EM BLI:

Eduka sa un Multilinge Bazeia ba Lian Inan

(Mother Tongue-Based Multilingual Education)

5th International Conference on Language and Education: Sustainable Development through Multilingual Education
19-21 October 2016
Bangkok, Thailand
Independence 2002
Population <1 million
Preschool – Grade 6 Classroom language map (2015)

46% Tetun Prasa
54% Others
Pre and Primary school in Timor-Leste

- **Preschool** (PS) optional – 15-20 percent
- **Basic Education** (Grades 1 – 6)

**Old Model:** Portuguese materials *(EGRA 2009 WB – very poor results)*

**National model (Bilingual)**
- Tetun language - medium *(MT for some; immersion for others)*;
- Portuguese introduced Gr.1

**Reform Curriculum in Tetun language introduced in 2015**

**Two additional models**
- Portuguese Reference Schools (CAFE)
  - heavily resourced
  - full submersion model
- EMBLI Schools – designed as a late exit MTB-MLE model
The EMBLI Project

Thesis:
Children will learn more effectively if taught in a language they understand; their first language (mother tongue).

Initiator:
Kirsty Sword Gusmão, former First Lady; Goodwill Ambassador for Education

Design:
Schools in 3 districts, 3 languages
The EMBLI Project, cont’d

Project team:

- Ministry of Education, owner
- Small team of local language speakers
- International consultants (SIL)
- National Commission TL UNESCO (logistic support)
- DFAT (funding support)
EMBLI Curriculum and Languages

- Instructional materials developed in each language
  - **Same**: content and learning outcomes as national curriculum
  - **Different**: sequential language acquisition (3 languages)
- MT is the Language of Instruction PS-Gr. 4.
- Tetun (L2) added Orally subject PS-B; Literacy Gr.2
- Portuguese (L3) added Orally end of Gr.2; Literacy Gr.4
- Goal: continue MT up through Gr.6 as subject
<table>
<thead>
<tr>
<th>Language</th>
<th>PS 1</th>
<th>PS 2</th>
<th>Klase 1</th>
<th>Klase 2</th>
<th>Klase 3</th>
<th>Klase 4</th>
<th>Klase 5</th>
<th>Klase 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L1</strong></td>
<td>Oral MT; Readiness skills</td>
<td>Oral MT Beginning Literacy</td>
<td>Oral MT Continuing Literacy</td>
<td>Oral MT Continuing Literacy</td>
<td>Oral MT Continuing Literacy</td>
<td>Oral MT Continuing Literacy</td>
<td>Oral MT Continuing Literacy</td>
<td>Oral MT Continuing Literacy</td>
</tr>
<tr>
<td>Tetun (L2)</td>
<td>Begin oral Tetun</td>
<td>Developing oral Tetun</td>
<td>Continue oral Tetun; Beginning literacy Tetun (Trimester 3)</td>
<td>Oral and written Tetun</td>
<td>Oral and written Tetun</td>
<td>Oral and written Tetun</td>
<td>Oral and written Tetun</td>
<td>Oral and written Tetun</td>
</tr>
<tr>
<td><strong>Language of instruction</strong></td>
<td><strong>L1</strong></td>
<td><strong>L1</strong></td>
<td><strong>L1</strong></td>
<td><strong>L1-L2-L1</strong> Beginning academic terms L2 in each discipline (T.3)</td>
<td><strong>L1-L2-L1</strong> Continue academic terms L2 in each discipline</td>
<td><strong>L1-L2-L1</strong> Continue academic terms L2 in each discipline</td>
<td><strong>L2-L3-L2</strong> Continue academic terms L2 and introduce L3 in each discipline; use L1 support</td>
<td><strong>L2-L3-L2</strong> Continue academic terms L2 and introduce L3 in each discipline; use L1 support</td>
</tr>
</tbody>
</table>
Investigating the Impact of the Preschool Program in Timor-Leste

Steve Walter, GIAL and Karla Smith, SIL and Ministry of Education, Timor Leste
Assessment Design

End-line testing 2015: Preschool B, Grades 1 and

Languages: 3 MT
• Tetun Dili (comparison schools)
• Portuguese (CAFÉ schools)

Sample: 2,341 students; 61 schools

Instruments:
• Curriculum-based Assessment (CBA): Grade 2 only
• Early Grade Reading Assessment (EGRA): Random selection (KG2, G1, G2)
Background Data Collected

