



PUTTING THE PIECES TOGETHER

New York Early Learning Program Data Systems

A report to the
New York State



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Data collected by state and local agencies on young children and the programs serving them have enormous potential value. Families, service providers, policymakers, researchers, advocates and others can use these data to better understand children's needs, improve access to services, strengthen services, enhance the efficiency of services, and understand the short- and long-term impacts of services. In New York, as in most other states, this potential has gone largely unrealized. Early childhood data have typically been maintained in silos by agency and service – and sometimes by region – frustrating efforts to draw comprehensive, point-in-time pictures and comparisons. Usually, too, data have not been available longitudinally, hampering ability to follow children and services over time. All too frequently, data systems are under developed and fail to collect all the data that is needed for research and policy and program decisions.

Recently, however, momentum to link early childhood data across agencies and across time is gathering in the states. A few pioneers – including Connecticut, Maryland, and Pennsylvania – have begun to integrate data systems for their state-funded prekindergarten and child care subsidy systems – linking child, program, and personnel databases. These states are also looking to develop linkages with other systems, notably health. Earlier, several states – including Wisconsin, South Carolina – built “data warehouses” to store, link, and provide access to historical data on services to children and adults.

Federal actions are stimulating this movement. State Early Childhood Advisory Councils, established under the Head Start Reauthorization Act of 2008, are charged with developing recommendations for “establishing or improving core elements of the State early childhood system, such as a statewide unified data collection system.” Statewide Longitudinal Data System grants, begun in 2001, at first focused on elementary and secondary education, but more recent grants, like New York's that began in 2010, include links to preschool data. Further, as a condition of receiving State Fiscal Stabilization Funds through the American Recovery and Reinvestment Act, all state education agencies have committed to build statewide longitudinal data systems to follow individual

students from pre-school, through K-12 and post-secondary education, and into the workforce.¹ Also, states successful in the Race to the Top education grant competition, including New York in 2010, had to show “significant progress” toward development of longitudinal P-20 data systems.²

A consortium of national organizations,³ the Early Childhood Data Collaborative, has convened to help states build, link, and use early childhood data systems. One of the Collaborative's first efforts has been to articulate a set of key policy questions that a well-crafted early childhood data system can help answer. Their initial questions focus on early care and education data, while anticipating subsequent links to data on other services.

- Are children, birth through age 5, on track to succeed when they enter school and beyond?
- Which children have access to high-quality early care and education programs?
- Is the quality of programs improving?
- What are the characteristics of effective programs?
- How prepared is the early care and education workforce to provide effective education and care for all children?
- What policies and investments lead to a skilled and stable early care and education workforce?
- Over time, the Collaborative encourages states also to include data from programs to document the full costs of providing early care and education services.⁴

This report represents an important first step to help New York answer these questions through a coordinated early childhood data system. In early 2009, the Early Care & Learning Council (ECLC)⁵ and the NYS Council on Children and Families (CCF) set out to survey New York State and New York City agencies providing services to young children to identify the elements their data systems and the accessibility of those elements. While committed to the long-term vision of a comprehensive data system covering the whole spectrum of early childhood services – early learning, health, family support, and others – to keep the initial task manageable, the ECLC and CCF

Table 1: Early Learning Data Systems in New York State and New York City

Responsible Agency	Data System	Geographic Scope	Focus/Contents
Office of Children & Family Services (OCFS)	Child Care Facilities System (CCFS)	NYS	Statewide: Registered family child care homes, registered school age programs; regulation-exempt providers receiving subsidies. Except NYC: licensed day care centers
Office of Children & Family Services (OCFS)	Child Care Subsidy Database/ Local Departments of Social Services (LDSS)	NYS (Except NYC)	Children and families receiving child care subsidies via Welfare Management System (WMS); providers serving subsidized children via OCFS
Office of Head Start	Program Information Report (PIR)	NYS	Head Start programs and participants (Data available at grantee/delegate agency level; not at individual site level)
State Education Department (SED)	Universal Prekindergarten Program Database (UPK)	NYS	State Prekindergarten programs (Participant data maintained at the district level.)
State Education Department (SED)	Preschool Special Education (PSE)	NYS	State Prekindergarten programs (Participant data maintained at the district level.)
State Health Department (SHD)	Early Intervention (EI)	NYS	State Preschool Special Education programs and participants
Early Care & Learning Council (ECLC)	Child Care Resource & Referral Databases (NACCRRAware)	NYS	Licensed group family child care homes, registered family child care homes; registered school age programs, licensed centers including Head Start; nursery schools/preschools
Early Care & Learning Council (ECLC)	Training Tracking and Technical Assistance Management Database (TTAM) <i>In development</i>	NYS	Training received by providers in NACCRRAware databases (see above); qualifications of trainers; details on trainings; Child Care Resource & Referral's (CCR&R) technical assistance to providers
City University of New York, Early Childhood Professional Development Institute	Quality Stars NY <i>In development</i>	NYS	Quality StarsNY ratings for participating licensed and registered: family child care homes; group day care homes; centers; Head Start programs; Universal Prekindergarten programs
City University of New York, Early Childhood Professional Development Institute	Personnel & Trainer Registry <i>In development</i>	NYS	Demographic, employment, formal education, certification, and training information on participating members of the early childhood workforce
Department of Health (DOH)	Bureau of Child Care Licensing Database (BCCL)	NYC	Licensed centers including Head Start, preschools/nursery schools, licensed group family child care homes
Administration for Children's Services (ACS)	Child Care Database	NYC	Contracted child care centers; family child care networks and Head Start centers; other regulated and informal/legally exempt facilities; the subsidized families who use these services
Administration for Children's Services (ACS)	Head Start Database	NYC	Head Start programs funded through ACS (Plans are in place to further automate this system and integrate it with the ACS Child Care Database.)

