

# Sustainable Multilingual Education as a Driver for Educational Change. The European Experience

Distinguished Lecture, University of Hong Kong, Faculty of Education, March 21st 2017

Piet Van de Craen, Ph.D. Vrije Universiteit Brussel (VUB),  
Multilingual Research Unit (MuRe), Centre for Neurosciences (C4N),  
European Language Council/Conseil européen pour les langues (ELC/CEL)



**MuRe**

Multilingual Research Unit



Vrije Universiteit Brussel



# OUTLINE

## 0. Theses

1. Three challenges for Europe

2. The development of language policies

3. The implementation of multilingual policies

4. Developments in multilingual education

5. The implications for language pedagogy

6. Sustainable education

# THESES

European education has greatly benefited from an educational approach called *'Content and Language Integrated Learning'* (CLIL)...

The main reason is that CLIL positively intervenes in the learning process and leads to *empowerment*...

This approach based on language and subject learning alike shows results that go *far beyond the language issue*...

*Hence we can speak of a major driver for educational change*

# CHALLENGES

## Three recent challenges

1. The economic crisis (2008-)  
*implications for education*
2. The growing distrust in the European Union  
*the rise of populism*  
*institutional reactions*
3. The migrants' crisis  
*distribution of resources*

# Language policies

## From monolingualism over bilingualism to multilingualism

### - Monolingualism

- *The birth of the nation states in the 19th century*
- *Slogan: one people, one nation, one language* (France 1789, Russia 1917)
- *Bi/Multilingual countries became monolingual ones* (e.g. Italy, Spain, Belgium,...)

### - Monolingualism and consequences for education

- Brussels, Belgium (1892-1914) : first *bilingual* programme for speakers of Flemish (Dutch) in a French-speaking environment...
- *'Transmutation classes'* – CED : 'to change something completely, especially into something different and better'
- This is a *politically very sensitive* issue...
- Italy, Spain, France : struggles in favour of *regional languages* in education throughout the 20th century...

# Language policies

## From monolingualism over bilingualism to multilingualism

- From 1950 until today
  - *Two tendencies within the nation states: one towards regionalization... one towards supra-nationalization, i.e. the creation of the European Union*
- With respect to education
  - *By the mid 1990s : **multilingualism** is the official EU policy*
  - *(1+2 formula) (see White Paper 1995)*
  - *Approach: at first, many ways are indicated, but today the CLIL approach (content and language integrated learning) is the **most popular one...** (see Call 2014)*

## Two aspects are important here...

### 1. subsidiarity...

‘The principle of subsidiarity aims at **determining the level of intervention** that is most relevant in the areas of competences shared between the EU and the EU countries [...] In all cases, **the EU may only intervene if it is able to act more effectively than EU countries at their respective national or local levels**’ (see <http://eur-lex.europa.eu/legal-content/>).

2. knowing the diversity of Europe and its *varied economical, social and political history* what are the parameters that predict success or failure of the implementation procedure...?

Research was part of the 6th Framework Programme...

**The Dylan Project** (see Van de Craen *et al.* 2013; Berthoud *et al.* 2013)

Hypothesis : *The implementation of multilingual policies in European countries depends on a number of sociolinguistic parameters that might hamper or favour it...*

Four parameters...

1. Standardization
2. Dominance
3. Threats
4. Legislation



## Four parameters...

### 1. *Standardization*

- did the country's language(s) undergo *early or late linguistic standardization* processes ?

### 2. *Dominance*

- did the language have a *dominant position or was it rather dominated* ?

### 3. *Threats*

- did the language at any point in time feel *threatened* (rightly or wrongly) ?

### 4. *Legislation*

- is there *light or heavy legislation* involved ?

## Four hypotheses...

**1. Countries that experienced *late standardization processes* are *less inclined to implement multilingual policies*...**

e.g. Italy, Dutch-speaking Belgium, Luxembourg,...

**2. Countries that were *dominated* are *less inclined to implement multilingual policies*...**

e.g. Latvia, Lithuania, Denmark, Dutch-speaking Belgium, Luxembourg...

**3. Countries that have the feeling being *under threat* are *less inclined to implement multilingual policies*...**

e.g. Latvia, Lithuania, Denmark, Dutch-speaking Belgium, Luxembourg...

**4. Countries with *heavy linguistic legislation* are *less inclined to implement multilingual policies*...**

e.g. France, Dutch-speaking Belgium, ...

-

## General results

1. These parameters do indeed predict ***the acceptance or non-acceptance*** of multilingual education...
2. ***The best example is the Netherlands... early standardization, a dominant position, no threats and no legislation of any importance...***
3. ***A noteworthy exception is France...early standardization, a dominant position, no threats but heavy legislation making multilingual education very difficult...***
4. ***In a way this approach also shows whether or not a country/ region has come to grips with modern European policies....***

## Major turnarounds...

Three regions/countries have shown *a remarkable turnaround* because one would expect them to follow the pattern of France...

- Spain
  - Since 2004-2005, *Andalucía and the Madrid area* have heavily invested in multilingual education...
- Italy
  - At first (2011) MLE for 18-year-olds and English only...
  - Now: *a vague of multilingual schools* working with English, Spanish, French and/or German as target languages...
- French-speaking Belgium
  - *Since 1998* multilingual schools with Dutch, English or German...

# IMPLEMENTATION OF MULTILINGUAL POLICIES



## Reasons for implementing multilingual education in Europe

1. The idea of *European integration* calls for *the internationalization of education* and the importance of being multilingual... (White Paper 1995, Commission 2005)
2. *Dissatisfaction* with the results of traditional language teaching... (Survey 2012)
3. New scientific insights related to acquisition and learning often *based on neuroscientific developments*... (Van de Craen *et al.* 2007)

As a result the foundations for *major educational changes* are being laid...

