IGDIs for Infants-Toddlers

University of Kansas
Juniper Gardens Children’s Project Team

Charles Greenwood, Judith Carta, Dale Walker, Jay Buzhardt, Mary Abbott, Barbara Terry
Rationale for Infant-Toddler GOMS

• Realization that many children enter kindergarten performing significantly below grade (or age) level
• Gap between low-performing children and typical peers starts well before kindergarten and grows over time
• Importance of early identification and early intervention—Prevent the gap from occurring
Intervention Programs for Infants and Toddlers

- Early Head Start—focusing on prevention for low-income children
- Part C—focusing on prevention and remediation
Goal: New measures for monitoring progress from birth to age 8

- Goal: an interlinked set of GOMs
- Goal: Measures that would allow for the examination of growth toward general outcomes from earliest infancy to school age
Continuum of PM measures of early communication, early literacy, through oral reading.
So, what do we call these measures?
Baby DIBELS?
DRIBBLES?
IGDIs!

Individual Growth and Development Indicators for Infants and Toddlers
Key Questions:

• How can we learn more quickly that a child is falling behind in development?
• How can we use that information to guide what we do in our programs?
• How do we know if what we are doing is improving a child’s trajectory?
The General Outcome Measurement (GOM) Approach

- Start by identifying “social valid” general outcomes for young children this age.
- Develop a few “sensitive” indicators of progress toward attaining the general outcome.
- Measure the indicators repeatedly to gauge rate of growth over time.
- Use a rate of growth metric (Growth Chart).
- Make intervention decisions based on progress or lack of progress as measured by change in the indicator.
General Outcome: Child can express wants and needs.

• How does this child demonstrate her ability to express her wants and needs?

• What would be a good indicator of this general outcome?
Early Communication Indicator for Infants and Toddlers

• Key Skill Elements
  – Gestures
  – Vocalization
  – Single Words/Signs
  – Multiple Words/Signs

• Combine to form
  Total Communication Indicator
General Administration

- **Standard Administration Procedures**
  - Toy-play setting with familiar adult as play partner
  - 6-minute testing sessions
  - Play partner’s role is to facilitate play and follow child’s lead
  - Set-up/clean-up/put away

- **Alternate Toy Forms**

- **Observational Recording Procedures**
Individual Child Report: *Total Communication Graph*

**Weighted Total Early Communication**

**Program:** Child: Oyle, Olive  **Date:** 12/08/2005

- **Child’s Observed Trajectory**
- **Child’s Slope**
- **Normative Trajectory**

- +1.5 SD
- Norm Slope: 0.64
- -1 SD
- -1.5 SD
- Oyle, Olive
- Milieu or Incidental Teaching
- Child Slope: 1.02
- Child Mean: 6.3

**Rate Per Minute**

**Age at Test (Months)**

- Below Benchmark
- Slightly Below Benchmark
Key Skill Elements: Vocalizations Graph

Early Communication Key Skill Elements - Vocalizations
Program: Child: Date: 09/21/2005

Vocalizations
Normative Data
Key Skill Elements: Single Words Graph

Early Communication Key Skill Elements - Single Words

Program: Child: Date: 09/21/2005

訪れ

Rate Per Minute

Age at Test (Months)
Key Skill Elements: Multiple Words Graph

Early Communication Key Skill Elements - Multiple Words
Program: Child: Date: 09/21/2005

- Multi Words
- Normative Data
Challenges to Implementation

• GOMs are really different way of thinking about assessment in early childhood

• Need for GOMS or any type of progress monitoring not apparent to many infant-toddler programs
  – Push for accountability just beginning
  – Limited attention to developing individualized programs

• Personnel who can implement measures are typically have limited skills
Recommendation for Advancing the Use of IGDIs

- Make them **easy enough** for early interventionists to implement
  - Easily accessible materials
  - Quick
  - Easy to learn to administer and score
    - Web-based training
The Public IGDI Home Page

Automated password update

Descriptions of all IGDI measures. What they measure, how they’ve been tested, and how to use and score them

Printable forms for conducting and scoring assessments

Training requirements for certification, training videos, PowerPoint presentations, etc.

