

# WELCOME

## Bilingual Preschools: Research meets Practice



# Welcoming Remarks

Prof. Dr. Holger Kersten (Projektleiter)



# Welcoming Remarks

**Patron Norbert Bischoff**

**Saxony-Anhalt Minister of Health and Social Affairs**



**SACHSEN-ANHALT**

Ministerium für  
Gesundheit und Soziales

# Introduction

**Dr. Annette Lommel (FMKS e.V. Kiel)**

**Dr. Kristin Kersten (Projektkoordination)**



# Immersion in Early Foreign Language Acquisition

**Prof. Dr. Henning Wode**  
(Universität Kiel)



**Early Language and Intercultural Acquisition Studies**  
Multilateral Comenius Project funded by the European Commission

# **Immersion in early foreign language acquisition: An international perspective**

# TERMINOLOGY



## **IMMERSION: *Methodology***

use of the language to be learned as the medium of instruction

**BILINGUAL EDUCATION: *Goal in terms of the number of languages to be promoted***

**BILINGUAL:** Promoting two languages

**TRILINGUAL:** ... three languages

**QUADRILINGUAL:** ...four languages ... etc.



# **EU LANGUAGE POLICY: 3<sup>+</sup>-LANGUAGE FORMULA**

**Each child residing in the EU is to have the chance to learn at least three languages at a functionally appropriate level of proficiency both in speaking and writing. Functionally appropriate means adequate for professional purposes.**

# QUOTES FROM JOB ANNOUNCEMENTS



- .... be fluent in three languages
- .... be fully competent with respect to both speaking and writing
- .... must be able to follow and conduct business negotiations

# KEY FACTORS IN SUCCESSFUL IMMERSION TEACHING



- **INTENSITY OF CONTACT:**

High amount of exposure to the new language in terms of time allowed for immersion

- **DURATION:**

At least 6 – 7 years

- **STRUCTURALLY RICH INPUT:**

Include all situations and subjects except language arts for the mother tongue

# Which language when and where?

## *For instance: Germany*

age	institution	language
0;0	family	mother tongue
3;0	preschool	first foreign language
6;0	primary school	continue L2
10;0	SEC I	L3
16;0	SEC II	L4

# Frog story. *Pictures 1 - 3*





***Excerpt from the Frog Story. End of grade 1.  
Claus-Rixen-Schule Altenholz. Video Child 08***

***Excerpt from the Frog Story. End of grade 2.  
Claus-Rixen-Schule Altenholz. Video Child 08***

**Excerpt from the Frog Story. End of grade 3.  
Claus-Rixen-Schule Altenholz. Child 08.  
Pictures 1-3**

8 Ehm one night a little boy ehm has *catched* a little frog and *put* him in a glass, and # ehm then he *took* the glass and *bring* it in his bedroom, and then he *looks* at the frog, and the frog *thinks* when the little boy *sleeps*: „I go out in the forest to my family,“ and ehm the light is on and the little dog ehm *looks* in the glass exactly on the frog

IE Mhm.

8 And when the frog ehm *go* out of the glass in the night, the little dog and the little boy are *sleeping*, and ehm the moon is *shining* in the window, and all is *standing* around and is dark. And when the day *comes* and the ehm sun *shines* on the glass and the little boy ehm *wakes* up and the dog as well, ehm the glass was empty because the frog ehm in the night *go* ehm to his family again in the forest.

# Language acquisition



- Each person/neonate can learn any human language.
- The language learning abilities allow any learner to acquire a language on his/her own. These abilities are self-initiating. They do not require the kind of exercises, explanations and/or corrections familiar from traditional foreign language teaching.
- There is no biologically based limit on the number of languages a person can learn.
- Additional languages can be acquired at any age.
- Irrespective of whether a language is learned as the first, second, or third language they are acquired according to the same basic regularities.
- In learning a language learners proceed in a highly systematic way which they do not need to be taught, because it is part of the genetic endowment of our species.

# Developmental errors in L1 German and L2 English

L1 German		L2 English	
error	instead	error	instead
er gebt	gibt	he comes	he comes
er rufte	rief	he went	he goes
wir schläfen	schlafen	he shaked	he shook
geschwimmt	geschwommen	he ranned	he ran
er kommte	kam	he catched	he caught
		rufing	
		spieling	

# Compounds used by the immersion children to overcome lexical gaps



<b><i>BEEHIVE</i></b>	<b><i>FROGS</i></b>	
bee house	frog baby/ies	frog woman
bee nest	frog kids	frog family
bee home/s	pet frog	frog mother
bee hutch	baby/ies frog/s	frog glass
wasp nest	frog children/s	frog noise
Bienensnest	children frogs	
Bienennest	lady frog	

# ESTABLISHING MEANING

	french expression	German equivalent	child	translated by child as
1	on va chanter une chanson	laßt uns ein Lied singen	G L	tschüß Schuhe
2	on va jouer	laßt uns etwas spielen	A B I, L	Hände waschen waschen gehen guten Tag
3	on range maintenant	laßt uns aufräumen	I	'ne Orange
4	on va dehors	laßt uns rausgehen	I	dann gehen wir raus
5	on rentre	wir gehen wieder rein	A, B C	aufräumen Eisenbahn spielen



## Excerpt Claus-Rixen-Schule, Altenholz/Kiel: Spontaneous contribution by child 08 during a lesson on Haithabu and the Vikings. Grade 4

L And why would you like to go the Viking museum?

8 Ehm I would go to the Vi/ Viking museum because ehm you can see many things about them and you ehm/ there ehm they show you how they lived and

L Mhm.

8 (doesn't stop) everything about Haithabu, and

L (interrupts again)

Yes. Now, what was Haithabu?

8 Haithabu was the city ehm where the Vikings lived.

L Yeah.

8 They built up many ehm trading places. And Haithabu/ Haithabu was one of the trading places.

# Further reading



**Wode, H. 2009. Frühes  
Fremdsprachenlernen in bilingualen  
Kindergärten und Grundschulen.  
Braunschweig: Westermann**

**ISBN 978-3-14-165001-3**

# ELIAS

## The Research Project



**Early Language and Intercultural Acquisition Studies**  
Multilateral Comenius Project funded by the European Commission

# The early bird gets the worm!



**Early Language and Intercultural Acquisition Studies**  
Multilateral Comenius Project funded by the European Commission

# The EU-Project



**ELIAS** (Early Language & Intercultural Acquisition Studies)

## Project Goals

- monitoring of bilingual preschools
- enhancement of **first** and **second language learning**, **intercultural competence**, and **bilingual environmental education** for preschoolers
- scientific documentation
- evaluation of conceptual designs
- recommendations and dissemination of results

# The EU-Project



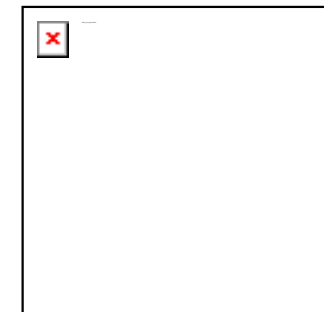
## Network

- 18 partners from 4 European Countries (Germany, Belgium, England, Sweden)
- cooperation partners from Italy and the Netherlands
- 8 universities
- Zoological Garden Magdeburg
- 9 bilingual preschools with English as second language, 1 monolingual English preschool



## Coordination

Otto-von-Guericke-University Magdeburg





# Background: EU Action Plan

## Mother tongue plus two foreign languages

*"Language competencies are part of the core of skills that every citizen needs for training, employment, cultural exchange and personal fulfilment ... It is a priority for Member States to ensure that language learning in kindergarten and primary school is effective, for it is here that key attitudes towards other languages and cultures are formed, and the foundations for later language learning are laid, ... in particular by teaching at least two foreign languages from a very early age."*

European Commission: Promoting Language Learning and Linguistic Diversity:  
An Action Plan 2004 – 2006, S. 8

# The Study



## *An Interdisciplinary Team:*

- 1. Preschools** ⇨ Longitudinal Study, Teaching Principles
- 2. Cultural Studies** ⇨ Intercultural Competence
- 3. Linguistics** ⇨ Second Language Acquisition (L2)
- 4. Speech Therapy** ⇨ First Language Acquisition (L1)
- 5. Biology-Didactics &**
- 6. Zoological Garden MD** ⇨ Environmental Education

# The Study

## Participant Observation

(Spradley 1980)

- qualitative research methods
- observers take part in daily preschool routines
  - ⇒ integrated in the preschool system
- avoiding "test situations"
  - ⇒ emotional stability for the children
- **Input and intercultural communication:**  
field notes and questionnaires
- **First & second language acquisition:**  
language assessment



# Materials



## Download from ELIAS web page

- ELIAS intermediate and final report (soon!)
- Information, guidelines and conceptual designs
- Teacher training materials
- Research materials
- Materials on bilingual environmental and zoo education (soon!)
- Presentations

[www.elias.bilikita.org](http://www.elias.bilikita.org)

# Bilingual Preschools



## Organisation and Structure



# Immersion



## Bilingual / immersive Learning (e.g. Wode 1995)

- most effective program for early foreign language learning
  - content-based
- ⇒ integrates content and language learning

## Early start

⇒ **3+ formula** (Wode 2001)

1. bilingual preschools
2. immersive primary school
3. bilingual education in high school



# Immersion



***Immersion***-principle (Genesee 1987, Wode 1995, Zydatiß 2000):

"to be immersed" in the foreign language (L2)

- The foreign language is used for communication:
  - ⇒ all daily activities and routines are carried out in the foreign language
  - ⇒ more than 50% of daily input in the foreign language

# Organisation



## Group teachers

- ⇒ one teacher who speaks the surrounding language (L1)
- ⇒ one teacher who speaks the foreign language (L2)  
(in preschools, L2 native speakers are recommendable)
- both should have the same amount of time in the group
- L2 should be present at core times and routines of the day

***Equal distribution of tasks and responsibilities  
for both teachers***

# Role of the Teachers



- ***one person – one language*** principle (Döpke 1992)
  - ⇒ each person only uses her/his mother tongue in the interaction with the children

***This distribution needs to be maintained so that the children can learn to tease the two language systems apart***

- ⇒ teachers provide organisational, linguistic, and time scaffolds in the daily routines
- ⇒ each activity is constantly commented on or accompanied by language

# Language Use

## Language

*Constant commentary for each action*

### Organisational and time scaffolds:

- ⇒ routines (topics, tidy-up time, morning circle, lunch)
- ⇒ signals for routines (bells, pictures, symbols, signs)

### Language scaffolds:

- ⇒ formulas, recurring phrases, frequent repetitions
- ⇒ songs, rhymes, games etc.

(Burmeister & Steinlen 2009)

# Language Use



## Comprehensible Input: Contextualisation

- facial expressions, gestures, mime
- pictures / visual aids, concrete objects and materials, films etc.
- clear, slow pronunciation
- repetitions, paraphrases, intonation, elaborations, "ear catchers":  
*oh, look at this!* ("caretaker speech / motherese")

## "Silent movie-technique":

*The relation between the situative context and the language needs to be visible at any time*

(Burmeister & Steinlen 2009)

# Language Use



## *What teachers avoid:*

- to translate
- to switch to the children's L1
- to be silent for a longer period of time
- to simplify the language ("pidgin")
- explicit corrections (instead, they *recast* the child's utterance correctly)
- to force children to use the L2
- to threaten

# Role of the Parents



*It is important that the parents:*

- support the immersion concept
- are interested in their children's reports on their L2 learning
- take part in some preschool's activities
- read to their children in their L1
- talk to the children a lot in their L1
- encourage their children to speak the L2, but do not force them to produce it, e.g. in front of friends
- work closely together with the teachers
- do not have exaggerated expectations

# The Children

- the children learn the L2 with joy and pride
- they understand the daily preschools routines within a short period of time
- they quickly understand words in phrases in context
- for the children, it is not problematic if they don't understand each single word, as long as the context is clear
- comprehension precedes production
- during the first year, the children predominantly respond in their mother tongue

# The Children

- they quickly learn to sing songs and to use recurring phrases
- the creative use of language takes more time
- children *code-mix* the two languages playfully (Gib' mir mal die *milk!*)
- they show developmental errors in their utterances, and do not pay attention to corrections if they understand the content

# Beispiele



Interviewer: Show me the mouth!

