
March 18, 2010
Capital Area Birth-to-Work

- Birth-to-Work combines the resources of the Capital Area community, represented by the Power of We Consortium and its coalitions, and Michigan State University, to promote positive transitions from birth to adulthood through critical periods of development with special emphasis on those living in areas of concentrated poverty.
Power of We Consortium Structure

The Power of We Consortium and its 12 Coalitions

Improved Capacity → Strengthened Social Services → Enhanced Community Well Being (measured by 33 indicators)

Community Economic Development Network
Greater Lansing Homeless Resolution Network
Long-term Care Collaborative
Immigrant and Refugee Resource Collaborative

Community Coalition for Youth
Ingham Substance Abuse Prevention Coalition
Strong Families / Safe Children
Asset Independence Coalition

Founding Entities → Community-Based Partners → Faith-Based Partners → Affiliates

Data Committee (information)
Investors Steering Committee (resources)
Leadership & Practice Committee (capacity)

Ingham County Health Department and Capital Area United Way (staff support)
Capital Area Birth-to-Work

Birth-to-Work is a systems change framework employed across community sectors and coalitions to **improve developmental outcomes for children, youth, and young adults.**
Capital Area Birth-to-Work

- Birth-to-Work targets systems change by integrating and improving existing systems for each transition period to form a seamless web of supports at key points in development.

- Birth-to-Work focuses on all levels of community systems that support development – that is, families, neighborhoods, organizations, and community systems.
Capital Area Birth-to-Work

- Capital Area Birth-to-Work works towards the goal that by 2020 children, youth, and young adults in the Capital Area will grow up with the skills and abilities to actively participate in the global knowledge economy.
Transitional Periods Across the Life Span: Relationship Impacts

- **Prenatal**
  - Partner Selection
  - Workplace
  - Society

- **Transitional Influences**
  - Peers
  - School
  - Community

- **Transitional Influences**
  - Parents
  - Family (Kin)
  - Neighborhood

- **Transitional Influences**
  - Early Childhood Transition Period (0-5)
  - Early Adolescence Transition Period (10-14)
  - Late Adolescence Transition Period (18-25)

- **Ongoing Life Course Risk Influences** (Racial and Social Inequalities)
  - Success in Early Childhood
  - Success in Elementary School
  - Success in High School
  - Success in Adulthood

- **Ongoing Life Course Resilience Influences**

**Risk**

**Resilience**
Systemic Sources of Risk Development

- **Through Family Characteristics**
  - Children of alcoholics and other drug-using parents
  - Children of parents with antisocial personality disorder
  - Children of parents with clinical depression
  - Children of parents in conflict
  - Child of parents with low family resources

- **Through Individual Characteristics**
  - Externalizing behavior, aggression, behavioral undercontrol, oppositional defiant disorder
  - Negative emotionality, depression
  - Attention problems, ADHD
  - Shyness, social withdrawal, social phobias
  - Biological diathesis (genetic, congenital, perinatal)

- **Through Social Environments**
  - High drug use environments
  - High stress environments (violence, poverty, unemployment)
Risk Factors for Infants and Young Children

- Poverty
- Infant and child mortality
- Low birth weight
- Single parents
- Absent fathers
- Substance abusing mothers/fathers
- Transience
- Child abuse and neglect

- Lack of quality child care
- Low wage jobs for parents
- Unemployed parents
- Lack of access to health and medical care
- Low parent education levels
- Poor nutrition
- Lack of contact with English as the primary language (in USA)
Factors Highly Related to Early Developmental Success

- Ongoing nurturing relationships with the same adults
- Physical protection, safety, and regulation of daily routine
- Experiences responsive to individual differences in such characteristics as temperament
- Developmentally appropriate practices related to perceptual-motor, cognitive, social stimulation, and language exposure
- Limit-setting (discipline), structure (rules and routines), and expectations (for positive outcomes)
- Stable, supportive communities (violence free) and culture (a sense of rootedness and connectedness)
Frontal Cortex and HPA Axis

