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

Introduction

Dr. Annette Lommel (FMKS e.V. Kiel)
Dr. Kristin Kersten (Projektkoordination)

Immersion in Early Foreign Language Acquisition

Prof. Dr. Henning Wode

(Universität Kiel)

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[+]-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*

E·L·I·A·S

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 cames	he comes
er rufte	rief	he wents	he goes
wir schläfen	schlafen	he shaked	he shook
geschwimmt	geschwom-men	he ranned	he ran
		he catched	he caught
er kommte	kam	rufing	
		spieling	

Compounds used by the immersion children to overcome lexical gaps

BEEHIVE	FROGS	
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

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
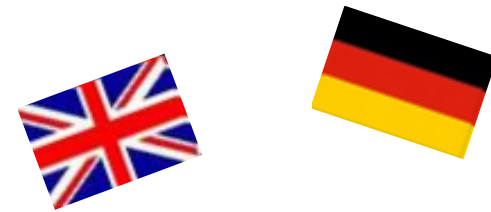
Coordination

Otto-von-Guericke-University Magdeburg
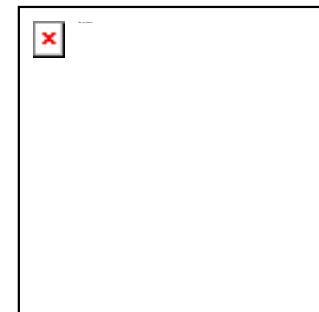
Background: EU Action Plan

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

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"

© ELIAS

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)

E·L·I·A·S

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) (n=83) Development over time
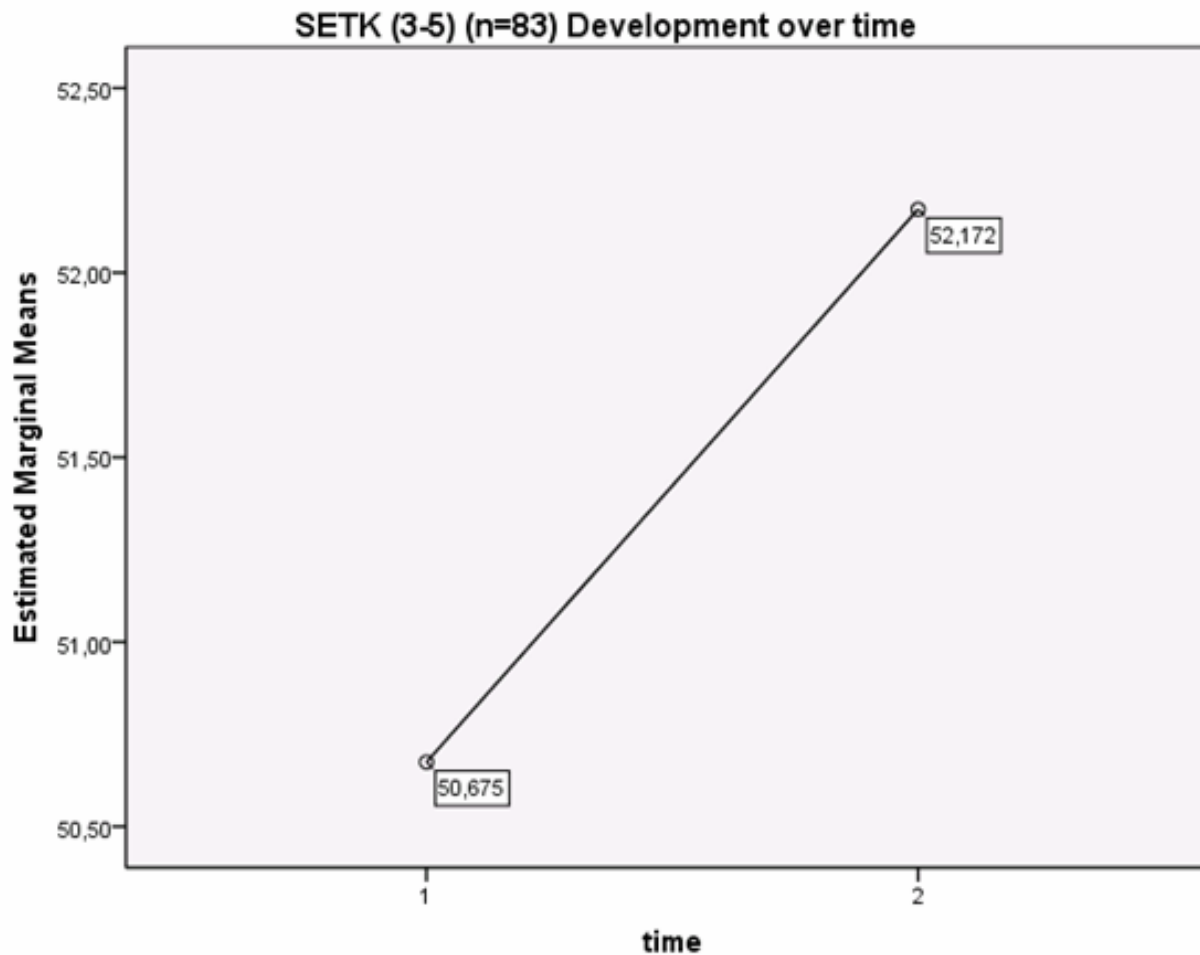
⇒ The children achieved significantly higher scores in Test 2 than in Test 1.

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

SETK (3-5) (n=83) Development over time
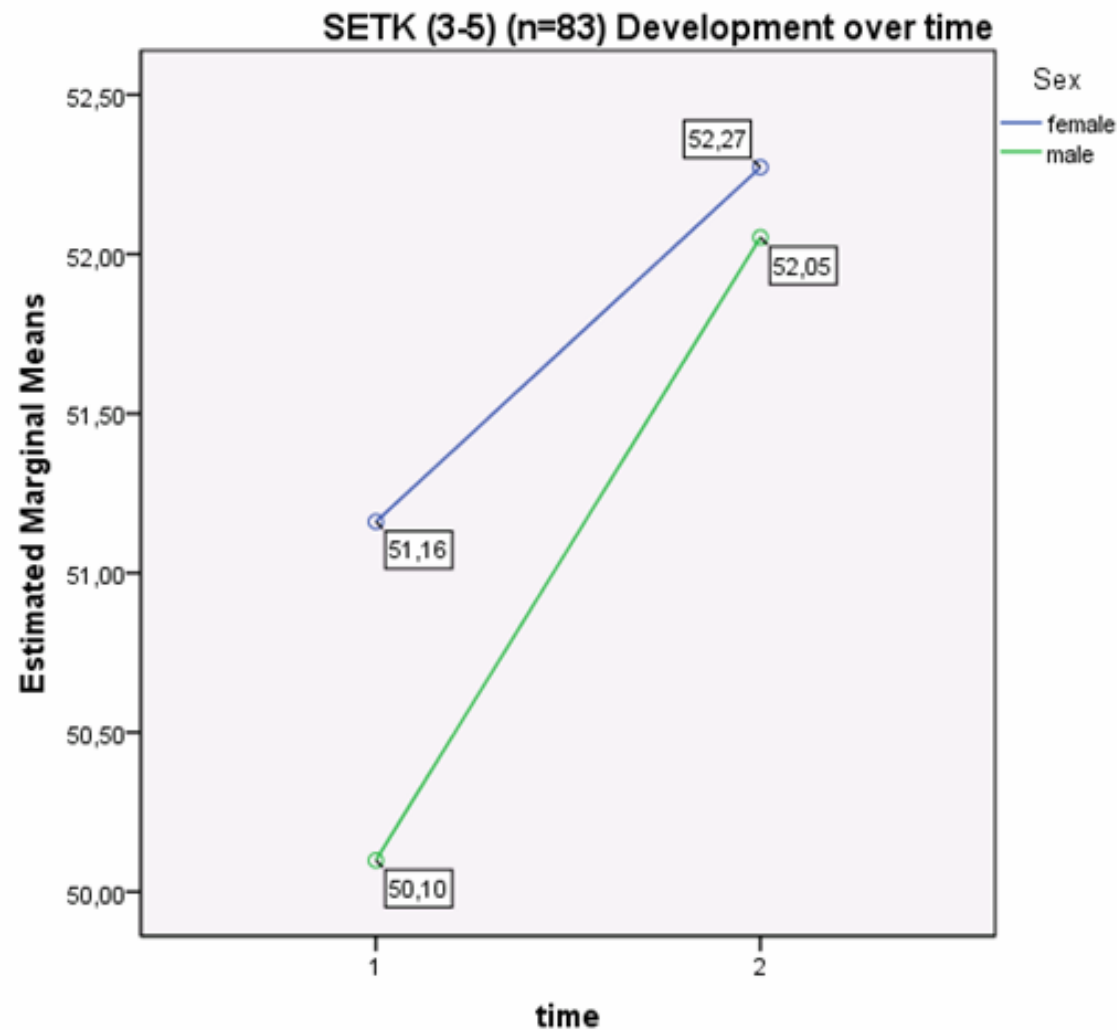
⇒ Girls as well as boys achieved significantly higher scores in Test 2 than in Test 1.

