Early Development Instrument (EDI)

Monitoring kindergarten readiness to improve children's outcomes before they arrive at kindergarten and support them as they progress thru school

Lisa Stanley, Project Director

Leila Espinosa, Knowledge to Action Director

UCLA

The Center for Healthier Children, Families & Communities

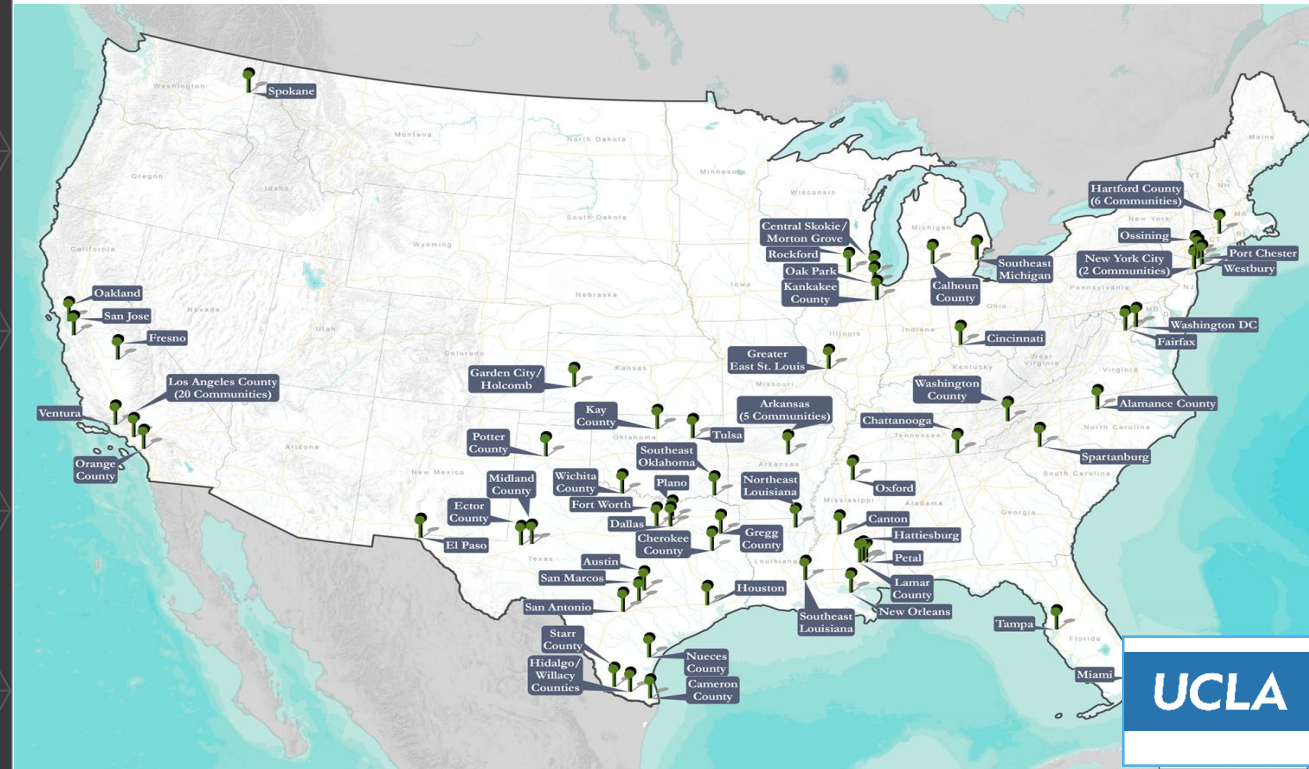Building a future where all children thrive.

Data Informed Futures

Knowledge and insights to transform children's lives

- Fifteen-year initiative
- Over 90 communities in 18 states

Participating communities join the national shared learning network meetings to innovate and scale efforts

Components of Measurement System

CHEQ
0-5 years
Early Life Experiences
PARENT'S PERSPECTIVE

EDI
4-6 years
Developmental Health
TEACHER-REPORTED

MDI
9-13 years
Social-Emotional Well-being
CHILDREN'S VOICE

National Neighborhood Equity Index
To understand how community conditions are affecting children's well-being

Note: UCLA partners with publishers at McMaster University and University of British Columbia on EDI, CHEQ, and MDI. The NNEI was developed by Dr. Charles Bruner and the Child and Family Policy Center.

3 Surveys on wellbeing & 1 metric of community context

Early Development Instrument (EDI)

- Kindergarten teachers report on developmental outcomes, 4-6-year-olds.

Childhood Experiences Questionnaire (CHEQ)

- Parent-reported at kindergarten entry about children's early experiences 0-5 years.

Middle Years Development Instrument (MDI)

- Student self-report on well-being, 4th to 8th grades.

National Neighborhood Equity Index (NNEI)

- A composite of 11 census indicators reflecting levels of socio-economic adversity at the neighborhood level.
- Overlaid onto survey data to understand how neighbohood conditions influence children's outcomes.

Objective

To understand the nuts and bolts of the Early Development Instrument (EDI)

What it is

How data are collected

How the information is used

The EDI

Early Development Instrument

- Holistic, population measure of children's developmental outcomes and school readiness.

- Predicts ELA and Math scores 3rd -5th grade.

- Reflects how well 0-5 systems are supporting children.

- Allows stakeholders to:

  - Look Back: To improve children's outcomes before they arrive at kindergarten.

  - Look forward: To understand incoming kindergarten cohort and support them as they progress thru school.

Developed at the Offord Center for Child Studies at McMaster University

Nuts and Bolts of the EDI

What is the EDI?

