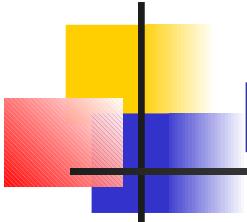


German kindergarten and the question of phonological awareness

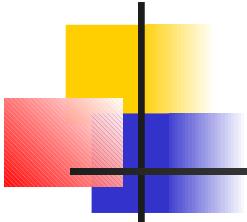
Paper presented at the 17th European
Conference
Mons

Prof. Dr. Renate Valtin



Relevance of preschool education

- The PISA-Shock in Germany: high correlation of achievement with social class, with a high proportion of pupils failing in school coming from lower socio-cultural and migrant backgrounds.
- The Standing Conference of Ministers of Education and Cultural Affairs has suggested early language training in preschool and kindergarten institutions.



The relevance of preschool education for the foundation of literacy

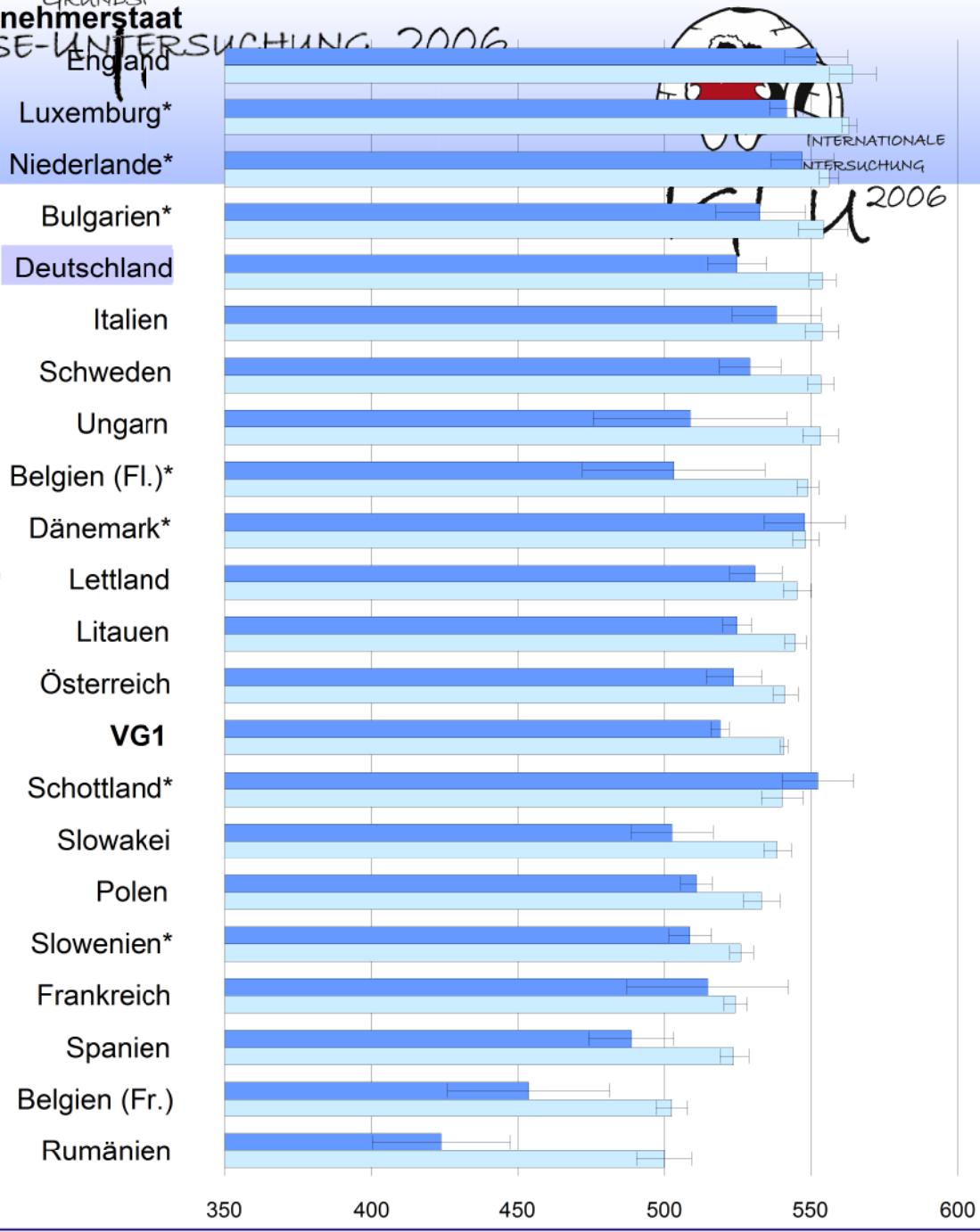
- Educational policy aims at improving both family literacy (Hornberg & Valtin, 2011) and the quality of early childhood education and care.
- As PIRLS demonstrates, children who have spent at least two years in kindergarten have an advantage in reading and mathematic in grade 4 over children with less or no participation in kindergarten (Bos et al. 2007).