Kind: *Die Maus is nich da.*



Interviewer: Look at the ducks over there!

Kind: *Das ist doch kein Dachs!*

Kind: Eric is red, Paul is dead – and Tini is fat!

# Presentations

## 1. L1-Acquisition by Native German Children and Children from Migrant Backgrounds



# Presentations

2. L2-Acquisition

3. Effects of the Teachers' Language Input

4. Intercultural Communication



# Presentations



## 5. Biligual Environmental Education: „Green Immersion“



# Presentations



## "Green Immersion":

⇒ *immersion language education  
based on nature-related ("green") topics*

(Kersten & Perret 2008)

- zoo education
- environmental education
- conservation (etc.)



# The Acquisition of German by Native German Children and Children from Migrant Backgrounds

**Katharina Neils**

(Logopädische Praxis Magdeburg)

**Prof. Dr. Thorsten Piske**

(Pädagogische Hochschule  
Schwäbisch-Gmünd)



# Outline



1. A brief introduction to the German language test “SETK 3-5”
2. Results
  - 2.1 Bilingual preschool children’s development of German
  - 2.2 Bilingual children’s development of German: Boys and girls
  - 2.3 Bilingual children’s development of German: Native German children and children from migrant backgrounds
3. Summary and conclusions



# 1. A brief introduction to the German language test “SETK 3-5”

Determining the developmental state

Changes in the developmental state

Determining the direction of change

# Method

- A test instrument developed to comprehensively assess 3- to 6-year-old preschool children's proficiency in German was required.

## Criteria:

- A test instrument for comprehensive language proficiency assessment
- A theory-based and empirically approved test instrument
- A test instrument with good validity and reliability

## Excerpt from an expertise by Fried (2004):

- “On the whole, we can conclude that the SETK 3-5 is particularly recommendable because it is currently the best instrument for comprehensive language proficiency assessment (...).”

# SETK 3-5: A German language test for 3- to 5-year-old children



**A test used to determine 3- to 5-year-old children's receptive and productive language skills.**

**It permits valid and reliable conclusions about the developmental state a child has reached.**



# Types of tasks/subtests

3-year-old children	4- and 5-year-old children
Comprehension of sentences	Comprehension of sentences
Encoding of semantic relations	Sentence memory
Phonological working memory for nonsense words	Phonological working memory for nonsense words
Morphological rule formation	Morphological rule formation
	Memory span for sequences of words



# Procedure



Duration: 20 to 30 minutes

Children are tested individually in the preschools

The tests are audio- and videotaped

Analysis of the data on the basis of normative data

On the basis of the raw values (mean normative) t-values are determined for the subtests

On the basis of the t-values the arithmetic mean is then calculated



## 2. Results

From February  
2009 onwards

- The first test was administered to children in 7 bilingual preschools in Germany
- Analysis of test results

From  
September  
(2009) onwards

- The second test was administered to children in 7 bilingual preschools in Germany
- Analysis of test results

# Participants

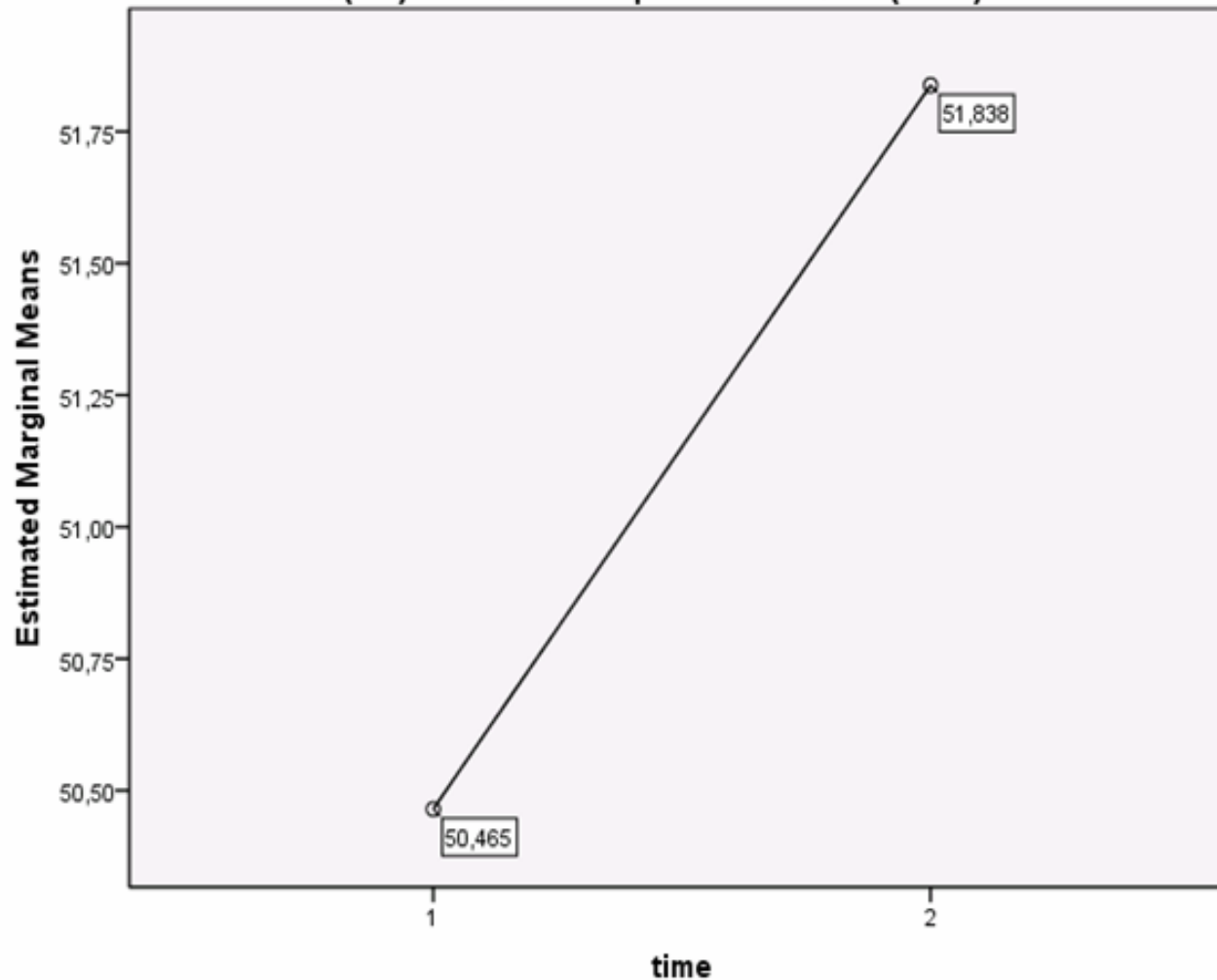


- On the whole, 83 children from 7 bilingual preschools were tested.
  - 45 girls and 38 boys
  - 71 children without and 12 with migrant backgrounds
- At the two times of testing the children were between 3 and 5 years old.



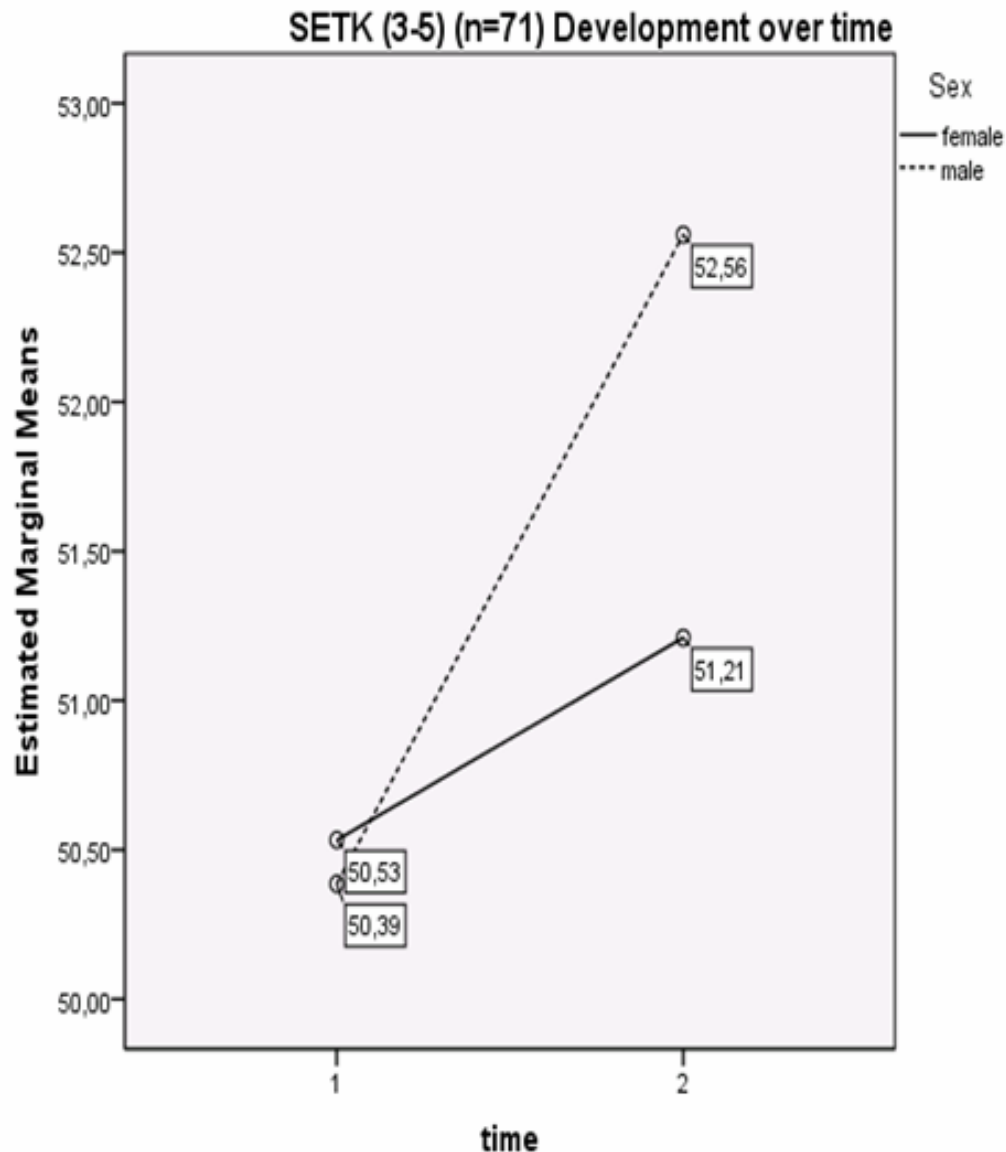
## 2.1 Bilingual preschool children's development of German

SETK (3-5) T1&T2 Development over time (n=71)



⇒ The children achieved significantly higher scores in Test 2 than in Test 1.