⇒ 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

SETK (3-5) (n=83) Development over time
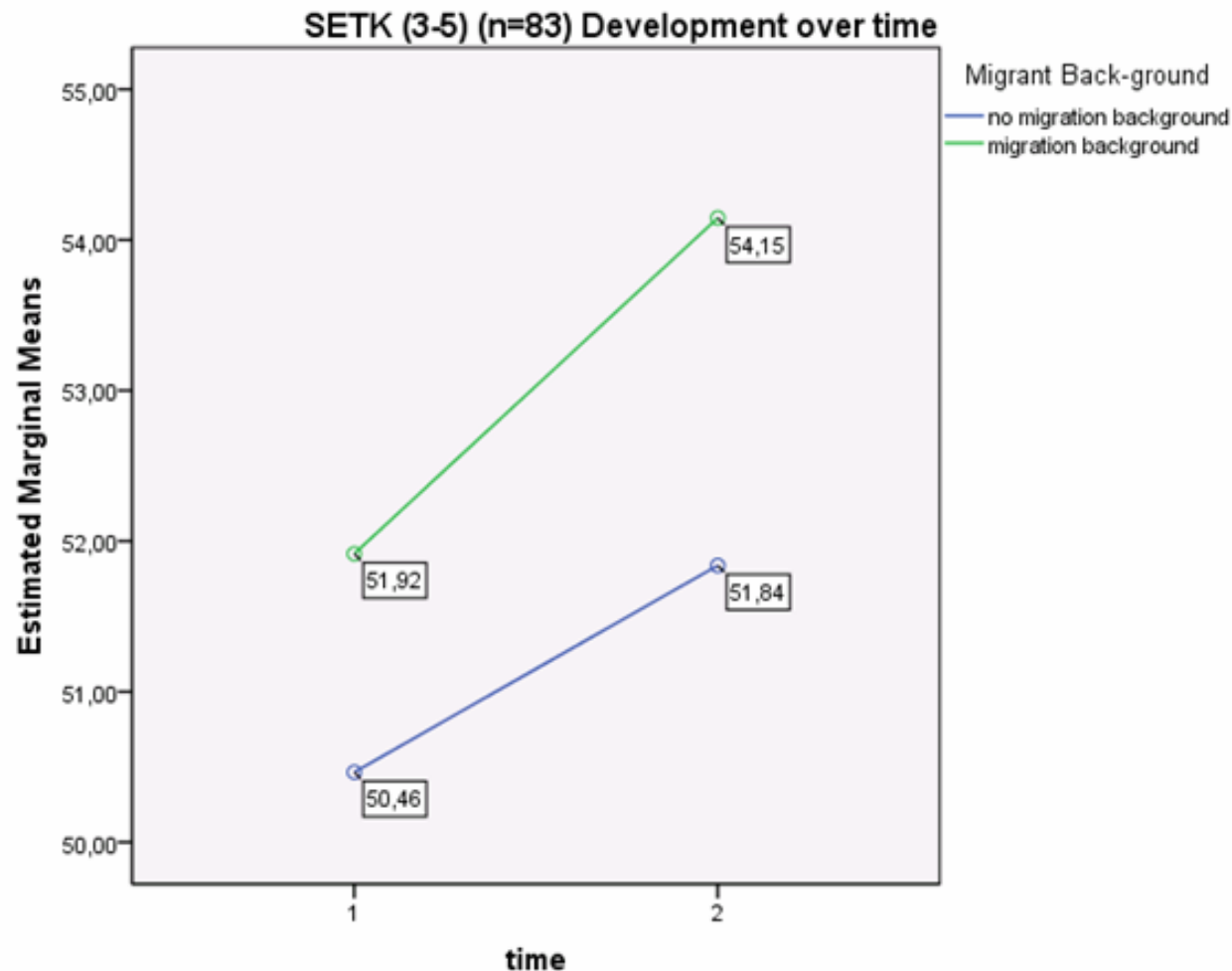
⇒ Both children with and without migrant backgrounds achieved significantly higher scores in Test 2 than in Test 1.

⇒ 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)

E·L·I·A·S

Outline

1. Introduction

2. L2-tests: grammar and lexicon

3. Results

      3.1 General development

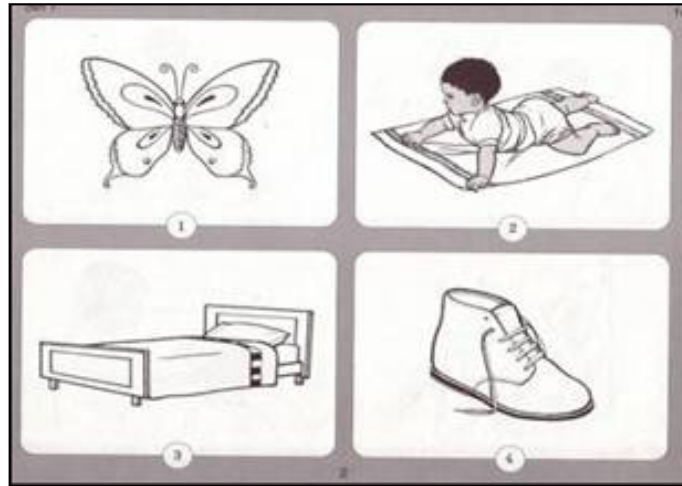   3.2 L2-contact

      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

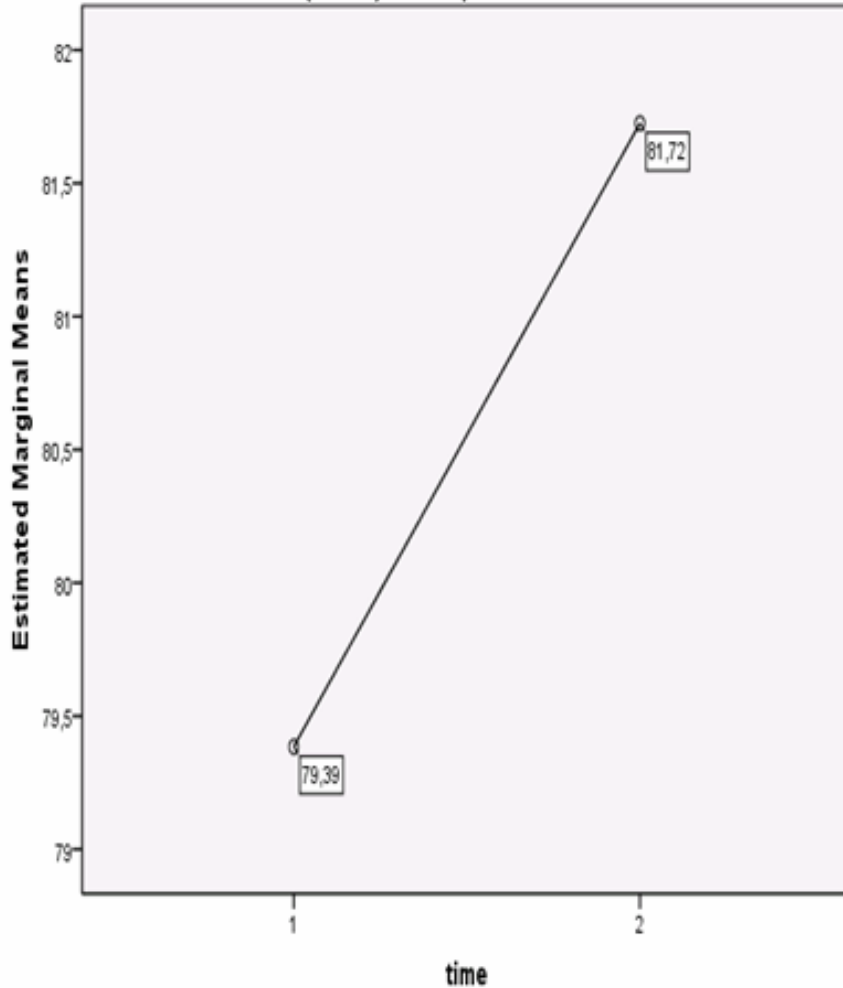**BPVS**

(British Picture Vocabulary Scale)