Holistic population snapshot for NM of children's wellbeing and school readiness in 5 key domains.

Who completes the EDI?

Completed by kindergarten teachers, on all students. This is not a test that students take.

When is it completed?

Spring. Done once every 2-3 years.

How is it completed?

Teachers watch 30-minute video. Then complete one EDI/student, based on recall, using on-line platform. Takes 10-15 minutes per student.

What doesn't it do?

Not reported at child level because not designed to screen, diagnose. Not reported at teacher level to assure them EDI is not used to assess performance.
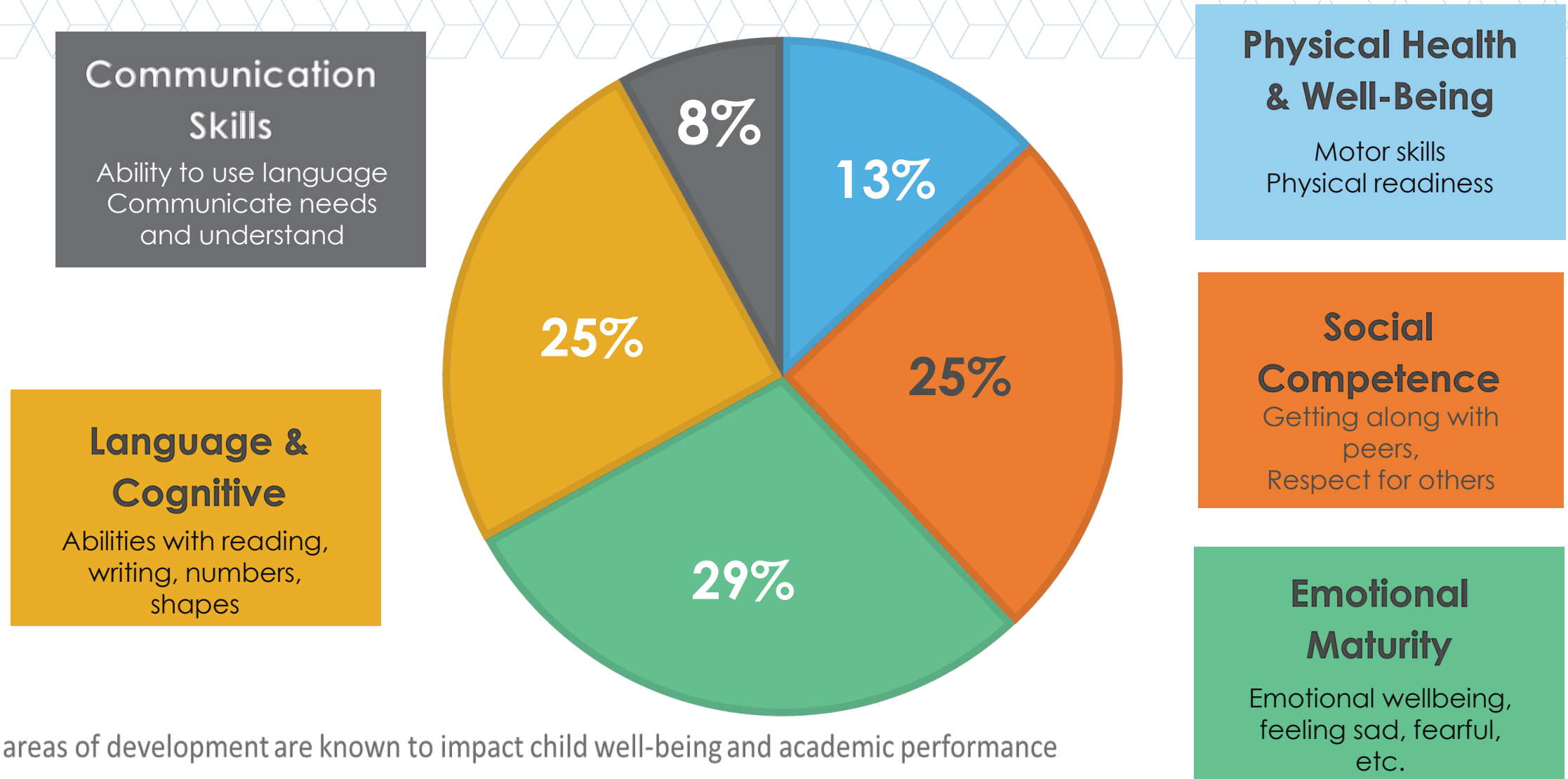
5 EDI Developmental Domains
Distribution of survey items by domain

Communication Skills
Ability to use language
Communicate needs and understand

Physical Health & Well-Being
Motor skills
Physical readiness

Social Competence
Getting along with peers,
Respect for others

Language & Cognitive
Abilities with reading, writing, numbers, shapes

Emotional Maturity
Emotional wellbeing, feeling sad, fearful, etc.

