	2,677
Kingston	11.13	3.034	3,129
Manchester	11.68	3.133	6,614
Portland	11.27	2.961	2,207
St. Andrew	11.74	3.015	15,261
St. Ann	11.38	3.278	5,986
St. Catherine	11.70	2.840	17,166
St. Elizabeth	11.49	3.098	5,088
Total	11.54	3.026	92,918

Source: Independent Evaluation Group analysis

Note: N = number.

Implications

The findings show very little differences in testing across the three years in which the assessments were done. It is quite possible that because the measures used were screening tools and not comprehensive assessment tools, they do not have the ability to show significant differences with even small ES and possible medium-to-large ES, where they exist.

In addition, evaluating school readiness might require a more “ecological” approach. For example, risk factors for families might have impacts on school readiness and should therefore be assessed. The ECC’s Family Support Screening Tool, for example, measures wealth, possessions, and distance from community organizations. It also measures substance use by adults in children’s households, exposure to crime and violence in the community, and parental coping in managing the child’s behavior. These factors may well be associated with children’s school readiness. Another limitation is that because the tools used were completed by teachers, none of the JSRA measures provide direct assessment of children.

The limited differences between scores for girls versus boys show that when the JSRA screening forms were used, at least at the preschool level, all genders are performing virtually equally. There was little difference between parishes on all JSRA screening tools. The database did not contain urban, suburban, semirural, and rural data, which might provide more information than the parish data. Exceptions include the data for Kingston, which has rural, semirural, and suburban areas, and St. James and St. Andrew, which have large urban, suburban, semirural, and rural areas. In addition, no information is included on private versus public early childhood schools. Although no directly collected data addressed this, it is possible that private ECIs have more resources and teachers with higher levels of education, which could lead to significant differences in primary school readiness.

A significant amount of data in the database were missing, including data about teacher education. Although maximum likelihood imputation addressed the missing data issue, it might not be as ideal as if there were fewer missing data or no missing data at all. It is therefore important that when ECC staff continue to collect data in the future, they try to ensure that teachers complete the JSRA in its entirety.

Despite the drawbacks of this project, this research has led to psychometric findings regarding the JSRA. For example, construct validity is at least partially associated with the MIRT factor analyses conducted. Internal consistency reliability was also calculated for the JSRA tools. Estimating other forms of reliability, such as test-retest reliability and interrater reliability, was impossible because the database did not contain such data. To estimate test-retest reliability, data were collected on a subsample of children for which each teacher would complete the JSRA on the same child at least two separate times (for example, within two weeks of each other). Scores from the first and second assessments would need to be highly correlated to reflect adequate test-retest reliability. An earlier project did examine test-retest reliability, but this was done in a single parish. Furthermore, the time between test and retest was especially long (one year) and where child maturity, interventions, and other extraneous variables could affect test-retest reliability accuracy. Interrater reliability information was also absent. Collecting such

interrater reliability would also include a subset of children where at least two teachers complete the JSRA on each child within this subset. Adequate interrater reliability would be evident if the scores across teachers were highly correlated.

To the credit of earlier studies conducted on the JSRA, effort was made to ensure that its screening tools have appropriate content and cultural validity. No previous research was done on criterion-related validity, and such data were not collected in the JSRA database. Assuming that the JSRA is designed to predict readiness for primary school, criterion-related validity data could be collected by studying the academic performance of children in primary school who were previously assessed with the JSRA. Such a study would help determine whether the JSRA has appropriate criterion-related validity. Convergent validity was studied in the past but was done on data from a single parish. For the large three-year database, this form of validity data was not collected in the JSRA. This would have required the administration of existing tools that measure similar constructs the JSRA measures in conjunction with the JSRA. Moderate correlations between the constructs the JSRA measures and similar constructs measured by previously existing measures would show evidence of convergent validity.

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Appendix G. Borrower Comments

Planning Institute of Jamaica Comments on the Project Performance Assessment Report (PPAR) for the Early Childhood Development Project (ECDP)

The Planning Institute wishes to thank the World Bank for the ECDP PPAR, the findings and recommendations of which, will inform strategic thinking on how best to craft future initiatives to benefit the Early Childhood Sector. We are pleased at the quality of expression and objectivity displayed by the evaluators in this document. The objective lens has provided an accurate assessment of the project and the challenges experienced. It also provides an opportunity to reflect on the sustainability of the investment made and the way forward.