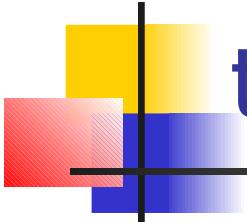


Lesekompetenz nach Dauer des Besuchs von Vorschule und Kindergarten in der Vergleichsgruppe 1 – Gesamtskala Lesen

- Bis 1 Jahr
- Mehr als 1 Jahr

* Zu Besonderheiten der Stichproben vgl. Kapitel II.

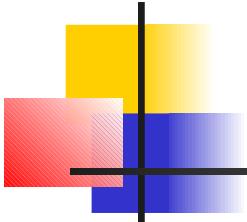




While the relevance of language training is acknowledged, however

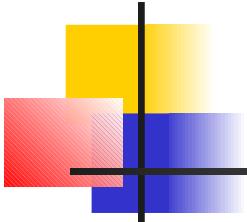
... there is a controversy between two approaches:

- Functional training (fostering phonological awareness)
- Integrative language learning and providing a literacy rich environment



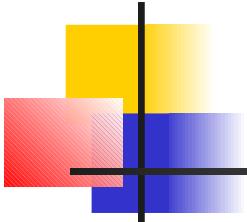
Phonological awareness (PA)

- In educational psychology awareness PA is supposed to be an important **prerequisite** skill for literacy learning;
- **deficits** are held to lead to difficulties in reading and spelling and
- should be compensated for, through **specific training prior** to the start of formal schooling.



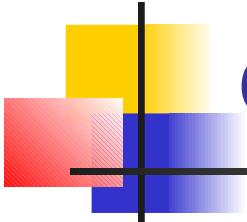
Topics of my presentation

- Is there empirical evidence of its importance for the learning of reading and spelling?
- Is phonological awareness (PA) a useful concept?
- Are phonemic training programmes in kindergarten useful?



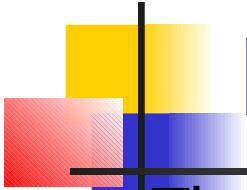
Definition of PA

- “the ability to explicitly reflect on the sound structure of spoken language” (Küspert, Weber, Marx und Schneider, 2007)
- distinguishing two components:
 - in a broad sense: “analysis of broader sound structures such as **words** and **syllables**”,
 - in a narrow sense it “concerns the ability to isolate **phonemes** within words and syllables” (Schneider et al., 2000)



Empirical evidence from educational psychology

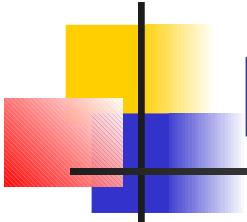
- Correlations between PA measures and reading and spelling are low to moderate
- Correlations have no explanatory power but may be attributed to common variance: IQ, vocabulary and preschool reading abilities



Low prognostic validity

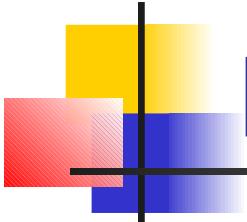
The positive correlations between reading and PA (as measured by the Bielefeld Screening, BISC) were not replicated (Brügelmann, 2005).

- The BISC could only identify fewer than 20 percent of the children with reading and spelling difficulties in first and second grade (Marx & Weber, 2006).
- Moreover, most of the “children at risk” developed normal reading and spelling competences (Brügelmann, 2005).



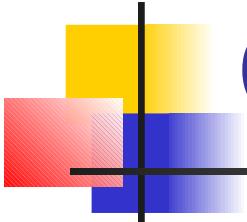
No or little transfer effects of a preschool training of PA

- No shortterm effects (Rothe 2008, Wolf, Stanat & Wendt, 2010)
- No longterm effects (Hartmann 2002)
- Effects only to decoding, not to comprehension (Schneider, Marx & Weber 2008)
- No effects in first grade, in second grade only small effects on reading and spelling of girls (Roos et al. 2007)



No or little transfer effects of a preschool training of PA

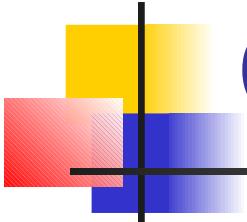
- No advantage of isolated phonological training compared to integrative methods (book-rich environment, experiences with written language (Lenel 2005; Rackwitz 2008)).



