# "Green Immersion" The concept of bilingual environmental education

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# Structure







- 1. Background
- 2. The EU-Project ELIAS

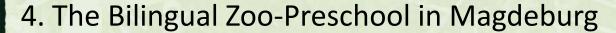
Goals

Structure

3. Green Immersion

What it is

How it works



(Suzanne Akerman & Shannon Thomas)

Setting and Conceptual Design

**Zoo Education** 



# Background







Zoos and aquariums enable people to develop appreciation, wonder, respect, understanding, care and concern about nature.

WAZA 2005: Building a Future for Wildlife – The World Zoo and Aquarium Conservation Strategy (WZACS); Chapter 5: Education and Training

# **Background: WZACS**





### **Education and Training**

- education as a central role for all zoos and aquariums
- develop strategic plan for education and environmental sustainability (a "green" ethos), incorporating conservation issues
- collaboration with a variety of educational institutions, universities and teacher training institutes to link educational programmes to curricula developments
- lifelong learning: students from pre-school to university
- evidence to evaluate impact and effectiveness of education programs

# **Background: EU**





# 'Mother tongue plus two other languages': Making an Early Start

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, p. 7

# Background







### Bilingual education / Immersion teaching (e.g. Wode 1995)

- most effective method of teaching foreign languages
- content-based
- integrating contents such as science & nature topics with foreign language teaching

### **Early start**

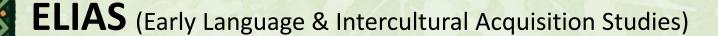
- **⇒ 3+ formula** (Wode 2001)
- 1. bilingual / immersion preschools
- 2. bilingual / immersion primary schools
- 3. bilingual education in high schools





# The EU-Project





### **Project Goals**

- Monitoring of bilingual preschools
- Enhancement of second language learning, intercultural competence, and bilingual environmental education for preschoolers
- scientific documentation
- evaluation of conceptual designs
- recommendations and dissemination

# The EU-Project







### **Network**

 16 partners from 4 European Countries (Germany, Belgium, England, Sweden)





Cooperation partners from Italy and the Netherlands



- 9 Universities
- Zoological Garden Magdeburg



 7 bilingual preschools with English as second language, e.g. the Zoo-Preschool in Magdeburg

### Coordination

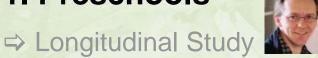
Prof. Dr. Holger Kersten, Kristin Kersten (Magdeburg University)



# The Study



### 1. Preschools











### 2. Cultural Studies

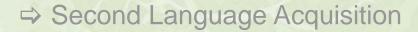








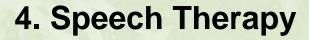
### 3. Linguistics

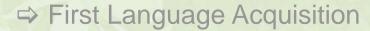




















- 5. Biology-Didactics
- 6. Zoological Garden MD











# The EU-Project

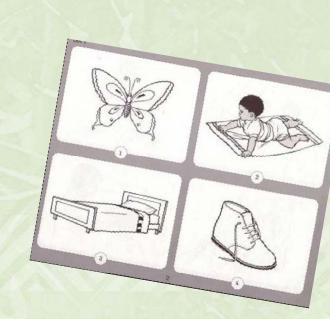






### Participant Observation (Spradley 1980)

- qualitative research methods
- observers take part in daily preschool routines
- ⇒ integrated in the preschool system
- avoiding "test situations"
- ⇒ emotional stability for the children
- field notes and questionnaires
- language assessment



# **Bilingual Education**





Immersion method (Genesee 1987, Wode1995, Zydatiß 2000)

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

- the second language as medium of communication, not as focus of grammatical learning
- ⇒ all content matter is taught in the second language
- in bilingual preschools: all daily routines and activities
- in immersion schools: as classroom language
- ⇒ more than 50% of the school subjects are taught in L2

# **Green Immersion**









### **Combining the factors**

### "Green Immersion":



(Kersten & Perret 2008)

- zoo education
- environmental education
- conservation







(Lorenz & Met 1989)

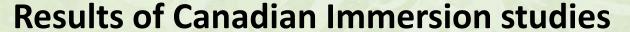
### Comprehensible input

"Understanding occurs when input ... is comprehensible, and input becomes comprehensible when it is supported by concrete experiences, visuals, realia, and nonverbal communication that assist in conveying meaning." (p. 37)

### **Contextualization of content**

- ⇒ body language, gestures, facial expressions
- ⇒ pictures / visual aids, concrete materials, realia
- ⇒ repetitions, paraphrases, intonation, extensions ("caretaker speech / motherese")





(e.g. Wesche 2002)

- the content knowledge is not negatively affected
- the development of the first language does not suffer
- attainment in second language is much higher than in traditional foreign language teaching
- more positive socio-psychological attitudes
- suited both for strong and weak learners
- ⇒ enhancement of language and general cognitive skills without negative effects for content knowledge and first language







# One Person – One Language Principle

(Döpke 1992)

□ native speakers of English as educators



## **Experiences from bilingual preschools**

- the children are enthusiastic and very proud of their second language skills
- within a few weeks they understand the daily routines in English
- comprehension of the second language precedes production







### **Examples**

Researcher: Show me the mouth!

Child: Die Maus is nich da.

[The mouse is not there.]

Researcher: Look at the ducks over there!

Child: Das ist doch kein Dachs!

[That's not a badger!]

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



### The Website



# www.elias.bilikita.org



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