Closing the Academic Gap through One-Way Dual Language Education

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TABE Executive Board

Texas Association for Bilingual Education

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Purpose of Bilingual Education

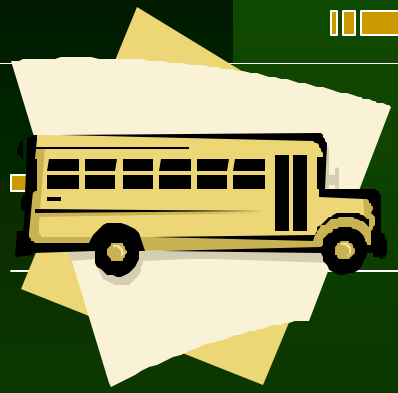
- ***Learn in native language while developing English***
  - **Learn grade-level content (literacy)**
  - **Learn knowledge & skills; keep up with English peers**
  - **Knowledge & Skills in first language (Spanish) transfer to second language (English)**
- ***Types of Language Proficiency***
  - **Basic 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



Speed of Academic Learning

L1 [75mph]

75mph / **Year 7**

65mph / **Year 6**

55mph / **Year 5**

45mph / **Year 4**

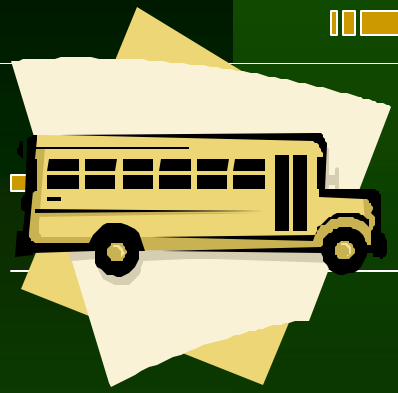
L2

35mph / **Year 3**

25mph / **Year 2**

15mph / **Year 1**

Highway Systems : L1/L2 Analogy



Speed of Academic Learning

L1 [45mph]

45mph / **Year 4**

35mph / **Year 3**

L2

25mph / **Year 2**

15mph / **Year 1**

Models of Bilingual Education

Additive/Enrichment

Dual Language
- **Two-Way**
- **One-Way**

Maintenance Bilingual

Strong Long-Term Achievement

Subtractive/Remedial

TBE - Late Exit

TBE – Early Exit

Content-Based ESL

ESL Pullout

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**

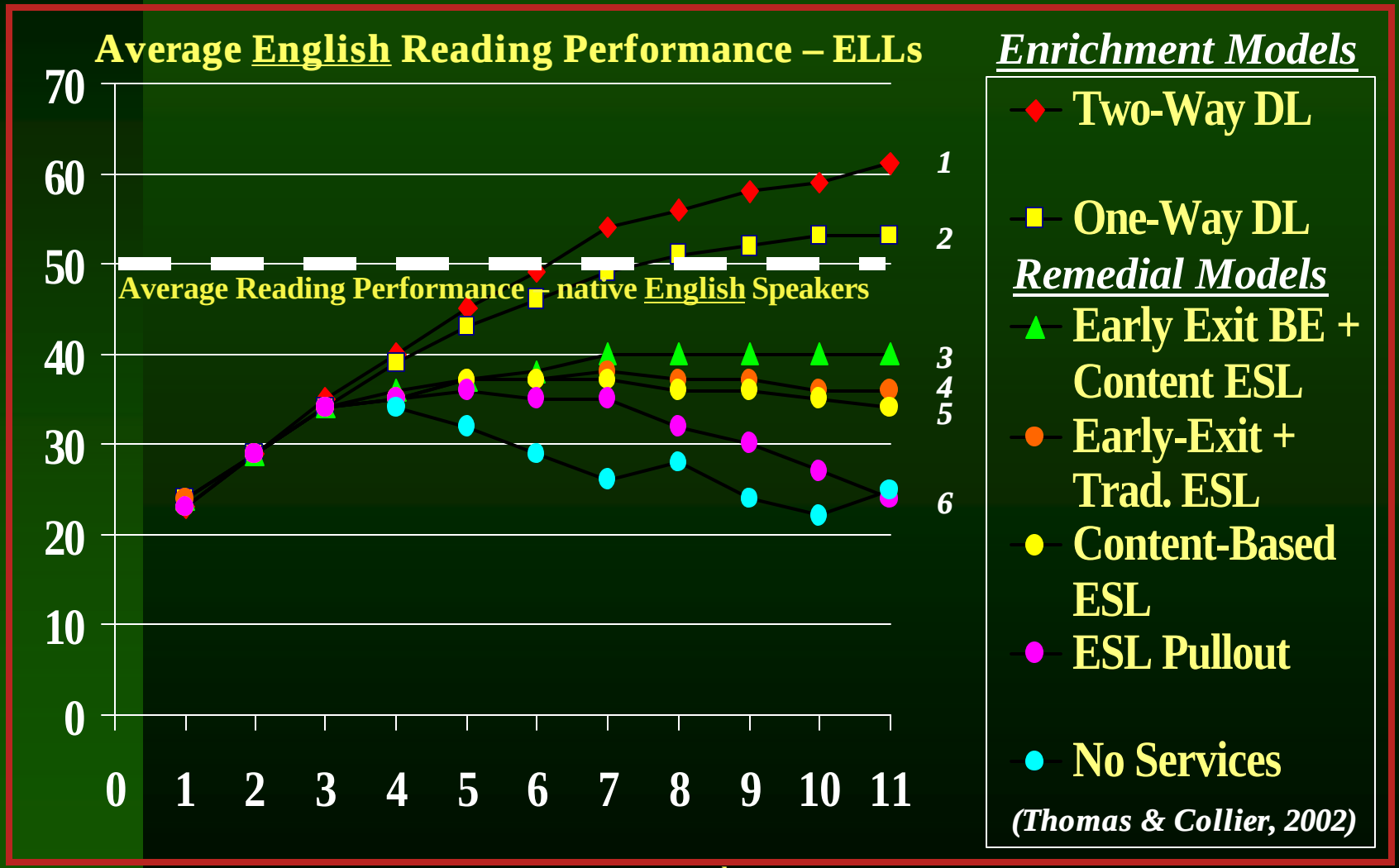
Balanced Bilinguals or Biliterates

- **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)