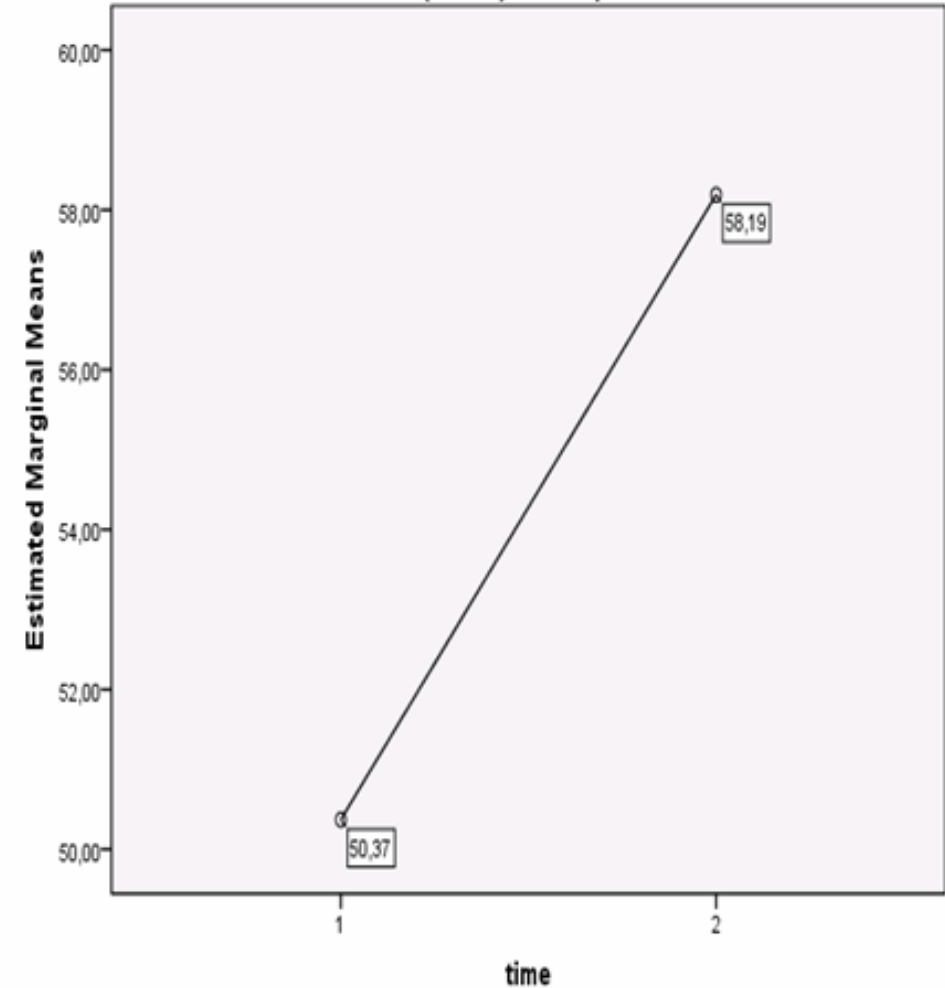**ELIAS Grammar Test**
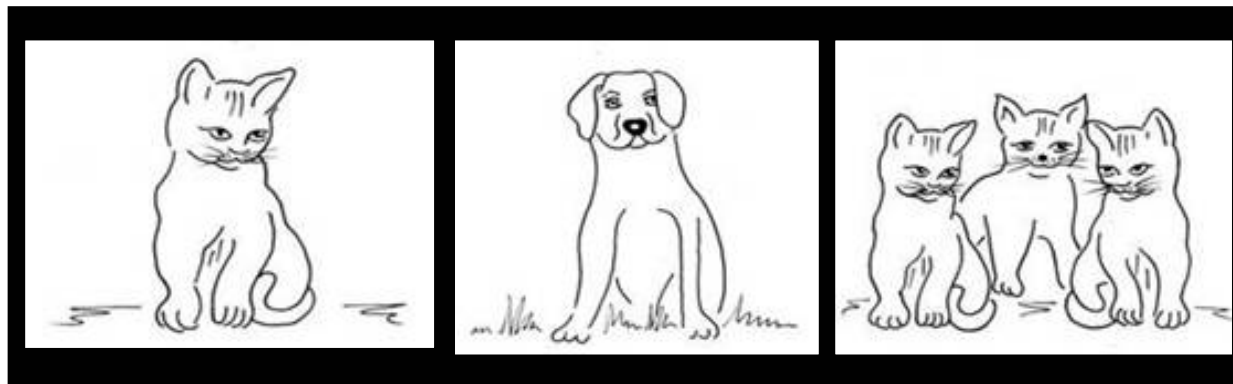
3. Results

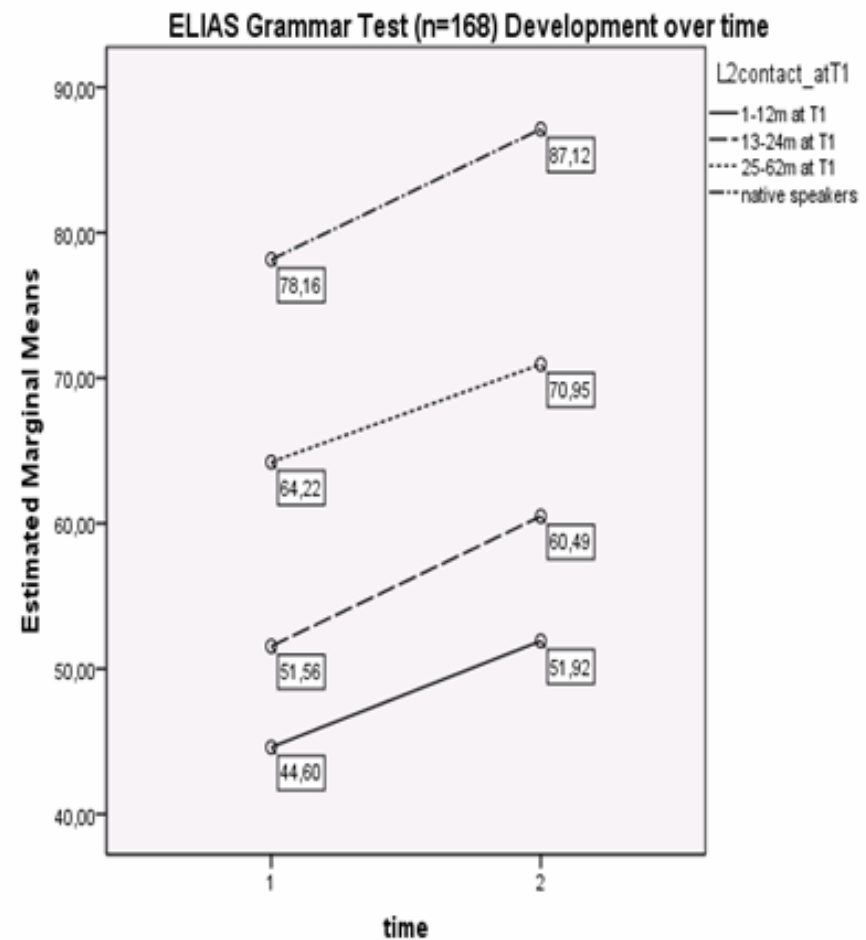# 3.1 Development T1-T2
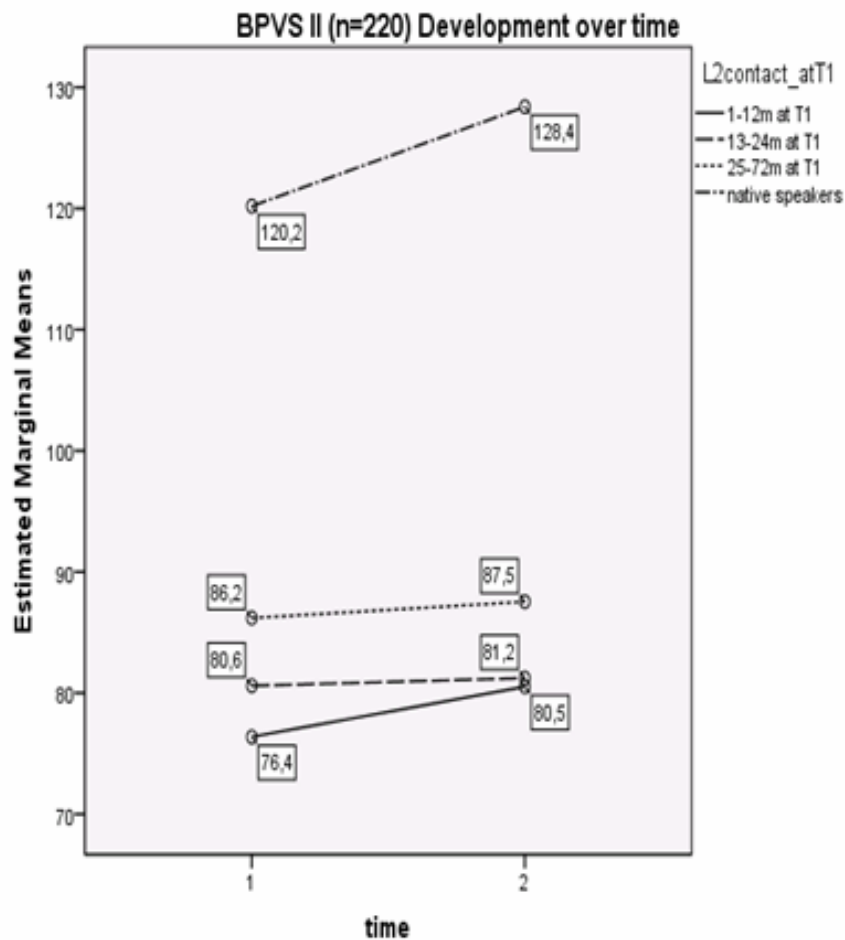

