Successful transition to school

Asia-Pacific Regional Policy Forum on Early Childhood Care and Education
Seoul, September 12, 2013

Professor Frank Oberklaid
Director, Centre for Community Child Health
Royal Children’s Hospital Melbourne
How do we define school readiness?

• Children ready for school
How do we define school readiness?

- Children ready for school
- Schools ready for children
- Families and communities that support early childhood development
Preconditions for successful transition to school

Ready Families
+ Ready Communities
+ Ready Services
+ Ready Schools
= Children Ready for School

Based on the Ready Child equation (Rhode Island KIDS COUNT, 2005)
The Ready Child Equation

- **Ready Families** support children’s development and learning
- **Ready Communities** engage with early years services and schools in the delivery of integrated services to young children and families
- **Ready Services** connect with other services to address barriers to child learning and development
- **Ready Schools** develop effective strategies for identifying and responding to the individual needs of all children
Outline of presentation

• School readiness starts at birth
  • *The early years impact on brain development*

• The community a child lives in is important
  • *Access to high quality services and supports can make all the difference*

• Children from disadvantaged environments start school less ready
  • *Worrying population data (Australia)*
  • Developmental trajectories increasingly difficult to change with passage of time
    • *For many children, by the time they enter school (or preschool) it is already too late*
School readiness starts at birth
Children’s development

- Development is the result of complex, ongoing, dynamic transactions between nature and nurture - a dance between biology and experience
- We cannot do much to change biology - but we can change the environment in which young children grow and develop
The neuroscience of brain development

- Brain architecture and skills are built in a hierarchical ‘bottom-up’ sequence
- Foundations important - higher level circuits are built on lower level circuits
- Skills beget skills - the development of higher order skills is much more difficult if the lower level circuits are not wired properly
- Plasticity of the brain decreases over time and brain circuits stabilise, so it is much harder to alter later
- It is biologically and economically more efficient to get things right the first time
SYNAPTIC DENSITY: Synapses are created with astonishing speed in the first three years of life. For the rest of the first decade, children’s brains have twice as many synapses as adults’ brains. Drawings supplied by H.T. Chugani.
The importance of relationships

• Nurturing and responsive relationships build healthy brain architecture that provides a strong foundation for learning, behaviour and health
• The relationships a young child has with their caregiver(s) literally sculpts the brain and influences the development of neural circuits
• When relationships are dysfunctional, levels of stress hormones increase - this interferes with formation of healthy neural circuits, and disrupts brain architecture
Adversity

Any adversity that impacts on the parents or caregivers has the potential to have a negative impact on brain development in the young child and therefore act as a risk factor for the health and development of the child
The impact of social inequality

- Psychosocial factors impact on health because of association with frequent/recurrent stress
- Major impact in early years - affects developing brain and establishment of neural circuits
- Chronic stress affects the body’s physiological systems - including the cardiovascular and immune systems - increasing vulnerability to wide range of diseases and health conditions
- ‘Double jeopardy’ - have the least access to supports such as consistent health care, quality childcare and preschool, good schools, and family supports
Barriers to children learning

- No barriers to learning - will do well regardless
- Severe barriers - generally have access to special services which begin prior to formal schooling
- Subtle to moderate barriers to learning and school success - may elude early detection, and intervention often delayed until problems entrenched and difficult to treat
What are the barriers to learning?

*Biological and/or environmental*

- Chronic medical conditions
- Developmental weaknesses - language, memory, visual-motor integration, etc
- Attentional and behavioural problems
- Poor environmental circumstances in the early years
Poverty and health (early years)

Less likely to:
- Be breast fed
- Be fully immunised
- Receive well child care
- Have regular and consistent access to health services

More likely to have:
- Low birth weight
- Developmental delay
- Higher incidence of SIDS
- Higher injury rate
- Suboptimal growth
- More frequent hospitalisations
- Behavioural disorders
Vocabulary growth - first 3 years

- High SES
- Middle SES
- Low SES

B Hart & T Risley Meaningful Differences in Everyday Experiences of Young American Children 1995
OR by socioeconomic position quintile for socio-emotional difficulties
OR by socioeconomic position quintile for socio-emotional difficulties
c. Vocabulary

OR by socioeconomic position quintile for socio-emotional difficulties

OR by socioeconomic position quintile for socio-emotional difficulties
School entry
Australian Early Development Index (AEDI)

- A population based measure which provides information about children’s health and wellbeing
- 100+ questions covering 5 development domains considered important for success at school
- Teachers complete the AEDI online for each child in their first year of full-time schooling
- Results are provided at the postcode, suburb or school level and not interpreted for individual analysis
Five AEDI ‘subscales’

- The AEDI measures a child’s development in 5 areas:
  - physical health and well-being
  - social competence
  - emotional maturity
  - language and cognitive development
  - communication skills and general knowledge
AEDI National Rollout 2009