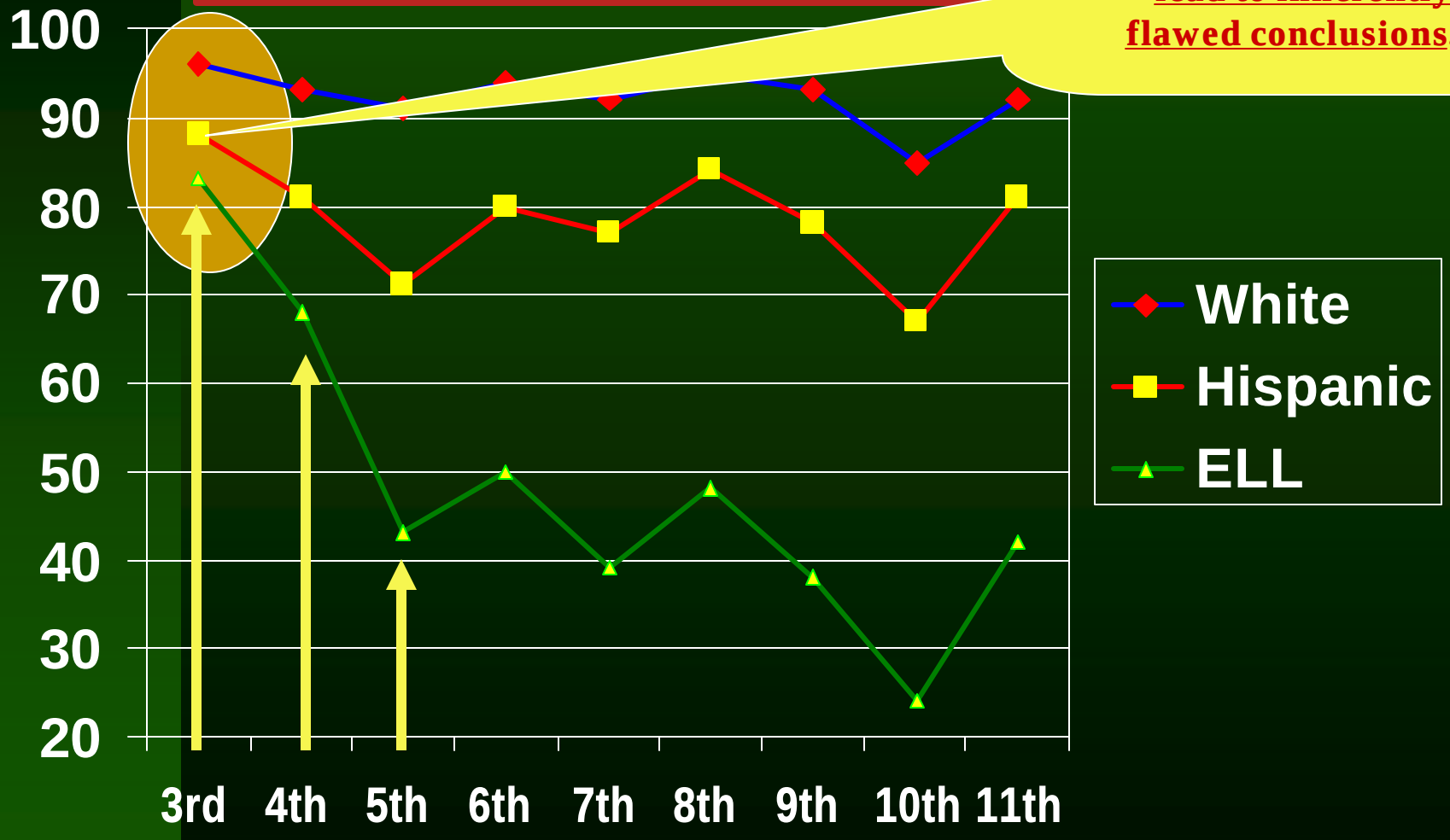
National Data - Remedial v. Enrichment Models Long-Term Academic Achievement of ELLs



Note: Program Implementation through 5th Grade only

Achievement Gaps (TAKS Reading)

For ELLs - 3rd & 4th grade <u>English</u> TAKS results <u>lead to inherently flawed conclusions</u>…



AEIS Indicator System, TEA (2004) ELA Reading TAKS

Dual Language Research

(Thomas & Collier, 1997, 2002; Christian, 1996; Lindholm, 1991; Lindholm-Leary, 2001); Gómez & Gómez, 1999)

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

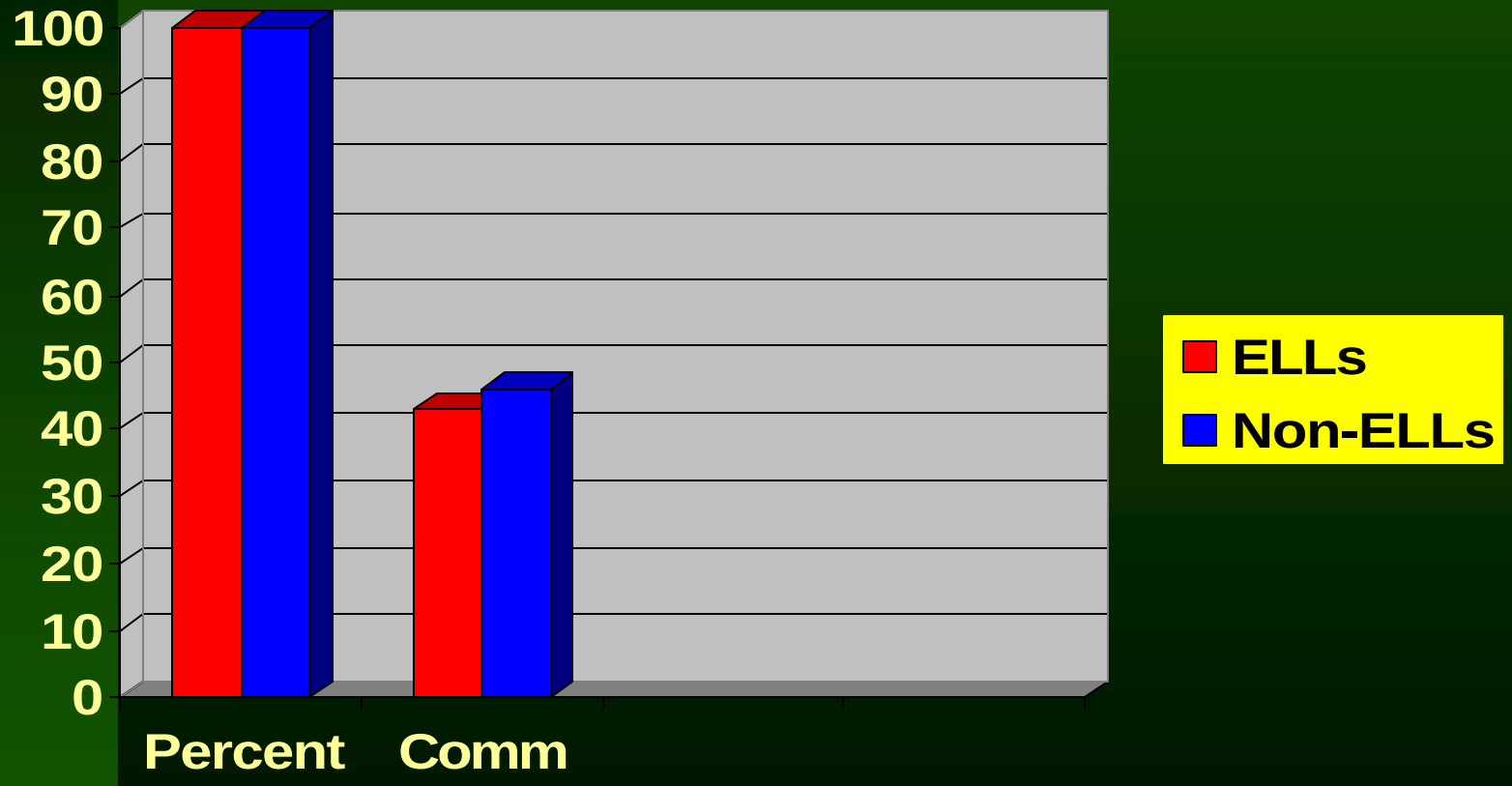
- **3rd Grade TAAS**
  - **Spring 2000 *(Before DLE)***
    - **Reading: 57%**
    - **Math: 66%**
  - **Spring 2001 *(1st DL Cohort)***
    - **Reading: 80%**
    - **Math: 81%**
  - **Spring 2002 *(2nd DL Cohort)*****
    - **Reading: 84%**
    - **Math: 86%**
- **3rd Grade TAKS**
  - **Spring 2003 *(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