BPVS II (n=200) Development over time
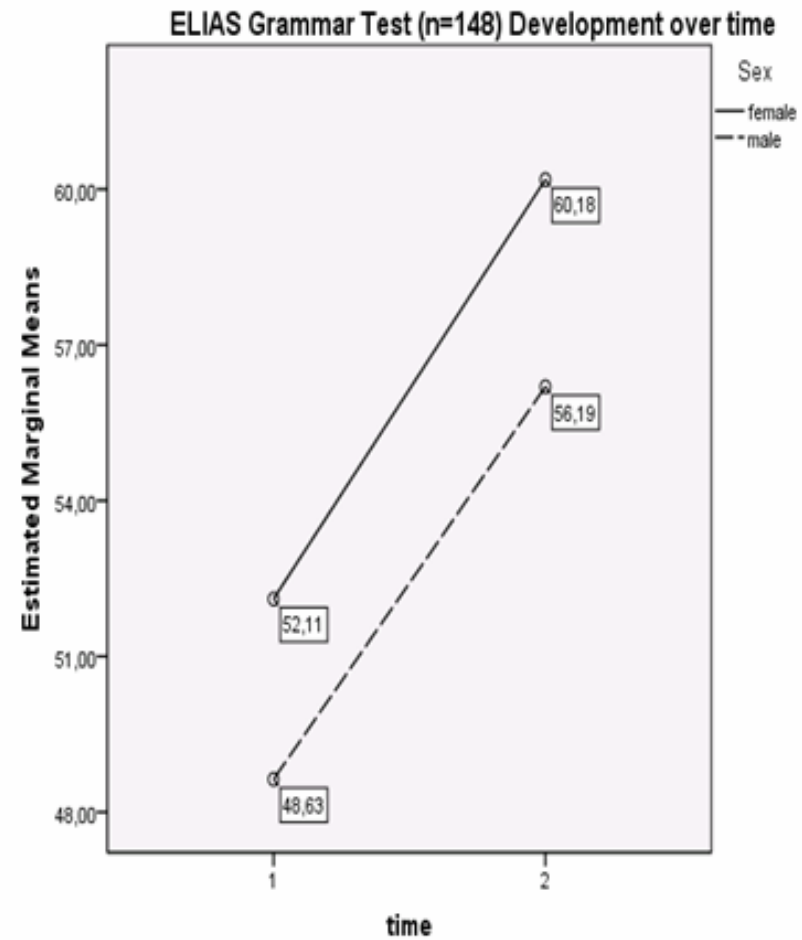
ELIAS Grammar Test (n=148) Development over time

- 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

BPVS II (n=200) Development over time

ELIAS Grammar Test (n=148) Development over time

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

3.4 Development T1-T2: Migration background

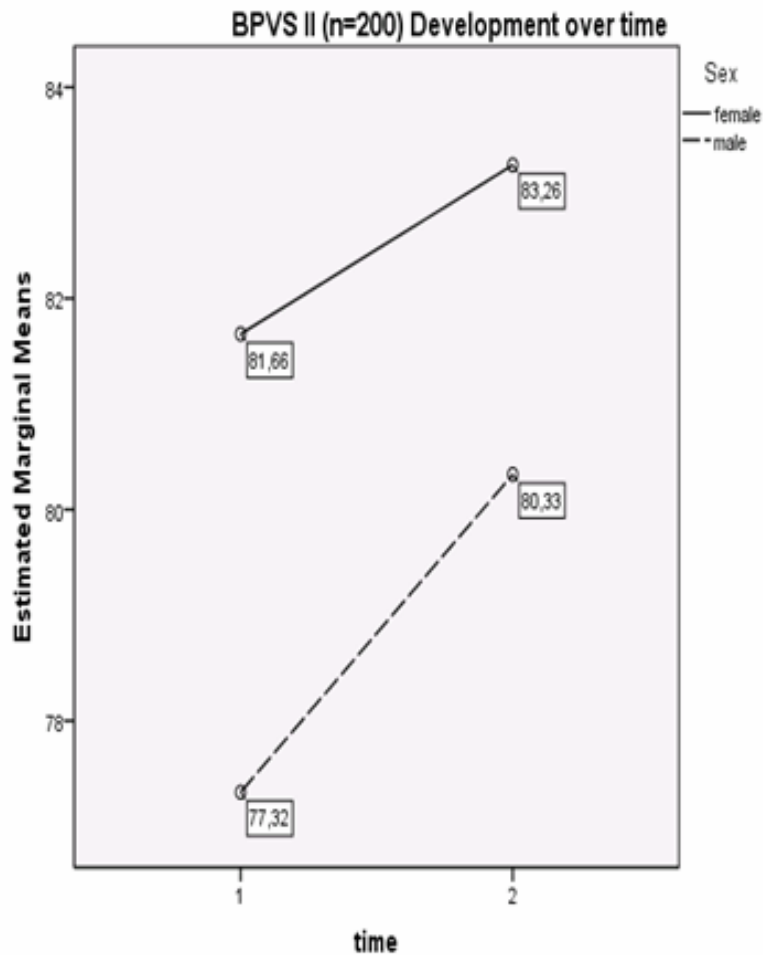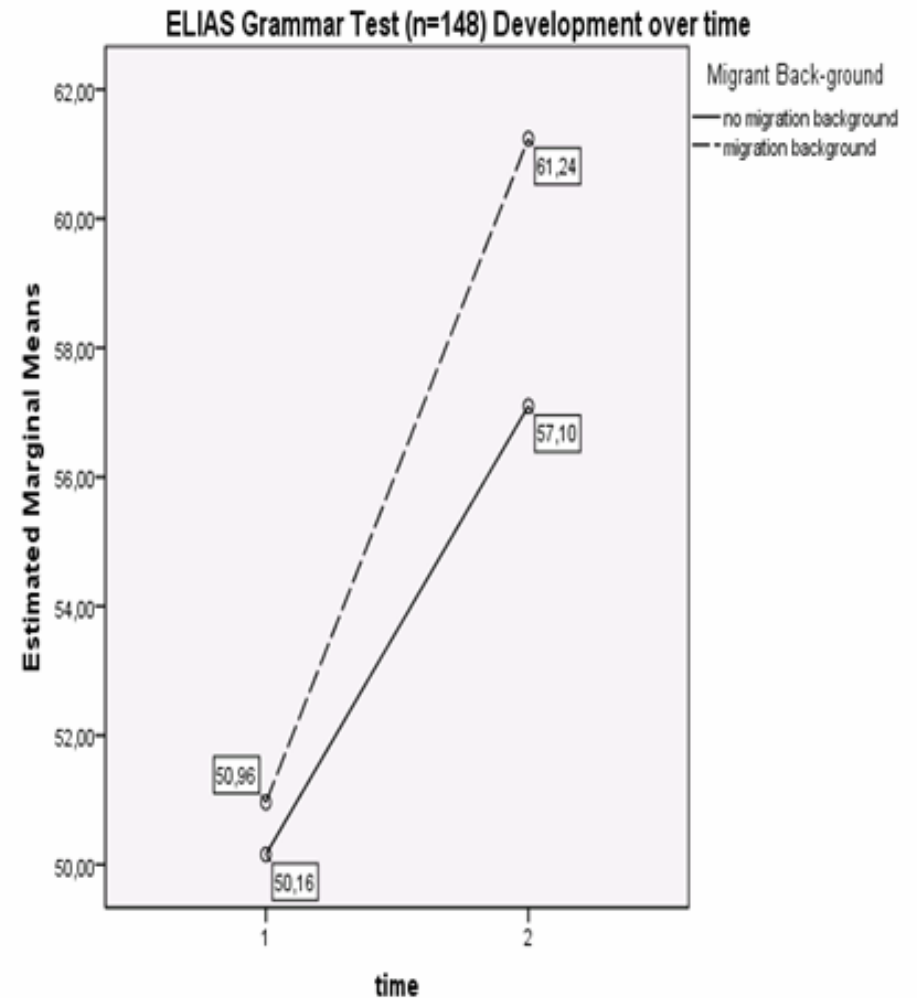BPVS II (n=200) Development over time