• Location
• Absenteeism
• Previous schools attended
• SES data
### Basic Statistics on the Preschool Population

#### Attended Preschool A (PS A)

<table>
<thead>
<tr>
<th></th>
<th>N Total</th>
<th>Attended</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Public</td>
<td>1,659</td>
<td>471</td>
<td>28.4</td>
</tr>
<tr>
<td>EMBLI</td>
<td>432</td>
<td>244</td>
<td>56.5</td>
</tr>
<tr>
<td>CAFÉ</td>
<td>250</td>
<td>207</td>
<td>82.8</td>
</tr>
</tbody>
</table>

#### Attended Preschool B (PS B)

<table>
<thead>
<tr>
<th></th>
<th>N Total</th>
<th>Attended</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Public</td>
<td>1,659</td>
<td>519</td>
<td>31.3</td>
</tr>
<tr>
<td>EMBLI</td>
<td>432</td>
<td>262</td>
<td>60.6</td>
</tr>
<tr>
<td>CAFÉ</td>
<td>250</td>
<td>188</td>
<td>75.2</td>
</tr>
</tbody>
</table>
General Findings
Performance on the EGRA by Model (Grades 1 and 2)

Average by Model (percent)

<table>
<thead>
<tr>
<th>Model</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Tetun</td>
<td>17.7</td>
</tr>
<tr>
<td>EMBLI</td>
<td>49.4</td>
</tr>
<tr>
<td>Reference</td>
<td>33.7</td>
</tr>
</tbody>
</table>
Comparing Performance on the Subtests of the CBA (Grade 2 only)

- **Public Schools**
- **EMBLI Schools**

**Group Mean Scores (percent)**

- **Reading**: Effect size = 1.3
  - $T = 17.9$; $p = 0.000$

- **Math**: Effect size = 0.88
  - $T = 14.4$; $p = 0.000$

**CBA Subtests**

- Reading
- Math
- Tetun Language
- Portuguese Language
Performance of Preschool Children on the Subtests of EGRA

- **Letter ID**: 40.7%
- **Familiar Words**: 26.7%
- **Nonwords**: 14.7%
- **Text Reading**: 15.1%
- **Comprehension**: 15.9%
Impact of the Preschool Experience
Impact of Preschool Attendance on the EGRA Subtests

- **Letters**: 62
- **Familiar Words**: 118
- **Nonwords**: 107
- **Text reading**: 121
- **Comprehension**: 132

**Groups**: No Preschool, Preschool, Advantage to Preschool
## Impact of Preschool on the Likelihood of Achieving a Passing Score on EGRA

<table>
<thead>
<tr>
<th></th>
<th>Grade 1 EMBLI Schools</th>
<th>Grade 2 EMBLI Schools</th>
<th>Grade 1 Standard Schools</th>
<th>Grade 2 Standard Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Preschool</td>
<td>11.8 percent</td>
<td>54.8 percent</td>
<td>2.4 percent</td>
<td>16.0 percent</td>
</tr>
<tr>
<td>Preschool</td>
<td>37.3 percent</td>
<td>74.6 percent</td>
<td>5.8 percent</td>
<td>32.9 percent</td>
</tr>
</tbody>
</table>
### Summary Statistics of the Impact of Preschool on Grades 1 and 2 in East Timor

<table>
<thead>
<tr>
<th>Grade</th>
<th>No. Preschool</th>
<th>Preschool</th>
<th>Pooled SD</th>
<th>Statistic</th>
<th>P value</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.86</td>
<td>15.63</td>
<td>14.45</td>
<td>T = 4.11</td>
<td>0.000</td>
<td>.54</td>
</tr>
<tr>
<td>2</td>
<td>24.40</td>
<td>37.41</td>
<td>24.74</td>
<td>F = 16.61</td>
<td>0.000</td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td>24.63</td>
<td>41.73</td>
<td>25.63</td>
<td>F=5.88</td>
<td>0.018</td>
<td>.67</td>
</tr>
<tr>
<td>2</td>
<td>50.08</td>
<td>62.83</td>
<td>29.82</td>
<td>F=3.80</td>
<td>0.054</td>
<td>.43</td>
</tr>
</tbody>
</table>