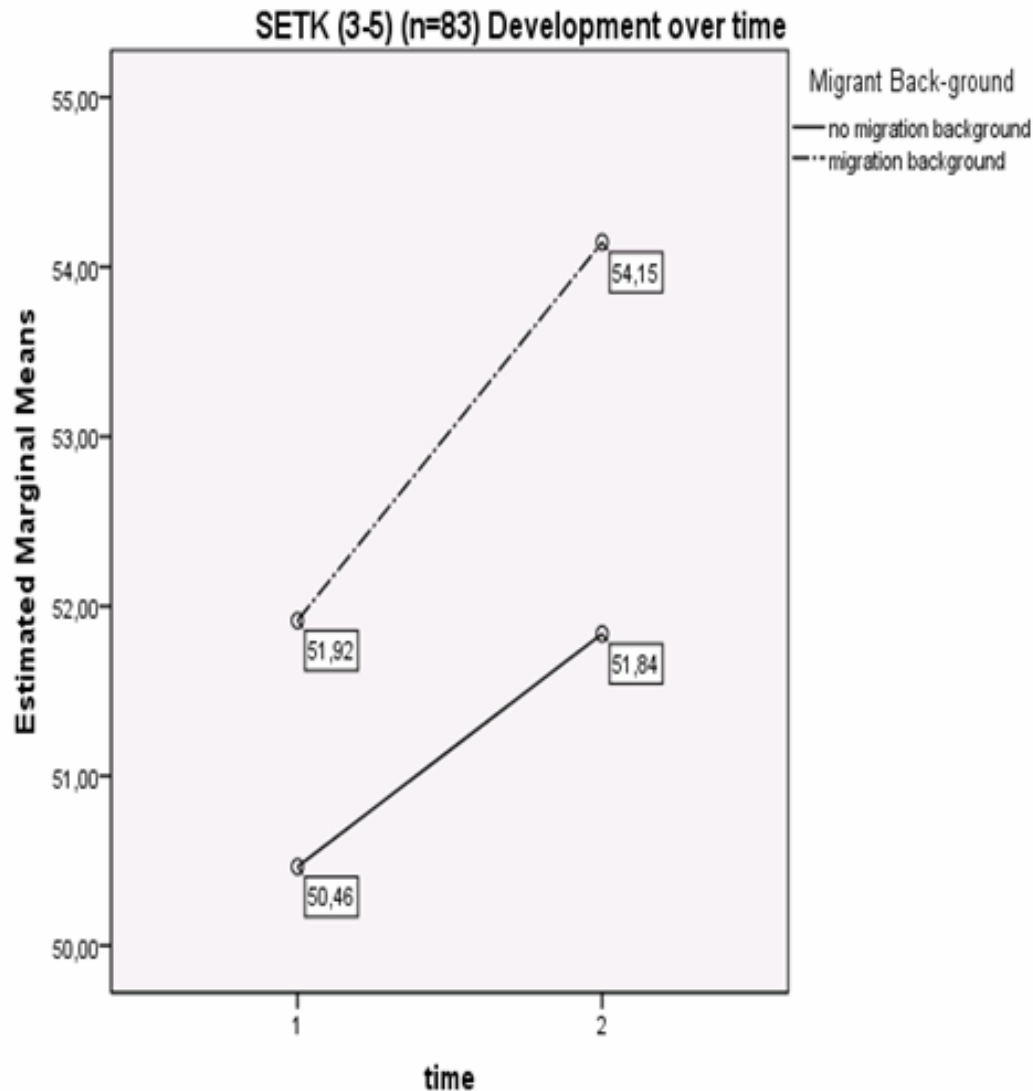
## 2.2 Bilingual children's development of German: Boys and girls



⇒ Girls as well as boys achieved significantly higher scores in Test 2 than in Test 1.

⇒ Girls and boys showed no significant differences in their development of German language skills.

## 2.3 Bilingual children's development of German: Children with and without migrant backgrounds



⇒ Both children with and without migrant backgrounds achieved significantly higher scores in Test 2 than in Test 1.

⇒ Children with and without migrant backgrounds showed no significant differences in their development of German language skills.

### 3. Summary and conclusions



- The scores achieved in Tests 1 and 2 suggest that the bilingual children's skills in German developed in a positive way.
  - Girls and boys as well as children with and without migrant backgrounds showed a similarly positive development in their German language skills.
- ⇒ **On the basis of the data collected so far, we can conclude that early intensive exposure to English does not necessarily have negative effects on bilingual children's proficiency in German.**
- But:  
In order to substantiate the conclusions regarding children from migrant backgrounds, a lot more data have to be collected.



***Thanks a lot for your attention!***

# L2 acquisition in bilingual preschools

**Dr. Anja Steinlen**

(University of Kiel, Germany)

**Prof. Dr. Gisela Håkansson**

(University of Lund, Sweden)

**Prof. Dr. Alex Housen**

(University of Bruxelles, Belgium)



# Outline



1. Introduction
2. L2-tests: grammar and lexicon
3. Results
  - 3.1 General development
  - 3.2 L2-contact
  - 3.3 Sex
  - 3.4 +/- migration background
4. Conclusion

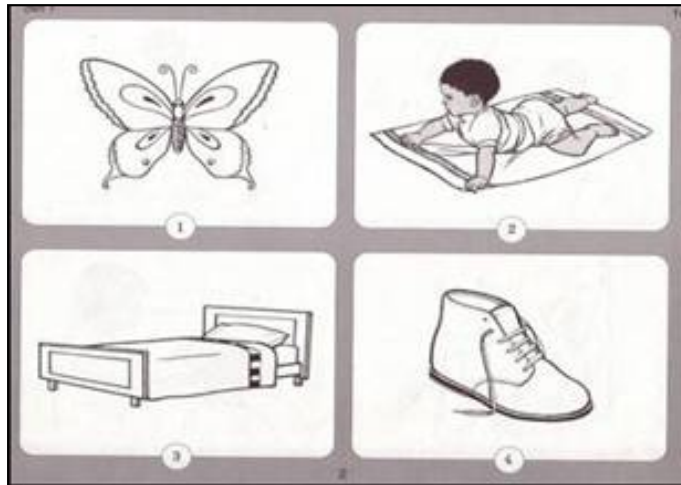


# 1. Introduction

## Reception precedes production in L2 acquisition:

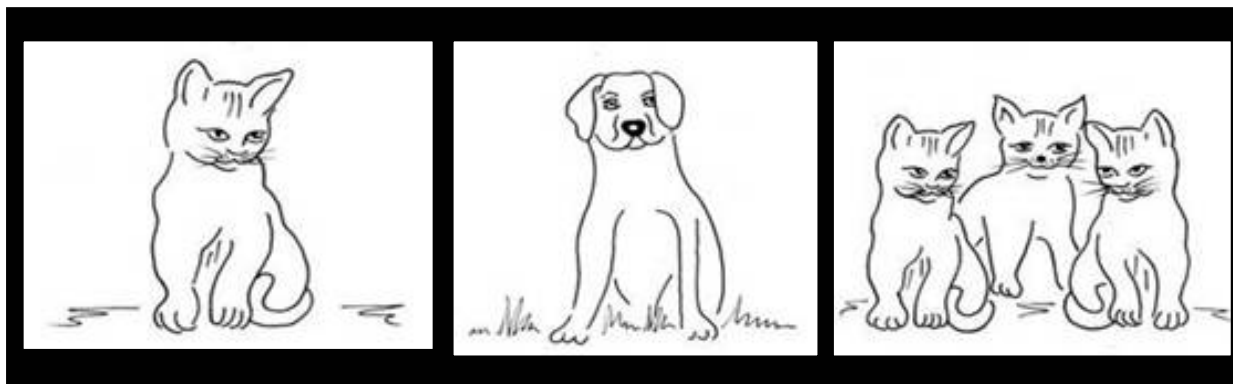
- How do grammatical and lexical comprehension skills develop during the preschool period?
- Which factors affect L2 comprehension?

## 2. The L2-Tests



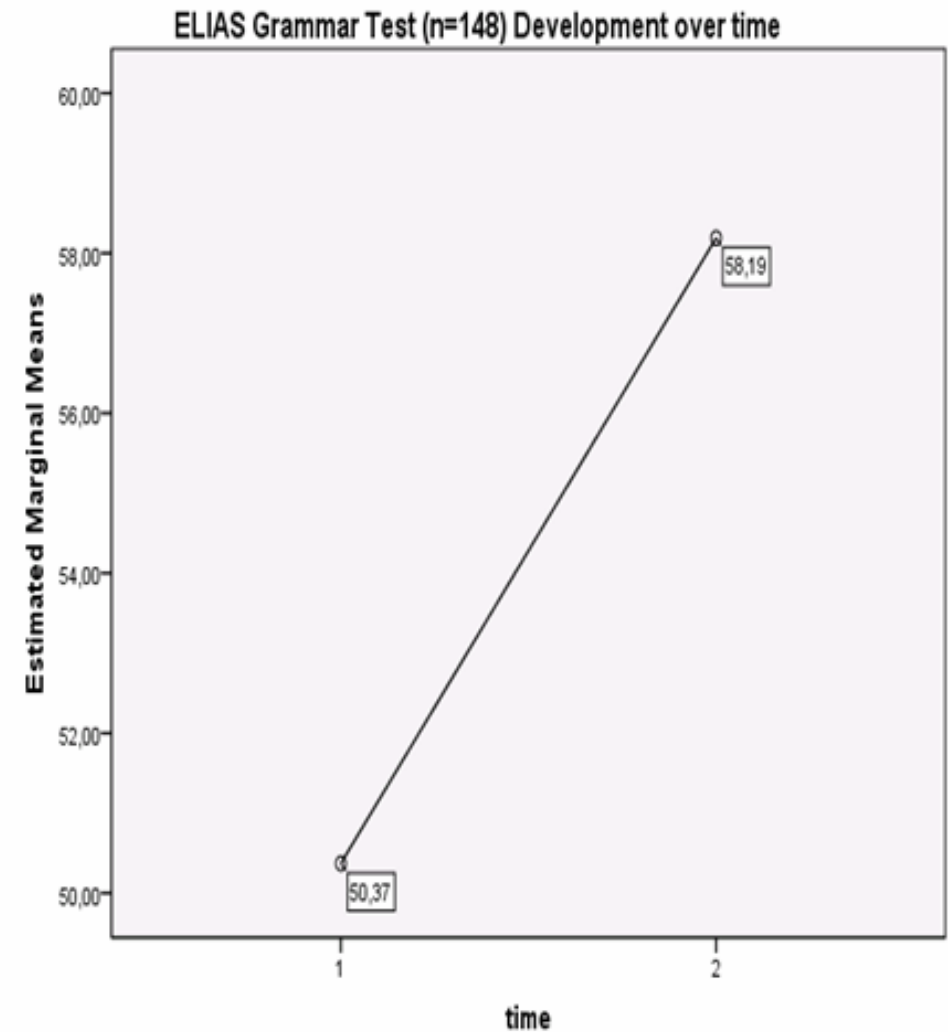
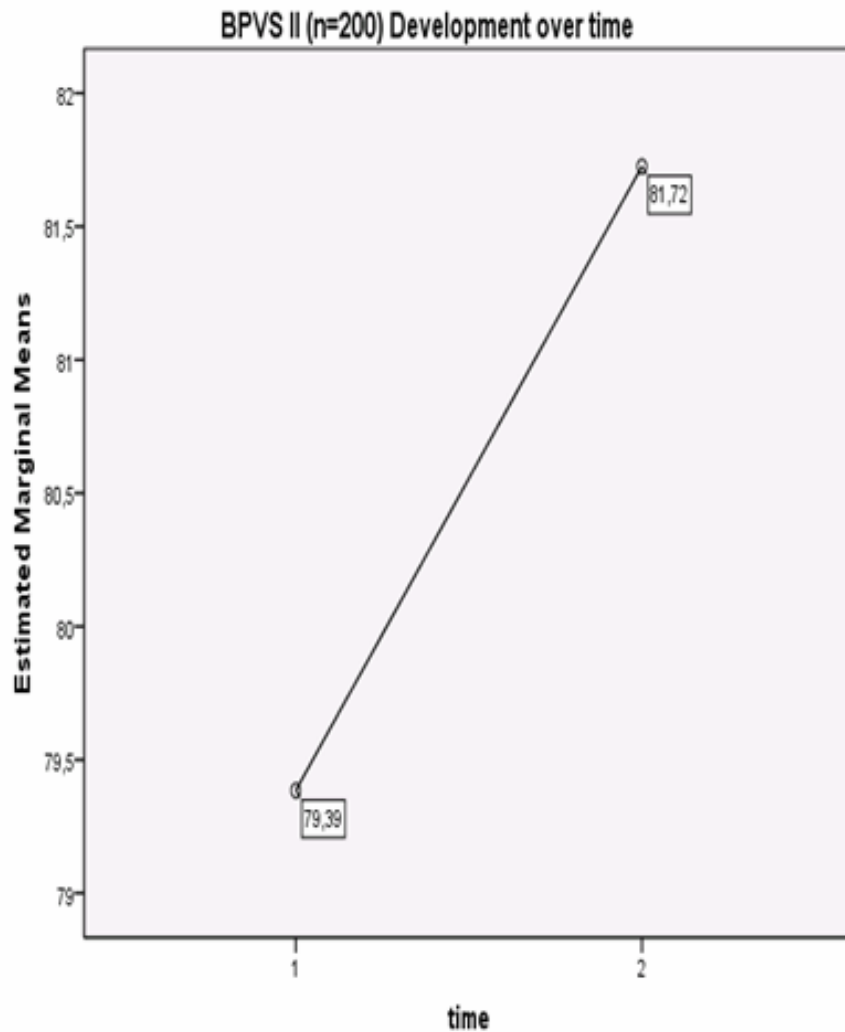
**BPVS**  
**(British Picture Vocabulary Scale)**