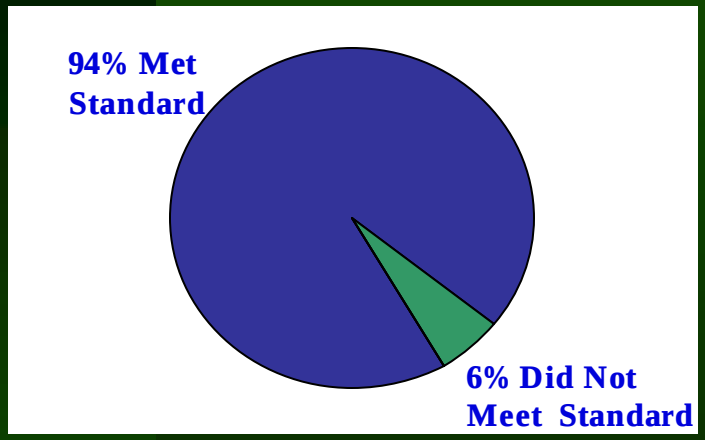
White Settlement ISD – 3rd Grade TAKS Reading Scores (2007)
N = 14 ELLs and 13 Non-ELLs (Two-Way DLE classroom)

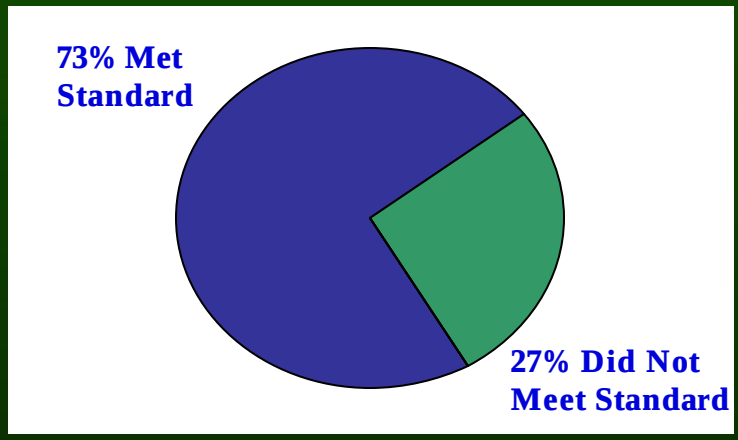


Note: ELLs: 13 tested in Spanish, 1 in English; 6 commended/1 perfect score
Non-ELLs: 6 commended/4 perfect scores

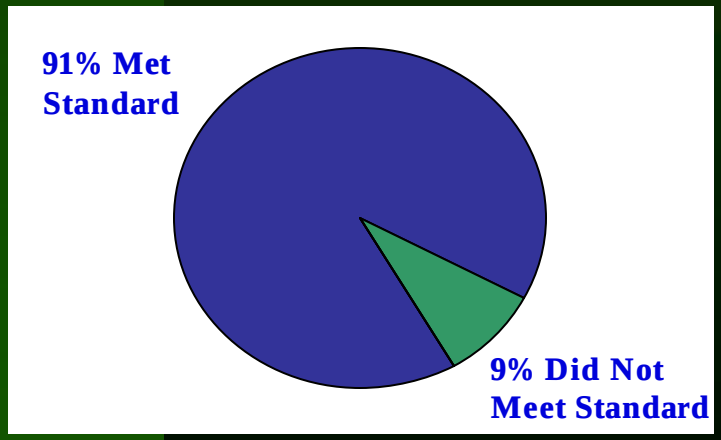
Texas Data - Dual Language Enrichment

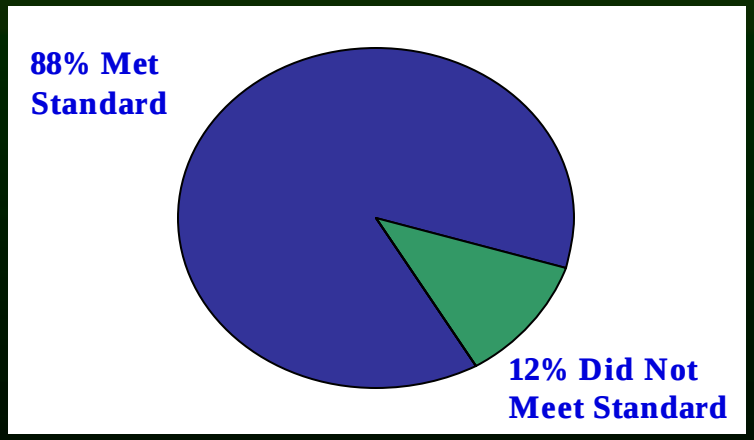
Two DLE Schools	*PSJA ISD*	*School District*
(N = 95)		(N = 1623)





5th Grade English TAKS (2005)