Critique of the concept

- PA does not refer to a unitary function but to an **arbitrary conglomerate** of heterogeneous linguistic units and operations:
 - Syllables: speech units
 - Words: grammatical units
 - Phonemes: abstract, linguistic category

While syllables are perceptual units, words and phonemes are conceptual.

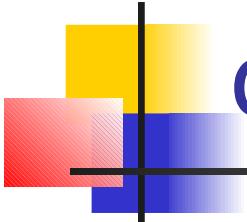


Critique of the concept of PA

The vague concept needs to be embedded

- into a **psycholinguistic theory**
 - dealing with the development of language awareness and with
- Into a **cognitive developmental theory**
 - dealing with literacy acquisition

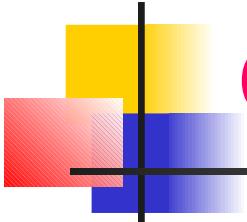
(Andresen 1985; Downing & Valtin 1984).



PA and reading acquisition – the cognitive clarity theory

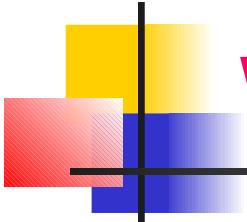
- Hypothesis : PA is a necessary prerequisite.
- Counterargument:
When learning written language children have to gain cognitive clarity (insights) regarding the function and the structure of print.

0 嘟 舊 錦 嘟 ③ 航 ⑤ 舊 舊 航 ⑩ 錦 ⑥ 餅 ⑤ ① ① ②
舊 錦 ③ 餅 ⑨ ① ① ⑤



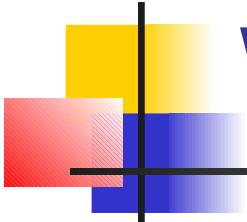
Four insights: 1. objectivation of language

- The ability to objectify language (abstraction from action context) is indeed a necessary prerequisite.
- Children have difficulty in differentiating between words and their referents:
 - >*cow*< is a longer word than >*butterfly*<
 - >*Blätter*< (leaves) are many words
 - “Listen, what does >*car*< begin with?”- “with a bumper.”



Four insights: 2. concept of a word, word segmentation

- Preschool children have difficulties to segment sentences into words.
- Only **content** words (nouns, verbs) are regarded as words, but not **function** words (articles, prepositions and conjunctions).



Writing without word spaces

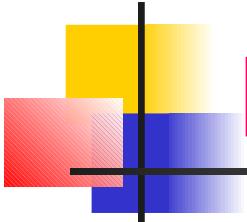
MarceL

1) EA Sr

2) EA SR Marcel

3) OmadPALESA

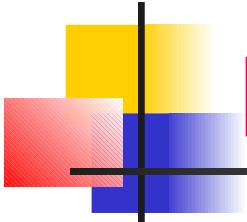
Mamaruft Ara



Four insights: 3. concept of phoneme, analysis and blending

The segmentation of words into phonemes develops gradually as invented spellings show:

- Recognition of prominent speech sounds
L (for elephant)
- Rudimentary or skeleton writings (LFT)
- Complete phonetic strategy: FEREND (friend)
- Phonemic strategy with first use of orthographic patterns



Four insights: 4. graphemes and phonemes

- The crucial point: assigning correct graphemes to phonemes by learning the phoneme-grapheme-correspondence rules and principles of orthography
- In German orthography we have 40 phonemes and 89 graphemes.

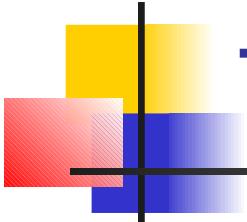
Main problem: assigning correct graphemes to the phonemes

Frühe Verunsicherung bei rechtschreibschwächeren Kindern



Älefanten
Elefanden
Elehfanten
Elefahnten
Ehlefanten
Eleffanten
Elephanten
Elevanten
Elevvantens
Ellefanten
Elefannten
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**106
Fehlervarianten
bei Elefanten**

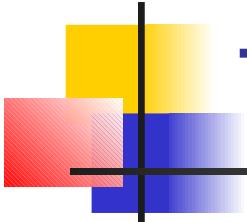


PA and reading acquisition – the cognitive clarity theory

The acquisition of reading, writing and spelling is seen as a **sequence of characteristic strategies for dealing with written language**, reflecting growing cognitive and linguistic **insights** into the relationship between spoken and written language and the specific orthography.