**ELIAS Grammar Test**



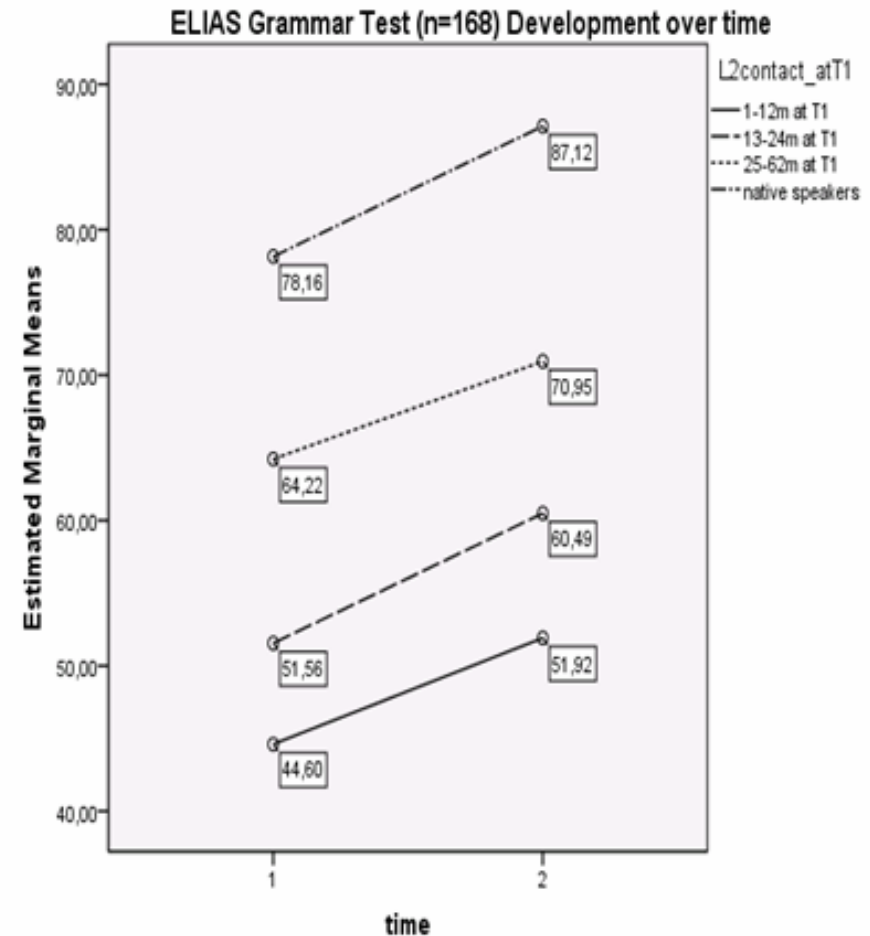
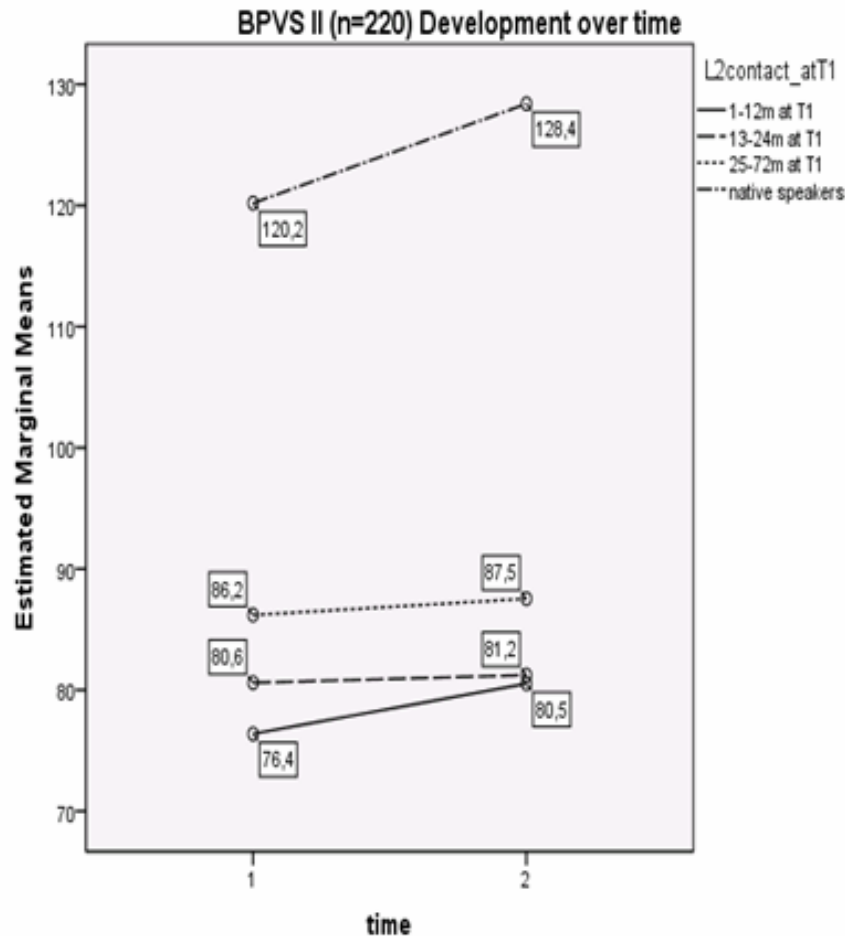
# 3. Results

# 3.1 Development T1-T2



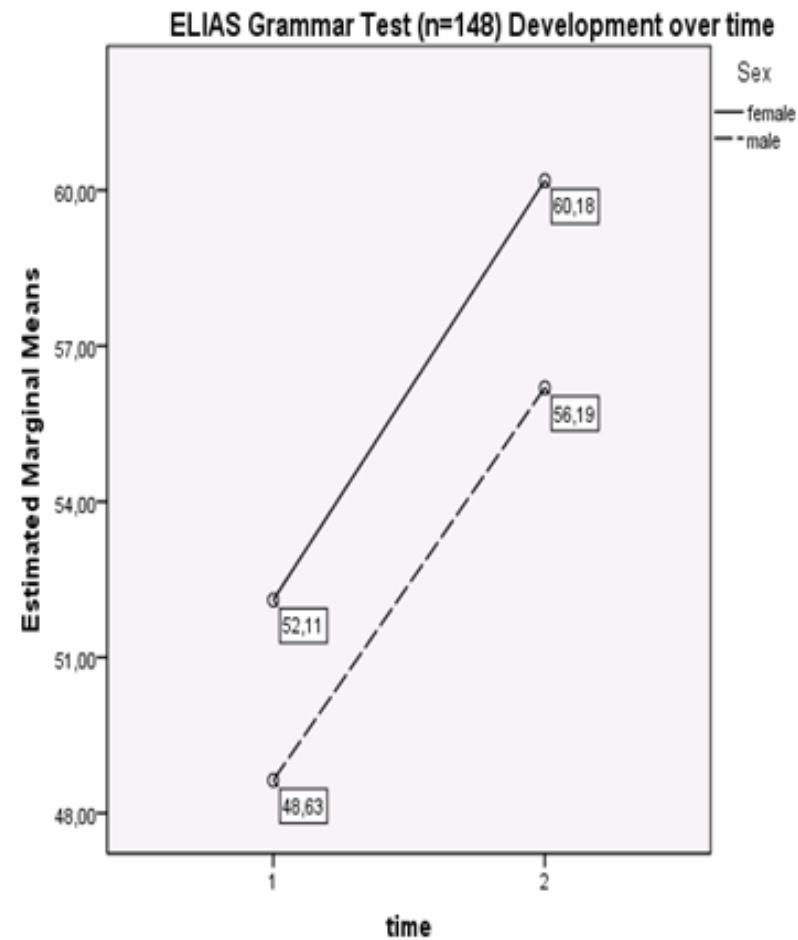
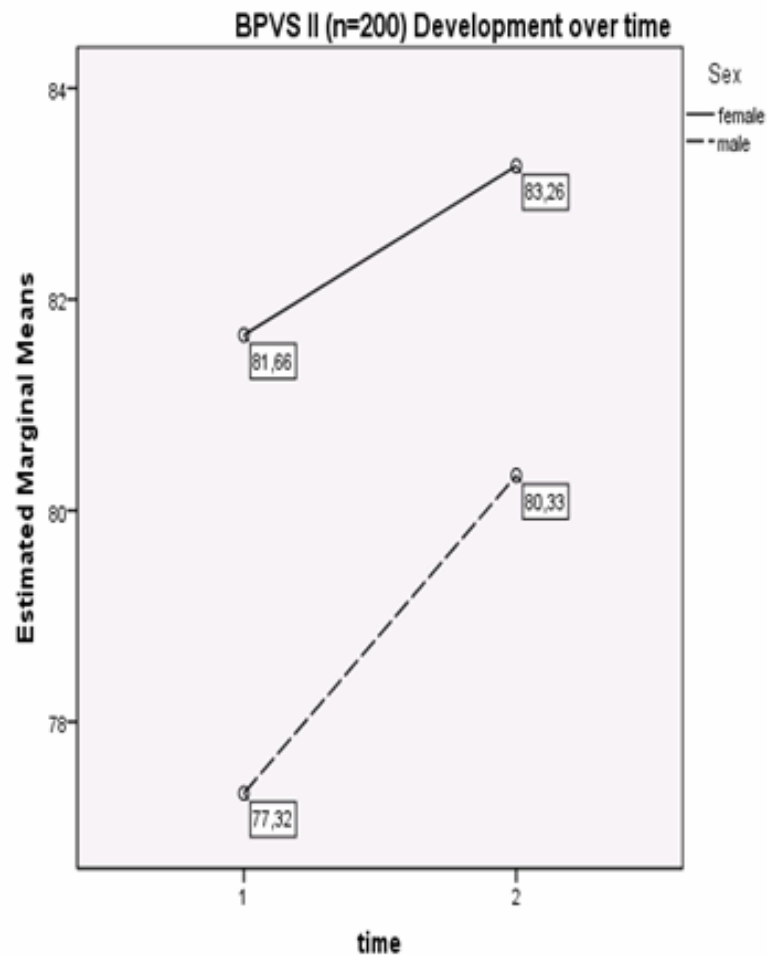
- Significant increase over time