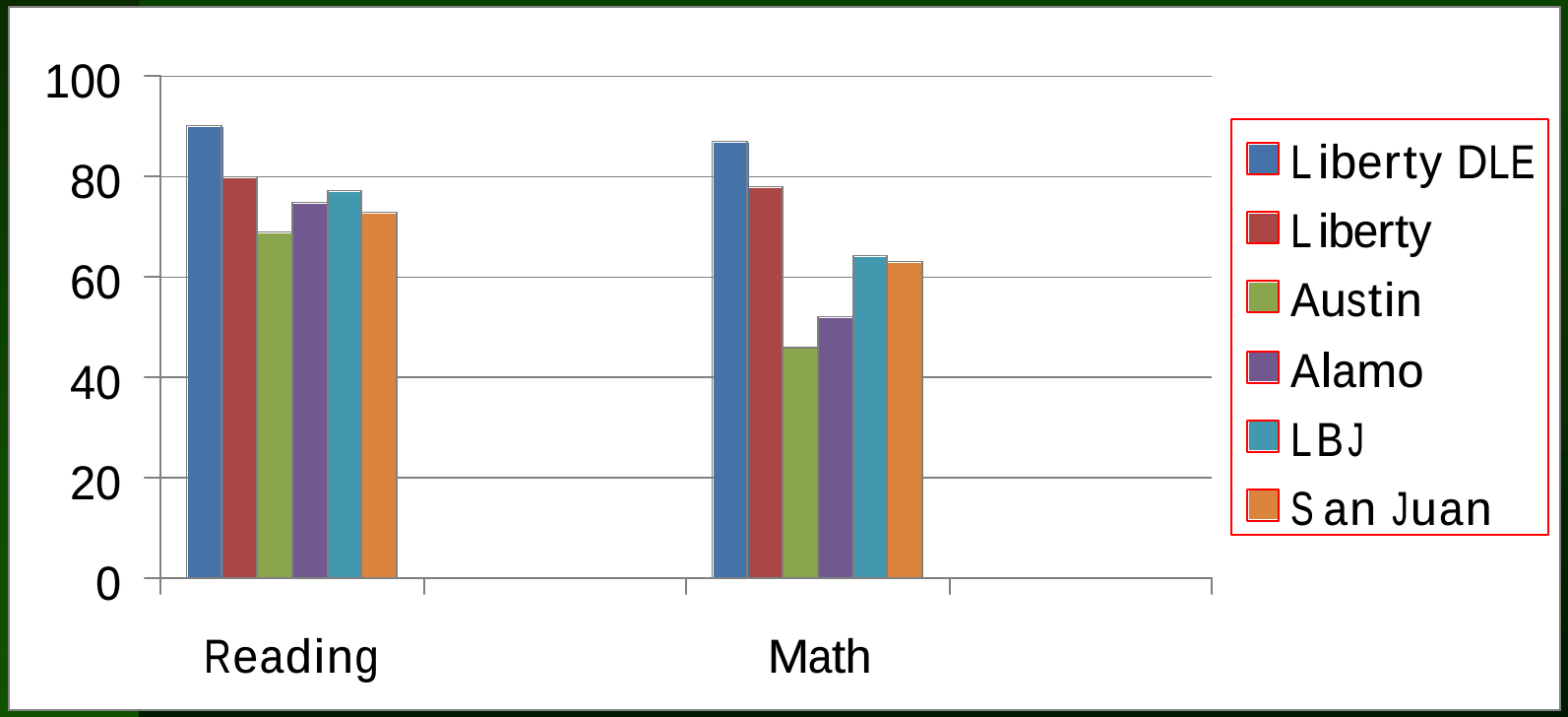




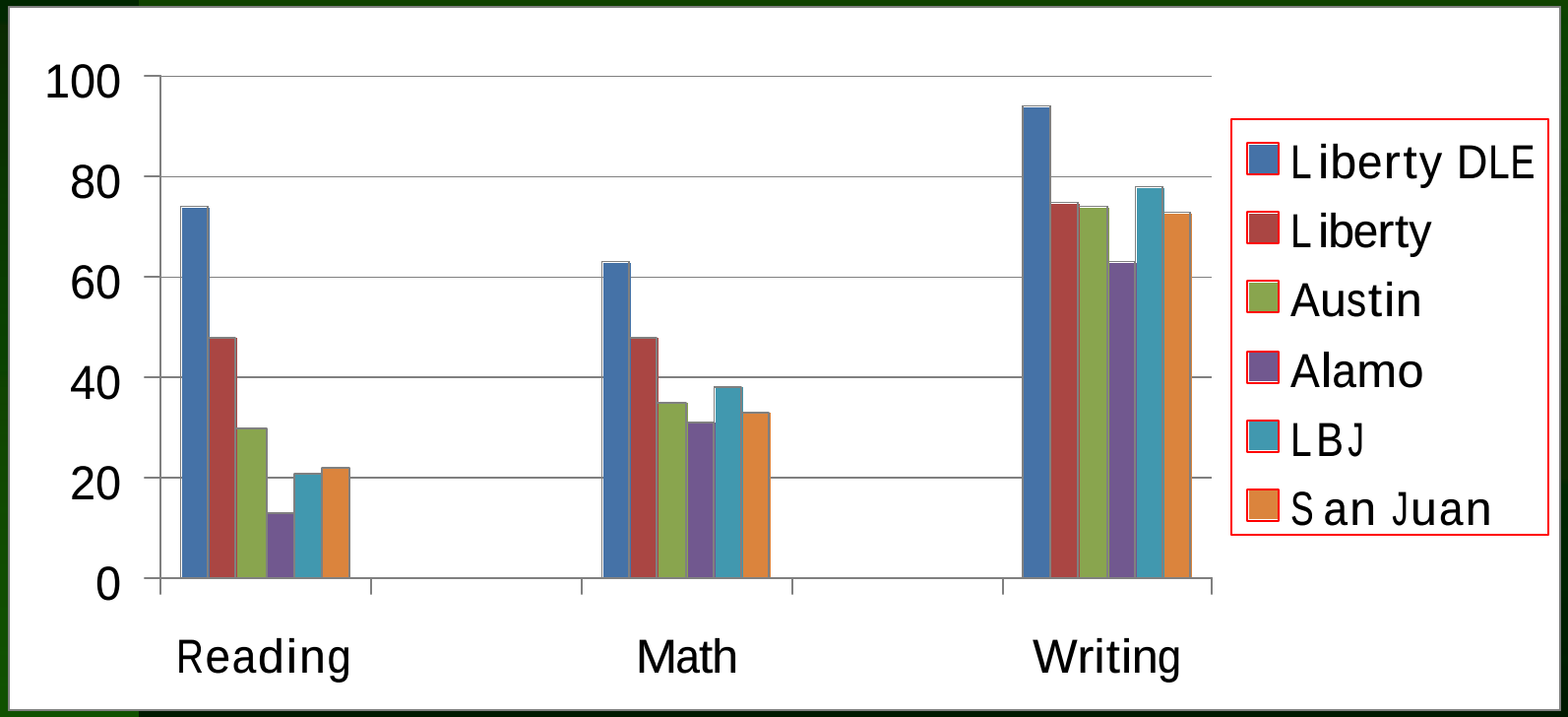
5th Grade English TAKS (2006)