13%
25%
29%
25%
8%

These 5 areas of development are known to impact child well-being and academic performance

16 Developmental Subdomains

- Physical readiness for school day
- Physical independence
- Gross and fine motor skills

Physical Health and Well-being

- Overall competence with peers
- Respect and responsibility
- Approaches to learning
- Readiness to explore new things
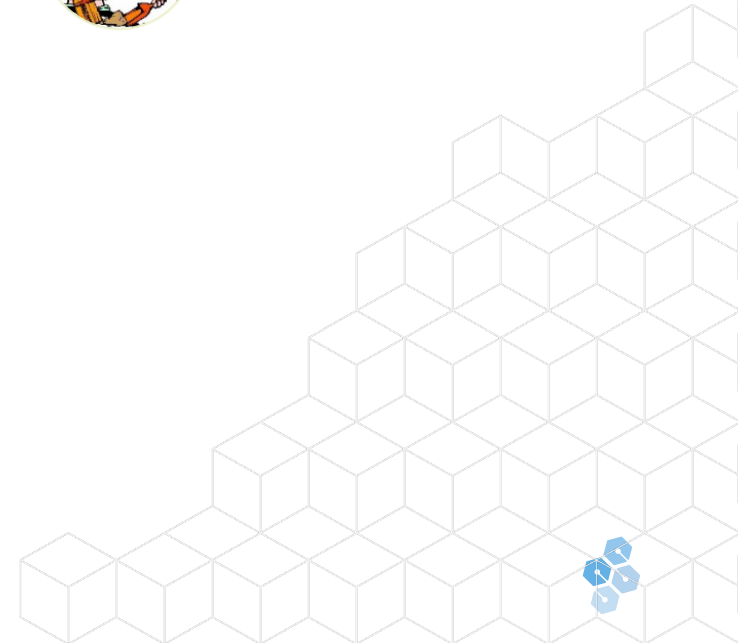
Social Competence

- Prosocial and helping behavior
- Anxious and fearful behavior
- Aggressive behavior
- Hyperactive and inattentive behavior

Emotional Maturity

- Basic literacy skills
- Interest in literacy/numeracy and memory
- Advanced literacy skills
- Basic numeracy skills

Language and Cognitive Development

Sample of EDI Items by Domain

EDI Items by Domain and Sub-domain

Physical Health and Well-being Domain
  A. Sub-domain: Physical readiness for school day
    1. Over- or underdressed for school-related activities
    2. Too tired/sick to do schoolwork
    3. Late
    4. Hungry
  B. Sub-domain: Physical independence
    5. Independent in bathroom habits most of the time
    6. Shows an established hand preference
    7. Well-coordinated
    8. Sucks a thumb/finger
  C. Sub-domain: Gross and fine motor skills
    9. Proficient at holding a pen, crayons, or a paintbrush
    10. Ability to manipulate objects
    11. Ability to climb stairs
    12. Level of energy throughout the school day
    13. Overall physical development

Social Competence Domain
  A. Sub-domain: Overall competence with peers
    1. Overall social/emotional development
    2. Ability to get along with peers
    3. Plays and works cooperatively with other children
    4. Able to play with other children
    5. Shows self-confidence
  B. Sub-domain: Respect and responsibility
    6. Follows rules and instructions
    7. Respects the property of others
    8. Demonstrates self-control
    9. Demonstrates respect for adults

Section C – Social and Emotional Development

How would you rate this child's	Very Good / Good	Average	Poor / Very Poor	Don't Know
1 overall social/emotional development	O	O	O	O
2 ability to get along with peers	O	O	O	O

Below is a list of statements that describe some of the feelings and behaviors of children. For each statement, please fill in the circle that best describes this child now or within the past six months.

Would you say this child	Often or Very True	Sometimes or Somewhat True	Never or Not True	Don't Know
3 plays and works cooperatively with other children at the level appropriate for their age	O	O	O	O
4 is able to play with various children	O	O	O	O
5 follows rules and instructions	O	O	O	O
6 respects the property of others	O	O	O	O
7 demonstrates self-control	O	O	O	O
8 shows self-confidence	O	O	O	O
9 demonstrates respect for adults	O	O	O	O
10 demonstrates respect for other children	O	O	O	O

