## MULTILINGUALISM AND LANGUAGE LEARNING: MYTHS, FACTS, AND CHALLENGES

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## Overview

- What does it mean to be 'bilingual'?
- Brief tour of misconceptions and research
- Some studies on language learning and bilingualism in schools


## Misconceptions on bilingualism

## Confusion

## Developmental delays

Problems at school



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'Useful' and 'useless' languages

## Five-minute tour of research



## What research shows

- Early perceptual separation of the two languages

- Similar stages and milestones in bilingual and monolingual language development


## Stages of Language

Development


## What research shows

## BILINGUALISM

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## Bilingual children 'notice' how language works

## WORDS



The girl cried.
The boy played.
The dog ran.
The movie star screamed.
The fireman yelled.

SOUNDS


## SENTENCES

## What research shows

Easier to learn other languages; potential better understanding of the structure of the majority language.


MAMMA, MANGIAMO PATATE CRUNCIOSE STASERA?
Competence and creativity in language mixing

## What research shows

- Good metalinguistic abilities

- Transfer of aspects of early literacy from one language to the other (when a sufficient vocabulary is learned)



## Multilingualism: cognitive effects

- Better awareness of other people's perspectives



# PURPLE YELLOW RED BLACK RED GREEN RED YELLOW ORANGE BLUE PURPLE BLACK RED GREEN ORANGE 

- Better cognitive flexibility in task switching


## Reasoning and problem solving

Benefits for some types of logical and mathematical reasoning...

... and problem-solving abilities


## Bilingualism = automatic benefits?

- "Now you see it, now you don't" (but no studies report a DISadvantage of bilingualism).
- Bilingualism comes in

Now you see it, now you don't!

Lessons in sleight of hand
by Bill Tarr Mlilustrated by Barry Rass many shapes and colours

## Children need input in both languages

- Bilingual children need to hear enough of both languages.



## Variety of speakers

## Hearing the language

 from different speakers is important to learn what is possible and what is impossible in the language.

## Social and family attitudes

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- both languages and both cultures are valued by the family and the community.



## Important to now that...

- Bilingual children have two vocabularies: all other things being equal, the size of vocabulary in each language is smaller than in monolinguals, especially in the first
 few years and in the weaker language.


## Important to know that...

- Children who have a home language different from the community language may go through a 'silent period' in which they produce very little.
- Some types of SLI and child L2 learning may look similar, but their developmental paths over time are different.



## Language learning at school

- Language Learning in
Scotland: 1+2 plan



## Language learning at school: realistic expectations

- One hour a week (or less): what can be achieved at different ages?
- Monolingual and bilingual children: do they learn differently?



## Early Chinese Learning Project

- Testing stage 1: P1 children from monolingual homes.
- Testing stage 2 : P3 children from bilingual and monolingual homes



## Pilot studies

- We train volunteer students who are native speakers of Mandarin, Spanish and French to work with the teacher in P1 classes.
- We act as a point of reference for questions on child language learning during the project.
- We do research on the outcome of the project


## Early Chinese Learning Project

- Testing at stage 1 :
- School A: 25 weekly sessions of 1 hr 30 hours. Cumulative input $=37.5$ hours; More native tutor-led activities.
- School B: 26 weekly sessions of 45 minutes. Cumulative input = 19.5 hours
- School C: 25 weekly sessions of about 1hr 45mins. Cumulative input $=43.75$ hours; more teacher-led activities.
- School Y: no input


## Early Chinese Learning Project

- What were the outcomes of the learning experience?
- How much Chinese have children learned?
- Did exposure to Chinese have any effects on English?
- Were there any effects of the learning experience outside language?