5th Grade Math TAKS (2006)

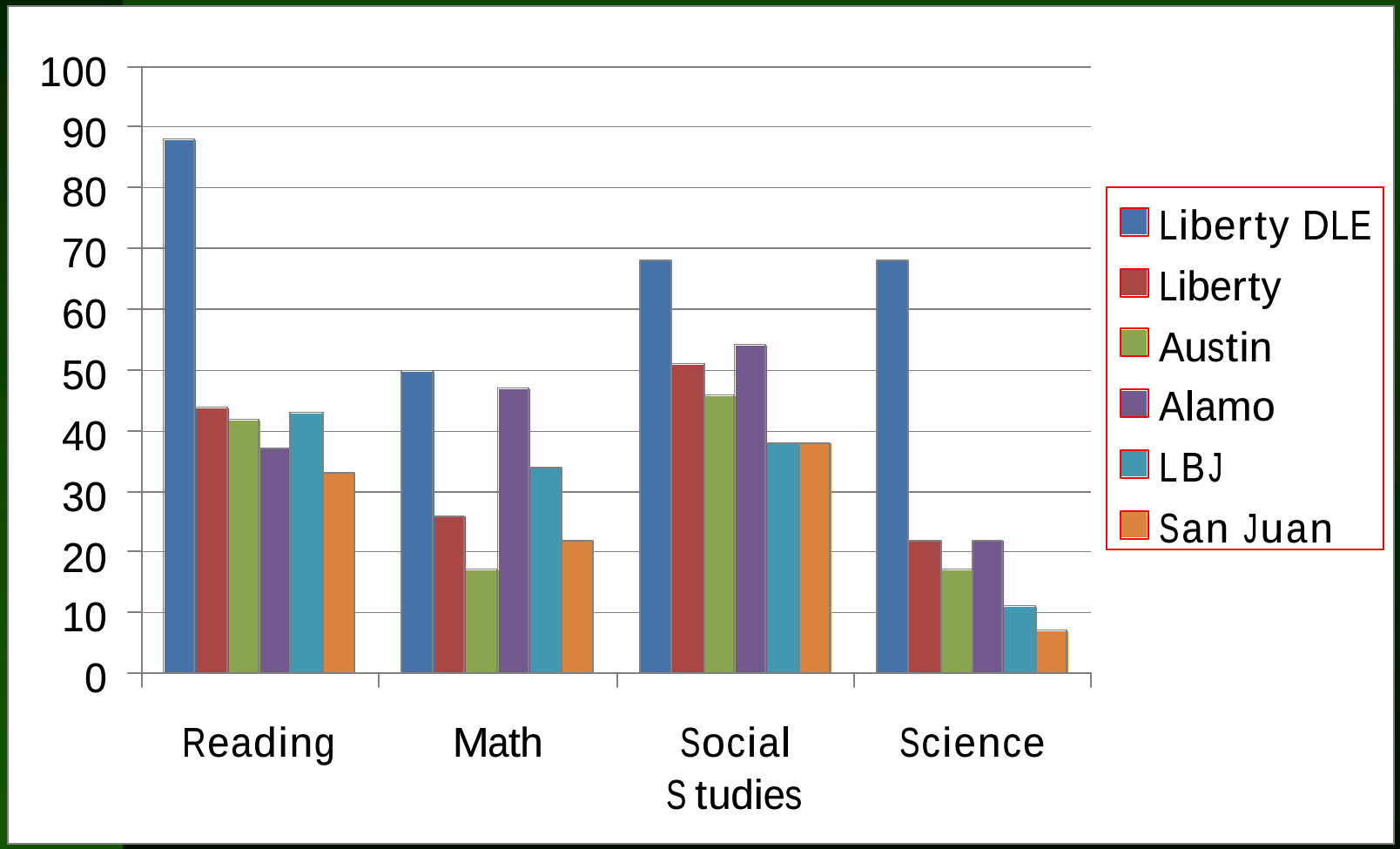
Texas Data - Dual Language Enrichment
6th Grade MS TAKS Data – Former ELLs (2007)



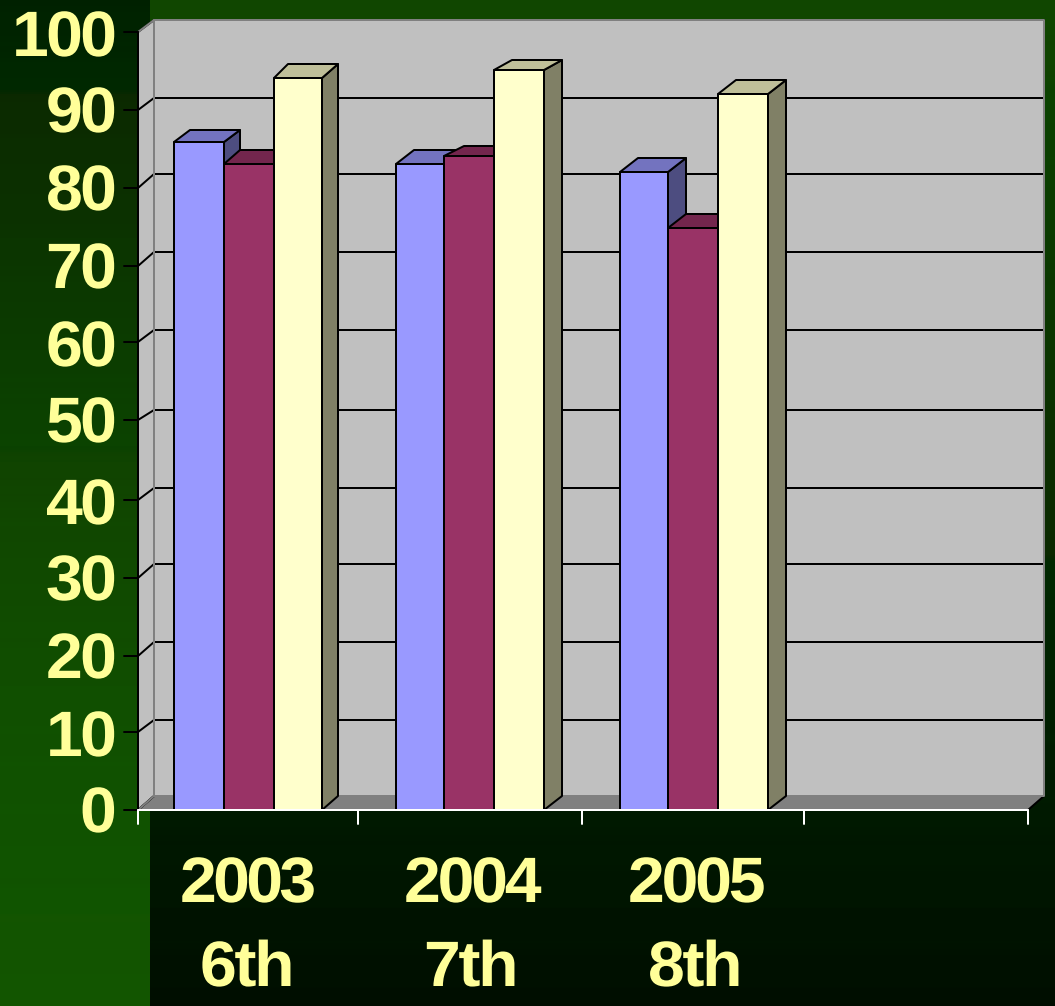
Texas Data - Dual Language Enrichment
7th Grade MS TAKS Data – Former ELLs (2007)