# 3.2 Development T1-T2: L2-contact



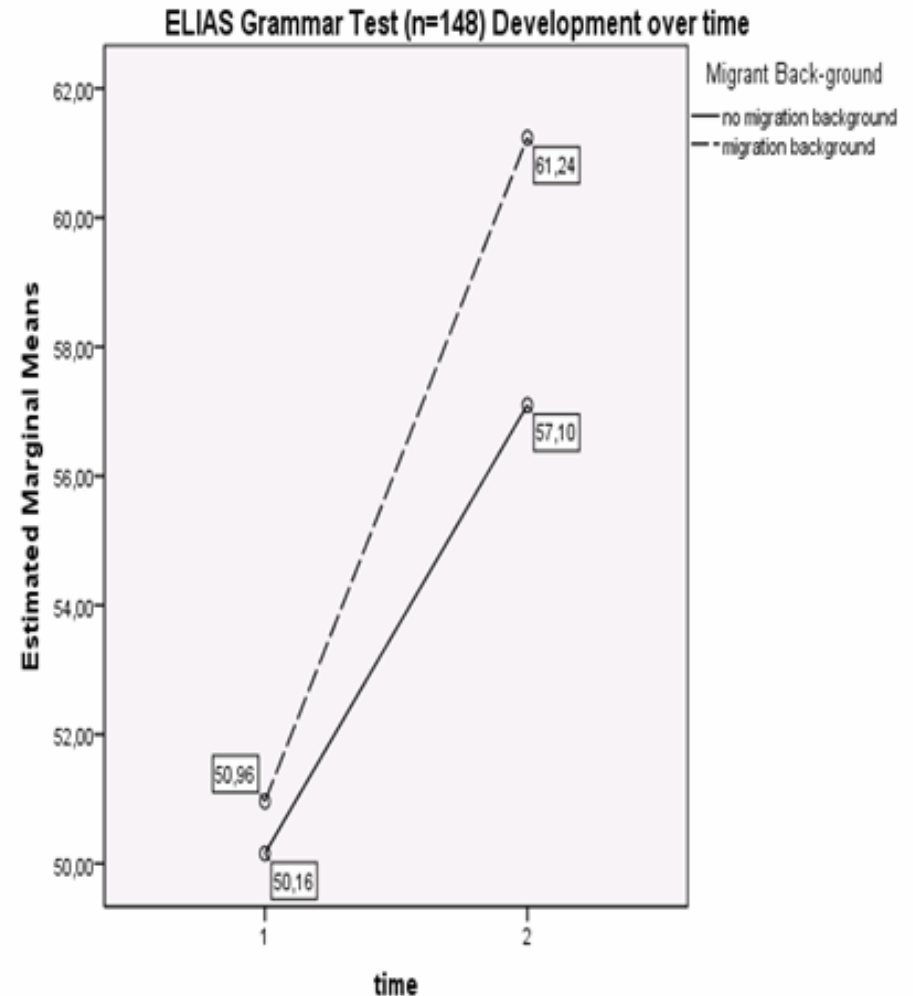
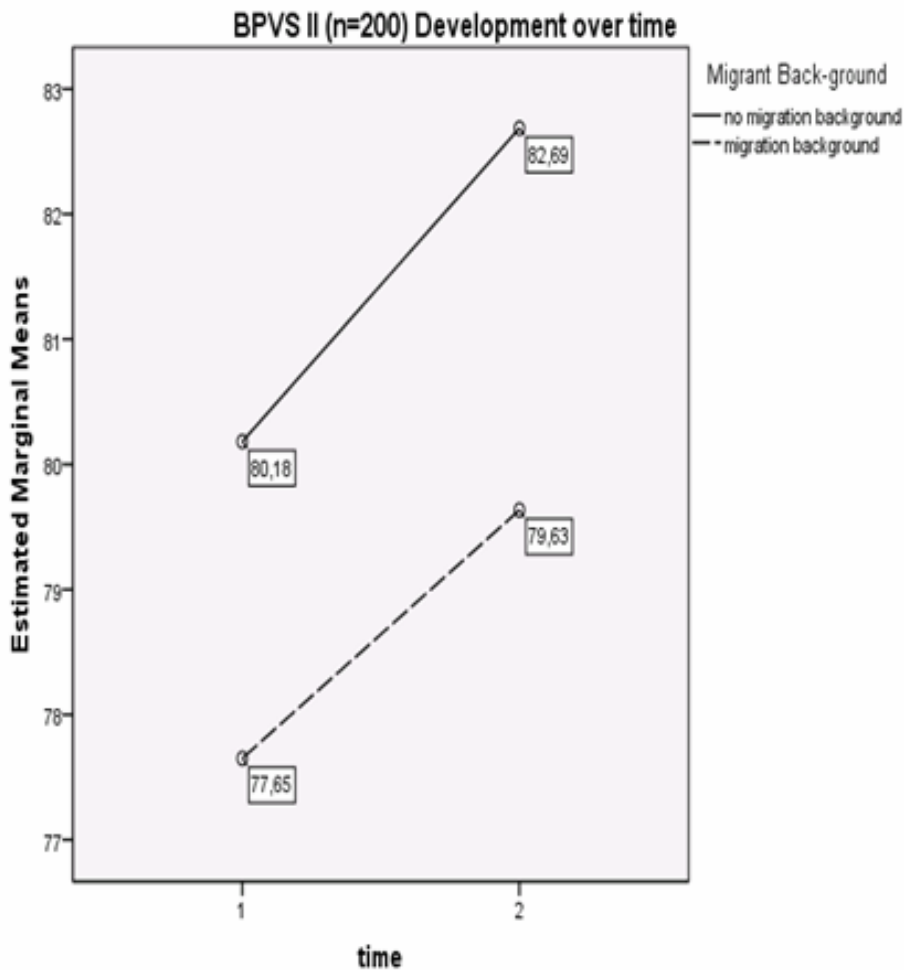
- Significant increase over time for all groups
- Significant differences between groups with high/low L2 contact

# 3.3 Development T1-T2: Sex



- Significant increase over time for both groups
- No significant difference between boys and girls

# 3.4 Development T1-T2: Migration background



- Significant increase over time for both groups
- No difference between children with and without migration background

## 4. Conclusion

### The results are affected by

- L2-contact duration
- the children's language background
- the quality of the L2-input ("IM-score")

### The results are not affected by

- the children's sex

# Great L2 learning progress in bilingual immersion programs in preschools!

# Thank you for your attention!

# Second Language Input

**Martina Weitz**

(Universität Köln)

**Marion Salentin**

(Universität Köln)

**Svenja Pahl**

(Universität Köln)

**Prof. Dr. Andreas Rohde**

(Universität Köln)



# Outline



1. Background information
2. Input Quality Observation Scheme (IQOS)
  - 2.1 Motivation
  - 2.2 Procedure
  - 2.3 Development
  - 2.4 Categories
3. Video Example
4. Results
5. Conclusion

# 1. Background information

- Immersion → most successful method for early L2-acquisition
- Preschool settings differ from each other (setup, the teachers' qualifications, their understanding of how to use the L2 with the children, etc.)
- Differences in L2 competence among various preschool programs
- Hypothesis: qualitatively high and quantitatively extensive and comprehensible input promote second language learning

## 2. Input Quality Observation Scheme (IQOS)

## 2.1 Motivation

- Existing observation checklists (such as COLT, TALOS, etc.) evaluate the communicative level of language teaching in the school context.
- ELIAS-Checklist → systematic observations of input and interaction in the preschool context.

# 2.2 Procedure

- L2 teacher is observed with the checklist: results reflect the input quality and quantity.
- Results are generalized → representative patterns of language use and interactional moves are deduced



IQOS – Input Quality Observation Scheme

Name of researcher/s:		Date:									
Name of preschool:		L2 Teacher:									
Please use the following scores for all checklist-observations: Codes: VL (Very Low): 1      L (Low): 2      H (High): 3 VH (Very High): 4      N.A. (Not Applicable): leave blank (only applies to blue fields!)											
Observation	Date										
	Situation										
	Activity										
<b>General information</b>	Duration (min)										
	Number of children										
	Average age of children										
	Number of native speakers (children)										
	Number of participating L1 teachers										
	Number of L2 teachers present										
	Activity: Focus on A: form, B: form (communicative context), C: meaning										
<b>TEACHER</b>											
Quantity	L2 amount										
	Absence of L1 use / translation										
Quality	Adapted speech (rate of speech, intonation)										
	Varied input (complex/diverse/"rich")										
	Verbal acknowledgment of children's interactional moves										
	Ritualized language/phrases (for scaffolding)										
	Focus on form (metalinguistic)										
Promoting comprehension	Explanation & comparison										
	Ensuring children's comprehension										
	Gestures / facial expressions / acting (internal)										
	Pictures / objects / realia (external)										
Reacting to children's output	Encourages and maintains L2 output										
	Implicit corrective feedback										
	Absence of explicit corrections / forcing correct imitation										
<b>CHILDREN</b>											
Children's reaction	Children listen										



## 2.3 Development

- First categories chosen on the basis of best practices  
→ reference to existing studies
- Via weekly observations: which categories are observable? which other aspects seem to be important? etc.

## 2.3 Development



- Systematic observation: clearly defined categories, detailed description of categories, training for observers, etc.
- Quantitative data elicitation: categories are graded as either very low or very high on a Likert scale from 1 (very low) to 4 (very high).
- Interrater reliability: via statistical analysis, detailed description of categories, videos and exemplary rating (with explanations)
  - Interrater Reliabilität (Pearson PMCC:  $r = .948$ )
  - Reliabilität (Cronbach's Alpha:  $.819$ )

## 2.4 Categories

- 15 categories are regrouped into 5 supercategories:

### 1. Quantity:

- L2 amount (Krashen 1982, 1985)
- Absence of L1 use / Absence of translations (Ronjat 1913, Porsché 1983, Saunders 1982, 1988)

## 2.4 Categories

### 2. Input characteristics:

- Adapted speech (Richards & Gallaway 1994; Solokov & Snow 1994)
- Varied input (Krashen 1985)
- Ritualized input (Burmeister 2006)
- Verbal acknowledgement of children's interactional moves (Klann-Delius & Hofmeister 1997)
- Focus on form (Long 1997)

## 2.4 Categories

### 3. Promoting comprehension:

- Contextualization I: gestures and facial expressions
- Contextualization II: pictures, objects and realia
- Explanation & comparison (Netten 1991, Lyster 2007)
- Ensuring children's comprehension

## 2.4 Categories

- **Reacting to children's output:**
  - Encouraging and maintaining L2 output (Swain 1985)
  - Implicit corrective feedback (Long 1980)
  - Absence of explicit corrections / absence of forcing correct imitation (Long 1980, Ellis 2008)
- **Children's reaction**
  - Children listen