## Early Chinese Learning Project What we tested

- Chinese language ability:
- Lexical tones
- some written Chinese characters.
- Metalinguistic awareness:
- Better awareness in the mother tongue
- Executive functions:
- Effects of Mandarin input on children's attentional skills

Target sound Sound in sentence

| ma1 | ma3 |  |
| :--- | :--- | :--- |
| shi2 | ir |  |
| hao3 | hao3 |  |

press 'l'


## Early Chinese Learning Project results




- Better performance is achieved by School A compared to the others:
(a) More hours of input, and
(b) More exposure to native speaker-led input.


## Early Chinese Learning Project results

Second study:

- Above-chance performance on Chinese recognition tests
- No difference in cognitive and English tests between children exposed to Chinese and children exposed to French.


## Early Chinese Learning Project: recommendations

Our recommendations:

- Introduce a streamlined syllabus for all schools which forms the core of language activities.
- Increase the amount of training and support available to teachers and volunteers
- Swap volunteers between participating schools or classes.


## Multilingual classrooms

- Maintaining home languages in migrant children helps school achievement in general, and language learning in particular.


## Speaking English at home instead of the home language? NO

- Many families force themselves to speak the L2 at home rather than their L1.
- Research has shown that children exposed predominantly to impoverished non-native L2 input are at a disadvantage in acquiring the L2.


## 1 WANT YOU <br> to spaak anglich. <br> 

WHY?

## The SOFT project

- Funded by EACEA - Lifelong Learning

Lifelong Learning Programme

- Partners: Italy, Spain, Switzerland, Germany, UK (Scotland).
- Start date: 1 December 2012, end date: 30 November 2015.



## The SOFT project



- Aim: fostering the linguistic and social integration of migrant children through shared language learning activities that involve children, teachers, and families.


## The SOFT project

503 children:
Scottish: 227 Non-Scottish: 276

Countries of origin: Poland, Iraq, Syria, South Africa, Nigeria, Zambia, Slovakia, China, Spain, Portugal, Italy, Brazil

29 teachers

## The SOFT project

## Quantitative Data:

- Cognitive Test: DCCS
- Language tests in English and in the other language learned
- Questionnaire on home language use patterns

Qualitative Data:

- Classroom observations by teachers and tutors.


## The SOFT project

Question 1: Do children exposed to a language in a classroom setting develop better general cognitive abilities?
$\rightarrow$ Yes: all children do, but immigrant children show a steeper development

Question 2: Do children who are already bilingual have an advantage at learning other languages?
$\rightarrow$ Yes, they do.

## Regional minority languages: Sardinian

Garraffa, Beveridge \& Sorace (2015)

- 95 children attending primary 1 and 2 classes in central Sardinia:

40 Italian-Sardinian bilingual children


45 Italian monolingual children.

## Regional minority languages: Sardinian

- Cognitive tests:
- Opposite Worlds (verbal)
- Dimensional Change Card Sorting task (non verbal)

- Linguistic tests:
- Modified version of COMPRENDO, a comprehension test of Italian.



## Regional minority languages: Sardinian

- Cognitive tasks: no differences for the younger children, but older children eventually overtake monolinguals.
- Italian language task: no differences between bilingual and monolingual children, except for two complex structures where bilinguals have an advantage on monolinguals.


# Language learning in schools 

## MORE INFORMATION = BETTER DECISIONS

## Bilingualism Matters

- University of Edinburgh Centre of Excellence
- Seminars and training for the community, international companies and institutions
- Public engagement and policy advice
- Regularly invited to comment by media (on language and multilingualism)
- Diversifed network in Europe (15 branches), growing in North America (2 branches)


## Areas of engagement

- Early language learning in the preschool and primary school years
- Maintenance of home languages in immigrant children
- Maintenance of regional minority languages
- Language learning in young and older adults


## Partnerships and collaborations

## BILINGUALISM

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## Projects

## BILINGUALISM <br> MATTERS



European
Commission


REGIONE AUTÖNOMA DE SARDIGNA REGIONE AUTONOMA DELLA SARDEGNA


## National Science Foundation

 WHERE DISCOVERIES BEGIN

Education and Culture DG
Lifelong Learning Programme

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