began with data systems related to early education and care. Initially, these included systems in agencies responsible for child care licensing, child care subsidies, Head Start, State Prekindergarten, Child Care Resource and Referral, as well as the agency developing QUALITYstarsNY, the state's Quality Rating and Improvement System, and the state's early childhood Workforce Registry. Subsequent surveys also covered data systems for Early Intervention and Preschool Special Education. (See Table 1) Later phases of this effort will necessarily incorporate data from other service sectors, as well as areas of early learning not included in this survey.⁶

Following a meeting with representatives of potential agencies to be surveyed, to introduce and solicit input on the project, the ECLC and CCF developed and sent out surveys to the initial group of agencies in late spring 2009. Taken together, the surveys covered six broad dimensions of available early learning data:

- Program/Provider Supply;
- Enrollment, Participant Demographics, and Demand;
- Early Childhood Workforce;
- Program Quality;
- Outcomes for Children and Families; and
- Costs and Financing.

After joining the project in mid-2009, the National Center for Children in Poverty (NCCP) sent follow-up surveys to the agencies. The second survey gave them opportunities to review their original responses and to share information about any plans to enhance their data systems. Synthesizing responses to both surveys, a preliminary draft of this report was reviewed at a March 2010 Data Forum in Albany, attended by representatives of the responding and other interested agencies, as well as invited members of the New York State Early Childhood Advisory Council. At the Forum's recommendation, NCCP subsequently surveyed the agencies responsible for Early Intervention and Preschool Special Education before finalizing the report.

Early Learning Program/Provider Supply Data

Survey responses on the first two dimensions of New York's early learning data – Program/Provider Supply; Enrollment, Participant Demographics, and Demand – document the state's present inability to provide a comprehensive answer to the key question: "Which children have access to high quality early care and education programs?" Available data can provide only partial and fragmented answers to sub-questions such as: "Where are the programs/providers?" "Which of them receive public funds?" "Which children use which services?" This section describes available data on the supply of programs and providers. The following section describes data on the state's children and families using and seeking early care and learning services.

As shown in Table 2a, the NYS and NYC agencies responsible for regulating child care services – the NYS Office of Children and Family Services' Child Care Facilities System (CCFS) and the NYC Department of Health's Bureau of Child Care Licensing (BCCL) – have a range of electronic data available on the programs and providers they regulate. Both agencies have basic data on type/location and capacity/ages served readily available, while the BCCL system has additional data available on schedule, staff, and funding. CCFS also maintains information on

regulation-exempt, informal providers throughout the state who receive subsidy payments (See Table 2b). The electronic databases maintained by the 39 Child Care Resource and Referral (CCR&R) member agencies of the Early Care & Learning Council (ECLC) hold data on regulated child care programs/providers and providers legally exempt from regulation in their respective service areas, which together cover the state. ECLC agencies access the CCFS system as they maintain their provider databases. The State Education Department's Preschool Special Education (PSE) has data readily available on program models/locations, as well as their capacities/ages served.

Other systems surveyed maintain electronic data on subsets of programs/providers that receive some form of public funding, in some parts of the state. Outside New York City, the only providers receiving subsidy payments for whom any readily accessible electronic data are available are regulation-exempt providers in the CCFS system.⁷ In New York City, the Administration for Children's Services (ACS) Child Care system maintains electronic data on the programs/providers – both regulated and exempt from regulation – that receive child care subsidy payments. Head Start Program Information Report (PIR) data for the state are not available at the individual program site level, though aggregate data are available for each of the Head Start program options.⁸ For Head Start programs in New York City, the ACS Head Start database has some individual program data available electronically, although so far it is difficult to retrieve. The Universal Pre-Kindergarten (UPK) data system of the State Education Department includes electronic data identifying programs operated by Community Based Organizations (CBOs), most of which are also in the regulatory data systems described above, and identifying programs operated by Local Education Agencies (LEAs), not required to be licensed. Most UPK data, however, are maintained at the local school district level. Finally, some ECLC member agencies maintain data on programs in their areas receiving subsidy, Head Start, and/or UPK funding.

Table 2a: Early Learning Provider Supply Data (Formal/Licensed/Registered)