Teacher Time

- **Estimate 6 hours of teacher time**
  - 30 minutes of training
  - 5.5 hours to complete the EDI. (e.g. 15 minutes per student x 20 students)
- **Determine mechanism to use teacher time**
  - During school time
    - Sub-release day
    - Professional training day
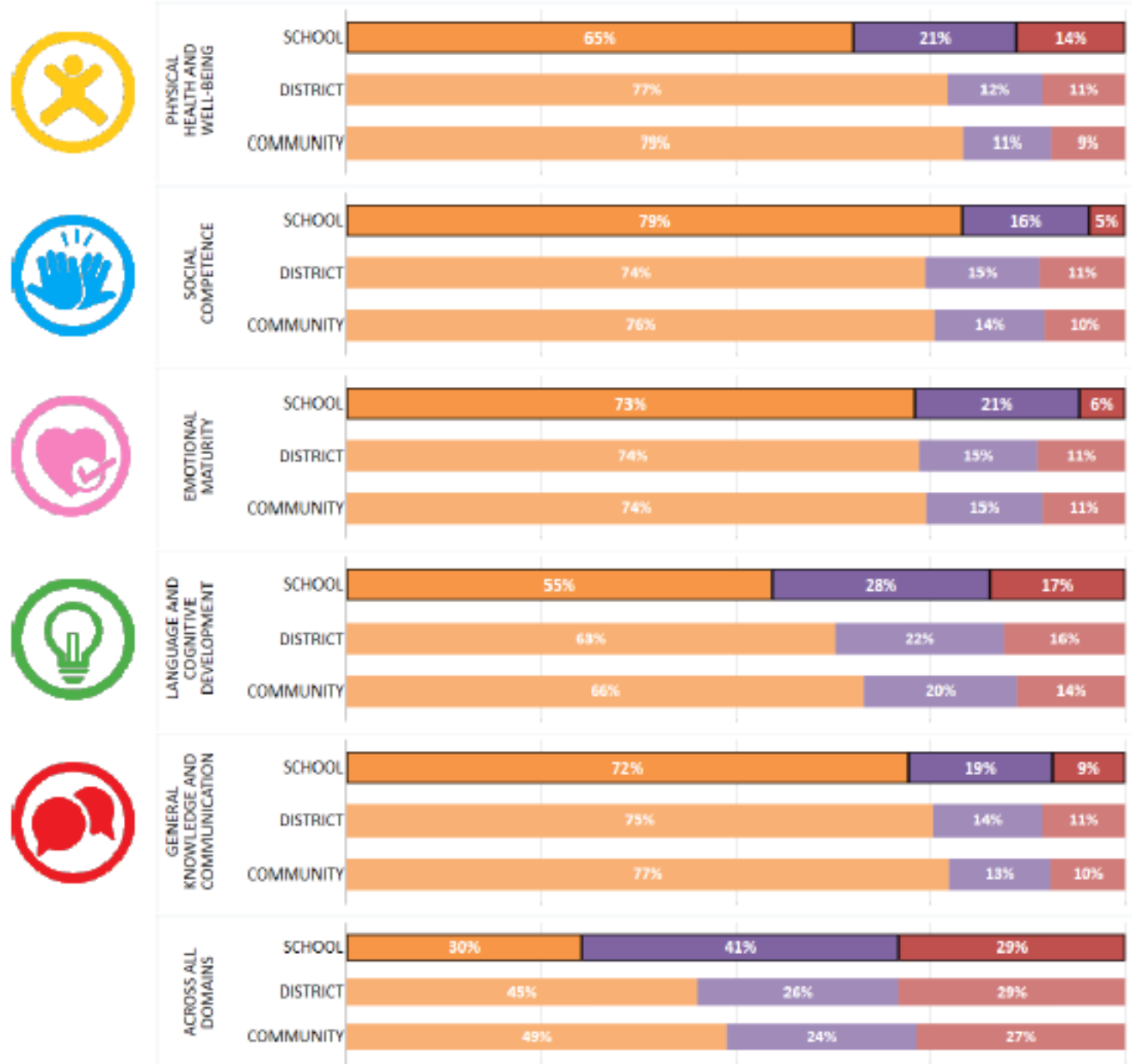 - Outside of school time

EDI Data Products

Level of Reporting	Type of Product	Audience
School	• Reports & Tables	Confidential to Education Sector
District/Charter	• Reports & Tables	
Neighborhood	• Story Maps: Interactive, web-based maps with text to describe results.	Public Access
County		
State		

EDI School Report

- **Percent of children**
  - On track (orange)
  - At risk (purple)
  - Vulnerable (red)

- **By each of 5 domains**

- **By school, district, state**

Chart 2. Children On Track, At Risk, and Vulnerable by Developmental Domain: Comparison of Individual School to All Participating Schools in the District to All Participating Schools in the Community

PHYSICAL HEALTH AND WELL-BEING

	On track	At risk	Vulnerable
SCHOOL	65%	21%	14%
DISTRICT	77%	12%	11%
COMMUNITY	79%	11%	9%

SOCIAL COMPETENCE

	On track	At risk	Vulnerable
SCHOOL	79%	16%	5%
DISTRICT	74%	15%	11%
COMMUNITY	76%	14%	10%

EMOTIONAL MATURITY

	On track	At risk	Vulnerable
SCHOOL	73%	21%	6%
DISTRICT	74%	15%	11%
COMMUNITY	74%	15%	11%

LANGUAGE AND COGNITIVE DEVELOPMENT

	On track	At risk	Vulnerable
SCHOOL	55%	28%	17%
DISTRICT	63%	22%	16%
COMMUNITY	66%	20%	14%

GENERAL KNOWLEDGE AND COMMUNICATION

	On track	At risk	Vulnerable
SCHOOL	72%	19%	9%
DISTRICT	75%	14%	11%
COMMUNITY	77%	13%	10%