The review has captured facts and perspectives and presents a very systematic evaluation of what was intended and what occurred. The analysis of project preparation, target setting, resource mobilization, sector readiness, and institutional capacity and leadership provide ample room for lessons learnt. Any assessment of the ECDP must take account of the eco-system or environment in which the project was implemented—severe fiscal constraints which affected GOJ’s ability to meet its recurrent and investment obligations. The SWAp was an attempt by the Bank to design an operation which was responsive to the Government’s fiscal constraints, while being fully aligned with the National Strategic Plan (NSP) for Early Childhood Development. The NSP in retrospect may have been too ambitious and may therefore have informed too complex a programme for implementation given the prevailing fiscal, institutional and human resource constraints.

The ECDP’s greatest contribution to Jamaica’s development arena has been its promotion of early childhood development in its widest sense, as a cross-sectoral, inter-ministerial development imperative requiring collaboration and integration, as well as alignment of the budgets and plans of several Ministries, Departments and Agencies. Prior to the ECDP the focus was disproportionately on Early Childhood education. The PIOJ saw the project as a **pilot**, forging a new path. The several iterations, restructuring and revisions represented a *learning by doing* exercise which was needed to respond to the dynamic environment in which the project was being implemented and the complexities of the reality of public policy.

The evaluation suggests that the restructurings should have addressed problems such as financial flows and staffing issues rather than reducing targets. Implementing such a recommendation would have proven difficult given the ecosystem in which the project

was implemented, specifically the limitations on both operational and investment financing within Government, as well as caps on the size of the public sector, new hiring and increased compensation. This notwithstanding, the restructuring could have involved an agreement with the Bank to focus only on a set of critical issues and manageable targets, giving more attention to sustainability, including institutional strengthening where possible.

While there is disappointment that some objectives may not have been met, the ECDP provided a platform from which implementation of elements of successive NSPs could proceed. Some of these aspects continue to be implemented, albeit slowly and in a manner which could be better coordinated. Additionally, early childhood development remains in the public space as a national priority.

Unfortunately many of the constraints which affected the ECDP remain. Prevailing fiscal limits continue to influence the allocation by Ministries to the ECD agenda and coordination challenges continue among Government agencies. As a result, some of the gains or mechanisms established under the ECDP have not been sustained. The Evaluation Report provides an opportunity for both the Bank and the country to reflect on lessons learnt. For Jamaica, it provides an opportunity to re-engage across Government on an ECD model which is more tailored to Jamaica's socio and macro-economic realities.



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**Project Performance Assessment Report:
Jamaica Early Childhood Development Project
ECC Response & Recommendations**

June 20, 2022

The Early Childhood Commission (ECC) acknowledges the Project Performance Assessment Report by the Independent Evaluation Group of the World Bank Group on the Jamaica Early Childhood Development Project. The ECC recognizes that the Early Childhood Development Project (ECDP) was a pioneer of cross-sector implementation for early childhood development (ECD) for the World Bank and Jamaica. The cross-sectoral approach used by the ECC was built on partnerships with Ministries, Departments and Agencies (MDAs) with responsibilities for ECD. Despite the global financial crisis, the cross-sectoral approach led the pathway for the Project under the guidance of Planning Institute of Jamaica (PIOJ) and the Ministry of Education and Youth (MOEY).

All Project Development Objectives (PDOs) received attention during the project and provided next steps for the third National Strategic Plan (NSP). Today, the ECC has a suite of assessments to include the Jamaica School Readiness Assessment (JSRA), the Ages and Stages Questionnaire Jamaica (ASQJ) and the Family Support Screening Tool (FSST) which is scheduled for roll-out in August 2022. The ECC also provides an Inclusive ECD Certificate Course which is aimed to sensitize practitioners of the different types of developmental disabilities in young children and how to provide support these children and their parents/caregivers.

Although the JSRA data for 2017, 2018 and 2019 showed no growth for children aged four, the ECC implemented strategies to track development by automating the Scope and Sequence from the Jamaica Early Childhood Curriculum. The ECC also provided continuous training to practitioners in the areas of play, developmental/educational programmes and learning environments. The Classroom Observation Tool provided an additional mechanism for practitioners to plan and implement activities that supported the areas of learning environment, classroom management, assessment and evaluation strategy and planning.

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Chairman –Mrs. Trisha Williams-Singh Executive Director –Mrs. Karlene DeGrasse-Deslandes



The ECC's 0-3 Comprehensive National Training programme aims to provide the tools needed for all ECC field staff, practitioners, parents and other stakeholders of children 0-3 years to better support young children's development. The tools consist of practical strategies and resources for planning and implementing programmes for young children.

The National ECD Policy is in the process of being reviewed with the completion date scheduled for November 2022. The community-based service delivery model has been implemented in NSP 3 2018-2023 with 17 active community early childhood development councils initiated across the country.