Texas Data - Dual Language Enrichment
8th Grade MS TAKS Data – Former ELLs (2007)



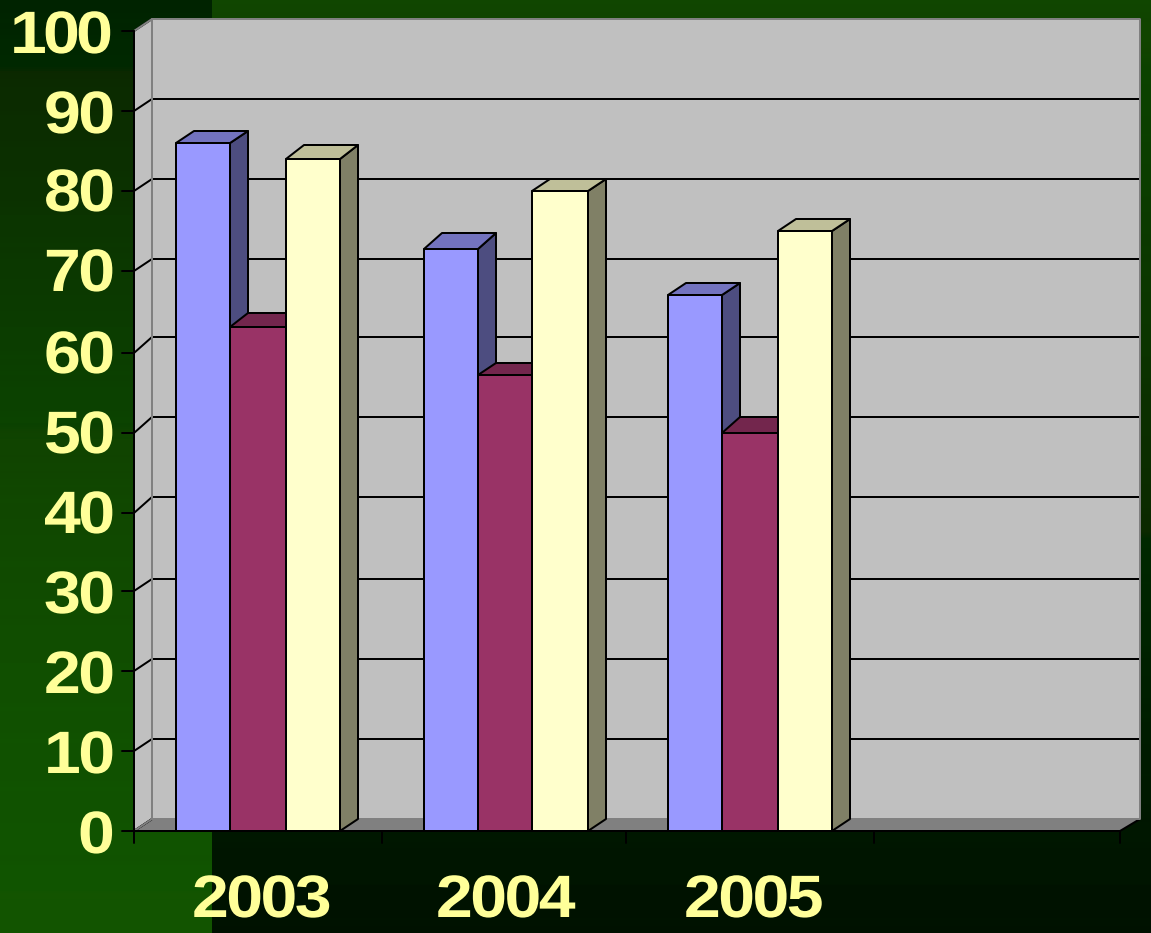
Texas Data - Dual Language Enrichment
MS TAKS Data (2003-2005) (DL Cohort #1)



6th - 8th Grade Reading

- Liberty MS
- State Hispanic
- State White

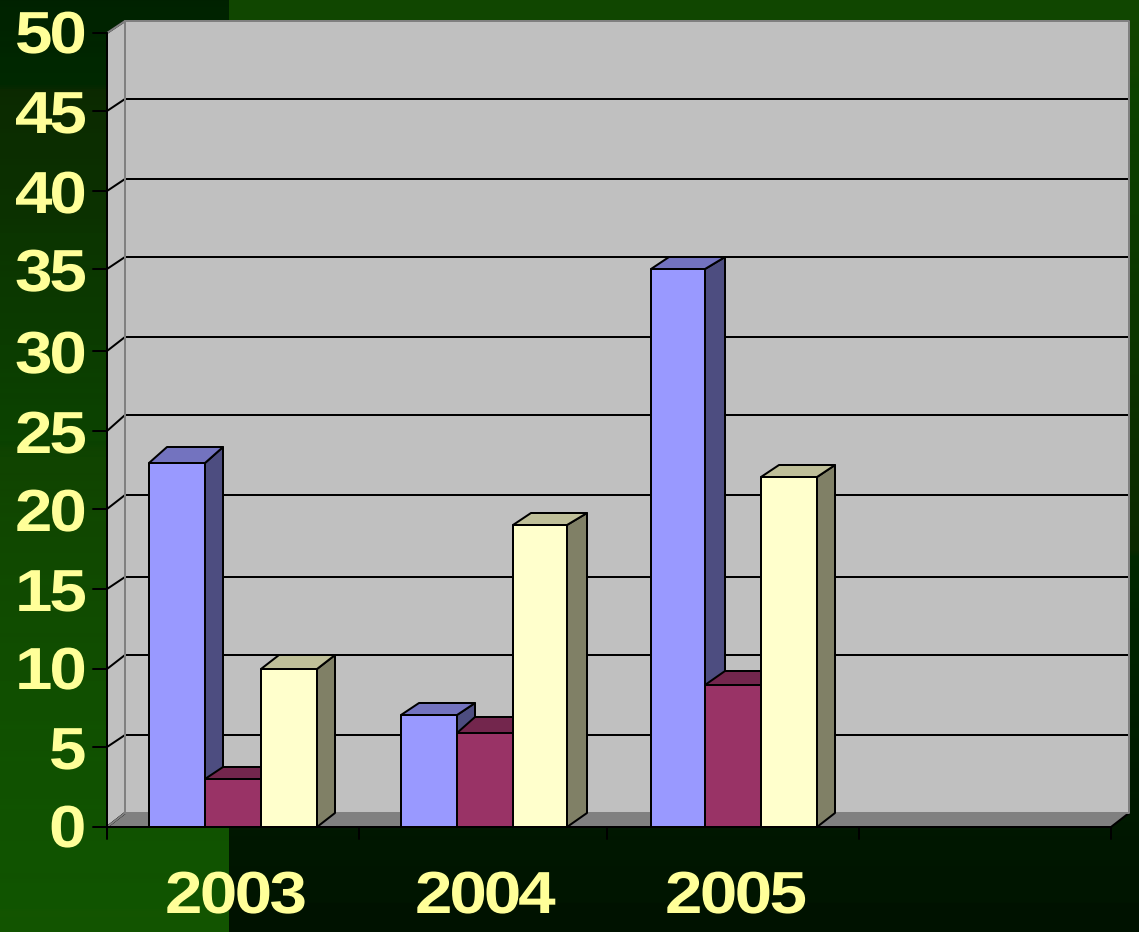
Texas Data - Dual Language Enrichment
MS TAKS Data (2003-2005) (DL Cohort #1)