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRAware	DOH BCCL	ACS** Child Care	ACS Head Start
1 = not collected										
2 = collected on paper only										
3 = collected electronically, difficult to retrieve										
4 = collected electronically, readily available										
n/a = not applicable										
Type/Location										
Number of providers by type	4	3	1	1	4	3 ¹	4	4	4/3	4
Type of care	4	3	1	1	4 ²	1 ³	1	4	1	1
Location	4	3	1	1	4	1 ⁴	1	4	1	1
Number of school districts served	1	1	1	1	3	1 ⁴	1 ⁵	4	1	1
Capacity /Ages Served										
Licensed/registered capacity	4	1	1	1	4	n/a	4	4	4/3	4/3
Ages of Children/licensed registered to serve	4	1	1	1	4	n/a ⁶	1	4	4/3	4/3
Number of children served	1	3	1	1	4	n/a ⁷	1	4	4/3	4/3
Ages of children served	1	3	1	1	4	n/a ⁶	1	4	4/3	4
Number of children by setting	1	3	1 ⁸	4	4	1	1	1	1	1
Schedule										
Hours of operation	1	1	1	1	4	1	4	4	4/3	4/3
Full day/Part day (fulltime/parttime)	1	1	4	4	4	1	1	1	1	1
Alternative care (weekends, nights)	3	1	1	1	1	1	4 ⁹	4	1	1
Length of time program in operation	3	1	1	1	4	1 ¹⁰	4	4	1	1
Staff/Program*										
Number of staff (teaching/administrative)	3	1	1	1	4	1	1 ¹¹	4	1/3	1
Program offered (curriculum, primary caregiving, etc)	1	1	1	1	4	4 ¹²	1	1	1	1
Affiliation/Funding										
Source of funding (subsidies, private pay, UPK, Head Start, employer support, IDEA Part B, IDEA Part C, other funding)	1	1	1	1	4	n/a	1 ⁵	4	4	4
Organizational affiliation	3	1	1	1	1	3	1 ¹¹	1	4	4
Capacity of funded slots	1	1	4 ¹³	4	4	n/a	1	1	1	1
Fully implemented prekindergarten programs	1	1	1	4	1	n/a	1	1	1	1
Prekindergarten programs operated by LEAs and CBO's	1	1	1	4	1	n/a	1	1	1	1
Types of CBOs operating prekindergartens	1	1	1	4	1	n/a	1	1	1	1
Participation in CACFP	1 ¹⁴	1	1	1	1	n/a	1 ⁵	3	1	4
*Also see Table 4, Early Childhood Workforce.										
**While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.										
1. Data available on number of agencies approved to provide Early Intervention (EI) services, as well as the number of individuals approved as independent contractors.										
2. Data available on approved preschool special education program models, from least restrictive to more restrictive environments: special education itinerant teacher (SEIT), special class in an integrated setting (SC/IS), and special class in a non-integrated setting (SC). In addition to special education, data are available on related services (e.g. occupational therapy, physical therapy, speech language pathology, vision services, etc.).										
3. Individuals employed by agencies and independent contractors must be licensed, registered, or certified for their profession by the New York State Education Department. Agencies maintain data on their employees' professions, which include audiology, dietetics and nutrition, medicine, nursing, occupational therapy, physical therapy, psychology, social work, speech language pathology, special education, and vision services.										
4. Data available only by county.										
5. Some ECLC member CCR&Rs collect.										
6. All service providers serve children birth through age 2.										
7. Many agencies serve populations in addition to EI.										
8. PIR data are not available at the site level. Aggregate data, however, are available by Head Start program option (e.g., center-based, home-based, combination, family child care, local).										
9. Most CCR&Rs collect.										
10. Data available on length of time approved to provide EI services.										
11. Could collect in future; NACCRRAware has capability, though not currently a required field.										
12. Data available on developmental services offered.										
13. Aggregate data available by Head Start program option.										
14. For legally-exempt providers only.										

Table 2b: Early Learning Provider Supply Data (Informal)

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED* PSE	SHD** EI	ECLC NACCRRAware	DOH BCCL	ACS*** Child Care	ACS Head Start
Number of providers	4	3	1	1	n/a	n/a	1	1	4	4
Number of children served	1	3	1	1	n/a	n/a	1	1	4 ¹	4
Relationship to Children (relative, non-realtime)	4	1	1	1	n/a	n/a	1	1	1	4
Hours of operation	1	1	1	1	n/a	n/a	1	1	4	4
Inspection and if violations were found	2	1	1	1	n/a	n/a	1	1	1	1
Relevant training/education	3	1	1	1	n/a	n/a	1	1	1	1
Complaints	2	1	1	1	n/a	n/a	1	1	1	1
Investigations	2	1	1	1	n/a	n/a	1	1	1	1

*All Pre-School Special Education programs and related services must be approved.
 **All EI service providers must be approved as qualified personnel.
 ***While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.
 1. ACS collects whether the child is related to the provider but does not collect whether the provider is related to the child.

System improvements in process and planned –

Three agencies reported initiatives underway that will strengthen their systems’ provider data. The ECLC has a project underway to better synchronize the NACCRRAware provider databases maintained by their member CCR&Rs, standardizing more data definitions and expanding the numbers of required fields. In New York City, ACS will launch a TMQA System Integration project, to enhance automation of the city’s Head Start data and integrate it with its data system for subsidized child care. Finally, OCFS is building a Child Care Time and Attendance Payment System that will standardize calculation of payments for subsidized providers in all the state’s Local Social Service Districts, except New York City. Funded through the American Recovery and Reinvestment Act, this project’s standardization of attendance reporting for subsidized children will also strengthen OCFS data on enrollment.

Early Learning Enrollment, Demographic, and Demand Data

Data presently available also cannot provide a comprehensive picture of children using early care and learning services throughout New York State. Available data are maintained in agency silos, by source of public funding and sometimes also by region of the state. Electronic data that are available are also generally hard to retrieve.

As Table 3 shows, the publicly funded programs that maintain accessible electronic enrollment data at the state level are SED Preschool Special Education and SHD Early Intervention and in New York City, ACS subsidized child care – with only current, not historical, data easily accessible. Local department of social services data on subsidy recipients elsewhere in the state can only be retrieved on a case-by-case basis. Data from the ACS Head Start system are available electronically, but hard to retrieve. Statewide Head Start PIR data are available only in aggregate, by Head Start program option. At present, no UPK enrollment data are accessible centrally; they are available only at the school district level. The NYC BCCL system maintains data on the actual enrollment of licensed centers and group family child care homes in New York City, irrespective of public funding.

