Closing the Academic Gap through One-Way Dual Language Education

Dr. Leo Gómez, Professor, UTPA
Dr. Iliana Alanis, Assistant Professor, UTSA
TABE Executive Board

Texas Association for Bilingual Education

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Purpose of Bilingual Education

• Learn in native language while developing English
  – Learn grade-level content (literacy)
  – Learn knowledge & skills; keep up with English peers
  – Knowledge & Skills in first language (Spanish) transfer to second language (English)

• Types of Language Proficiency
  – Basic Interpersonal Communication Skills (BICS) (2-3)
    • basic commands, social conversation, communicative fluency
    – not sufficient for academic content learning in school
  – Cognitive Academic Language Proficiency (CALP) (5-7)
    • reading, writing, content-based, sophisticated language
    – developed in at least one language to stay on grade level

(Cummins, 1981)
Common Underlying Proficiency
Linguistic and Cognitive Transfer

• A learner well-schooled in the L1 will *transfer* knowledge and academic/cognitive skills to the L2

• The *stronger* the L1, the *stronger* the L2; the weaker the L1, the weaker the L2 (academic and cognitive)
Highway Systems: L1/L2 Analogy

L1 [75mph]

- 75mph / Year 7
- 65mph / Year 6
- 55mph / Year 5
- 45mph / Year 4
- 35mph / Year 3
- 25mph / Year 2
- 15mph / Year 1

Speed of Academic Learning

L2
Highway Systems: L1/L2 Analogy

Speed of Academic Learning

L1 [45mph]

L2

15mph / Year 1

25mph / Year 2

35mph / Year 3

45mph / Year 4
Models of Bilingual Education

Additive/Enrichment
- Dual Language
  - Two-Way
  - One-Way
- Maintenance Bilingual

Subtractive/Remedial
- TBE - Late Exit
- TBE – Early Exit
- Content-Based ESL
- ESL Pullout

Strong Long-Term Achievement
Poor Long-Term Achievement
Bilingual Illiterates vs. Balanced Bilinguals

**Limited Bilinguals or Bilingual Illiterates**

- Learners that exhibit *low levels* of academic proficiency (CALP) in both languages *(not at age-appropriate competence)*
  - has *negative cognitive effects* on current/future academic learning

- *Early Exit* TBE or ESL models typically produce these students about 2nd-3rd grade

**Balanced Bilinguals or Biliterates**

- Learner that exhibits *high level* or *age-appropriate competence* in both languages
  - has *positive cognitive effects* on current/future academic learning *(cognitively enhanced)*

- DLE models typically produce these students about 4th-5th grade
Dual Language is for All Students

- **Two-Way Dual Language**
  - Students from both language groups learn in two languages (*native Spanish and native English speakers*)
  - Accommodates dominant English parents’ wishes for language enrichment opportunities for their children

- **One-Way Dual Language**
  - Students from one language group learn in two languages (*only native Spanish Speakers*)
  - One-Way DL can easily be adopted as the bilingual program serving ELLs (additive BE)
National Data - Remedial v. Enrichment Models
Long-Term Academic Achievement of ELLs

Average English Reading Performance – ELLs

Enrichment Models
- Two-Way DL
- One-Way DL

Remedial Models
- Early Exit BE + Content ESL
- Early-Exit + Trad. ESL
- Content-Based ESL
- ESL Pullout
- No Services

Note: Program Implementation through 5th Grade only

(Thomas & Collier, 2002)
Achievement Gaps
(TAKS Reading)

For ELLs - 3rd & 4th grade
English TAKS results lead to inherently flawed conclusions...

AEIS Indicator System, TEA (2004) ELA Reading TAKS
The number one predictor for long-term academic achievement in English is the extent and quality of L1 schooling.

(Thomas & Collier, 2002)
Texas Data - Dual Language Enrichment

Runn Elementary, Donna ISD
One-Way Dual Language School-South Texas

- **3rd Grade TAAS**
  - Spring 2000 (Before DLE)
    - Reading: 57%
    - Math: 66%
  - Spring 2001 (1st DL Cohort)
    - Reading: 80%
    - Math: 81%
  - Spring 2002 (2nd DL Cohort)**
    - Reading: 84%
    - Math: 86%

- **3rd Grade TAKS**
  - Spring 2003 (3rd DL Cohort)
    - Reading: 87%
    - Math: 86%

- **4th Grade TAKS**
  - Spring 2003
    - Reading: 84%
    - Math: 82%
    - Writing: 90%

- **5th Grade TAKS**
  - Spring 2004
    - Reading: 90%
    - Math: 93%

*98% LEP Students
Texas Data - Dual Language Enrichment

White Settlement ISD – 3rd Grade TAKS Reading Scores (2007)
N = 14 ELLs and 13 Non-ELLs (Two-Way DLE classroom)

Note: ELLs: 13 tested in Spanish, 1 in English; 6 commended/1 perfect score
Non-ELLs: 6 commended/4 perfect scores
### Texas Data - Dual Language Enrichment

<table>
<thead>
<tr>
<th>Two DLE Schools (N = 95)</th>
<th>PSJA ISD (N = 1623)</th>
<th>School District (N = 1623)</th>
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</thead>
<tbody>
<tr>
<td><strong>5th Grade English TAKS (2005)</strong></td>
<td><strong>5th Grade Math TAKS (2006)</strong></td>
<td></td>
</tr>
<tr>
<td>91% Met Standard</td>
<td>88% Met Standard</td>
<td>88% Met Standard</td>
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<tr>
<td>9% Did Not Meet Standard</td>
<td>12% Did Not Meet Standard</td>
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Texas Data - Dual Language Enrichment
6th Grade MS TAKS Data – Former ELLs (2007)

[Bar chart showing reading and math scores for different schools in Texas data.]
Texas Data - Dual Language Enrichment
8th Grade MS TAKS Data – Former ELLs (2007)

[Bar chart showing data for Reading, Math, Social Studies, and Science for Liberty DLE, Liberty, Austin, Alamo, LBJ, and San Juan.]
Texas Data - Dual Language Enrichment
MS TAKS Data (2003-2005) (DL Cohort #1)

6th - 8th Grade Reading

Liberty MS
State Hispanic
State White
Texas Data - Dual Language Enrichment
MS TAKS Data (2003-2005) (DL Cohort #1)

6th - 8th Grade Math

- Liberty MS
- State Hispanic
- State White
Texas Data - Dual Language Enrichment

MS TAKS Data (2003-2005) (DL Cohort #1)

6th - 8th Grade
Commended Performance
English Math TAKS

- Liberty MS
- State Hispanic
- State White
Texas Data - Dual Language Enrichment
9th Grade HS TAKS Data (2006) (DL Cohort #1)
Texas Data - Dual Language Enrichment
10th Grade HS TAKS Data (2007) (DL Cohort #1)
Texas Data - Dual Language Enrichment
MS TAKS Data (2006) (DL Cohorts #2 - 3)

8th Grade: History
8th Grade: Science
7th Grade: Writing

Liberty-DL
Liberty
District