To improve the utilization of the Child Health Development Passport (CHDP), the ECC designed a 13-week parenting curriculum that seeks to address the ages and stages of child's development. In addition, the Jamaica Brain Builders Programme: Jamaica's First Thousand Days Strategy for children zero to three was developed in 2018. The Strategy outlines responsive parenting, parenting education and support, healthcare, nutrition, early stimulation and early learning and protection from violence, abuse and neglect. In addition, the ECC developed the 1st 1000 Days App to support parents in the area of child development.

With 48 Parent Places certified by the closure of the project, the ECC continued to put the necessary systems in place in order to expand the Parent Places model. To date, the ECC has identified an additional 26 Parent Places for certification. With seven Community Intervention Officers, the ECC has sustained the 48 Parent Places with workshops and referral support. The ECC continues to target parents within the lower income bracket and impoverished communities through the ECC Community Flex and the ECC Walk and Talk, which takes ECC Community Intervention Officers into the communities with parents for interactive conversations and demonstrations related to increased parenting skills and child development. Between the health clinics and ECIs, the Parent Places serve as an additional support for parents. Due to the COVID-19 pandemic, parent groups met virtually using online platforms. The platforms supported parents at a time when they needed educational support for their children when schools were closed for face-to-face classes.

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The ECC worked closely with both the World Bank and other MDAs from whom it received guidance and technical support regarding the NSP. The ECC was guided by the ECC Board of Commissioners, its parent ministry the MOEY and the PIOJ.

Over the years, the ECC continued to publish the Annual Review Publications, 2016-2019. The 2020-2021 report is scheduled to be completed by December 2022.

Currently in the third NSP 2018-2023, the ECC continues to monitor the activities according to the NSP's nine processes to include Public Education and Resource Mobilization.

Recommendations:

1. The report hints at the cross-sectoral approach managed by the ECC being ineffective, however this approach continues to be proven as most appropriate given the segmentation of services of ECD within the Government of Jamaica (GOJ). The recommendation is to apply a greater focus on establishing clearer lines of collaboration through joint planning meetings and MOUs, prior to and throughout the implementation phase. This will encourage a feeling of accountability which will then lead to better cooperation and ownership of the success of the project. Additionally, coming out of these planning meetings will be tasks/processes with owners within each MDAs. This will also allow for continuity of the implementation and greatly reduce the risk of failure due to staff turnover stemming from external changes.

2.

In addition, responsibility for cross sectoral outputs should be tied to higher order personnel in MDAs such as Permanent Secretaries. Budget allocations should be signed off where line budget is specific to the MDAs activity for meeting the NSP targets. For example, the Well Child Clinic certification needs a clear allocation of funds for this activity within the MOHW budget, as well as a Child Health Passport Campaign budget for re-sensitization of healthcare workers. Sustained follow-up with MDAs at specific timelines and take actions to higher authority for outcomes.

Reference Page: x (Summary – What did not work)

3/page



3. The allocation of government funds to ECD and ECC staff salaries was a concern throughout implementation of the ECDP. A Reclassification proposal was submitted to relevant authorities and the ECC awaits a response.

Report Reference Page: 41

4/page



COMMENTS ON IEG EVALUATION OF JAMAICA ECD PROJECT 2022

Agree with:

Design Complexity

The ECC has now become a Department of MOE

ECCs role was hindered by its reporting structure. ECC should report to the Parliament, not the MoE for cross-sectoral work.

There have been delays due to ECC capacity in completing the ECD Policy, implementing the screening system, data analysis, discontinuation of the child development module. Related to salary scales and limited in-country professionals.

Remuneration at ECC contributed to capacity limitations and high staff turnover. This was recognised and discussed but was unable to be addressed due to the financial crisis at the time.

Changing WB staff created challenges in continuity.

General Comments:

The report does not seem to acknowledge that the background work has allowed for further development to be built on. Though some activities did not take place during the project period the structures and systems and information obtained has allowed further growth (online training of trainers of development officers to support children with disabilities, online training of EC teachers to support children with disabilities) .

The report does not take into account that there was no detailed national data before on ECIs across the country, including teacher qualifications. Baseline data from all ECIs was necessary prior to targeting. This took quite a number of years from development to operationalising implementation of standards and data analysis. Targetting is now taking place, though its challenges are well recognised.

The report does not take into account activities of the ECC that were not included in the NSP that addressed some areas that are identified as being absent, such as teacher support through development officers and resources for ECIs, parent support in Parents Places at ECIs. For example, the support provided by development officers to train teachers, the role of the ECC in developing partnerships to fill gaps, such as sourcing and facilitating resources provided to all ECIs (e.g. Crayons Count project and others). There has been significant improvement in trained teachers and in resources available at ECIs with the support of the ECC.