ELIAS Grammar Test (n=148) Development over time
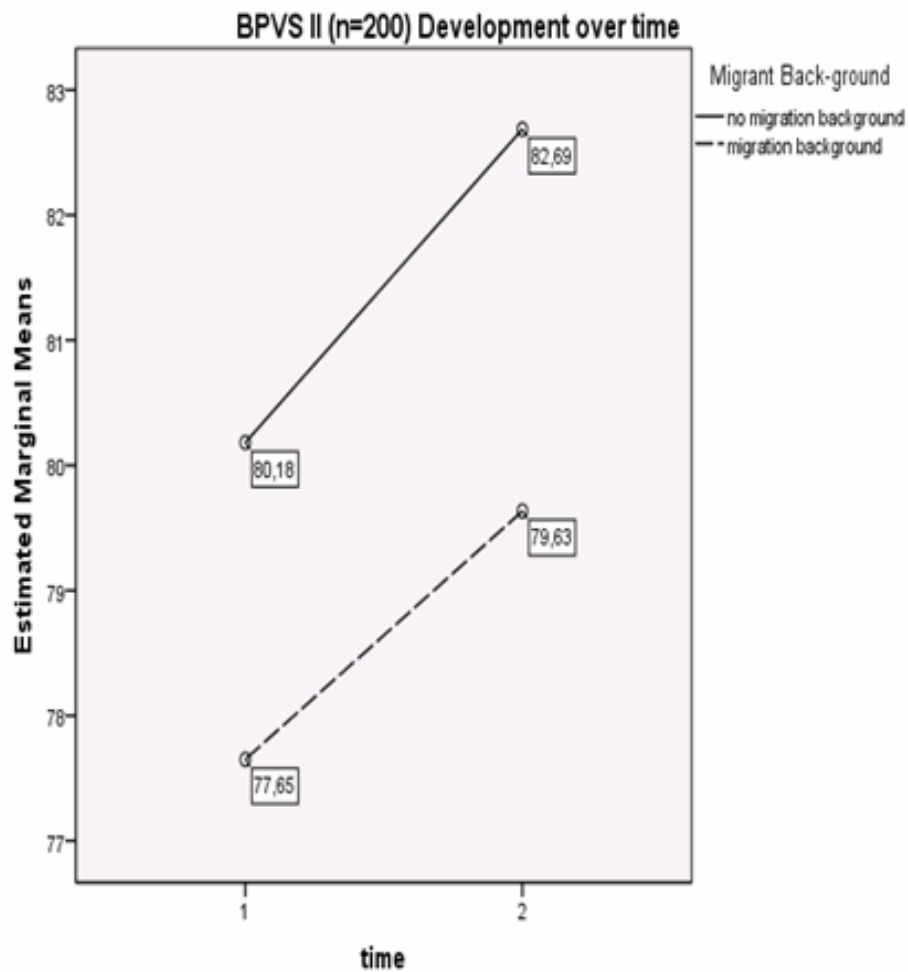
- Significant increase over time for both groups
- No difference between children with and without migration background

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 Develoment

     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 $\rightarrow$ 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									
General information	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									
TEACHER										
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									
CHILDREN										
Children's reaction	Children listen									

© Early Language and Intercultural Acquisition Studies

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 scale from 1 (very low) to 4 (very high).

- Interrater reliability: via statistical analysis, detailed description of categories, videos and exemplary rating (with explanations)

2.4 Categories

Regrouped into superordinate categories:

1.   Input quantity: input amount, translations

2.   Input quality: adapted speech, varied input, ritualized input, etc.

3.   Promoting comprehension: contextualization, comprehension check, explanations, etc.

4.   Reactions to children's output: promoting and maintaining L2 output, corrective feedback, etc.

5.   Children's reactions: attention, comprehension

3. Video Example

4. Results

General information

- Results for 21 L2-teachers in 9 preschools

- Cecklist-scores (IM-Scores) allocated to 3 groups with homogenous number of children.

- Checklistwerte (IM-Scores) in 3 Gruppen mit möglichst homogener Kinderzahl unterteilt:

  1. IM-Score low

  2. IM-Score middle

  3. IM-Score high

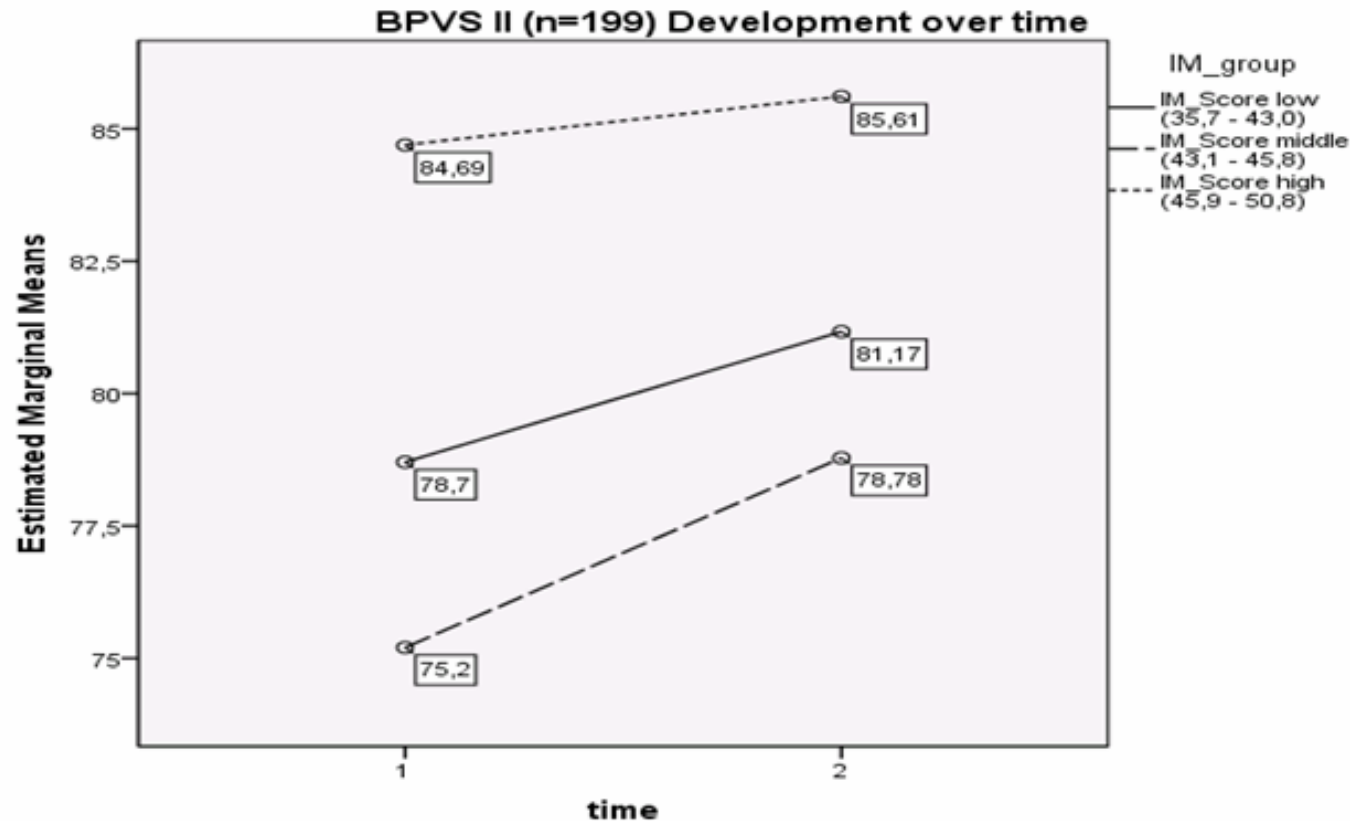- Correlation of Checklist-scores with language test results