Table 3: Early Learning Enrollment, Demographic and Demand Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRaware	DOH BCCL	ACS* Child Care	ACS Head Start
1 = not collected										
2 = collected on paper only										
3 = collected electronically, difficult to retrieve										
4 = collected electronically, readily available										
n/a = not applicable										
Enrollment										
Actual enrollment	1	1	4 1	1	4	4	1	4	4/3	3
Number of recipients	1	3 ²	1	1	4	4	1	1	4/3	1
Number of families registered on waiting list	1	1	1	1 ³	1	n/a ⁴	4	1	4/3	3
Number of enrolled children speaking a language other than English at home	1	1	4	1	1	3	1	1	1	1
Health, income, disability characteristics of children	1	1	4 ⁵	1	1	4 ⁶	1	1	1	1
Demographic										
Age of children	1	3 ²	4	1	3	4	4	4	4/3	1
Birth date	1	3 ²	1	1 ³	4	3	4	1	4/3	1
Age at time of collection	1	3 ²	1	1	4	n/a	3	1	1	1
Age of mother	1	3 ²	1	1	1	1	1	1	1	1
Birth date	1	3 ²	1	1 ³	1	1	1	1	1	1
Age at time of collection	1	3 ²	1	1	1	n/a	1	1	1	1
Age of father	1	3 ^{2,7}	1	1	1	1	1	1	1	1
Birth date	1	3 ²	1	1	1	1	1	1	1	1
Age at time of collection	1	3 ²	1	1	1	n/a	1	1	1	1
Marital status	1	3 ²	1	1 ³	1	1	1	1	1 ⁸	1
Grandparent as head of household/primary caregiver	1	3 ²	1	1	1	1	1	1	1	1
Family size	1	3 ²	1	1	1	1	1	1	4	1
Income-eligibility for child care subsidy	1	3 ²	1	1	1	1	4 ⁹	1	1	1
Employment status	1	1	1	1	1	1	4	1	4/3 ¹⁰	1
Mother employment status	1	1 ¹¹	4	1	1	1	1	1	4/3 ¹⁰	1
Father employment status	1	1 ⁷	4	1	1	1	1	1	4/3 ¹⁰	1
Household income	1	3 ²	4 ³	1 ³	1	1	1	1	1	1
Reason for care	1	3 ²	1	1	1	1	1	1	4	1
Mother education	1	1	4	1	1	1	1	1	1	1
Primary language	1	3 ¹²	4	1 ³	1	1	4 ¹³	4	4/3 ¹⁴	1
Race/ethnicity	1	3 ²	4	1	4	4	1	1	4/3 ¹⁴	1
Demand										
Types of care that parents are interested in and characteristics about the families	1	1	1	1	1	1	4	1	1	1
Projected demand in relation to live births / neighborhood demographics	1	1	1	1	1	1	1	4	1	1
<p>*While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.</p> <p>1. Available by program option (e.g., center-based, home-based, combination, family child care, etc).</p> <p>2. Data can be retrieved from the Welfare Management System only on case-by-case basis.</p> <p>3. These demographic data are available at the district level.</p> <p>4. All eligible children who apply for EI are served.</p> <p>5. Health info includes insurance status, medical home, medical services, immunization receipt, dental home, dental services and mental health services; disability info includes primary disability; income includes above/below FPL for children whose eligibility is based on income. PIR also includes family income info including number of families receiving WIC, TANF, and SSI.</p> <p>6. Some health and disability data are available</p> <p>7. Only available if father is part of the case</p> <p>8. Marital status not available. Single or 2 parent household available.</p> <p>9. Available for all clients/parents who call their CCR&R.</p> <p>10. Based on reason for care data.</p> <p>11. Only available if mother is part of the case.</p> <p>12. On application only - optional.</p> <p>13. This varies across CCR&Rs. This is not a standardized field throughout NYS so that CCR&Rs can add local languages as necessary.</p> <p>14. Available at the case-parent level.</p>										

Available demographic data describing children enrolled in publicly funded early learning services in New York State are similarly siloed. Like UPK enrollment data, UPK demographic data are available only at the district level.

Two responding agencies reported data on demand for early care and education services. ECLC maintains accessible type of care sought by families calling CCR&Rs; New York City DOH makes projections of demand for services based on neighborhood demographics and live births.

System improvements in process and planned –

The State Department of Education plans to begin assigning unique P-12 child identifiers to every child enrolled in UPK and Preschool Special Education beginning in 2011. These identifiers will create capacity to track children's progress through their elementary and high school years and will make centralized enrollment and demographic data possible for UPK. As noted above, the new Child Care Time and Attendance System and Tracking System at OCFS will standardize attendance reporting for subsidized children throughout the state, with the exception of New York City. The ACS Head Start automation and integration project, also described above, also promises to expand site level data on New York City's Head Start programs and enhance its access. The State Department of Health's Bureau of Early Intervention makes probabilistic matches with selected subpopulations from the Newborn Screening database and is applying for access to the data warehouse of eMedNY, the state's Medicaid claims processing system.

Early Learning Workforce Data

Survey responses on the third dimension of New York's early learning data – the Early Childhood Workforce – also document the state's similar inability to answer two more key questions posed by the Early Childhood Data Collaborative: "How prepared is the early care and education workforce to provide effective education and care for all children?" and "What policies and investments lead to a skilled and stable early care and education workforce?"

Again, as seen in Table 4, data are siloed – often with different definitions for similar data elements in the various silos. In provider demographics, for example, languages spoken are tracked in a variety of ways, for various subsets of providers by the OCFS/CCFS, Head Start/PIR, SHD/EI, ECLC/NACCRRAware, and ACS/Child Care systems. Qualifications and staff positions recorded also vary by system, reflecting the requirements of their funding sources. Head Start/PIR, for example, holds data on staff without any degree or credential and those possessing the Child Development Associate (CDA) credential, associates', bachelors', masters' and advanced degrees, as well as staff enrolled in degree programs. The State Education Department's UPK and PSE systems maintain data on teacher certifications held by staff. The New York State CCFS and New York City BCCL licensing databases also hold electronic data on staff education and experience, varying by position and ease of access.

