

Bilingual education in U.S.

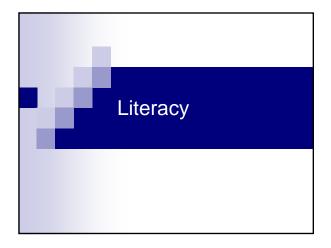
- Early bilingual education programs focused on German-English (Ohio in 1839, St Louis in 1870s)
- by 1917 German in schools is discontinued backlash against German and other languages
- 1960s bilingual Spanish-English schools established in Miami for Cubans
- 1968 federal Bilingual Act provides federal funding for native-language instruction

Milestones in bilingual education

- 1967 California SB 53 allowed use of languages other than English in public schools
- 1974 Lau vs. Nichols Supreme Court decision
 - 8 year old Kenny Lau sued SF School Board over English-only schools
 - □ ruling in Lau's favor that lack of native language instruction violates Civil Rights Act of 1964 to provide equal education
 - districts with limited English proficiency (LEP) students must provide service to minority language students

Proposition 227

- 1998 labeled the 'English for the Children' initiative or the Unz initiative, after Ron Unz, the entrepreneur who sponsored it
- Supported by One Nation, US English, English Only
- Passed 61/39% and effectively ended 30 years of bilingual education programs in California (Arizona passed a similar law in 2000)



Sound-meaning correlation

- Words in language involve an arbitrary match between sound and meaning
- Orthography or spelling is sometimes oneto-one: nag blond pat tap apt
- But in many writing systems (like English), symbols do not match well with actual sound: cough, comb, phlegm, seek, seal, piece, knife,

Phonological awareness

- Must have tacit command of phonology of language -> knowledge of how sounds are pronounced in different contexts, even if written the same way
- beauty, tree, toad, beet, atone, button
- cops, pits, blocks, ribs, pads, frogs, bulls, pins Spanish:
- caldo [d], conde [d], dia [d], crudo [ð]
- saco [s], ese [s], dos [s], mismo [z], rasgo [z]

Phonological awareness

- Ability to access and manipulate sounds in words
- Syllables, division of syllables into onsets and rimes, basic phonemes
- Onset: consonants that begin syllable: plank
- Rime: vowel + consonants that end syllable: plank
- → important skill for reading

Other factors in reading

- Phonological memory short-term memory for sounds
- Rapid automatized naming capability speed of retrieval and production of words
- Oral vocabulary knowledge

Implications for education

- Sound-symbol connection means that oral competency is required in order to master reading
- Early literacy should ideally be in first language
- Oral competence in second language is needed before literacy skills taught

Interdependence

- Positive interdependence between two languages
 - □ → cognitive advantages of bilingualism
 - □ → building blocks of L1 towards L2

Some criticisms of positive interdependence

- Profile effects bilingual learners perform better on some tasks but worse than others compared to monolinguals
- Cummins has argued that positive interdependence is strongest for academic tasks, as they involve context reduction and high cognitive involvement
 - □ But academic settings use extensive *context-embedding* and *high cognitive involvement* is found outside school

Shared elements

- When languages are similar, does that help learning?
- Concrete structural elements → phonology
- Similar writing systems → yes, but do not help as much as shared structure

Studies show...

- Turkish/Dutch in Netherlands
 - □ Bilinguals show lower vocabulary scores, but good decoding skills
- Spanish/English in Miami
 - □ Bilinguals showed low oral vocabulary and lower reading comprehension than monolinguals; good decoding
 - → consistent across immersion contexts, and high socioeconomic groups also fared worse than monolinguals

Vocabulary Bilinguals' vocabulary may actually be as large or larger than monolinguals when both languages are considered Language 1 Language 1 Bilingual

Decoding

- Why are decoding skills good in these groups of bilinguals?
- Share an alphabet
- Graphemic-phonemic mappings (sound-writing symbol) are finite
- Many phonological elements and graphemic elements are common across languages

Transfer – alphabet vs. non-alphabet

- Spanish-English bilinguals between K and 2nd grade outperformed English monolinguals on phoneme segmentation but Chinese-English bilinguals do not (Bialystok et al 2003)
- → sharing of alphabetical system helps
- but, languages are similar structurally, so isn't that a confound?

Transfer – alphabet vs. nonalphabet

- Holm & Dodd (1996) tested mainland Chinese students exposed to pinyin (Chinese alphabetic writing system) versus Hong Kong students learning traditional Chinese logographic system
- Pinyin learners better at segmenting English words and naming nonwords
- Chinese ESL students who perform well on real words perform worse than English students on spelling nonsense words (Wang & Geva 2003)

Transfer - different alphabetical writing?

- Urdu and Persian use Arabic writing, which has right-toleft directionality
- Bilinguals were strong readers if words followed regular sound-grapheme relations
- Low Urdu/High English competency correlated with better reading skills for *irregular* sound-grapheme relations
- lacktriangledown ightarrow transfer effects stronger if shared alphabetic writing
- → bilinguals' performance best on *regular* soundgrapheme relations

Literacy

- In general, literacy skills should be taught in the native language
- Transfer effects will occur if shared alphabetical system, and to a more limited extent with non-shared alphabets
- Oral competency is required prior to literacy for both first language, and is preferred for second language