ACROSS ALL DOMAINS

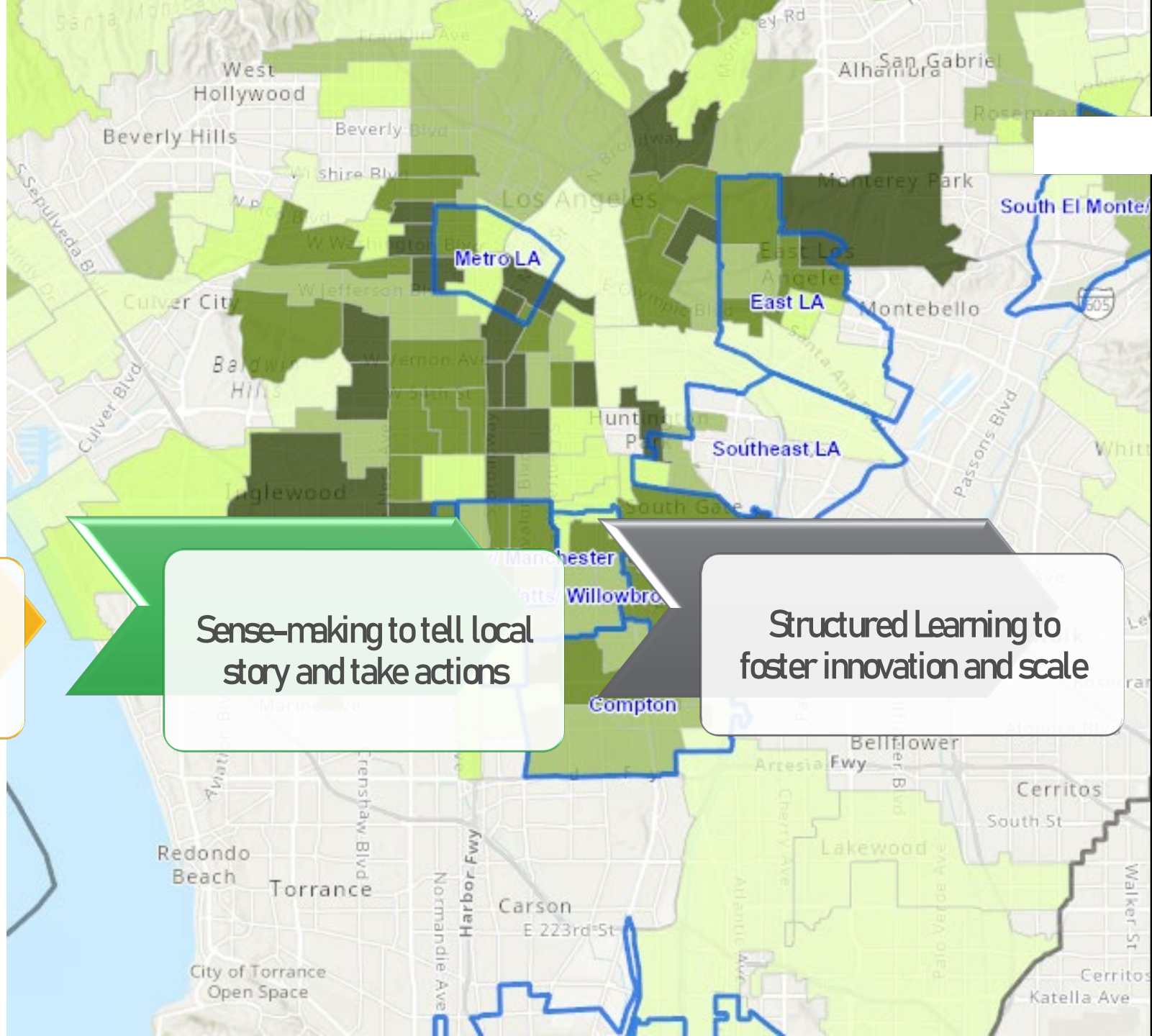|	On track	At risk	Vulnerable
SCHOOL	30%	41%	29%
DISTRICT	45%	26%	29%
COMMUNITY	49%	24%	27%

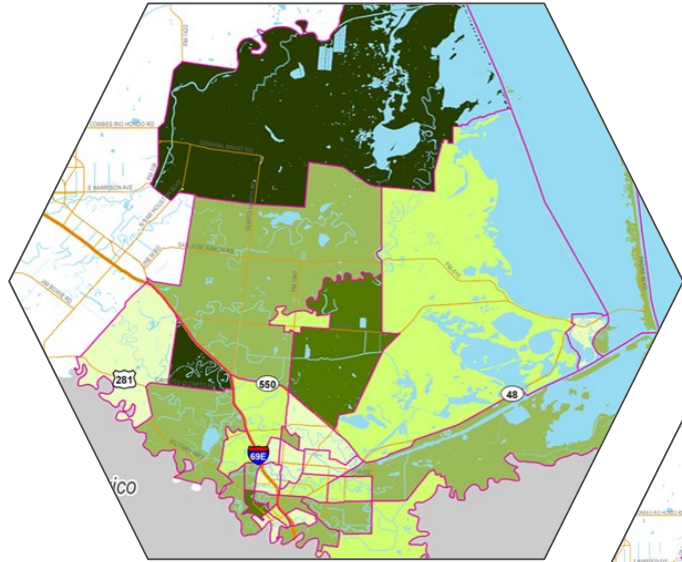# Measurement & Learning System Approach

Data for understanding strengths and needs

Sense-making to tell local story and take actions

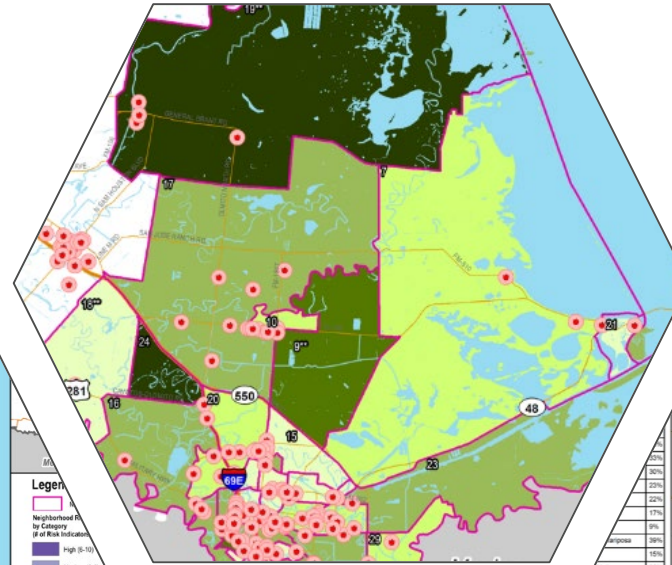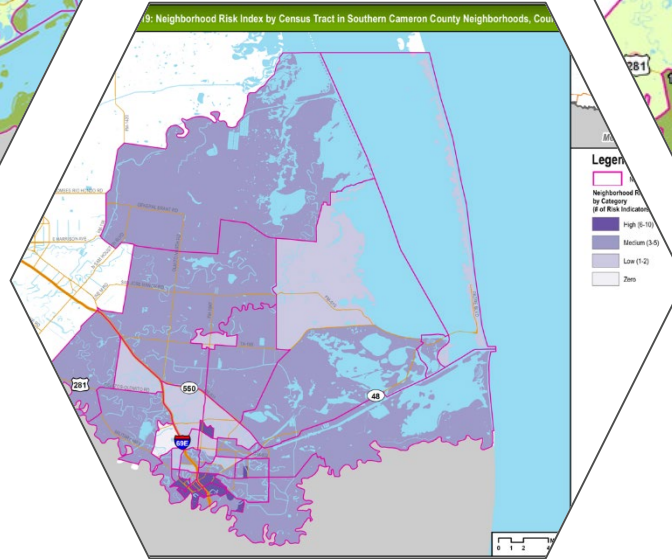Structured Learning to foster innovation and scale