To date, very few data are available on the professional development/training, compensation, or employment history of members of the workforce. NYS CCFS also maintains information on continuing education and training for directors and site supervisors, not for other staff. UPK data on professional development and training are, again, available only at the district level. Compensation data are available in the PIR for some Head Start positions, and data related to turnover and retention are available in the PIR, ACS Head Start, and BCCL systems. No work history data are yet available in the state, though these are expected to be available through an anticipated statewide Registry for the early childhood workforce at City University of New York (CUNY).

Table 4: Early Learning Workforce Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRaware	DOH BCCL	ACS* Child Care	ACS Head Start
1 = not collected										
2 = collected on paper only										
3 = collected electronically, difficult to retrieve										
4 = collected electronically, readily available										
n/a = not applicable										
Provider Demographics										
Age of provider										
Birth date	4	1	1	1	1	2	1	1	1	1
Age at time of data collection	4	1	1	1	1	1	1	1	1	1
Language(s) spoken	4 ¹	1	1 ²	1	1	2	4	1	4 ³	1
Race/Ethnicity	1	1	4	1	1	1	1	1	1	1
Marital status	1	1	1	1	1	1	1	1	1	1
Qualifications										
Staff qualifications	1/3 ⁴	1	1	1	2	2	1	4	1	1
Staff with ECE or related degree by position	1	1	4 ⁵	1	2	1	1	1	1	1
Degree or professional licensure held by:										
– Head Teacher	1	1	4	1	2	1	1	1	1	1
– Health Services Manager	1	1	4 ⁶	1	1	1	1	1	1	1
– Child Development and Education Manager	1	1	4 ⁶	1	1	1	1	1	1	1
– Dental	1	1	1 ⁷	1	1	n/a	1	1	1	1
– Family and Community Partnerships Manager	1	1	4	1	1	1	1	1	1	1
– Dietician	1	1	4	1	1	3	1	1	1	1
Administrator/Manager years of experience	1	1	1	1	1	2	1	1	1	1
Staff/Assistant ECE degree attainment and credentialing	1	1	1	1	1	1	1	1	1	1
Staff/Assistant years of experience	1	1	1	1	1	1	1	1	1	1
Number of staff with an AA degree who are enrolled in a BA/S program	1	1	4	1	1	1	1	1	1	1
Number of staff with a CDA who are enrolled in a degree program	1	1	4	1	1	1	1	1	1	1
Number of staff without a CDA who are enrolled in a degree program	1	1	4	1	1	1	1	1	1	1
Number of staff without a CDA who are enrolled in CDA training	1	1	4	1	1	1	1	1	1	1
Number of staff who are former or current Head Start parents	1	1	4	1	1	1	1	1	1	1
Number of staff with an AA degree who are enrolled in a BA/S program	1	1	4	1	1	1	1	1	1	1
Pre-service education (degrees, certifications, trainings received)	1/3 ⁴	1	1	4 ⁸	4	2	1	4 ⁹	1	4
Experience (positions, years in positions)	1/3 ⁴	1	1	1	1	2	1	3/4 ¹⁰	1	4
Education, training and experience of staff/providers including ECE or related degree by position	1/3 ⁴	1	1	4 ¹¹	1	2	1	2/4	1	1
Highest educational level of individual by position	1	1	1	1	1	1	1	1	1	1
Teacher certification	1	1	1	4	4	3	1	1	1	1
Professional Development										
Location of training/education	1/3 ⁷	1	1	1 ¹²	4	2	1	1	1	1
Continuing education/training (degrees, certifications, training received)	1/3 ⁷	1	1	1	1	2	1	4	1	4
Education provider type (2-year, 4-year, graduate college, trade school, HS, BOCES)	1	1	1	1 ¹²	1	2	1	4	1	1