Cerebral Cortex
- Frontal Lobe
- Parietal Lobe
- Corpus Callosum
- Thalamus
- Occipital Lobe
- Superior and inferior colliculi
- Midbrain
- Cerebellum
- Tissue Dividing Lateral Ventricles
- Hypothalamus
- Pituitary Gland
- Hippocampal Regions
- Temporal Lobe
- Pons
- Medulla
- Spinal Cord
- Central Canal of Spinal Cord

Executive Function, Behavior Regulation, Emotion Regulation
Experience Matters for Neurotransmission

**SENDING CELL**
- Transporter
- Mitochondria
- Vesicle

**CHEMICAL TRANSMISSION**
- Neurotransmitters:
  - Dopamine
  - Serotonin
  - Norepinephrine
  - Endogenous Opioids
  - Acetylcholine
  - Endogenous Cannabinoids
  - Glutamate
  - Gamma-Aminobutyric Acid (GABA)

**SYNAPSE**
- Receptor Molecules

**RECEIVING CELL**
- Electrical Activity
### Organizational Periods During Prenatal Development: Vulnerability to Environmental Teratogens

<table>
<thead>
<tr>
<th>Conception</th>
<th>Embryonic Period (in Weeks)</th>
<th>Fetal Period (in Weeks)</th>
<th>Full Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>20-36</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Major Vulnerable Period
- Central Nervous System
- Heart
- Arms
- Eyes
- Legs
- Teeth
- Palate
- External Genitalia
- Ear

#### Major Period of Growth

# Postnatal Organizational Periods

<table>
<thead>
<tr>
<th>Developmental Process</th>
<th>Maximum Period of Organization</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor development</td>
<td>Prenatal to age 4</td>
<td>Exploration</td>
</tr>
<tr>
<td>Emotion regulation</td>
<td>Birth to age 2-3</td>
<td>Self control</td>
</tr>
<tr>
<td>Visual processing</td>
<td>Birth to age 2-3</td>
<td>Orienting in space</td>
</tr>
<tr>
<td>Emotional attachment</td>
<td>Birth to age 2</td>
<td>Emotional and social systems</td>
</tr>
<tr>
<td>Language acquisition</td>
<td>Birth to age 4</td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cognition/thought</td>
</tr>
<tr>
<td>Second language</td>
<td>1 year to age 4</td>
<td>Communication</td>
</tr>
<tr>
<td>Math/logical thinking</td>
<td>1 year to age 4</td>
<td>Cognitive processing</td>
</tr>
<tr>
<td>Music and rhythm</td>
<td>3 years to age 5</td>
<td>Creative expression</td>
</tr>
</tbody>
</table>
Factors Highly Related to Middle Developmental Success

- Adult role models and supportive and mentoring relationships with adults
- Positive peer influence
- Constructive use of time and acquisition of skills through creative activities, sports, cultural and community activities/future orientation
- Acquisition of academic and social competencies related to planning and decision making, interpersonal relationships, personal safety and conflict resolution
- Limit-setting (discipline), structure (rules and routines), and positive expectations
- Stable, supportive communities and culture (a sense of rootedness and connectedness)
ITEC: Transition to Knowledge Economy through Technology

Community Neighborhood Association Leader
[has aspirations and ideas]

MSU Dept. of Computer Science and Engineering
contacts

Interdisciplinary Team of Researchers
assembles

MSU Researchers
[performing research – issues related to the use of IT]

PARTNERS
- Holmes Street Neighborhood Association
- Spartan Internet Consulting Corporation
- Dewpoint, Inc.
- TechSmith Corporation
- Prima Civitas, Lansing
- City of Lansing
- Lansing School District
- City of Lansing Economic Development Corporation
- Capital Area IT Council
- Michigan State University

University-Community Linkage

- Abandoned school building
- Underprivileged neighborhood
- Underperforming children
- Pressure for community to use building for substance abuse program
- Community declines substance abuse program
- Private company Spartan Internet bought building

Disparities in Internet access and use
- Media training centers
- Educational computer games
- Computer science/software development and technologies

ENGAGEMENT OCCURS
Result: ITEC

ITEC | Information Technology Empowerment Center
Factors Highly Related to Later Developmental Success

- Positive interpersonal relationships
- Adult role models and facilitators
- Opportunities for apprenticeships, training, and post-secondary education/career planning and job shadowing during high school
- Academic competencies appropriate to career goals/financial literacy and future planning
- Interpersonal competencies for the workplace
- Stable, supportive communities and culture (a sense of rootedness and connectedness)
Currently in the Capital Area Birth-to-Work

- We are using the Ingham County Great Start Collaborative experience as a method for developing broad support from coalitions, organizations, groups, and individuals around each transition period.

