# USING AN INTERACTIVE WEB-BASED TOOL TO CONNECT FAMILIES, PRACTITIONERS, AND POLICY MAKERS

# Dawn Thomas<sup>1</sup>, Keith Hollenkamp<sup>2</sup>, & Catherine Corr<sup>1</sup>

<sup>1</sup>PhD, Department of Special Education, University of Illinois, Urbana-Champaign (United States of America)

<sup>2</sup>MS, School of Information Sciences, University of Illinois, Urbana-Champaign (United State of America)

#### **Abstract**

The Early Childhood Asset Map is an interactive, web-based tool that provides one state with a connective data pipeline between families, early childhood programs, advocates, researchers, and policy makers. The Asset Map provides transparency in resource allocation across the state in early childhood program funding.

**Keywords:** Early childhood, data, practitioners, policymakers.

# 1. Early Childhood Asset Map

The Early Childhood Asset Map is an interactive, web-based tool that provides one state with a connective data pipeline between families, early childhood programs, advocates, researchers, and policy makers. The Asset Map provides transparency in resource allocation across the state in early childhood program funding. The interactive tool enables the general public, administrators, policy makers, and researchers to obtain tabular data and interactive maps describing the current range of early care and education services by geographic regions. The geospatial data set includes all licensed childcare programs, licensed exempt childcare programs and family childcare programs, as well as Pre-K sites, Head Start, and infant toddler programs. The current locations of early education programs can be superimposed on thematic maps that show the population of preschool children, median family income, and employment levels, thus adding more comprehensive perspectives of particular regions. The Asset Map is a leading provider and expert on early childhood program and demographic data and works with state agencies to determine service gaps so legislature can be created to close any gaps based on poverty or race/ethnicity. The Asset Map work scope also includes hosting special features on the web site, providing mandated data for statewide funding, analyzing data for stakeholders and programs, developing rankings for the Capital Development Board, as well as preparing and geocoding early childhood and demographic data for display purposes.

The Early Childhood Asset Map is a part of data conversations at the state and national level. The Asset Map is a part of an enormous initiative for the state, involving agencies, organizations, universities, and computer scientists, for early childhood through adulthood. Our presentation will cover: the overarching purpose is to develop (1) standardized data elements and types across data sources, (2) integrated data sets to answer questions posed by researchers and educators, and to (3) provide unduplicated counts of children across funding streams.

# 2. Standardized data elements and types across data sources

IECAM is the public facing hub for early childhood education funded enrollment data from multiple agencies in the state of Illinois. This includes data from the Illinois State Board of Education (ISBE), the Illinois Department of Human Services (IDHS), the Illinois Network of Child Care Resource and Referral Agencies (INCCRRA), as well as data from the American Community Survey (ACS) from the United States Census. These data arrive annually and reflect either the previous Fiscal Year or School Year.

When these data arrive at IECAM they often require a large amount of cleaning and formatting before being considered ready for public view. Much of the data are submitted directly to agencies by

individual child education providers, so the chance of user input errors is high. There is also currently very little cleaning or standardization done to the data before being sent to IECAM. Cleaning involves name standardization, address checking, de-duplication, and more.

Once cleaned, data is geocoded and placed into where they fall into 14 geographies: County, Township, Municipality, Chicago Community Area, Elementary and Unit School district, Zip Code, Legislative District, and more. This allows users to find exactly how many early childhood education slots and providers they have in their desired geography.

# 3. Integrated data sets to answer questions posed by researchers and educators

One of the most common requests IECAM handles is to assist in slot gap analyses across Illinois. These aim to determine the difference between the number of children who quality for services based off of their federal poverty level (FPL) and the number of enrollment slots an area has. Researchers, school administrators, and legislators use these analyses to determine where additional funding should be going in the State. When we can get reliable and accurate race and ethnicity numbers, we try to include those.

IECAM data is also formatted and presented for those filling out Requests for Proposals (RFP) for additional early childcare education funding for their area. This often requires the combination of different programs that serve specific age groups, for example programs that serve 0-2 and those that serve 3-5. We combine these data with demographic information for a region to help paint a complete early childhood education landscape.

IECAM data is highly sought after for statewide reports focused on how well we are reaching children with state and federal services. These reports often take a look at the risks facing 0-5 year-olds and the state or federal programs designed to help combat those risks. Such reports by IECAM have been used to impact legislature and funding throughout Illinois.

### 3.1. Provide unduplicated counts of children across funding streams

Unduplicated counts of children receiving early childcare services are the holy grail of our field. The goal is to show the unique numbers of children receiving early childcare services, with emphasis on those children who receive multiple, simultaneous services. As lead developers of the Early Childhood Participation Dataset (ECPDS) as part of the brand new Illinois Longitudinal Data System (ILDS), IECAM is leading the way in creating this dataset to help provide a more accurate look at the early childhood landscape in Illinois. A big goal of the ECPDS is to ensure equitable services based on race and ethnicity.

Unduplicated counts across funding streams also help when determining unique providers in Illinois and the funding streams they receive. IDHS has asked IECAM to use our data to create a list of all unique early childhood providers in the state and what services they provide, to determine where funding is layered.

#### 4. Collaborations

The Asset Map also partners with other major state and private universities to develop "risk and reach" reports to be used for program and agency outreach and decision-making. Similarly, the project's staff work with a large state agency to decode a "layering landscape" for more accurate counts and allocation across the state and serves as data stewards for this state agency.