- Number of communities: 660
- Number of schools: 7,423
- % of schools completed: 95.6%
- Number of teachers: 15,528
- Number of students: 261,203
- % of students completed: 97.9%
## Key Findings

Percentage of children developmentally vulnerable (DV) across Australia by jurisdiction

<table>
<thead>
<tr>
<th></th>
<th>DV ≥ 1 domains (%)</th>
<th>DV ≥ 2 domains (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
<td>23.3</td>
<td>11.7</td>
</tr>
<tr>
<td>New South Wales</td>
<td>21.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Victoria</td>
<td>20.1</td>
<td>9.9</td>
</tr>
<tr>
<td>Queensland</td>
<td>29.2</td>
<td>15.6</td>
</tr>
<tr>
<td>Western Australia</td>
<td>24.3</td>
<td>12.0</td>
</tr>
<tr>
<td>South Australia</td>
<td>22.5</td>
<td>11.4</td>
</tr>
<tr>
<td>Tasmania</td>
<td>21.7</td>
<td>10.8</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>36.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>21.9</td>
<td>10.8</td>
</tr>
</tbody>
</table>
Proportion of children reported to be enrolled in a preschool program (AEDI, 2008 and 2009)
Results: Socio-economic status

mentally vulnerable on two or more domains
AEDI Domain comparison – vulnerability by SEIFA

N=261,000

Domain Vulnerability by SEIFA

Percent vulnerable

- Physical health and Wellbeing
- Social Competance
- Emotional Maturity
- Language and Cognitive Development
- Communication Skills and General Knowledge

Most Disadvantaged
3
Least disadvantaged

SEIFA
Disadvantage and preschool participation

Preschool or kindergarten program (including in a day care centre)

<table>
<thead>
<tr>
<th>SEIFA IRSD QUINTILE</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Most disadvantaged</td>
<td>75.6</td>
</tr>
<tr>
<td>2</td>
<td>79.6</td>
</tr>
<tr>
<td>3</td>
<td>80.3</td>
</tr>
<tr>
<td>4</td>
<td>82.2</td>
</tr>
<tr>
<td>5 Least Disadvantaged</td>
<td>86.0</td>
</tr>
</tbody>
</table>
Implications of these data

• Waiting until children start formal education (preschool or school) is too late
• For many children, a sub-optimal developmental trajectory is established in the first three years of life
• ECCE sector must develop links with the health sector in the critical early years

BUT

• In most communities, there is fragmentation of services for young children and families
Fragmentation of services

- Child health information
- Parenting programs
- School
- Preschool
- Disability services
- Family support
- Early intervention programs
- Pediatrician
- Childcare
- Child protection agency
- Kindergarten
- Children’s library services
Mapping the current service system in Victoria

Decision to seek assistance/support

Health
- Maternity
- Maternal Child Health Service
- Private specialist
- Family self management with professional support
- Hospital paediatrics service

Intervention
- Paediatric assessment
- Decision is made if referral accepted

Community health service
- Community health A
- Community health B

GP
- Early Childhood Intervention services
- Doctor’s referral decision to access allied health or specialist care

Education
- Early childhood education and care
- Preschool
- Primary school
- Program for child with disability
- Primary school nurses

Welfare
- Family services agencies
- Out of home care
- Child FIRST
- Child protection

Source: Blue Sky Research Project: Shifting Children’s Developmental Trajectories.
The mapping of families engaging with agencies highlighted the lack of communication between organisations.
Linking services

- Child health information
- Parenting programs
- School
- Preschool
- Early intervention programs
- Family support
- Childcare
- Child protection agency
- Kindergarten
- Pediatrician
- Disability services
- Children’s library services

Centre for Community Child Health
Integrating services

- Child health information
- Family support
- Childcare
- Child protection agency
- Kindergarten
- Pediatrician
- Children’s library services
- Early intervention programs
- Parenting programs
- Preschool
- Disability services
- School
- Child & Family Hub

Centre for Community Child Health
Successful transitions to school
Key approaches

- Early childhood part of staff team
- Recognition of the broader needs of young children and their families
- Emphasis on parent participation not just involvement
- Strong focus on community engagement and links with community services
- Integrated governance models
Type of initiatives/programs

- Early Learning Centre
- Playgroups
- Parents’ rooms
- Parenting sessions
- English language programs
  - Intensive classes for recent migrants
  - Prep Language Development Program (PLDP) in the first year of school
Summary

• School readiness starts at birth
• Many children – especially those from disadvantaged environments - begin (pre) school already in trouble
• ECCE has to forge partnerships with health and other community agencies
• Need to rethink role of schools in teaching children – teaching is not the same as learning
• Identify and address the barriers to learning
Sustainable solutions

1. Knowledge base
2. Political will
3. Social strategy

- Dr. Julius Richmond
Developmental health - Aims

- Ideal child-development trajectory
- Current practice
- At-risk child-development trajectory without intervention
• frank.oberklaid@rch.org.au
• www.rch.org/ccch