Correlation: grammatical development and checklist-scores
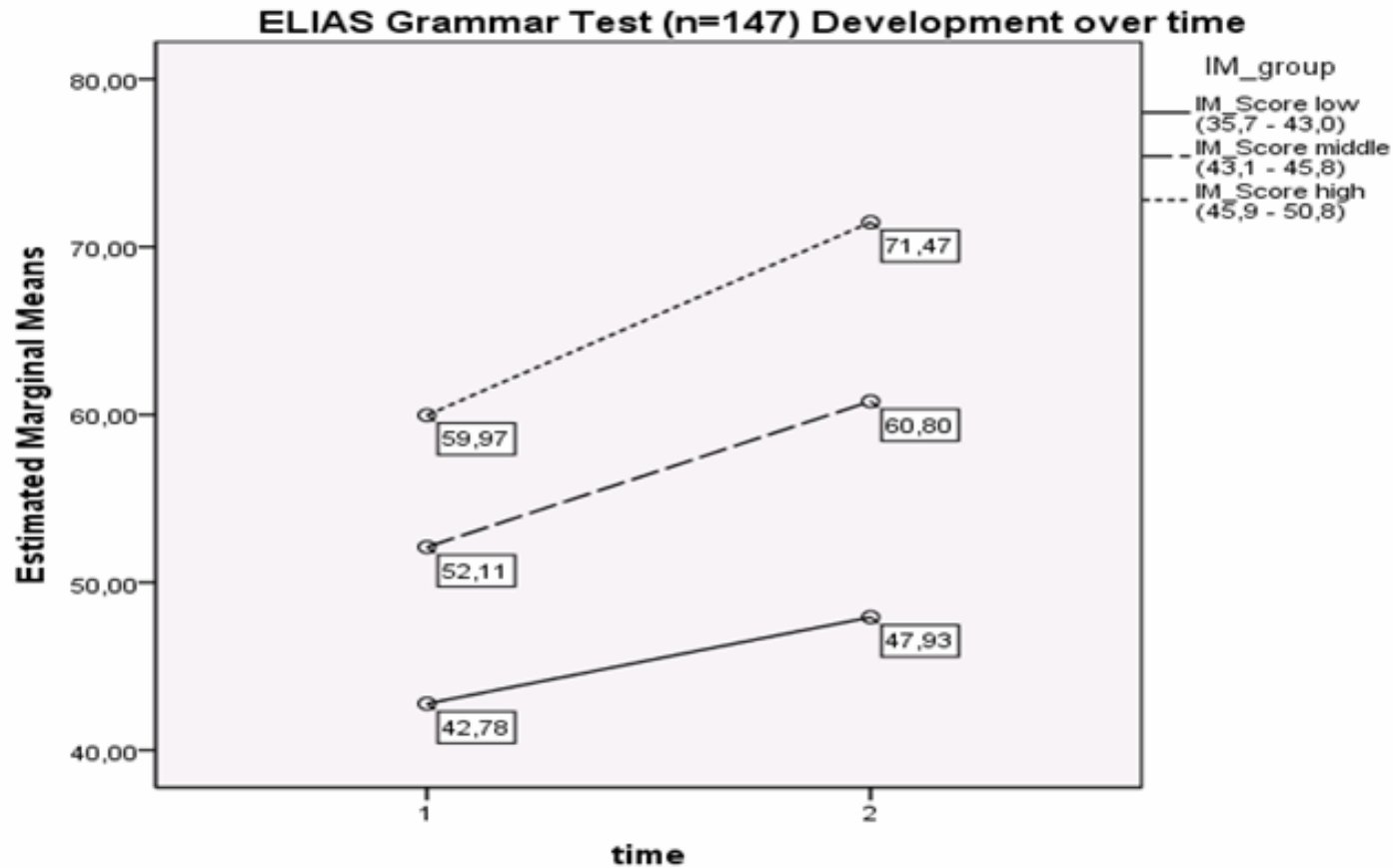
- significant difference between IM-Score groups in the children's grammatical development

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 skills (grammar) develop significantly better with a qualitatively high input.

5. Conclusion

- For the first time, quantitative data suggests that the input quality strongly influences L2 competence.

- 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.

References

Krashen, S., 1985, The input hypothesis: issues and implications. Harlow: Longman.

Long, M.H., 1983, Native speaker/non-native speaker conversation and the negotiation of comprehensible input. Applied Linguistics 4, 126-41.

Spada, N. & Fröhlich, M., 1995, COLT: Communicative Orientation of Language Teaching Observation Scheme. Coding Conventions and Applications. Sydney: National Centre for English Language Teaching and Research.

Swain, M., 1985, Communicative competence: some roles of comprehensible input and comprehensible output in its development. In Gass, S.M. and Madden, C.G. (Hrsg), Input in second language acquisition. Rowley, MA: Newbury House, 235-53.

Ullmann, R. & Geva, E., 1982, The Target Language Observation Scheme (TALOS): Handbook. Modern Language Centre, Ontario Institute for Studies in Education.

Thank you for your attention!

Intercultural learning

Lydia Gerlich (Universität Magdeburg)

Prof. Dr. Ute Massler (Pädagogische HS Weingarten)

"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

<div align="right">(Földes, 2007, S. 7 ff)</div>

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 how 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 contcat:

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

- After a few month:

  M. brings a book to L2 teacher and sais 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 uncertanties

(Erll & 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

Shannon Thomas (Zoologischer Garten Magdeburg)
Prof. Dr. Michael Ewig (Pädagogische HS Weingarten)
Prof. Dr. Petra Burmeister (Pädagogische HS Weingarten)

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

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 <u>uncoupled</u> 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"
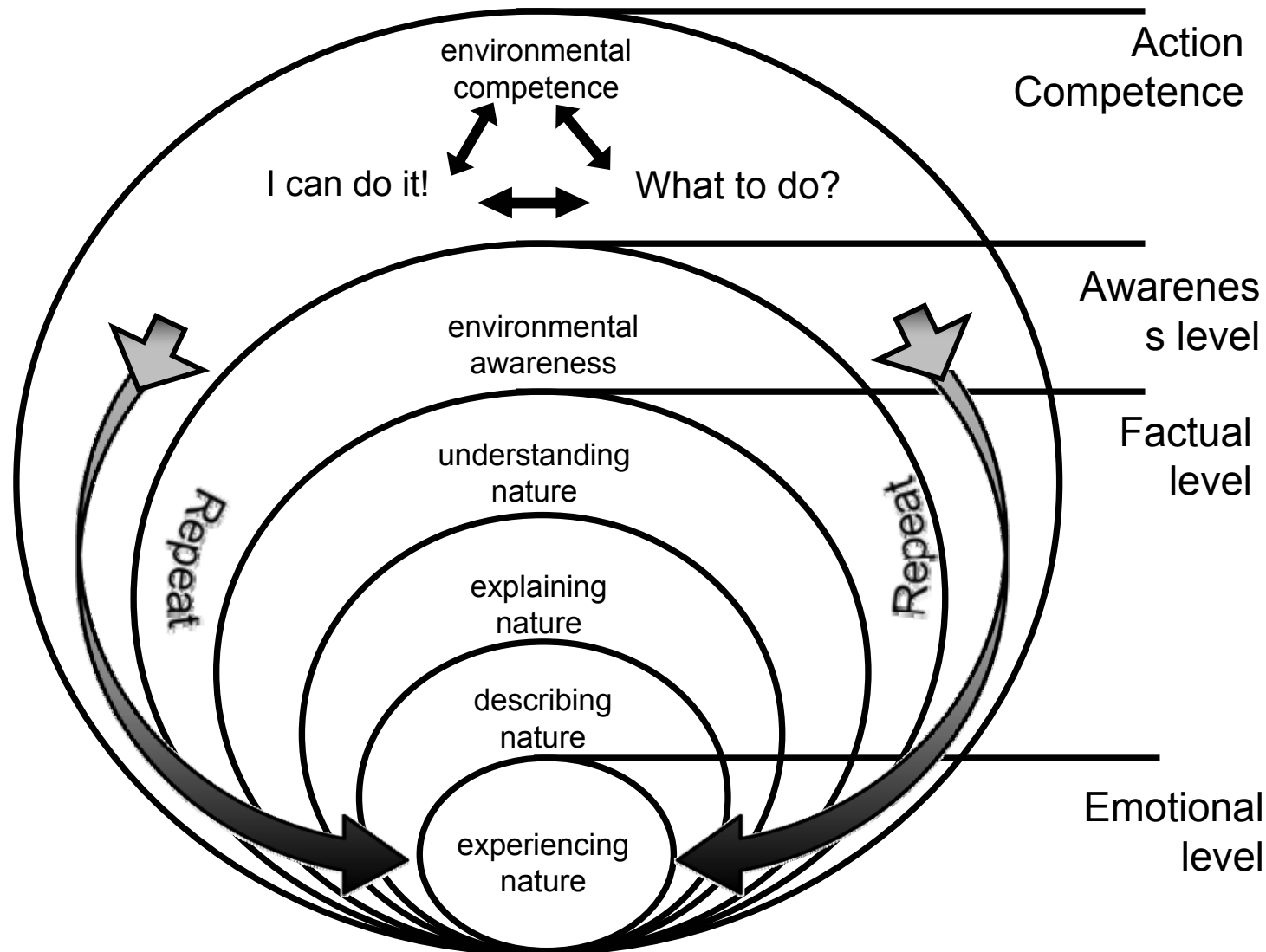
Ebenen der Naturbegegnung (by JANßEN, 1988, from UNTERBRUNER, 2006)

What is Green Immersion?