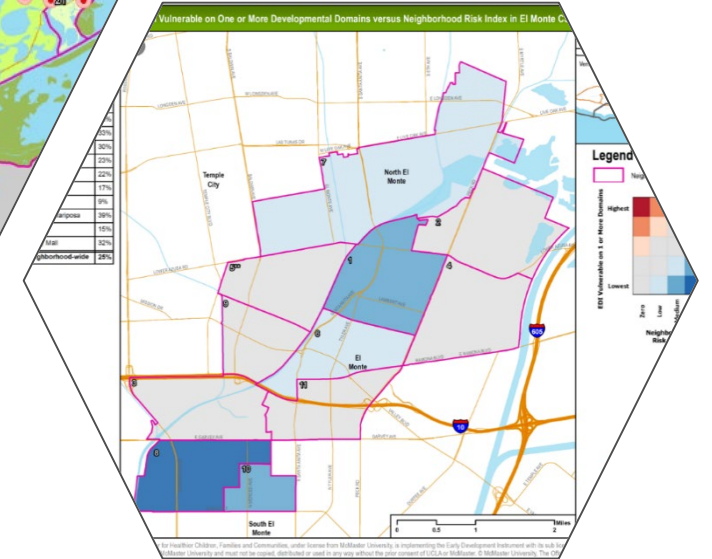# StoryMaps: Children's Well-being & Community Conditions
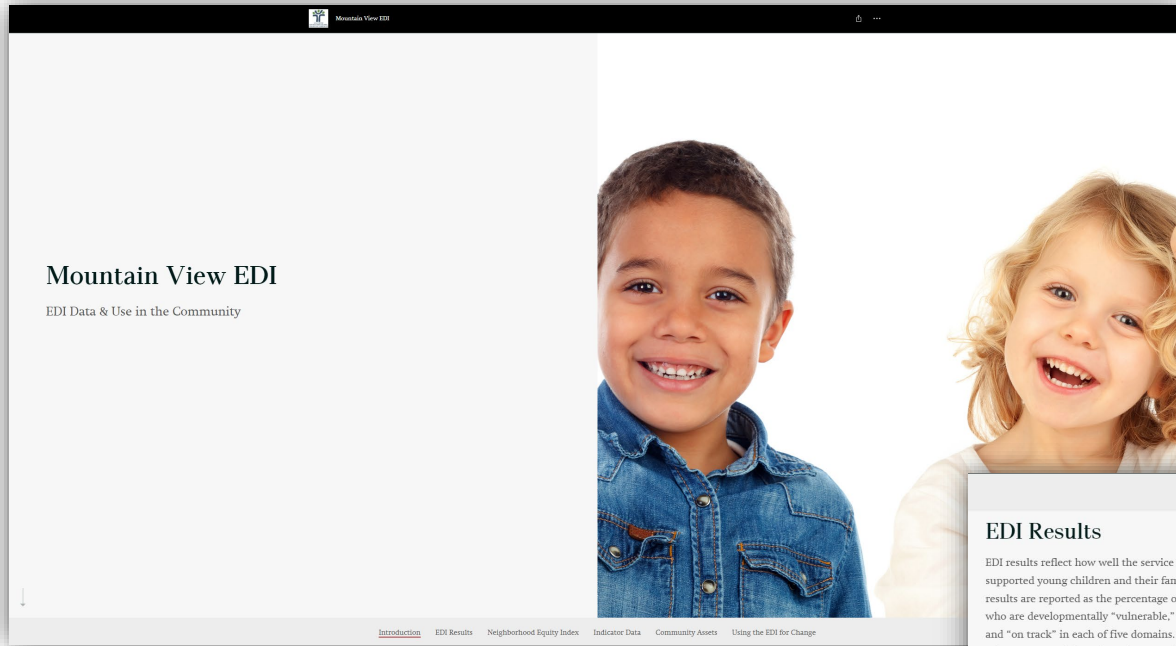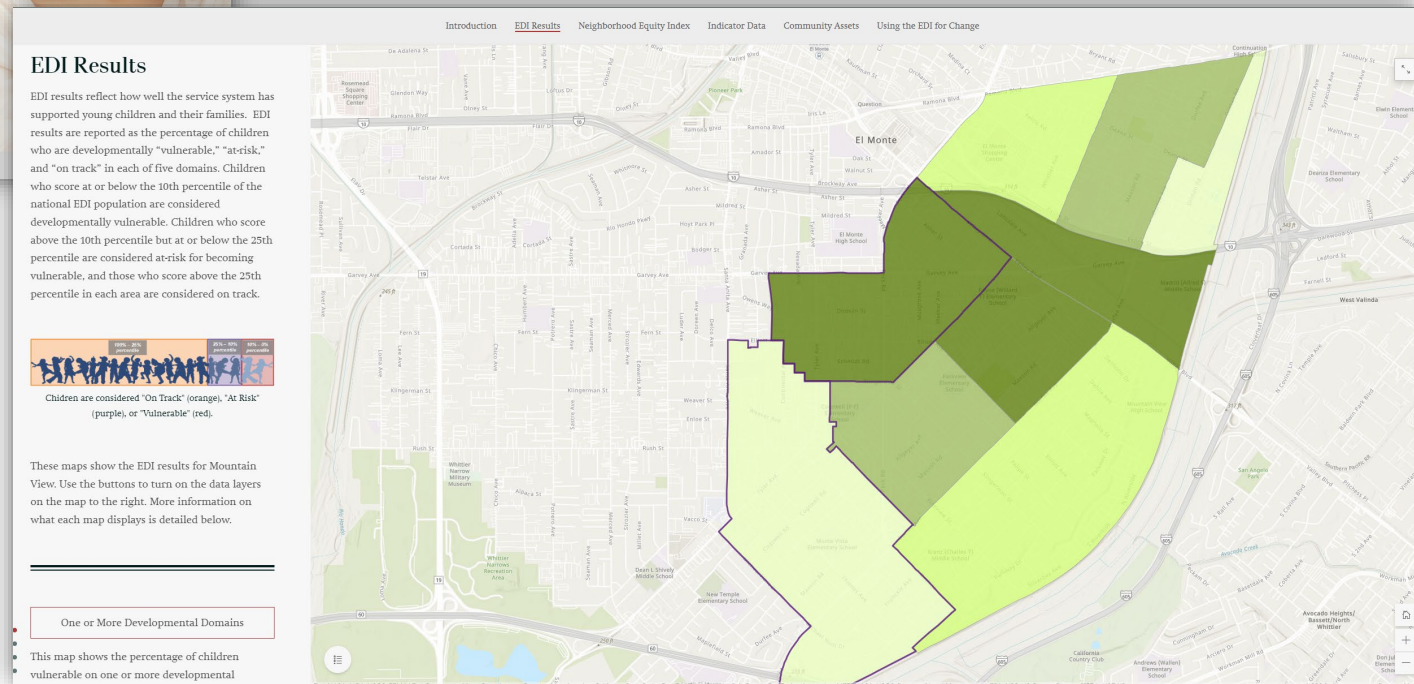