6th - 8th Grade Math

- Liberty MS
- State Hispanic
- State White

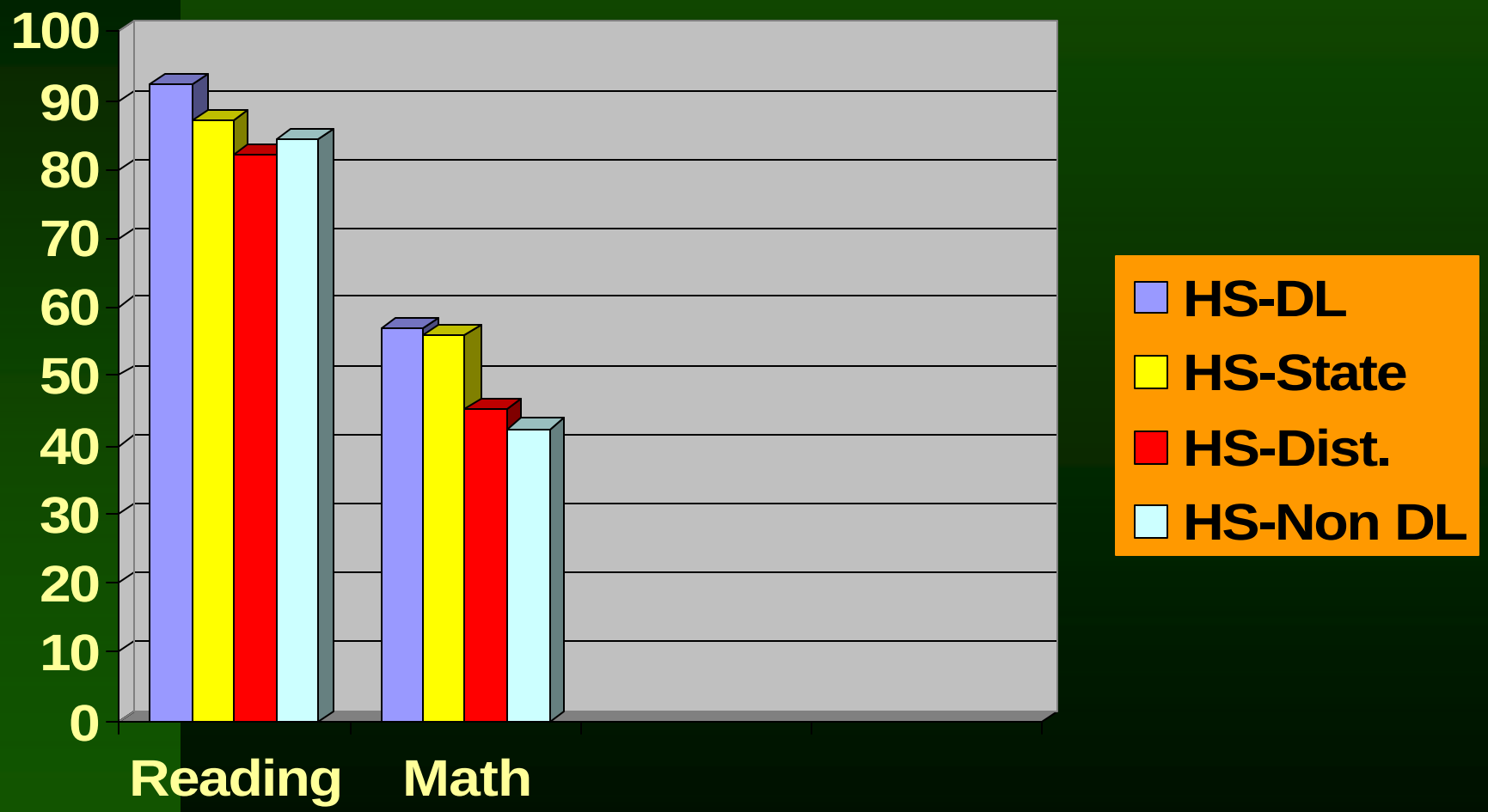
Texas Data - Dual Language Enrichment
MS TAKS Data (2003-2005) (DL Cohort #1)