# 3. Video Example

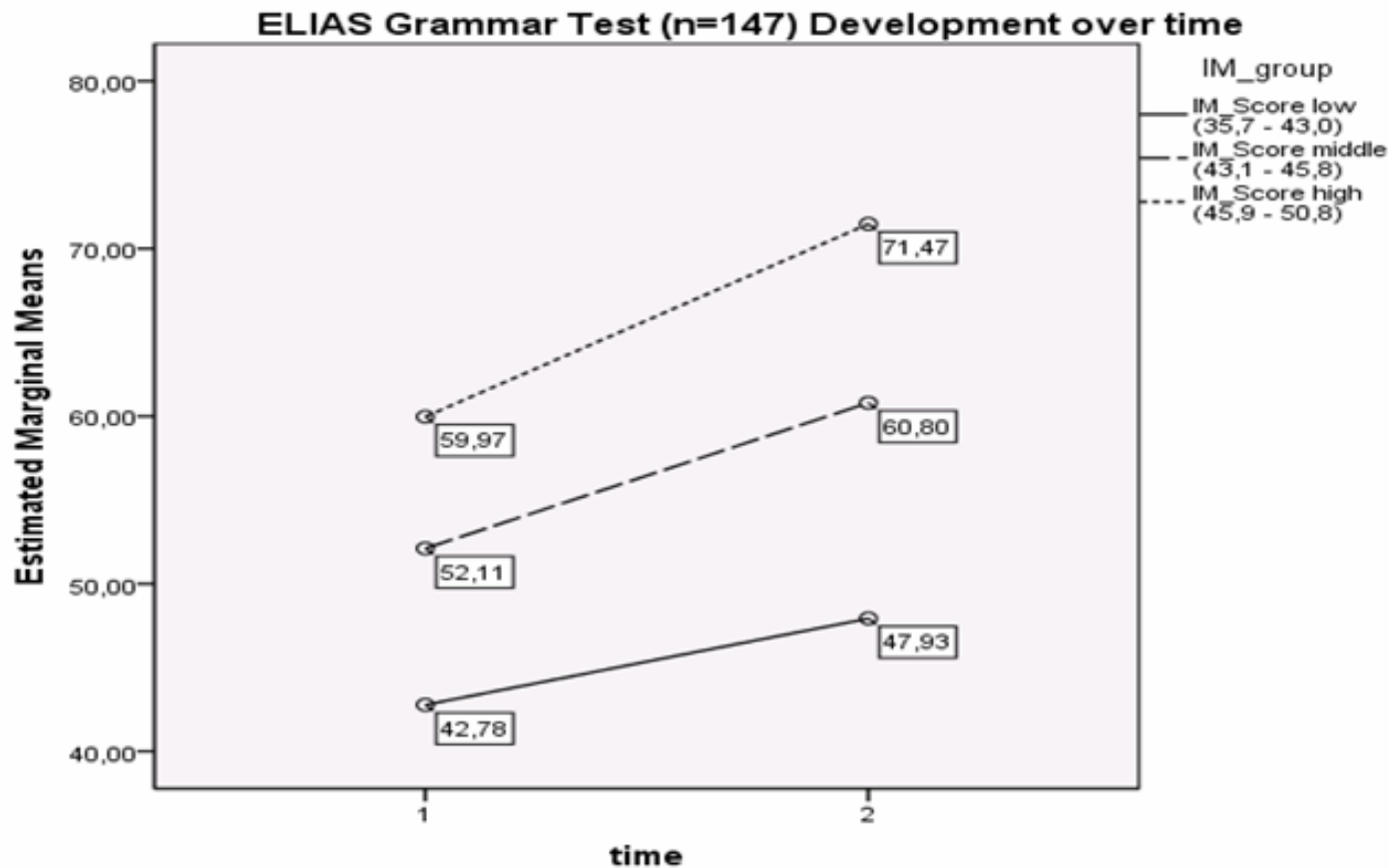
# 4. Results

# General information



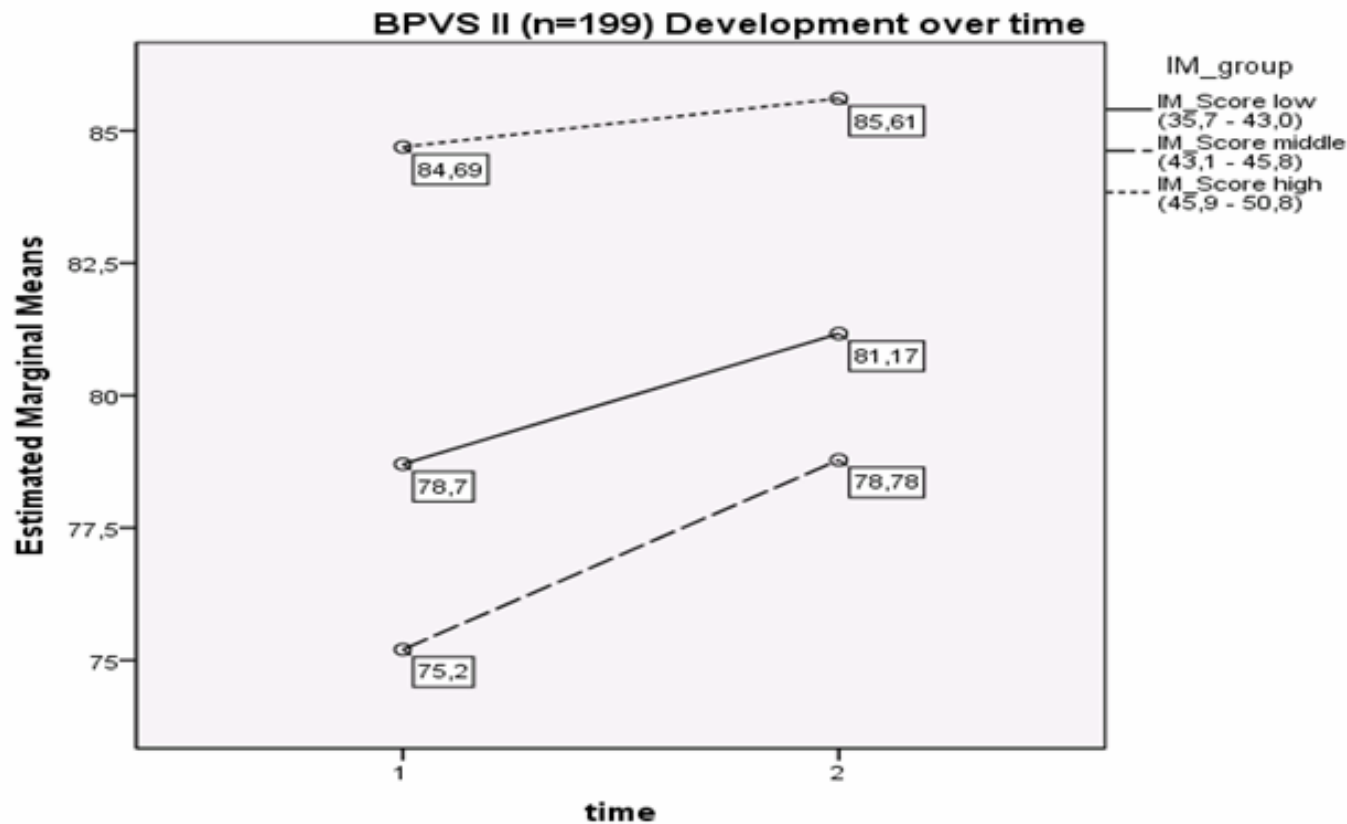
- Results for 21 L2-teachers in 9 preschools
- Checklist-scores (IM-Scores) allocated to 3 groups with homogenous number of children:
  1. IM-Score low
  2. IM-Score middle
  3. IM-Score high
- Correlation of Checklist-scores with language test results

# Correlation: grammatical development and checklist-scores



- significant difference between IM-Score groups in the children's grammatical development

# Correlation: lexical development and checklist



- no significant differences between the IM-Score groups in the children's lexical development
- but: significant difference between highest and middle IM-Score group with respect to average results

# 4. Results



- There are fundamental differences in input quality (and quantity) among various L2-teachers.
- There is a highly significant correlation between input quality and the children's L2-performance in their receptive grammatical development
- The grammar test shows: receptive L2 grammar knowledge develops significantly better with a qualitatively high input.

# 5. Conclusion



- For the first time, quantitative data suggests that the input quality strongly influences L2 development in bilingual preschools.
- Results provide important implications for various language learning contexts (promoting L1 acquisition; promoting L2 learning for children with migration backgrounds)
- Trained teachers can also use the checklist as a means of self-evaluation.



***Thank you for your attention!***



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# Intercultural learning

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“My mom is from Spain,  
My dad is from Germany.  
France is in the middle,  
But I’m not a frenchman.”

(Bilingual boy, 4 years old)

# What is intercultural communication? (ICC) ?



- “We don’t know yet, what ICC is“
- “culture“ (E) und „Kultur“ (G) are not the same terms in every aspect
- Problems dealt with are:  
culture and language,  
communication behavior and expectations of “the other”  
and the perception of intercultural actions

(Földes, 2007, S. 7 ff)



# Previous research on ICC



- Many scholarly disciplines are doing research on ICC:
- Behavioral Approach (e.g. Ruben & Kealey 1979)
- Foreign language teaching (e.g. Byram 1997)
- Linguistic approaches (e.g. Risager 2007)
- The main focus so far has been on adults and their behavior e.g. in the working environment (e.g. Koester & Olebe 1988)



# Why intercultural communication?

- Our world is getting smaller, distances are melting away and our contact to individuals of other culture is growing
- Europe is growing together, and the future will bring even closer bonds and contacts leaving nowadays' language and political boundaries behind.
- **intercultural communicative competence (ICC)**  
is a key competence for the future

# ELIAS research approach

How does intercultural  
communicative competence  
develop in bilingual preschools?

# And what about children?



- The previous tools for assessing and evaluating ICC are not applicable for research on young children
- Hence new tools have to be developed
- A first step: a pilot study in the ELIAS- preschools
- Screening various methods on their applicability
- The team then decided to use **ethnographic observation** (Pitman 1989) to collect data



# Ethnographic observation



- Prefers to observe action in it's natural environment
- Focuses on collection and interpretation of data, questions often emerge during the course of the investigation
- “data first“ theories are formed on the data basis  
(Pitman 2001, p. 52 ff)
- Development of an observation sheet to collect data
- Situations were described and commented
- Data from 8 preschools:  
more than 70 different children in more than 150 observations



# Define competence



Competence:

- To have cognitive abilities and skills available, or to acquire them
- Motivated and conscious use of the own abilities in order to solve problems

(s. Weinert 2001: 27)



# Intercultural competence

## 1. Attitudes

towards different / foreign / new people

## 2. Knowledge

of culture, language, modes of interaction, values

## 3. Abilities and skills

to interpret, to mediate, to adapt

(Byram 1997: 34)

# Results of pilot study

*Children in bilingual preschools perceive the different languages and cultures in their environment and show tolerance to speakers of other languages*

- Children show a variety of **attitudes**
- Children show (basic) **knowledge** and **abilities**
- Observations are comparable with the categories describes in literature about adult behavior

# Attitudes



## Attitudes towards “the other“, “the foreign“

- Prejudice and stereotypes
  - Fear and denial
  - Openness and curiosity
  - Respect
  - Motivation
  - Readiness to take the other’s point of view
- (Byram 1997; Ward 2001; Norris 2007)



# Attitudes



## Examples:

- At the beginning of L2 contact:

M. reacts to L2 teacher by crying, he is covering his ears with his hands, or is leaving the morning circle

- After a few months:

M. brings a book to L2 teacher and says in German: "Can you read this to me? I think it is in English."



# Knowledge



- Of own culture
- Of other cultures and languages
- Is gathered by experiance and education
- Is partly conscious, partly unconscious

(Byram 1997)



# Knowledge

## Examples:

- Multilingual child is coloring, points on one of the colors and says to L2 teacher: „Du, das ist red, auf portugiesisch heißt das vermelho.“ (This is red, in Portuguese it's called vermelho)
- Child says to L2 teacher in German:  
„I have a different language, that's why I can not understand you.“

# Knowledge



## Topics discussed by children:

- different languages and their sounds
- other countries and their items of identification (flags, position, language, non-domestic animals)
- food
- skin color
- cloths
- religion
- the children's own abilities



# Skills and abilities



- Using appropriate communication patterns, and effective conflict solution strategies
- To mediation
- To relate
- To interact
- To cope with anxieties
- To cope with ambiguity and uncertainties

(Erlil & Gymnich 2007; Byram 1997)



# Skills and abilities



Examples:

- Girl, 5, says to teacher in German:  
“Well, K. already knows some good German now.”
- German teacher asks child 1 (L1 Polish) to chose one of the pictures and name the fairytale.  
Child1 reacts with uncertainty and hesitates, hereupon child 2 repeats the teachers demand in English using a lot of gestures
- At naptime: „Can I book in five minutes?“
- At the coloring table: „Kannst du mir nen dog malen?“ (Can you draw me a dog?)



# For example



At a zoo visit:

the stick bug refuses to sit on the L2 teachers hand.

Boy, (5 years old) explains in:

“Maybe it is afraid of you, because you have such a dark skin.”