Reports and presentations of IGDI research, descriptions, and training materials

Send us questions using an online form or give us a call

Registered Users Login Here

Username:
Password:
Forgot Password?
Login
Recommendations for Advancing the Use of IGDIS

• Provide reports that are easy to understand
• Provide support so practitioners can use IGDIs to guide intervention
• Give practitioners the tools they need to use IGDIs in a problem-solving model
Data-Based Decision Making Model

IGDIs

Monitor

Identify/Validate Need For Intervention

Evaluate Intervention Effectiveness

Monitor

Generate Intervention Strategies

Implement Intervention

Exploring Intervention Solutions

©2003 Juniper Gardens Children's Project
Making Online Decisions (MOD)ase History Supported by an Online Tool

MOD for child Tara Hogart

Currently on Step 4 - Home Visitor's Fidelity Follow-up Checklist

<table>
<thead>
<tr>
<th>Step</th>
<th>Complete?</th>
<th>Completed on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 - Is there a problem?</td>
<td>Yes</td>
<td>02/17/2008</td>
</tr>
<tr>
<td>Step 2 - Why is it happening?</td>
<td>Yes</td>
<td>02/17/2008</td>
</tr>
<tr>
<td>Step 3 - What should be done?</td>
<td>Yes</td>
<td>02/17/2008</td>
</tr>
<tr>
<td>Step 4 - Is it being done?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Step 4 - Home Visitor's First Fidelity Checklist
  (for observation done on 07/13/2006)                     | Yes      | 02/17/2008  |
| Step 4 - Home Visitor's Fidelity Follow-up Checklist
  (for observation done on 07/14/2006)                     | View/Print Follow-up                  | Yes      | 02/17/2008  |
| Step 4 - Home Visitor's Fidelity Follow-up Checklist
  (for observation done on 07/16/2006)                     | View/Print Follow-up                  | Yes      | 02/17/2008  |

| Step 5 - Is it working?                                    |          |             |

Weighted Total Early Communication

Program: Juniper Gardens Test  Child: Hogart, Tara  Last ECI: 10/15/2006

- Child Slope 1: -0.47
- Child Slope 2: 0.04
- +1.5 SD
- Norm Slope: 0.6
- -1 SD
- -1.5 SD
- Hogart, Tara
- Making Online Decisions System

Rate Per Minute

Age at Test (Months)
Supporting the Practitioner’s Use EBP

What should be done? - Selected Strategies

Please print a copy of this page and a copy of the First Checklist, and take both of them with you the next time you visit this family. Be sure to complete the checklist so you can enter it into the MOD.

General Language Strategies

Learning to Talk
Children learn to talk by hearing others talk to them. You can help your child learn to talk.

Things to Do and Say
- Focus on the same thing
  - watch your child; talk about what he or she looks at
  - move objects into your child’s view to talk about them
- Follow your child’s lead
  - imitate your child’s movements
  - imitate your child’s sounds
- Have pretend conversations
- Talk about your child’s sounds and movements

- Set up a regular daily schedule
  - for eating
  - for bathing
  - for reading
  - for napping
  - for playing
- Use similar words each time you play with, feed, bathe, and read with your child
- Make positive comments
  - You’re such a good baby
  - What a happy boy/girl!

Kansas Department of Social and Rehabilitative Services
13

Language Activity #2
Outcome Indicators for Infants and Toddlers

- Early Communication Indicator (ECI)
- Early Movement Indicator (EMI)
- Early Social Indicator (ESI)
- Early Problem Solving Indicator (EPSI)
- Indicator of Parent-Child Interaction (IPCI)

www.igdi.ku.edu
Developments for Infant-Toddler IGDIs

- Development of a set of 5 infant-toddler IGDIs linked to outcomes
  - Standardized administration and scoring procedures
  - Measures that meet high standards of reliability and validity
- Scaling up use of Infant-Toddler IGDI to statewide programs—KS and MO Early Head Start programs: Development of large databases used to establish benchmarks
- Development of web-based systems for entering data, obtaining individual and program reports, and for training practitioners
- Web-based system to guide practitioners in problem-solving model using infant-toddler IGDIs and randomized trial to test the effectiveness of using the web-based problem solving model
- Use of Early Communication Indicator in nationwide study of Early Head Start—beginning Fall 2008