The ECCs 0-3 strategy is not mentioned in the report.

There seems to be a mis-understanding of the relationship between the ECC and the NSPC and the concept of Parents Places as community based parent support centres.

There seems to be a mis-understanding of timing as to when research reports were available to inform the NSP and to inform interventions.

The NSP was generally built on limited knowledge of the EC sector, as only limited knowledge was available at the time. This was an acknowledged weakness in the design and contributed to the need for multiple restructuring; this was done as knowledge was collected through the project and through the institution of the ECCs regulatory system. The role of the project in providing critical data that now informs further development of the EC sector is not mentioned.

PATH Programme comparisons do not seem realistic to the multiple aspects that need to be considered in early childhood development. Targetting is notoriously difficult and has remained a challenge in programmes internationally and in the country, including in the PATH programme.

The impact of the H1N1 epidemic in shifting MOH priorities was not considered; this led to delays in well child clinic activities in the project.

Specific Comments:

Page 19:

The ECCs focus was not only on ECI standards initially.

Page 27-28:

Reduction of foundational work on parenting

Response to pgs. 19 and 27-28 comments on parenting

Early on in the NSP (2005), the ECC led discussions on the importance of establishing a parenting policy to guide parenting support for children at the early childhood sector. In discussion with the GOJ, for efficiency purposes it was decided that a parenting policy should be developed for the entire child cohort rather than just the early childhood group. The ECC led the development of the National Parenting Policy and National Parenting Strategy (which included the establishment of Parent Places in schools, communities, churches etc.), which then resulted in the establishment of the National Parent Support Commission (NPSC), which was established based on the ECC structure (Samms-Vaughan and Tortello, 2014). The NPSC has been critical in supporting the establishment of Parent Places in schools and most recently in supporting parents during COVID-19.

The report does not mention that one of the standards included in inspection of ECIs is Parent and Community Engagement.

There was never a shift from parenting at ECIs and clinics to Parent Places. Parenting support was to be provided at all possible contacts. Parent Places do not reflect an institution but a concept for parent support.

In Preventive health care, nutrition was an early focus, with nutrition guides and recipe manuals developed and subsequently provided to all ECIs, once a suitable consultant was identified.

Page 30

The original intention of the training of the first CDT was to evaluate curriculum content for conversion to online modality to allow for training of a greater number of persons at lower cost. This was impacted by the pandemic in 2020. Priority was given to building capacity for those working in the GOJs early intervention programme (ESP) and funding was sought for these students,

but it was never envisaged that funding would be provided by the government for subsequent cohorts.

Page 33 1.35

There should be a lot of caution in interpretation of an absence of change over a 3 year period in the JSRA, a screening tool, rather than a diagnostic tool. There is also no previous data available so the baseline is not known and therefore change from the baseline to the current JSRA analysis is also unknown. Child development is also the outcome of a number of complex factors of which the school environment is only one.

Pg 36. 1.41

“Little attention was given to how early intervention services would be provided following screening and diagnosis, particularly in the ECIs”

“In contrast, establishing a robust process to monitor children’s development and support parenting via CHDP could have also screened for children at risk of development delays.”

Based on the JSRA, and the Screening, Referral and Early Intervention System, the first level of support was to be provided in the classroom with additional attention, the second level of support was to be provided by development officers who would also do a second level of screening to reduce strain on limited intervention resources. Development Officers have now been trained to support children with special needs in the classroom.

The instruments in the CHDP are not sensitive enough to identify children with developmental disability. The SREI system utilises this as a first line screening tool at health centres. The same instrument is included in the JSRA but there is always a secondary screening mechanism..

Page 38 1.44

“Project design and preparation also did not make sufficient use of existing research on ECD in Jamaica “

Only very small studies predated the NSP. None of the studies had included mechanisms for targeting on a population basis or for scaling up interventions. Child development measures utilised in small studies are highly costly and not suitable for population based implementation. It was first necessary to gather information on child development and ECIs on a population basis in order to effect targeting.

The JA KIDS study enrolled child participants at birth in 2011 and did not produce any work that could have influenced either NSP1 or NSP 2

Page 42 1.56

Intervention strategies described in this paragraph were not developed at the time of the development of the NSPs. These strategies now inform practice at ECIs and well child clinics.

Data from ECI inspections now inform targetting.

Page 43. 1.55

“ Among the most consequential implementation changes was moving support to parenting improvement, which was anchored within two institutional services (health clinics and ECIs), to Parent Places in collaboration with the National Parenting Support Commission established by Act of Parliament in 2012 “

This did not occur. The NPSC was the certifying body. Parent Places occur in communities and at ECIs.

Maureen Samms-Vaughan