# Results of pilot study



## Tendencies are shown towards:

- Broad individual differences
- rejecting behavior, such as fear or objection seem to decrease the longer the children have contact to people of different cultural backgrounds
- Most examples were found in knowledge and attitudes, also the lack of knowledge or negative attitudes have been recorded
- Motivation could be observed and a high number of situations
- Meta-communication has only been seen in a few examples



# Further research

## Implications

- The gathered data give a first impression on what can be observed in preschools
- The observation sheet needs further development to become more independent of the observer
- To make qualitative statements more data has to be collected in a more systematic way on in a longer course of time
- The observations should also be performed in a non bilingual preschool to have comparison data
- The intercultural experience or education of the staff members should be considered as well

# Summary



- Children in bilingual preschools show first signs of intercultural communicative competence
- These signs can be interpreted as attitudes, knowledge and skills
- They fall into the same categories that have been described for adults
- The environment of bilingual preschool generates intercultural situations and creates opportunities to learn and test intercultural competence



***Thank you for your attention!***

# Green Immersion

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# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”

#### Tradition of “Environmental Education”:

- 1972: “Club of Rome” publishes “The Limits to Growth”
- 1972: First UN conference on the Environment in Stockholm
- 1975: Conference on Environmental Education in Belgrad
- 1977: UNESCO conference with Declaration on Environmental Education : “41 Recommendations of Tiflis”
- ... ..
- 1992: “Earth Summit”, Rio de Janeiro: Agenda 21 & Education for Sustainable Development emphasise: Triad of Ecology - Economy - Social Relations & action competence! (de Haan





# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”

#### environmental... knowledge - consciousness - activity:

- *environmental knowledge* does not automatically lead to “environmental activity”, but is a necessary prerequisite
- *environmental consciousness* comprises cognitive as well as *emotional aspects*, aiming at environmental activity
- *environmental activity*, as empirical evidence shows, is uncoupled from environmental knowledge and environmental consciousness
- research in the field of environmental education now tends to analyse barriers against environmental activities
- models of environmental education always aim at **environmental activity** as well, as the highest competence in the field of environmental education



# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”



### Models for how to achieve environmental action competence - a selection:

- BERCK & KLEE (1992):  
“Seven Step Model: from fascination to action competence”
- KLAUTKE & KÖHLER (1991):  
steps of environmental education
- JANßEN (1988):  
Levels of Encountering Nature



# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”



**BERCK & KLEE (1992):**

**“Seven Step Model: from fascination to action competence”**

*Experiences with plants & animals lead to*

1. *fascination* / fascination being followed by cognitive & emotional satisfaction
2. *satisfaction* elicits further engagement
3. *engagement* arouses positive attitudes
4. *positive attitudes* deepen engagement
5. deepened engagement leads to interest
6. *interest* arouses internalised standards
7. *internalised standards* result in **environmental activities**



# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”



#### KLAUTKE & KÖHLER (1991):

##### “steps of environmental education”

1. *Encounter with the Environment*: direct encounter with nature as a prerequisite for intensified examination & interest
2. *Knowledge about the Environment*: support of interest through extending naturalistic knowledge
3. *Conscience towards the Environment*: exposing existing relationships on a basis of environmental knowledge addresses the environmental conscience
4. *Environmental Ethics*: information and consternation help to develop environmental ethics with standards and appreciation
5. *Moral environmental activity*: environmental ethics become apparent with moral environmental activities & engagement



# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”



JANßEN (1988):

“Levels of Encountering Nature”

- comparing the models (in advance):

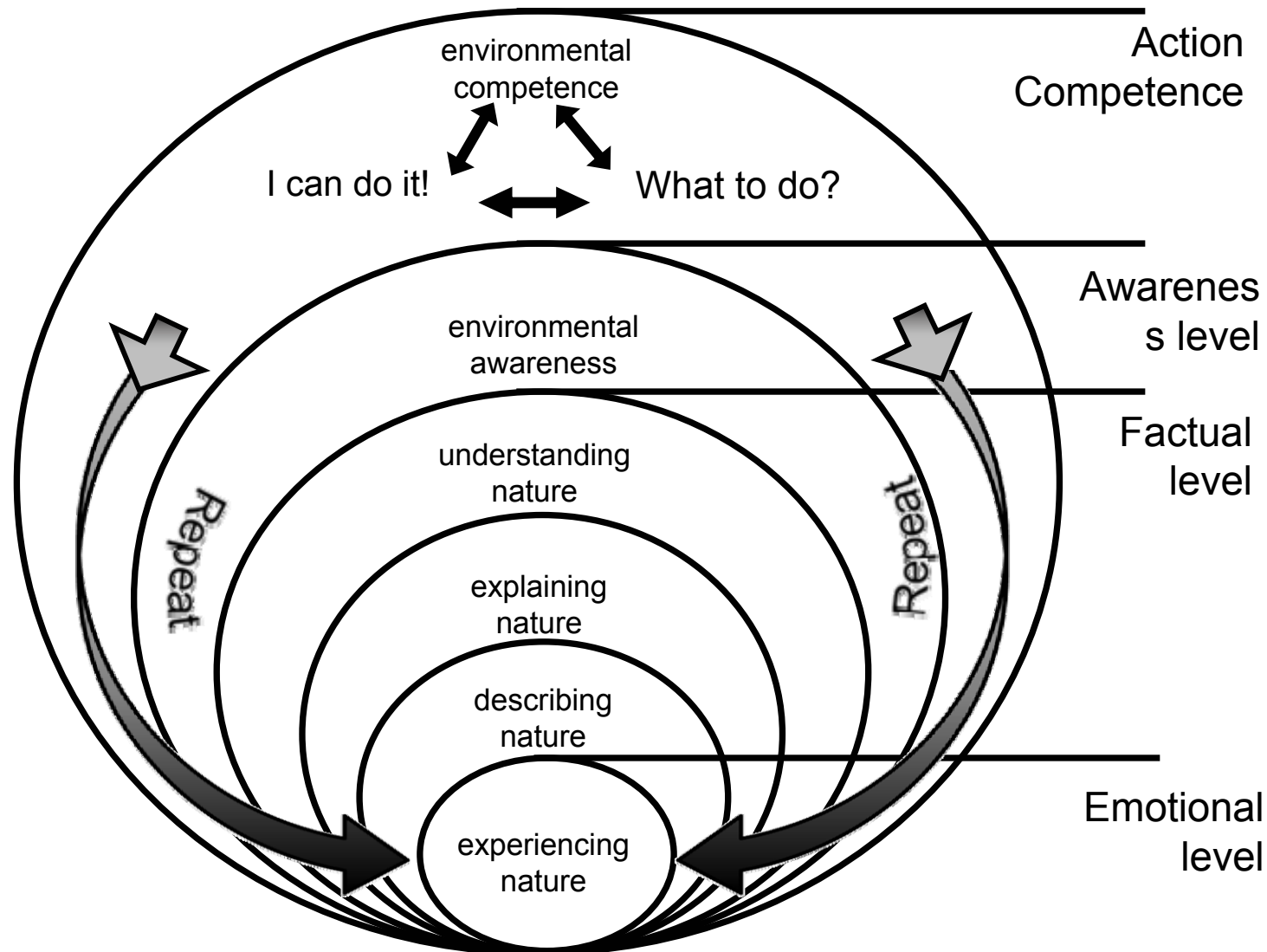
- **all** models start by **encountering nature** - thus providing a potential reference framework for environmental education at a (bilingual) zoo kindergarten ...
- the aim of **all** models, in accordance with the idea of an Education for Sustainable Development – is to have **environmental activities** as the highest level of “environmental competence”
- **differing from the models shown above** the model of **Janßen** (1988) also includes levels referring to linguistic competencies – thus seeming to be adequate for an **integration of environmental and linguistic education** - e.g. at a bilingual zoo Kindergarten...



# Environmental Education

## – Education for Sustainable Development

### – “Green Immersion”

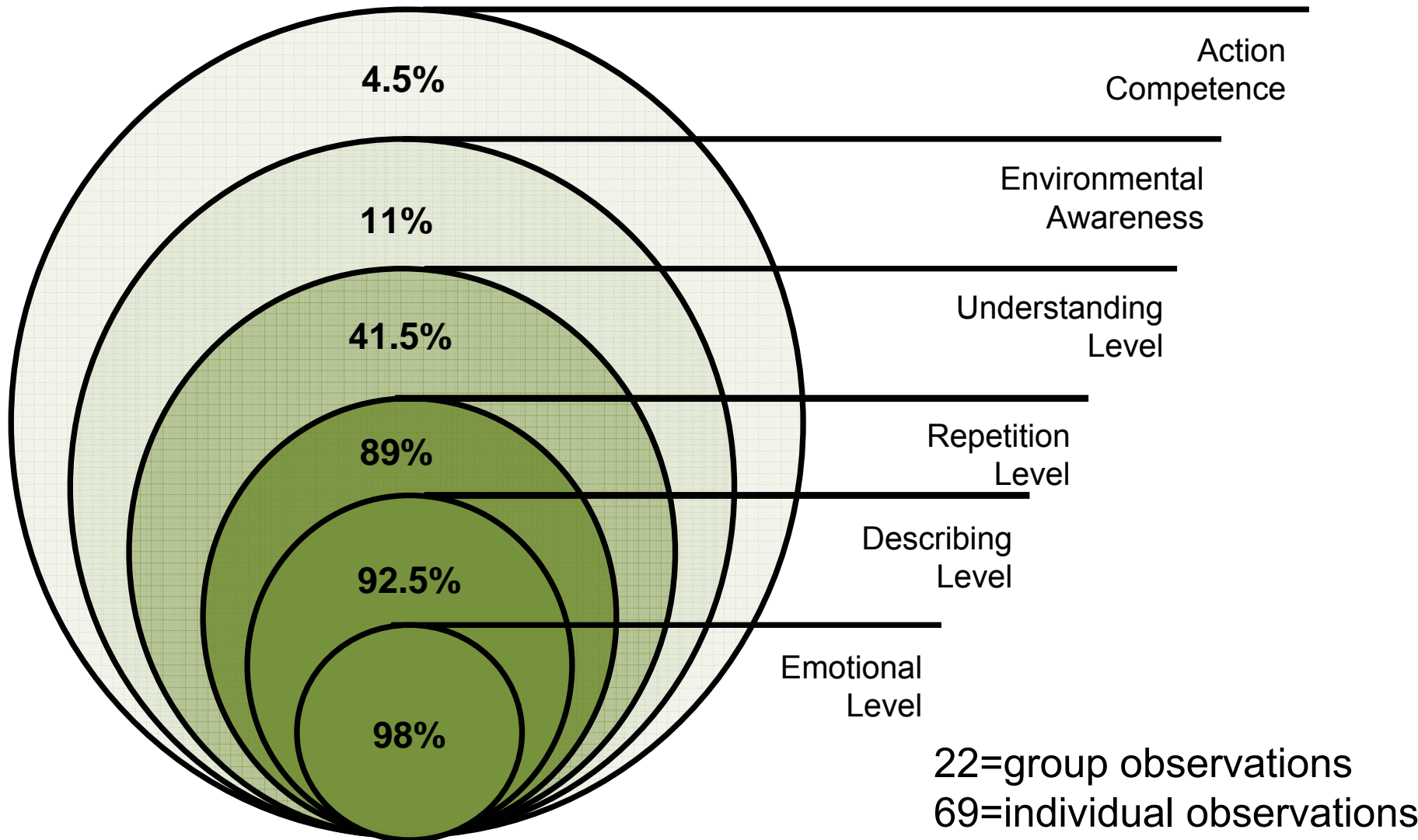


Ebenen der Naturbegegnung (by JANßEN, 1988, from UNTERBRUNER, 2006)

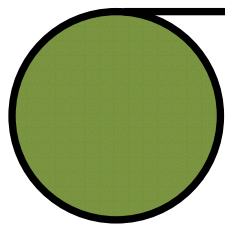
# What is Green Immersion?

Who	<ul style="list-style-type: none"> <li>• 0-47 months = 6 children</li> <li>• 48-59 months = 8 children</li> <li>• 60-71 months = 7 children</li> <li>• 72-83 months = 3 children</li> </ul>
What	<ul style="list-style-type: none"> <li>• data on a 6 level GI learning model, based on Janßen (1988)</li> <li>• degree of learning materials on engagement</li> <li>• data used for the presentation highlight the 6-month final observational period</li> </ul>
Where	Magdeburg Zoo-kindergarten
When	<ul style="list-style-type: none"> <li>• a period of 6 to 24 months</li> </ul>
Why	<ul style="list-style-type: none"> <li>• provide the children with the necessary tools for environmental Action Competence</li> </ul>

# The Children's Progression in GI



The Percentage of All Observations through the 6 Levels of GI



Emotional  
Level



# Emotional Level

## Goal for the EL in GI learning

- for the children: to acknowledge the nature/environment presented to them

## Indications of positive engagement at EL

- body language is 'open'
- eyes are following the activity and the child is actively watching
- attention is focused for an extended period of time
  - (length is dependent upon child's personality)



# Deductions from observational data at EL



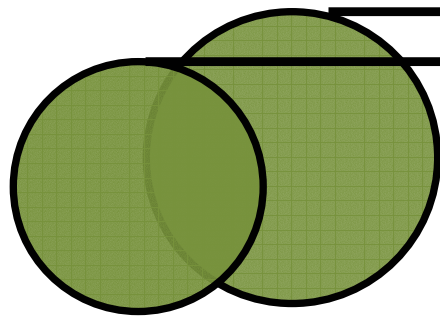
How frequently did the children engage the GI activity at the Emotional Level?