Table 4: Early Learning Workforce Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRaware	DOH BCCL	ACS* Child Care	ACS Head Start
1 = not collected										
2 = collected on paper only										
3 = collected electronically, difficult to retrieve										
4 = collected electronically, readily available										
n/a = not applicable										
Professional Development <i>(continued)</i>										
Training provider type (independent consultant, CCRR, other training institution)	1	1	1	1 ¹²	4	2	1	1 ¹³	1	1
Evaluation of training provided	1	1	1	1 ¹²	2	1	1	1	1	1
Qualifications of trainer (certification, education)	1	1	1	1 ¹²	2	1	1	1	1	1
Administrator/Manager ECE education and credentialing	1	1	1	1	1	1	1	1	1	1
Compensation										
Average teacher salary by qualifications	1	1	4	1	1	1	1	1	1	1
Average salary of assistant teachers	1	1	4	1	3	1	1	1	1	1
Average salary of home-based visitors	1	1	4	1	1	1	1	1	1	1
Health insurance (co-pays, premiums)	1	1	1	1 ¹²	3	1	1	1	1	2
Pension	1	1	1	1 ¹²	3	1	1	1	1	1
Other benefits	1	1	1	1 ¹²	3	1	1	1	1	1
Utilization of scholarship aid	1	1	1	1 ¹²	1	1	1	1	1	1
Teacher turnover	1	1	4	1	4	1	1	1	1	1
Information regarding turnover (reason, geographic location, types of position)	1	1	1	1 ¹²	1	1	1	3	1	3
Retention rate	1	1	1	1	1	1	1	1	1	1
Longevity in current program	1	1	1	1	1	1	1	1	1	3
Reason for leaving current position	1	1	1	1 ¹²	1	1	1	1	1	3
Number of teacher vacancies that remained unfilled for 3+ months	1	1	4	1	1	1	1	1	1	1
Work History (data projected to be collected by Registry)										
Employer Name	1	1	1	1	1	2	1	1	1	1
Employment Type	1	1	1	1	1	2	1	1	1	1
Start Date	1	1	1	1	1	2	1	1	1	1
Title	1	1	1	1	1	2	1	1	1	1
Hourly wage	1	1	1	1	1	1	1	1	1	1
Hours worked per week	1	1	1	1	1	2	1	1	1	1
Work with Infants and Toddlers	1	1	1	1	1	2	1	1	1	1
Work with Preschool Children	1	1	1	1	1	2	1	1	1	1
Work with School-Age Children	1	1	1	1	1	1	1	1	1	1
<p>* While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.</p> <p>1. Primary language only, not required.</p> <p>2. The PIR does track the number of direct child development staff who are proficient in a language other than English, but it doesn't track which languages</p> <p>3. Language can be tracked, but not required.</p> <p>4. 3 (director, site supervisor, on-site supervisor); 1 (rest of staff)</p> <p>5. Includes Head Start teachers, asst. teachers, home visitors, family child care providers, child development supervisors, home-based supervisors, and family & community partnerships staff.</p> <p>6. Does not track whether or not degree is ECE-related.</p> <p>7. Only if same as Health Services Manager. Not a recognized category for Head Start staff.</p> <p>8. Certifications collected; not trainings.</p> <p>9. For certified teachers - information available electronically / study plan info also available.</p> <p>10. Experience tied to some positions as job requirements.</p> <p>11. Collect certification data-not training or experience-in database. (That might be available through individual program information folders).</p> <p>12. District maintains these files. Contacting individual districts would provide SED this.</p> <p>13. Going forward training data will be available.</p>										

System improvements in process and planned –

Two statewide systems under development promise significantly to expand available data on professional development acquired by and open to individuals in New York’s early learning workforce. Records planned for CUNY’s statewide registry are to include demographic information, employment history, formal education/professional certifications, and training experiences for all those who voluntarily “register” with. The registry will also house records for trainers, including their credentials and experience. The second system, NACCRRRA’s Training Tracking and Technical Assistance Management database being implemented by ECLC’s member network will track the professional development of providers in CCR&R databases and the technical assistance given to providers by CCR&Rs. The system will also hold data on qualifications of trainers and details of trainings offered.

In New York City, the DOH is planning to make more training data available through its BCCL system. DOH is also revising its internal data system to provide capacity to track staff movement within the city’s child care system and working to connect with the NYC Department of Investigation database to track

staff criminal clearances. DOH already connects to the State Central Registry database in Albany to track indicated cases of child abuse.

Early Learning Program Quality Data

As survey responses on the fourth dimension of New York’s early learning data – Program Quality – show, the state has scant data available to address important questions about quality, including: “What are the characteristics of effective programs?” and the longitudinal question, “Is the quality of the programs improving?” The state is just now preparing systems with the capacity to address questions on program quality.

While the siloed data on staff qualifications available in varying formats described in Table 4 can yield insights into the structural quality of programs, few electronic data are available based on overall program assessments.⁹ Difficult-to-retrieve electronic program assessment data are available on state PSE and EI programs. Another exception is the New York City ACS data based on scores programs received on the agency’s Program Assessment Instrument. The ACS Head Start system collects program assessment data

Table 5: Early Learning Program Quality Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRRAware	DOH BCCL	ACS* Child Care	ACS Head Start
Program assessment data	1	1	1 ¹	1	3 ²	2/3 ³	1	1	3/4 ⁴	2
Accreditation	1	1	1	1	1	1	1 ⁵	1	1	1
Serious/non-serious infractions	4	1	1	1	3	2	1 ⁵	4	1	1
Inspection and outcome; violations determined	4	1	1	1	4 ⁶	2	1	4	1	1
Complaints	4	1	1	1	4	2	1 ⁵	4	1	1
Complaint/incidents	2/4 ⁷	1	1	1	4	2	1	4	1	1
Investigations	4	1	1	1	4	2	1	4	1	1
License suspensions/fines	2	1	1	1	4	1	1	4	1	1

*While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.

1. Head Start makes available a list of performance indicators some of which address structural dimensions of quality.

2. Compliance data and narrative information gathered by regional Special Education Quality Assessors available in Comprehensive Special Education Information System (CSEIS).

3. Data system holds only a limited amount of the available data.

4. Outside its child care data system (ACCIS), since 2006 ACS has used a system with the scores that child care programs received on the Program Assessment Instrument-this is a total score including performance on quality and compliance with regulations. ACS is revising the way it measures quality with the NYC Common Quality Performance System, so this system will need to be revised.

5. Some CCR&Rs collect.

6. Pre-School Special education uses the terms “review” and “non-compliance,” “rather than,” “inspection” and “violation,” respectively.

7. 4 Licensed & registered providers; 2 legally exempt, informal providers.

on paper. Some CCR&Rs in the ECLC network maintain data on accreditations held by child care centers and homes in their communities. Electronic data on programs' problems with compliance with licensing standards – the foundation for program quality – are available from both the state OCFS CCFS and SED PSE systems and from New York City's DOH BCCL system.

