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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)

Founding 
Entities

Community 
Economic 
Development 
Network

Greater Lansing 
Homeless 
Resolution 
Network

Long-term 
Care 
Collaborative

Immigrant 
and Refugee 
Resource 
Collaborative

Ingham 
Substance 
Abuse 
Prevention 
Coalition

Community 
Coalition 
for Youth

Strong 
Families / 
Safe Children

Asset 
Independence 
Coalition

Impact

Birth to 
Five 
Subcommittee

Affiliates

Land Use 
and Health 
Resource 
Team

Infant 
Mortality 
Initiative

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 and Age Period Program Exemplars

Transitional Influences
- Partner Selection
- Workplace
- Advanced education
- Society

Transitional Influences
- Peers
- School
- Community

Transitional Influences
- Parents
- Family (Kin)
- Neighborhood

Transitional Influences
- Workforce
- IT opportunities
- Creative enterprises

Success in Adulthood
- Higher education
- Internship programs
- Work force
- IT opportunities
- Creative enterprises

Late Adolescence Transition Period (18-25)
- Quality afterschool programs
- Effective mentoring programs
- Safe environments
- Parent monitoring
- Youth entrepreneurial programs
- IT Opportunities
- Internship opportunities

Early Adolescence Transition Period (10-14)
- Maternal support services
- Quality child care/development
- Father involvement
- Healthy nutrition
- Positive environments

Early Childhood Transition Period (0-5)
- Quality prenatal care

Prenatal

Success in Elementary School

Success in High School

Success in Early Childhood

Ongoing Life Course Risk Influences (Racial and Social Inequalities)
Transitional Periods Across the Life Span: Relationship Impacts

1. **Prenatal**
   - Transition Influences: Parents, Family (Kin), Neighborhood

2. **Early Childhood Transition Period (0-5)**
   - Success in Early Childhood

3. **Early Adolescence Transition Period (10-14)**
   - Transition Influences: Peers, School, Community

4. **Late Adolescence Transition Period (18-25)**
   - Transition Influences: Partner Selection, Workplace, Society

Ongoing Life Course Risk Influences (Racial and Social Inequalities)

Ongoing Life Course Resilience Influences

Risk to Resilience

Birth to Work
Michigan Capital Area
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)
Frontal Cortex and HPA Axis

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

**Sending Cell**
- Electrical Activity
- Mitochondria
- Transporter
- Vesicle

**Chemical Transmission**
- Synapse

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

**Receiving Cell**
- Electrical Activity
- Receptor Molecules
Organizational Periods During Prenatal Development: Vulnerability to Environmental Teratogens


High Periods of Organization
Less Intense Periods
No Danger
## 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>

Birth to Work
Michigan Capital Area
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)
Executive Function, Behavior Regulation, Emotion Regulation
Neurobiological changes during adolescence

- Decrease in gray matter in prefrontal cortex (synaptic pruning)
  - Improvements in information processing

- Changes in dopaminergic receptors in paralimbic and prefrontal cortex
  - Contributes to sensation seeking, especially in early adolescence

- Increase in white matter in paralimbic & prefrontal regions (myelination)
  - Processing of multiple sources of information

- Increase in connections between cortical and subcortical regions
  - Emotion regulation
Neurobiological changes during adolescence

- Arousal of the reward system, immature self-regulatory system
- Self regulatory system organizes slowly during preadolescence to early adulthood

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]
- 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

MSU Dept. of Computer Science and Engineering
- Contacts

Associate Provost for University Outreach and Engagement
- Assembles

Interdisciplinary Team of Researchers

MSU Researchers
[performing research – issues related to the use of IT]
- Disparities in Internet access and use
- Media training centers
- Computer use in schools
- Educational computer games
- Computer science/software development and technologies

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

Disparities in Internet access and use

Computer use in schools

Educational computer games

Computer science/software development and technologies

Michigan Capital Area
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

By 2020 all 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.

**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
- Business Community
- State and Regional Government
- 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 Development

## Singular, Non-Developmental Approach

- Focus on single individual representative from the community agency in the partnership
- Focus on single community agency
- Focus on single community sector/university department
- Focus on primary outcome only

## Singular but Developmental Approach

- Involve multiple individuals from a single level of influence (all managers or all case workers) in the partnership
- Focus on single community agency while involving in periphery other community agency
- Focus on single community sector/university department while involving in periphery influencing sectors/departments
- Focus on primary outcome while including other variables in model as “extraneous”

## Systemic and Developmental Approach

- Involve multiple individuals from multiple levels of influence in the partnership
- Focus on multiple community agencies as equal partners
- Focus on multiple community sectors/university departments as primary partners
- Focus on primary and other variables to more fully understand the complexities of promoting the primary outcomes
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
University Outreach and Engagement
Michigan State University
Kellogg Center, Garden Level
East Lansing, MI 48824

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