EDI Maps

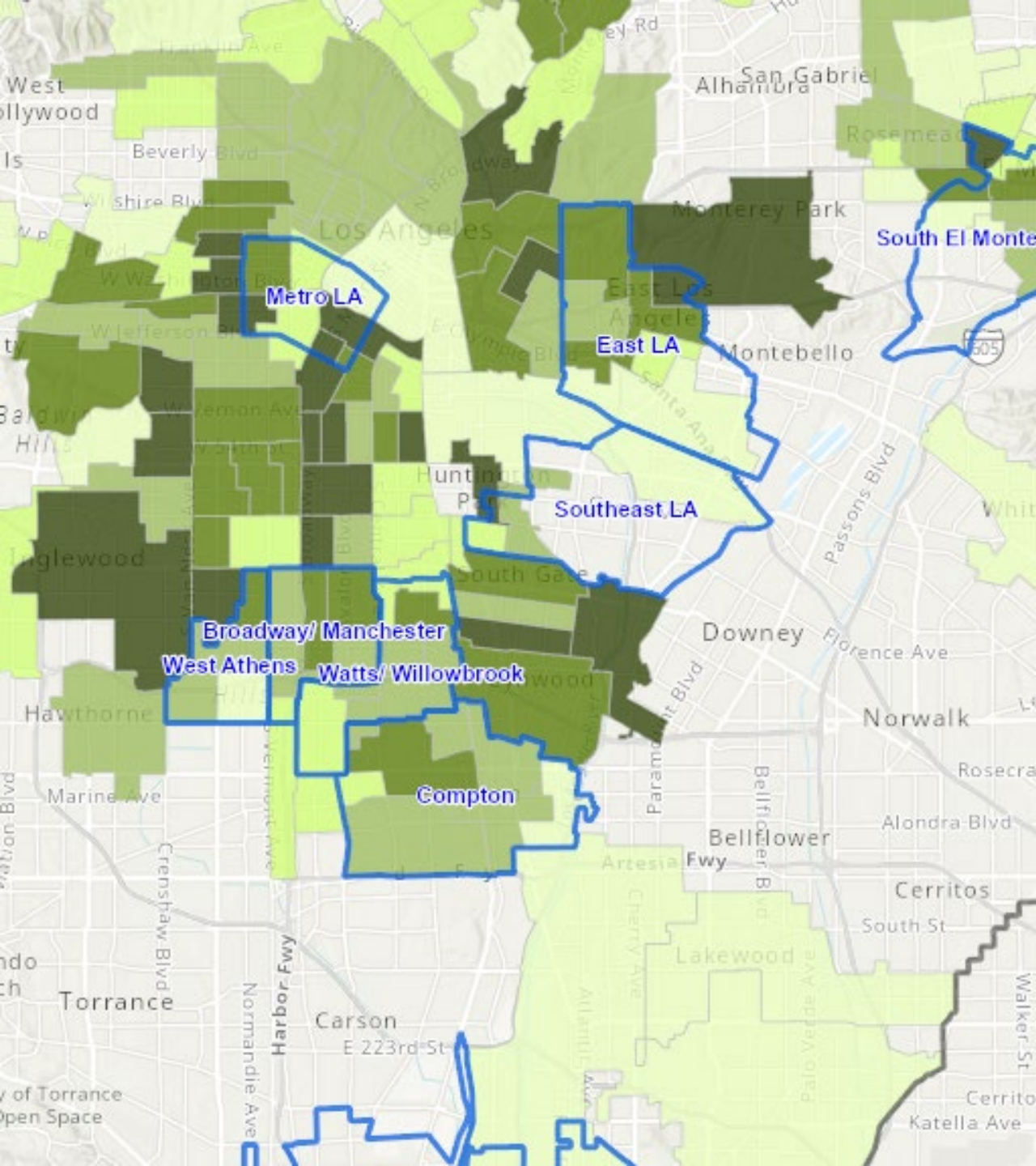Indicator Maps

Asset/ Resource Maps

Resilience Maps

StoryMap

Allows partners to tell the story alongside interactive maps and other media (e.g. videos, photos, etc.)