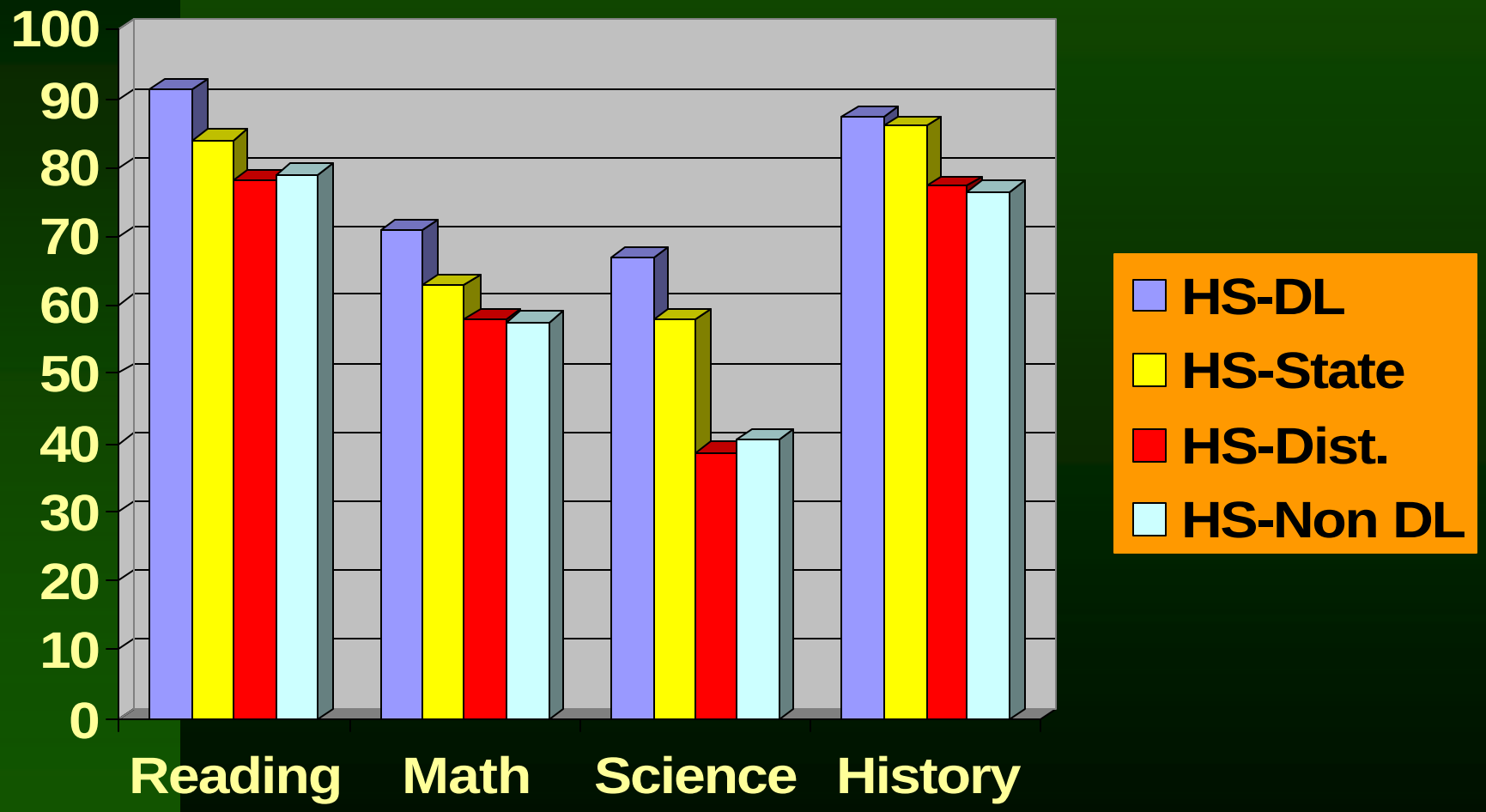
6th - 8th Grade
Commended Performance
English Math TAKS

- Liberty MS
- State Hispanic
- State White

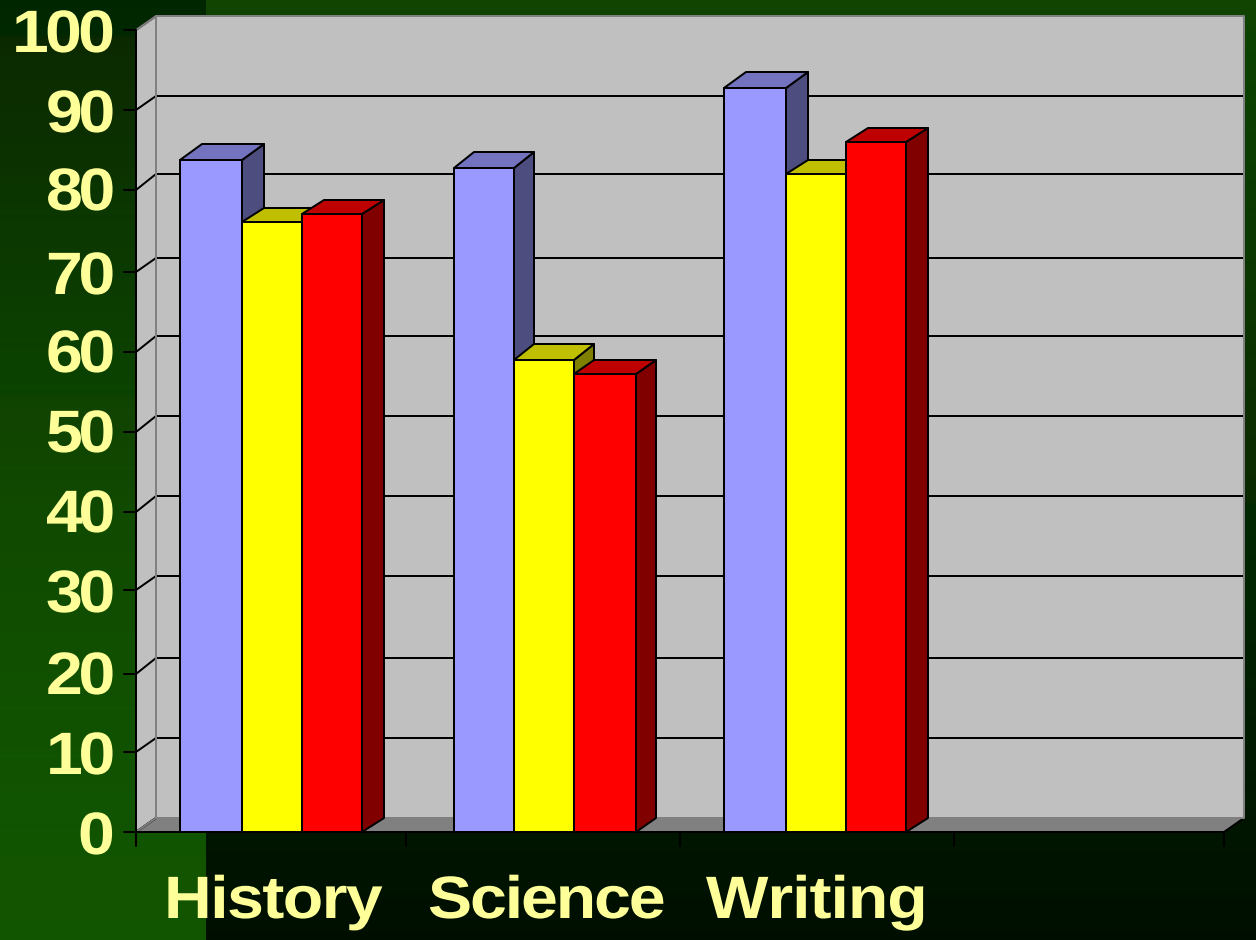
Texas Data - Dual Language Enrichment
9th Grade HS TAKS Data (2006) (DL Cohort #1)



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