- in 22 group observations, group engaged at the EL 100%
- in 69 individual observations, the children engaged at the EL 97%

Have the goals been met for EL?

- a successful accomplishment of the goal for EL





Describing  
Level

Repetition  
Level



# Describing Level & Repetition Level

## Goals for DL & RL in GI learning

- for the children to use their own words to describe what they see presented in the activity
- to have the children accurately repeat back the new concepts/ideas introduced, preferably in English

## Indications that DL & RL have been reached

- utterances in either L1 or L2 concern the GI activity
- the child parrots/repeats the new GI vocabulary and ideas, in either L1 or L2



# Deductions from observational data at DL and RL

Encouraging results from observations at both levels

	Describing Level	Repetition Level
group (n=22 observations)	95%	95%
individual (n=69 observations)	90%	83%

- group observations showed the group to progress from EL to DL 95% of the time, and 95% from DL to RL
- individual observations showed a progression from EL to DL 90% of the time, and 83% from DL to RL
- results show an encouraging number of children fulfill the goals of DL and RL and have progressed in GI



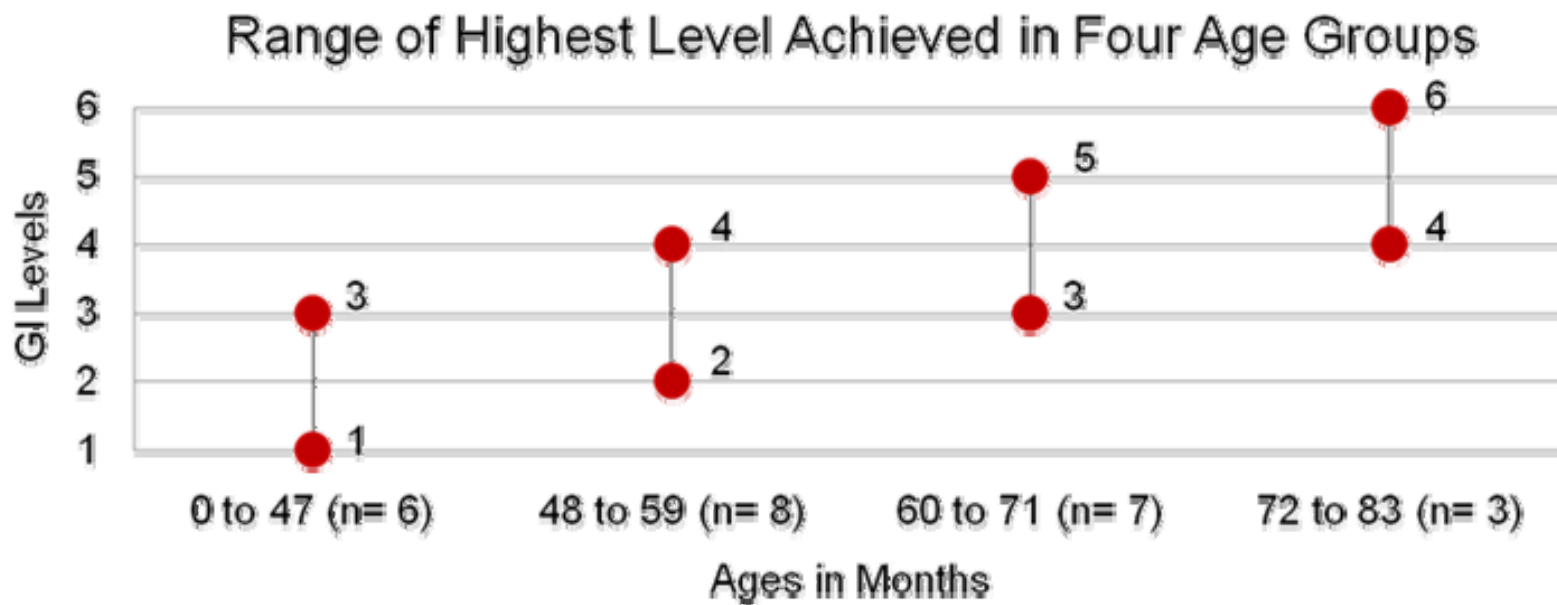
# Understanding Level, Environmental Awareness & Action Competence



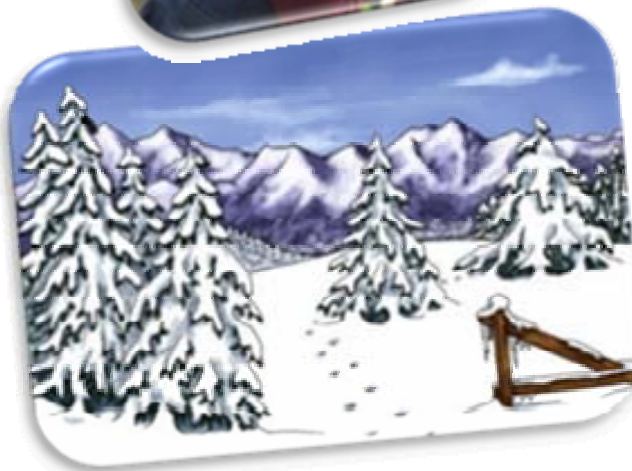
## What happens after the Repetition Level?

- natures of UL, EA and AC are knowledge application to the greater picture in an ever expanding “circle”
  - to understand GI topics, to apply that understanding on a personal level and then to apply that understanding on a “societal” level
- of the group observations at UL: 50% progressed
- of the individual observations at UL: 33% progressed





- different age groups of the observed children reach different levels of GI
- GI levels increase with age
- within each age group, there is a variation between children
- variation is restricted to a small range of levels
- this tendency needs to be quantified with a larger group of subjects
- qualitative observations show that other factors might be responsible for the individual differences
  - i.e.: exposure to GI, personality, language ability, etc.



# Materials for Green Immersion

# Materials assisting in progression

## Three categories of GI materials

Animals or “the Real Thing”



how do penguins move



preparing an animal enrichment

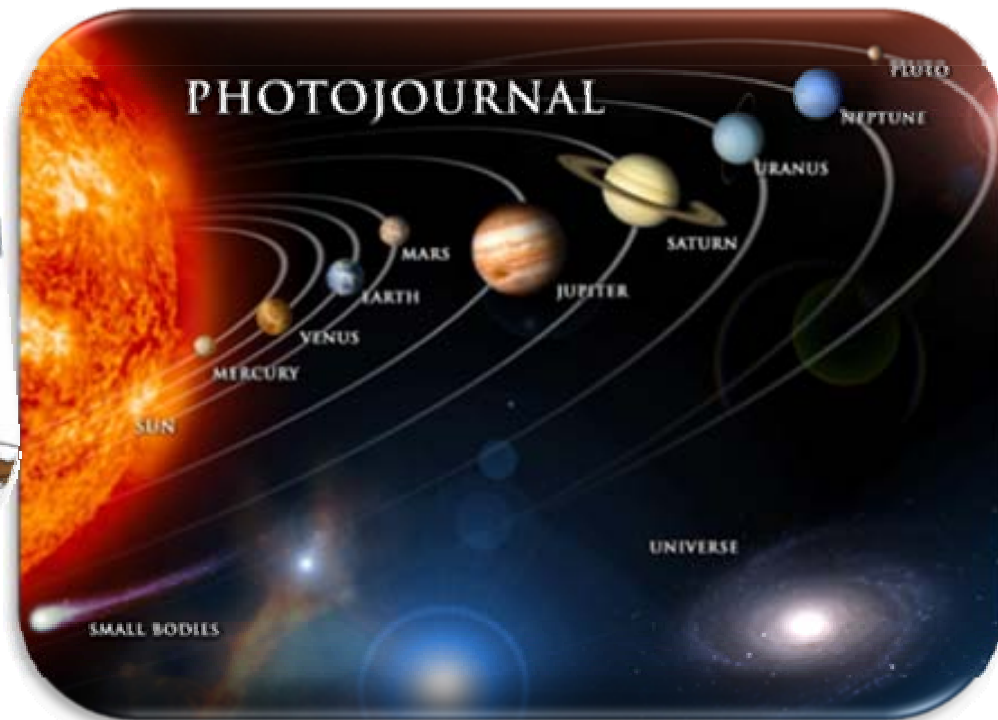
# Materials assisting in progression

## Three categories of GI materials

Photos and Drawings



animals and winter



our solar system



# Materials assisting in progression

## Three categories of GI materials

### Photos and Drawings

- inc: videos, photos, songs, games, “real thing”, experiments, stories



how strong is an ostrich egg

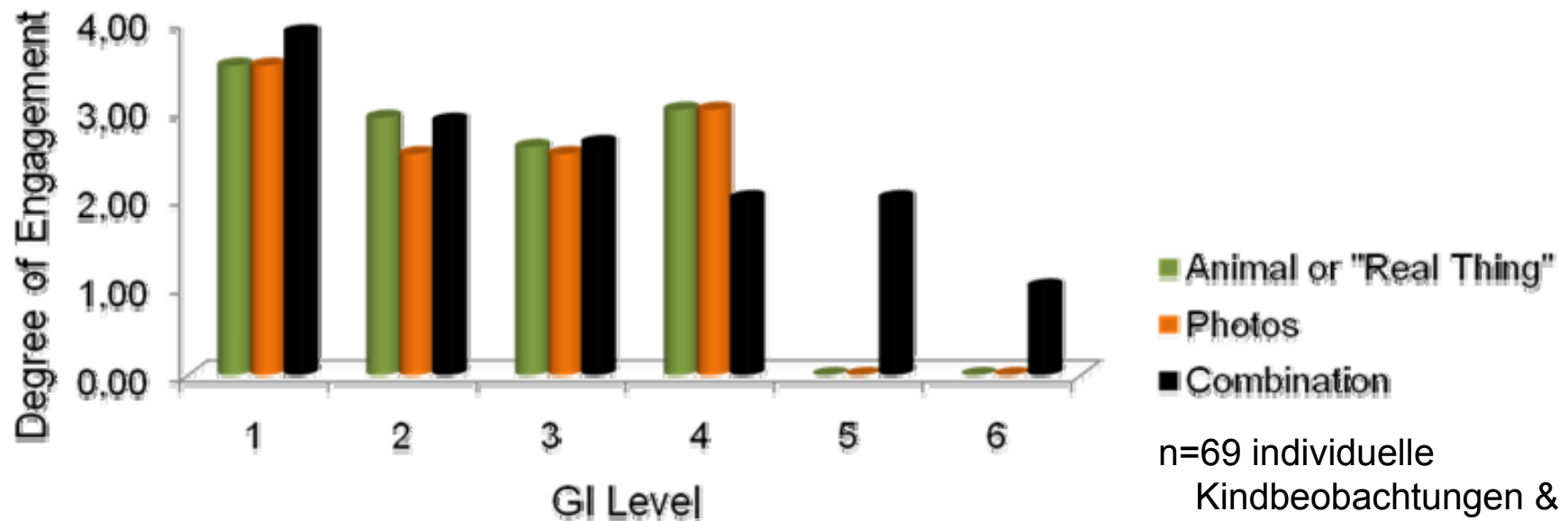


what does an ostrich look like

# Materials assisting in progression



## Effectiveness of Materials on GI Learning



n=69 individuelle  
Kindbeobachtungen & 22  
Gruppebeobachtungen

- all three categories of materials attracted the children to a high degree of engagement in the beginning levels of GI learning
- it was the combination of materials which was observed to be used when Action Competence was reached



# Thank you!



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# Discussion



# Workshops 14.30 – 16.00 Uhr



1. Cultivating Native Language Skills **Room 5**
2. Intercultural Education in Bilingual Institutions **Hörsaal 1**
3. Discovery and Experimentation:  
English Language Nature and Technology Activities **Room 7**
4. Games, Songs & Co.: English Preschool Materials **Room 4**
5. Establishing a Bilingual Preschool **Audimax**
6. How Do Children Acquire a Second Language?  
**a) Room 6**  
**b) Hörsaal 4**
7. Prerequisites for Effective L2 Acquisition  
in Majority Language Children and Children from  
Migrant Backgrounds **Hörsaal 5**