Developmental model of acquisition of reading and spelling

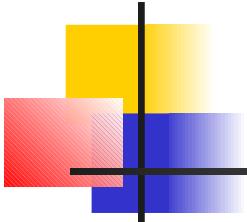
Level	Skills and insights	Reading	Spelling
1	Imitation of behaviour	Pretend reading	Scribbling
2	Knowledge of single letters in a figurative sense, but no insight into the relationship between letters and sounds	"Naïve-holistic" reading: Children guess at words, orienting themselves to context and figurative cues	Logo graphic strategy: drawing arbitrary sequences of letters or letterlike forms, ("pseudo-words")
3	Beginning insight into the function of letters. Knowledge of some letters/sounds	Beginning alphabetic strategy (phonetic cue reading)	Rudimentary or skeleton writings
4	Insight into the alphabetic principle, ability to segment words into speech sounds and phonemes	Sounding-out strategy (reading letter by letter), sometimes without understanding	Phonetic-articulatory strategy (I spell as I speak)
5	Knowledge and use of orthographic patterns	Alphabetic reading with use of chunks	Phonemic strategy with first use of orthographic patterns
6	Automatized processes	Automatized word recognition	Correct spelling

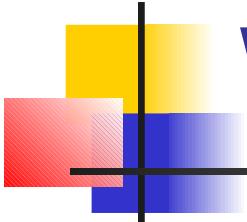


PA and reading acquisition – the cognitive clarity theory

Phoneme awareness and the ability to analyze and blend phonemes are

- central for the grasping the alphabetic code
- components (not prerequisites) of learning to read and spell
- only relevant at stage 4: sounding out strategy in reading and „spell-as-you-speak“ strategy in spelling

- 
- Phonological training as preparation for learning to read and write?



A critical look at the Würzburg Training

- Children learn 12 letters and their sounds (A, E, M, I, O, R, U, S, L, B, T, N).
- Each letter is introduced with a story:
 - a (like in **father**): at the dentist you open the mouth and utter „aaaa“
 - „zzz“ makes the bee (für S).
- This approach has been criticised already 70 years ago and has been abandoned in primary school.

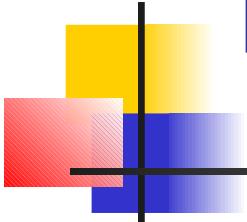
Würzburger Training

„Funny Stories“

- Children listen to a sentence with the information that all words start with the same (!) sound

Ohrwurm Olli organisiert originelle Opern.

- This is a confusion of letter name and phoneme
>O< represents 2 phonemes, a short and a long vowel sound.



Phonological training in kindergarten?

- Instead of learning meaningless elements of written language such as letter-sound-associations in didactically questionable formats, the time in kindergarten should be devoted
- to oral language development (vocabulary and grammatical structures)
- to experiences with the *functions* of written language
- by providing a rich literacy environment.

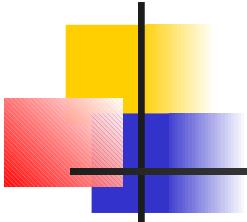
Phonological training in kindergarten?

- The ability to shift the attention from content to form may be fostered in language games, using rhymes, tongue-twisters and poems.
- No isolated training seems necessary.

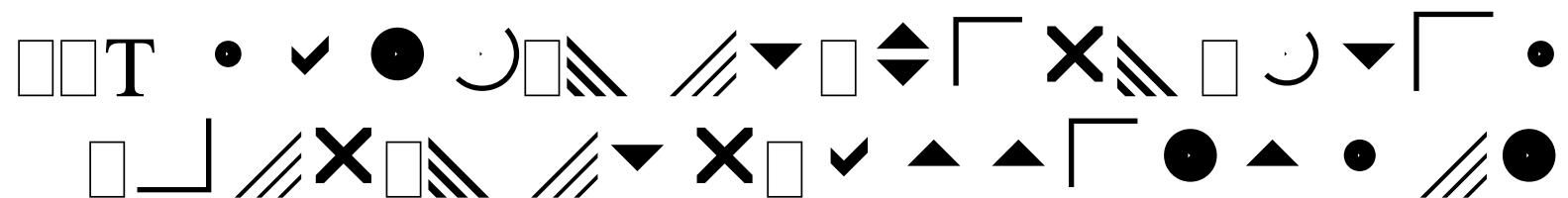
Spielerische Erfahrungen mit Sprache und Schrift

S





Thank you very much for your attention!



Literatur

- Valtin, R.(2010). Phonologische Bewusstheit– eine notwendige Voraussetzung beim Lesen- und Schreibenlernen? *leseforum.ch*. Online-Plattform für Literalität, 2, /www.leseforum.ch/myUploadData\files\2010_2_Valtin_PDF.pdf (Aufruf 10.4.2011).
- Valtin, R. (2003). Methoden des basalen Lese- und Schreibunterrichts. In U. Bredel, H. Günther, P. Klotz, J. Ossner & G. Siebert-Ott (Hrsg.), *Didaktik der deutschen Sprache. Ein Handbuch*. Bd. 2 (S. 760-771). Paderborn: Schöningh.