System improvements in process and planned – QUALITYstarsNY, the new child care Quality Rating and Improvement System presently being piloted in 13 communities across the state, is creating a system to house data on the star ratings of participating programs, based on ratings in several quality components, including learning environment (which can include Environmental Rating Scale scores), family engagement, qualifications and experience, and leadership and management. When fully operational, the QUALITYstarsNY system will make comparable data available across the state's spectrum of participating child care, Head Start, and Universal Prekindergarten services – both center/classroom- and home-based – and, ultimately, across time. In New York City, ACS is working with the Department of Education to develop a Common Quality Performance System for UPK, child care, and Head Start programs in the city. This new system will involve revision of the current ACS Program Assessment Instrument.

Early Learning Child Outcomes Data

With a few exceptions, data presently collected on Child Outcomes – the fifth dimension surveyed – are maintained at local levels, are difficult to retrieve, and/or are available only in aggregate. Thus, for now, New York is far from being able comprehensively to answer the first question posed by the Early Childhood Data Collaborative: “Are children, birth through age 5, on track to succeed when they enter school and beyond?”

As Table 6 shows, electronic child assessment data are available only from the SED Preschool Special Education and SHD Early Intervention programs. SED's UPK child assessment data are available in aggregate on paper in the State Education Department's annual End of Year Report. ACS has difficult-to-access electronic child outcome data for its Head Start children available in aggregate. The PIR includes aggregate, state-level Head Start Performance Indicators on end-of-enrollment-year service outcomes such as percentage of children with medical homes and up-to-date immunizations.

System improvements in process and planned-Unique P-12 child identifiers that the State Education Department plans to assign to children, described above, will create capacity to link children's early childhood education experiences with their elementary and secondary school experiences and outcomes.

Table 6: Early Learning Child Outcomes Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACCRRAware	DOH BCCL	ACS* Child Care	ACS Head Start
Child assessment data	1	1	1 ¹	2 ²	4 ³	4 ⁴	1	1	1	5 ⁵

*While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.

1. Headstart makes available a list of performance indicators some of which can assess short-term outcomes for children - eg. end-of-enrollment-year percentage of children with medical home.
2. End of Year Report.
3. Early Intervention assessments conducted on a sample of children.
4. HS- Under a contractual arrangement with external vendors, ACS has access to web-based data reports that provide aggregate child outcomes data for HS children. Data are separate for each assessment instrument, which in turn are tied to the curriculum being used. The data are difficult to retrieve.
5. Individual child collected through Student district and state reports, Pupils with Disabilities Report (PD-4) and State Performance Plan, Indicator 7-Student Outcomes.

Early Learning Cost and Financing Data

Survey results on the sixth and final dimension surveyed – Costs and Financing – document the present limited ability of state data on programs to document the full costs of providing early care and education services.

Financial data are available for only a few publicly supported early learning programs. As Table 7 shows, the State Education Department has accessible electronic data on UPK and PSE budgets. Final district budgets for each year are available once the actual enrollment numbers submitted on Basic Education Data System (BEDS) day in October have been verified. Hard-to-access budget data are also available for the State Health Department’s EI programs. In New York City, budget data are available for ACS Head Start programs. While no budget data are available for ACS child care programs, there are data on fees paid by families using these programs. A related source not included in Table 7 are data that OCFS gathers on the prices charged by samples of center- and home-based providers from communities across the state for its biannual child care Market Rate Surveys.

System improvements in process and planned – The Child Care Time and Attendance Payment System, described earlier, will standardize data on payments for subsidized providers in all the state’s Local Social Service Districts, except New York City. Also, the Financing Work Group of the state’s Early

Childhood Advisory Council is exploring a computer program to model costs of early childhood services. With data on a program’s funding, quality dimensions, and ages of children enrolled, for example, costs per child at various levels of quality could be modeled.¹⁰

Opportunities

Taken together, the tables presented above amply document the present inability to obtain a comprehensive understanding of early learning in New York State and City. Most of the cells are presently coded 1, “not collected,” and those cells coded “4,” “collected electronically, ready available,” largely represent data that are not collected uniformly.

Encouragingly, however, the survey also revealed a host of substantial and promising efforts to strengthen and better coordinate systems.

- Work to synchronize the provider databases of the CCR&R members of the ECLC and work to integrate the Head Start and child care data systems at New York City’s ACS will both result in more comprehensive and useful data on the state’s supply of early learning programs and providers.
- The Child Care Time and Attendance Payment System being built by OCFS will standardize available information outside New York City on providers accepting subsidies, children using subsidies, and the cost of subsidies.

Table 7: Early Learning Cost and Financing Data

Key	NYS							NYC		
	OCFS CCFS	OCFS LDSS	Head Start PIR	SED UPK	SED PSE	SHD EI	ECLC NACRRAware	DOH BCCL	ACS* Child Care	ACS Head Start
Budget and reimbursement	1	1	1	4 ¹	4	3	1	1	1	4
Rules for use (number of absences paid)	1	1	1	1	1	1	1	1	3/4	1
Dollar amount (value) of each UPK program	1	1	1	4	1	n/a	1	1	1	1
Family fees and subsidies/Co-pays	1	1	1	1	1	n/a	1	1	3/4	4

*While current ACS child care data are readily available, historic data are often difficult to obtain. Therefore, they are dual coded: 4 for current data, 3 for historical data.
¹. Approved budgets possible after Basic Educational Data System (BEDS) day in October.