- Ingham County Great Start Collaborative is developing broad support for the infant and young children transition period. To get connected contact Michelle Nicholson at MNICHOLS@inghamisd.org

- Community Coalition for Youth is organizing to develop broad support for the youth transition period. To get connected contact Angela Austin at aaustin@ingham.org

- LEAP’s Emerging Talent Initiative is organizing to develop broad support for the young adult transition period. To get connected contact Pam Jodway at jodwayp@leapinc.biz
Next Steps

Michigan Capital Area Birth to Work Web Site

A portal for University-Community Partnerships

(currently in development, left image is a design mock-up of the site)
LEAP

STRATEGIC INITIATIVES

• Regional Cooperation
• Value-Added Enterprises
• New Enterprises
• MSU Leverage
• Global Community
• Emerging Talent

PARTNERS

• Capital Area Michigan Works
• City of Charlotte
• City of East Lansing
• City of Eaton Rapids
• City of Lansing
• City of St. Johns
• Clinton County Economic Alliance
• Delhi Charter Township
• Delta Township
• DeWitt Charter Township
• Eaton County
• Ingham County Economic Development Corporation
• Lansing Regional Chamber of Commerce
• Lansing Township
• Meridian Charter Township
• Prima Civitas Foundation
• University Research Corridor
• Watertown Charter Township
Community Based Initiatives: Building Relationship Networks for Success

Human Services Sector

PreK - 16 Education

State and Regional Government

Business Community

BTW
Programmatic to Systemic Approach

- **Programmatic Approach**
  - Current way of thinking
    - Looks at component parts in isolation
    - Looks at risk and supportive factors only in the immediate domain
    - Looks for individual outcomes rather than key levers of influence

- **System Approach**
  - Incorporates “Big Picture” idea
    - Strives to understand the supportive and risk factors
    - Looks for the key levers of influence
    - Consciously avoids shifting problems
    - Looks for interrelationships across systems
    - Geared toward the long-term
## The Journey Towards Systemic

<table>
<thead>
<tr>
<th><strong>Singular, Non-Developmental Approach</strong></th>
<th><strong>Singular but Developmental Approach</strong></th>
<th><strong>Systemic and Developmental Approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on single individual representative from the community agency in the partnership</td>
<td>Involve multiple individuals from a single level of influence (all managers or all case workers) in the partnership</td>
<td>Involve multiple individuals from multiple levels of influence in the partnership</td>
</tr>
<tr>
<td>Focus on single community agency</td>
<td>Focus on single community agency while involving in periphery other community agency</td>
<td>Focus on multiple community agencies as equal partners</td>
</tr>
<tr>
<td>Focus on single community sector/university department</td>
<td>Focus on single community sector/university department while involving in periphery influencing sectors/departments</td>
<td>Focus on multiple community sectors/university departments as primary partners</td>
</tr>
<tr>
<td>Focus on primary outcome only</td>
<td>Focus on primary outcome while including other variables in model as “extraneous”</td>
<td>Focus on primary and other variables to more fully understand the complexities of promoting the primary outcomes</td>
</tr>
</tbody>
</table>
Principles of Community Development

We value innovation and entrepreneurship in seeking new ways to respond to the challenges of distressed communities. We are dedicated to a set of principles that:

- Promote active and representative citizen participation so that community members can meaningfully influence decisions that affect them.
- Engage community members in issue identification so that those affected may adequately understand the factors that contribute to their situation.
- Help community members understand the economic, social, political, environmental, and psychological impacts associated with alternative solutions to the issue.
- Assist community members in designing and implementing plans that build upon community assets by emphasizing shared leadership and active citizen participation.
- Seek alternatives to any effort that is likely to adversely affect the disadvantaged segments of a community.
- Actively work to increase leadership capacity, skills, confidence, and aspirations in the community development process.
How to Reach Us

Birth-to-Work Framework
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Kellogg Center, Garden Level
East Lansing, MI 48824

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