EDI Web Maps

Story Maps: Public-facing, narrated

- Los Angeles, CA: https://arcg.is/Xb44f

EDI Web Maps: In-depth analysis

- San Antonio, TX: https://arcg.is/1Xqeqv0

- Spartanburg County, SC: https://arcg.is/HbriO

Community EDI Websites

- San Antonio UW, ReadyKidSA Scorecard: https://embed.clearimpact.com/Scorecard/Embed/23585

- Spartanburg Academic Movement (SAM): https://learnwithsam.org/the-early-development-instrument

How is Data Used?

Conduct data driven, collective planning and action

Guide actions about resources, practices, programs, policies.

Understand patterns of inequity to build partnerships and shared accountability

Monitor and evaluate systems over time

Looking Back: Excel by 8 for Arkansas Communities

Strategies undertaken by the community partners:

- *Family education*: Promoted CDC milestones tracker with families.

- *Fill resource gaps*: Identified childcare center gaps in certain neighborhoods.

- *Systems improvement*: Brought data to the community college – Reviewed the early childhood curriculum for educators to better prepare them.

Looking Forward: School Districts/Charters Using EDI

- Links school system with larger group of early childhood stakeholders to improve children's readiness for kindergarten.

- Understand needs of incoming cohort.

- District-level planning, grant writing, placement of new school-based services (health clinics, preschools, etc.).

- Informs school transition and alignment efforts from preK-4 to Kindergarten to 1st grade.

- Improve professional development, curriculum development.

- Engage parents and parent councils.

Cultural Sensitivity

Strengths-Based Approach

- Reflects how well systems are supporting children.

- Emphasize the positive metrics such as percent of Children "On Track".

- Identifying neighborhood resiliency.

- Engaging families in telling their story and taking leadership in solutions.

EDI

- 15 years research: Valid and reliable tool across diverse cultural & language groups.

- Appropriate for all children including those with disabilities.

- Teacher training addresses strategies for minimizing bias.

- Teacher guide flags items requiring heightened cultural sensitivity with supplemental information to avoid bias.

- Convened English Language Learner Advisory Group:

  - Critical look to make improvements;

  - Illuminated ELL strengths in data and strengths-based strategies;

  - Identified additional research needed, now underway.

Measuring Children's Language Abilities

What languages does the EDI have?

- This is not a test that students take. No direct observation or work-sampling.

- EDI is completed by teachers, based on recall and therefore, it is provided to teachers in English.

- For the small # of items that rely on a child's language abilities, teachers asked to rate these abilities in the language of instruction.

- For dual immersion programs, children's language abilities assessed in the primary language of instruction.

How does the EDI account for child's home language abilities?

- UCLA collects roster data that identifies child's home language and English Language Learner (ELL) status.

- Can gather or link EDI with supplemental information on children's home language skills by:

  - Linking with existing district information on children's home language skills.

  - Using the EDI's 5 additional and customizable questions.

Roles for key partners

UCLA

- Support data collection.

- Provide mapping consultation to define neighborhood boundaries.

- Prepare data reports, maps.

- Support shared learning network meetings.

Roles for key partners

State Leads

- PED
  - Execute data sharing agreement with UCLA.
  - Provide UCLA with rosters.
- ECECD
  - Engage partners/community in using EDI to improve EC systems
  - Co-host statewide shared learning network.

Roles for key partners

- **District/Charter EDI Coordinator (Doesn't need to be DTC)**
  - Communicate and coordinate logistics with district/charter and school staff
  - Send parent letters home
  - Provide teachers with class list that includes both State Student IDs and Student names
  - Login to EDI data collection portal to monitor teacher completion

- **Teachers**
  - Complete teacher training - asynchronous (30 minutes)
  - Complete EDI for each child online (10-15 minutes per child)
  - Complete one feedback form online

Proposed Timeline

Implementation Steps	EDI 2023-24
EDI Implementation Webinar with District/Charter EDI Coordinators	March 12: 3:00-4:30 pm March 14: 8:00-9:30 am
PED provides roster to UCLA and class lists to teachers	March
Districts/Charters communicate with principals, teachers	March
District/Charters EDI Coordinators Login to portal to Activate Account	March
Districts/Charters send Parent letter & Teacher-Class Lists	April
Teachers listen to training video	April
Teachers complete EDIs	April-May

PED's EDI Webpage

- **https://webnew.ped.state.nm.us/bureaus/edi/**

The Futures Team at UCLA

- Lisa Stanley, Project Dir. LisaStanley@mednet.ucla.edu
- Leila Espinosa, Knowledge to Action Dir. Lespinosa@mednet.ucla.edu
- Tyler Cole, Implementation Coordinator TWCole@mednet.ucla.edu
- DataInformedFutures@mednet.ucla.edu