- Furthered by the Race to the Top award to SED, development of a longitudinal P-20 educational data system that assigns unique identifiers to children in UPK and Preschool Special Education will greatly enhance ability to understand current use and longer term impacts of these programs across the state.
- Creation of databases that document available professional development and the professional development and employment histories of those working in all the state's early learning settings will help New York better understand and support its early learning workforce – CUNY's Registry and NACCRRRA's Training Tracking and Technical Assistance Management system being implemented by ECLC.
- Matching between the Early Intervention and Newborn Screening databases can help ensure appropriate services for children identified at birth with conditions that put their development at risk.
- New data on program and provider quality to be generated by QUALITYstarsNY will benefit everyone with a stake in early learning in the state – parents, providers, policymakers.
- New York State can draw lessons from New York City's recent experience creating a linked data system – HHS-Connect – to integrate not only information, but also activities, across nine of its health and human services agencies.

All future work to improve state and city early care and education data systems should rank coordination with other systems high among its goals. For example, coordination between CUNY and ECLC as they develop their respective Registry and Training Tracking and Technical Assistance Management systems promises to strengthen and add efficiency to both systems. The Early Intervention program (for children birth through age 2) and the Preschool Special Education program (for children 3 through 5) share a sense of the importance of greater data sharing across their age spans and host state departments. Similarly, coordination efforts already underway will enhance both CUNY's development of QUALITYstarsNY statewide and ACS's work on the Common Quality Performance System in New York City.

Recommendations

Participants in the March 2010 Data Forum outlined the following steps necessary for New York to take to join the vanguard of states building effective integrated early childhood data systems.¹¹

- The New York State Early Childhood Advisory Council (ECAC), through its Data Development Work Group, should articulate the important questions that end users will look to a linked system to answer, prioritizing those most important and most feasible to answer first. The key policy questions posed by the Early Childhood Data Collaborative – on children, programs, and the workforce – offer a starting point for this task.
- In addition to ECAC members, the Data Development Work Group should include representation from offices responsible for management of current early care and education data systems. The Work Group should also engage appropriate technical expertise early on.
- The ECAC's Data Development Work Group should identify all groups – service providers, families, policymakers, researchers, advocates, any others – who will use linked data to improve outcomes for children and families, to ensure that their questions and their ability to make use of the data are considered as the system is designed.
- The ECAC's Data Development Work Group should identify and define the data elements essential to answer the highest priority questions – usually through combinations of two or more elements.
- Through this report, New York's ECAC has a head start on the next task – identifying where essential elements are already tracked, as well as which elements are not yet tracked and need to be added.
- The ECAC should recommend an existing or new centralized management structure to be responsible for overall coordination of the early learning and other early childhood data systems in the state.
- From the onset of planning through the roll-out and operation of the coordinated system, the ECAC and managing body must ensure data confidentiality and legal safeguards.

- The ECAC and the managing body, supported by technical experts, must select and implement processes by which data are to be safely integrated. Among the options are building a data warehouse and/or creating interoperability, the capacity for separate systems to communicate with one another. Again, New York is poised to capitalize on current coordination work.
 - Building on the State Department of Education’s plans to assign unique identifiers to all children enrolled in UPK and Preschool Special Education, these identifiers should be assigned to children when they first enroll in any publicly supported early learning program and eventually any early childhood service.
 - Similarly, unique identifiers should be assigned to all members of the early learning workforce. As the state’s Personnel and Trainer Registry is developed, steps should be taken to make its identification numbers compatible with SED teacher certification numbers.
 - Unique identifiers should also be assigned to all early learning settings
 - Identifiers for children, personnel, and settings will make possible the linkages needed for a truly coordinated and comprehensive early childhood data system.

Endnotes

1. Forty-four states now assign unique identifiers to children in public pre-kindergarten programs, 33 can link their K-12 and postsecondary data, and 10 link education data with workforce data. (*Linking Data Across Agencies: States That Are Making It Work*, a joint publication of the Data Quality Campaign and the Forum for Youth Investment, March 2010 www.dataqualitycampaign.org/resources/699).
2. Early Childhood Data Collaborative, *Building and Using Coordinated State Early Care and Education Data Systems: A Framework for State Policymakers*, Washington, DC: Early Childhood Data Collaborative, 2010.
3. Partner organizations in the Early Childhood Data Collaborative are the Council of Chief State School Officers, Center for the Study of Child Care Employment at UC Berkeley, Data Quality Campaign, National Center for Children in Poverty at Columbia University’s Mailman School of Public Health, National Conference of State Legislatures, National Governors Association Center for Best Practices, and Pre-K Now at the Pew Center on the States.
4. Early Childhood Data Collaborative, *Building and Using Coordinated State Early Care and Education Data Systems: A Framework for State Policymakers*.
5. The Early Care & Learning Council was formerly known as the New York State Child Care Coordinating Council.
6. Early learning data systems not yet surveyed include those for NYS Registered Nursery Schools, NYS Title I Programs, Home Visiting Programs, and the Child and Adult Care Food Program.
7. Outside New York City, most data on regulated programs/providers participating in the child care subsidy program are currently maintained at the county—local social service district—level. Limited information on regulated providers (name and address) is available through the Benefit Issuance Control Subsystem (BICS) when a Local Department of Social Service issues a payment directly to a provider.
8. Head Start reports come from delegate agencies, which typically have several sites. Head Start program options include center-based, home-based, combination, family child care, and locally designed.
9. The PIR includes aggregate, state-level Head Start Performance Indicators on structural quality such as number of classroom children per classroom teaching staff and average class size.
10. *Data Collection Overview For New York ECE Cost Model*, Augenblick, Palaich, and Associate, 2010.
11. These recommendations have been adapted from *Linking Data Across Multiple State Agencies*, Georgia State Advisory Council on Early Education and Care, 2010.