Who	• 0-47 months = 6 children • 48-59 months = 8 children • 60-71 months = 7 children • 72-83 months = 3 children
What	• data on a 6 level GI learning model, based on Janβen (1988) • degree of learning materials on engagement • data used for the presentation highlight the 6-month final observational period
Where	Magdeburg Zoo-kindergarten
When	• a period of 6 to 24 months
Why	• provide the children with the necessary tools for environmental Action Competence

To begin, I'll introduce the programme and concept. Green Immersion is an environmental education programme that assists children in their understanding of environmental topics, by presenting the children with a weekly, 2-part activity, taught all in the second language.
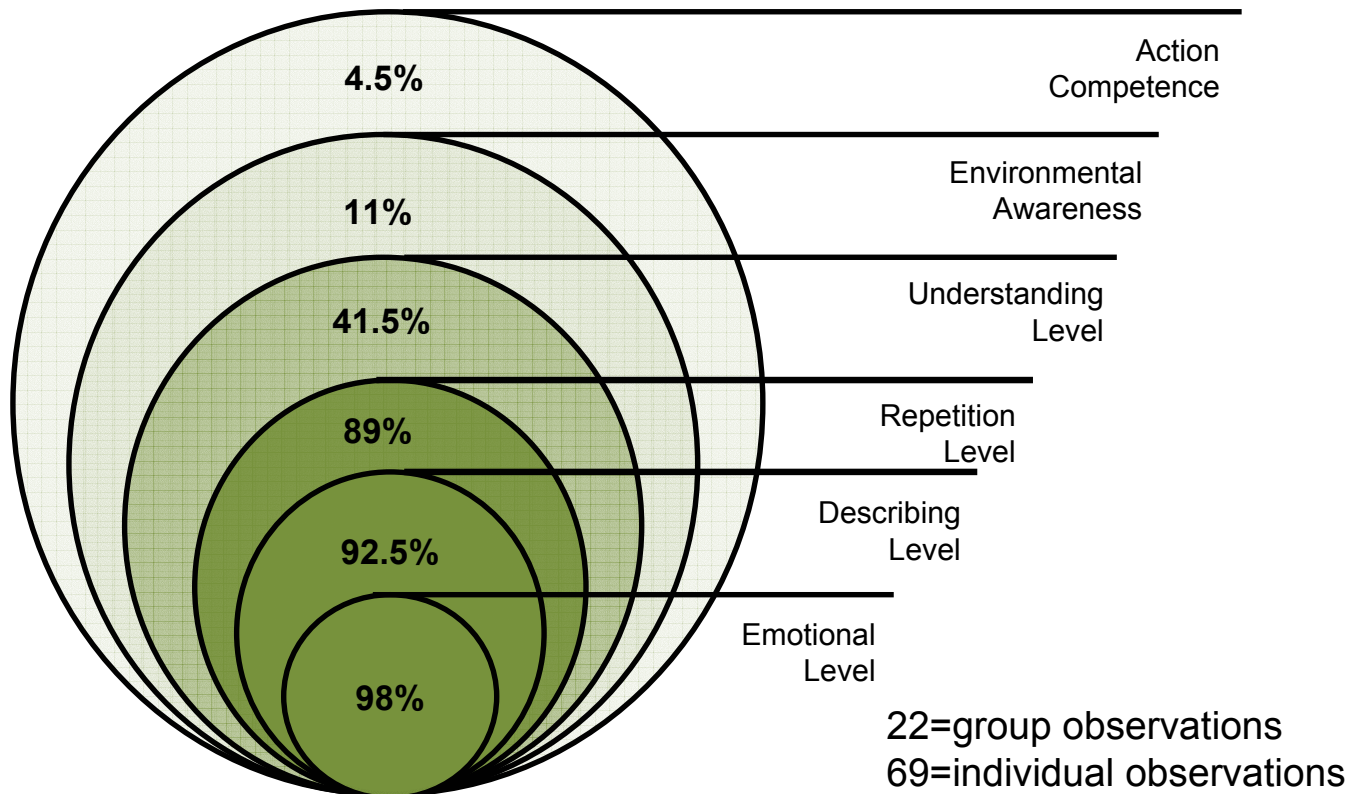
The programme began in October 2008 with 11 children who continued throughout the entire programme and by the end of the observational period, May 2010, the programme had 28 participants. The age range of the observed children varied between 38 to 82 months. Within the programme 24 children were observed over a period of 6 to 20 months. The data in this short presentation highlights the final 6-month observational period.

The data collected observed both group and individual growth, through the various levels of GI learning, from the Emotional Level to Action Competence. Each level was also observed as to the degree of engagement of the group or the individual, on a scale of 1 to 4.

Let's take a little closer look at the progression through the levels of GI learning.

The Children's Progression in GI

4.5% — Action Competence

11% — Environmental Awareness

41.5% — Understanding Level

89% — Repetition Level

92.5% — Describing Level

98% — Emotional Level

22=group observations
69=individual observations

The Percentage of All Observations through the 6 Levels of GI

First, I'll give you an overview of the observations collected regarding the GI level progress. We used a model based on Janssen to illustrate the progression. As you can see, majority of the children progress through the first three levels of Green Immersion. However, something interesting happens after the third level of Green Immersion, after the Repetition Level. The number of children progressing through the three latter stages of GI learning decrease.

Let's take a little closer look at what is happening throughout the levels of GI learning.

**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)

The first level of GI learning is the Emotional Level. **>**The goals we have for the children at this stage are for the children to acknowledge the nature/environment presented to them during an activity.

Within this level the second language is present, but not needed for a child to fulfill the goals of this level.

>Indications of achievement or engagement at the EL were the following;

The child's/children's body language is 'open'; they aren't shying away or leaving the activity.

The children's eyes are following the activity and the children are actively watching the activity.

Finally, the attention span of the children is extended while watching the activity. This last criteria is very dependant upon the individual's personality, and this was taken into account while collecting the observations.

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

The results from the data collected on this level are as follows. >Of the group observations in the final 6-month period, 100% of the time in 22 separate recorded observations, the group engaged in the activity. In the 69 individual observations the children engaged in the activity 97% of the time.

>When reviewing the criteria for this level and interpreting the results, we can say with confidence that the goals for this level were successfully accomplished.
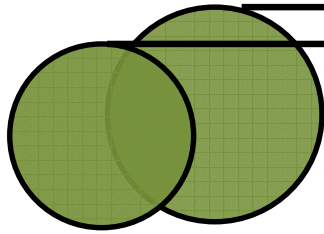
Describing
Level

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

The next two levels are the Describing and the Repetition Level. Both levels work together and can be cyclic. As well, in these two levels either the first or second language begins to play a major role.

> The goal we set for the Describing Level is to have the children use their own words to describe what they see presented in the activity; this description does not need to be accurate, the child just needs to talk about the activity. The goal for the Repetition Level is to have the children repeat back the accurate environmental and language information presented to them.

> The indicators we looked for in the children at these levels were: the children describe the GI activity in either L1 or L2, and the child parrots/repeats back the new information 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

Conference in Magdeburg, June 19, 2010   **Bilingual Preschools: Research meets Practice**   © ELIAS

Now let's take a look at some of the results at this level. The results showed that majority of the children progressed through the Emotional Level and onto the Describing Level and further into the Repetition Level. >Group observations showed that the group progressed to the Describing Level 95% of the time. In individual observations, the children progressed to DL 90% of the time. Both results are encouraging to interpret; in that, the GI activity was attractive enough to engage the child at the Emotional Level and to further stimulate a linguistic response in the children at the Describing Level. The data collected on the Repetition Level showed that the group progressed 95% of the time and 83% of the time in the individual.

>When accounting for the indicators at both the Describing Level and the Repetition Level, again we can positively say that the goals for these levels have been accomplished.

# 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

What did the data report for the remaining three levels of GI learning? The *first* three levels of GI all create a foundation and a scaffolding, which is helpful for progression into the latter three levels; a foundation in environmental competence and language competence. Once the first three levels are grasped, the next level of GI is to understand the topic, which leads to a child's environmental awareness and ultimately positive action competence.

>The goals we had for the latter levels of GI were to apply GI knowledge to the bigger picture in ever expanding circles. First, to begin to understand the connections of environmental topics, then to take those connections and apply them on a personal level and finally apply those connections on a "societal" level.

A trend that we observed indicated that the older a child was *and/or* the time of exposure to GI learning the farther the child progressed into the latter three levels or the quicker the child progressed into these levels. We considered reasons why this distinction would occur and deduced that these children have both the language scaffolding and the environmental knowledge established which supports their growth into the latter levels of GI.

Range of Highest Level Achieved in Four Age Groups
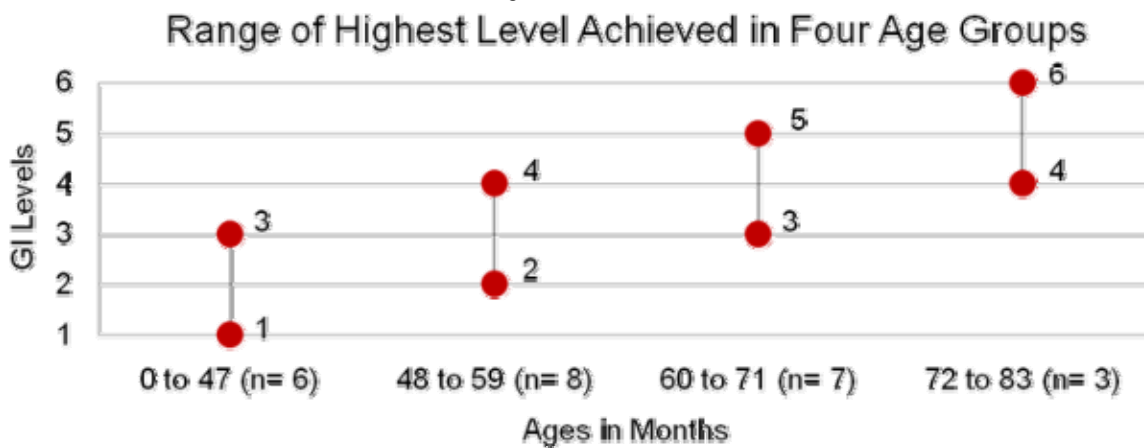
- different age groups of the observed children reach different levels of GI

- 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.

Conference in Magdeburg, June 19, 2010   **Bilingual Preschools: Research meets Practice**   © ELIAS

> This chart provides an illustration of the observed children, regarding the *range* of highest level achieved in the four age groups. As you can see, there is a steady increase of level achievement with each age group, and this trend can be used to understand the change in percentage.

Also, the results showed that within each age group there was a variation in the highest level achieved; such as, the youngest group varies between a level 1 and 3, whereas the oldest group varies between a level 4 and 6.

Of course, this was a small group of individuals, and this study would be very interesting to do on a larger group of subjects. Additionally, the observations on the individual children showed that other factors might be responsible for the individual differences, such as exposure to GI learning, personality, language ability and so on.

Materials for Green Immersion
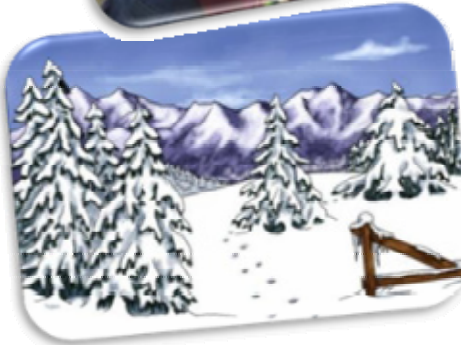
Let me shift gears a little and discuss the effectiveness of materials in GI learning. As an educator I want my children to learn, to become engaged in the activity. I used the observations to map out a trend of the effectiveness of the materials. After looking back through all the data I found 3 major categories of materials, which showed interesting results in the degree of child level progression.

Materials assisting in progression

Three categories of GI materials

Animals or "the Real Thing"

how do penguins move

preparing an animal enrichment

The first category was the use of animals or "the real thing" during a GI activity to help attract the children and support them as they progressed through the levels of GI learning. The first photo is of an exploration into how animals move, specifically penguins. For some GI activities the children prepared animal enrichments and observed how the animals interacted with what they put together.
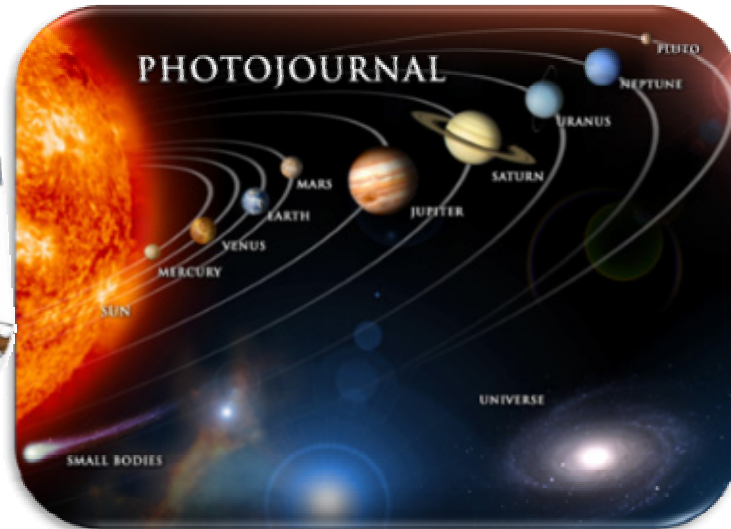
Materials assisting in progression

Three categories of GI materials

Photos and Drawings

animals and winter

our solar system

PHOTOJOURNAL

PLUTO
NEPTUNE
URANUS
SATURN
MARS
JUPITER
EARTH
VENUS
MERCURY
SUN
UNIVERSE
SMALL BODIES

The second category was the use of photos and drawings during a GI activity to help the children in their GI learning. Whenever the GI activity goes outside the scope of 'touchable' realistic photos are needed to help assist in learning; hence the picture of our solar system. Also, if we would like to introduce a theme/new vocabulary we use drawings to attract the children and hopefully lead them to describe what they see in the drawing.

Materials assisting in progression

Three categories of GI materials

Photos and Drawings

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

what does an ostrich look like

how strong is an ostrich egg

The final category was a combination of everything in one GI activity. The "combination" included: videos, photos, songs, games, "real thing", experiments, stories. These pictures are from one GI activity where the children were invited to bring something from home about a topic of their choice. The child brought an egg, books, a feathers and the educator brought along photos to add if needed.

So which did the observational data indicate to be effective for the children's GI level progression?

Materials assisting in progression

Effectiveness of Materials on GI Learning

n=69 individuelle Kindbeobachtungen & 22 Gruppebeobachtungen
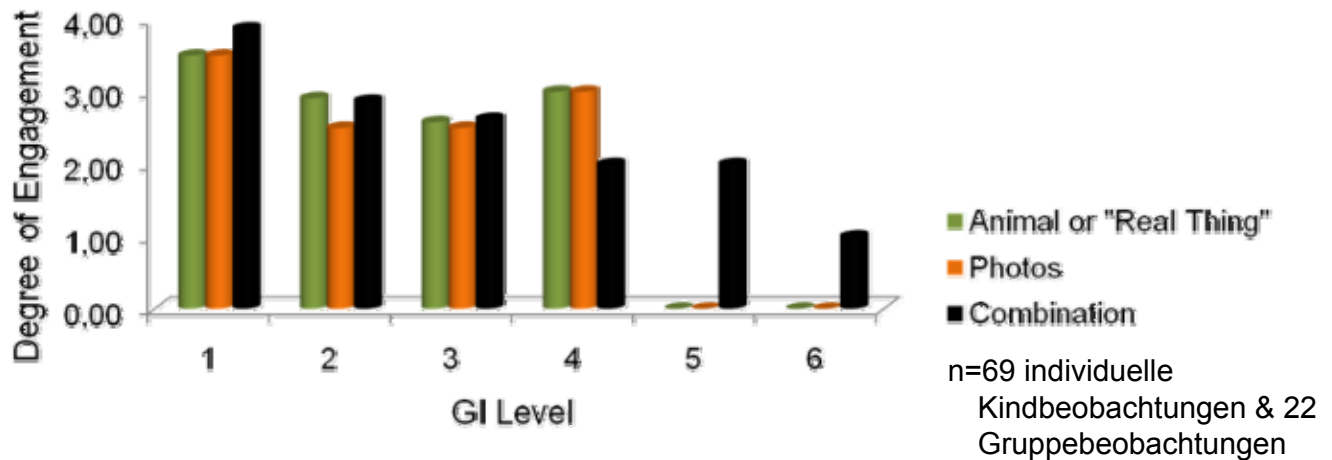
- all three categories of materials attracted the children to a high degree of engagement in the beginning levels of GI learning

- it was the combination of materials which was observed to be used when Action Competence was reached

Conference in Magdeburg, June 19, 2010   **Bilingual Preschools: Research meets Practice**   © ELIAS

This graph is a break down of the three material categories. The results are scaled to an average degree of engagement at each level of GI learning, the "degree" being how intensively did the children/group engage in the activity at a particular level. The results were taken from the 69 individual observations as well as 22 group observations.

> As seen in the results, including animals or the 'real' thing in the activity's materials attracts the children at a high degree; likewise, the use of photos. Yet to expand on these results, it was interesting to see that with the combination of materials, an "Action Competence" was observed in the children.

Thank you!

Conference in Magdeburg, June 19, 2010   **Bilingual Preschools: Research meets Practice**   © ELIAS

To finish I must give a huge thank you to all of the people involved over the last 2 years. From the wise leaders who supported the project, to the parents and fellow teachers who actively participated in this project. But mostly to the kids, who were amazing to teach and who exceeded so many of my expectations. Thank you.

References

- Berck, K.-H. & R. Klee (1992): Interesse an Tier- und Pflanzenarten und Handeln im Natur-Umweltschutz: eine empirische Untersuchung an Erwachsenen und ihre Konsequenzen für die Umwelterziehung. Europäische Hochschulschriften, Reihe 11 - Pädagogik, Band 500. Lang, Frankfurt

- Hallmann, Maika. (2010). "Winter".

- Janssen, W. (1988): Naturerleben. Unterricht Biologie 137/12, 2-7

- Massyn, Andrew. (2006) "Ostriches cape point.jpg". Wikipedia Commons.

- NASA. (n.d.) "Solar System Photojournal".

- Klautke, S. & K. Köhler (1991): Umwelterziehung - ein didaktisches Konzept und seine Konkretisierung. Unterricht Biologie 164/15, 48-51

- Unterbruner, U. (2006): Umweltbildung. In: Gropengießer, H. & U. Kattmann (Hrsg.): Fachdidaktik Biologie. Aulis, Köln

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**