## Resistance...

- *L1 will suffer...*
- *'Poor learners' will drop out...*
- *Subject teachers cannot do that!*
- *We will all be 'anglicized' or 'frenchified'...*
- *School results will suffer...*
- *Language impaired children cannot profit...*

(see also Bruton 2011, 2013, Mehisto & Genesee 2015)

Since the early 1960s we see ***an increase in the importance of bi/multilingual education...***

- **First in Canada and the *immersion programmes*..** (cf. Peal & Lambert 1962) .
- **From the mid 1990s In the EU where it was called **CLIL** (Content and Language Integrated Learning)...**(Eurydice 2006)
- **From the 1970s many programmes appeared mainly focusing on newcomers called *migrant workers' children, speakers of other languages, allochthonous pupils,...*** These programmes failed...

***For more than 40 years the debate on languages in education has been dominated and paralyzed by the migrants' issue..***





# DEVELOPMENTS IN MULTILINGUAL EDUCATION

## The Cone of Learning

sparkinsight.com

*I see and I forget.  
I hear and I remember.  
I do and I understand.*  
— Confucius



Source: Edgar Dale (1969)

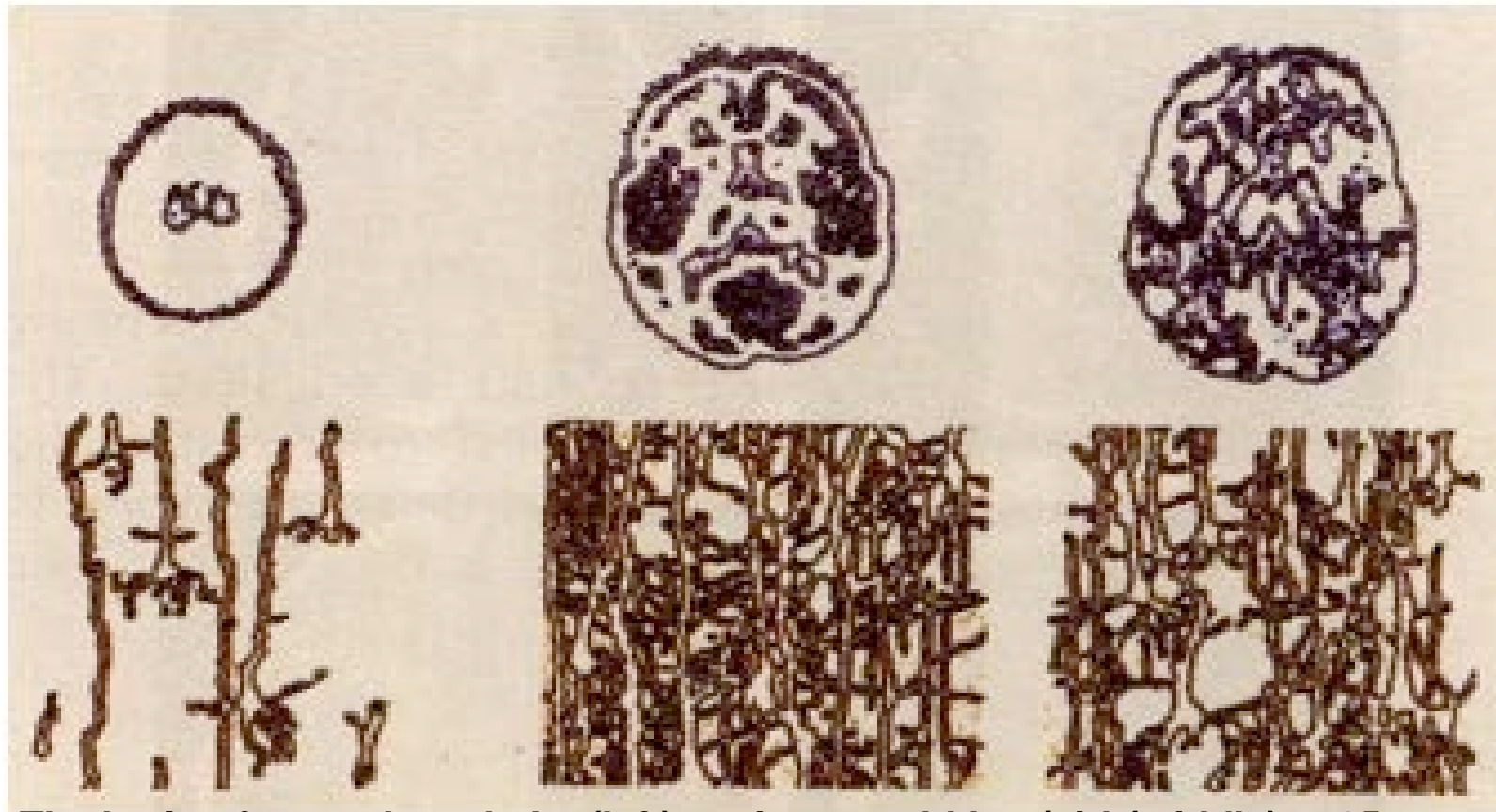
If *the cone of learning* makes any sense, the question remains ***why is this so?***

The answer is given by the ***neurosciences...***

- LEARNING is ***the creation of neuronal connections*** in the brain, through ***experience*** and ***embodiment...***
- MEMORY is the (***active***) ***recreation*** of the connections that were formerly made...

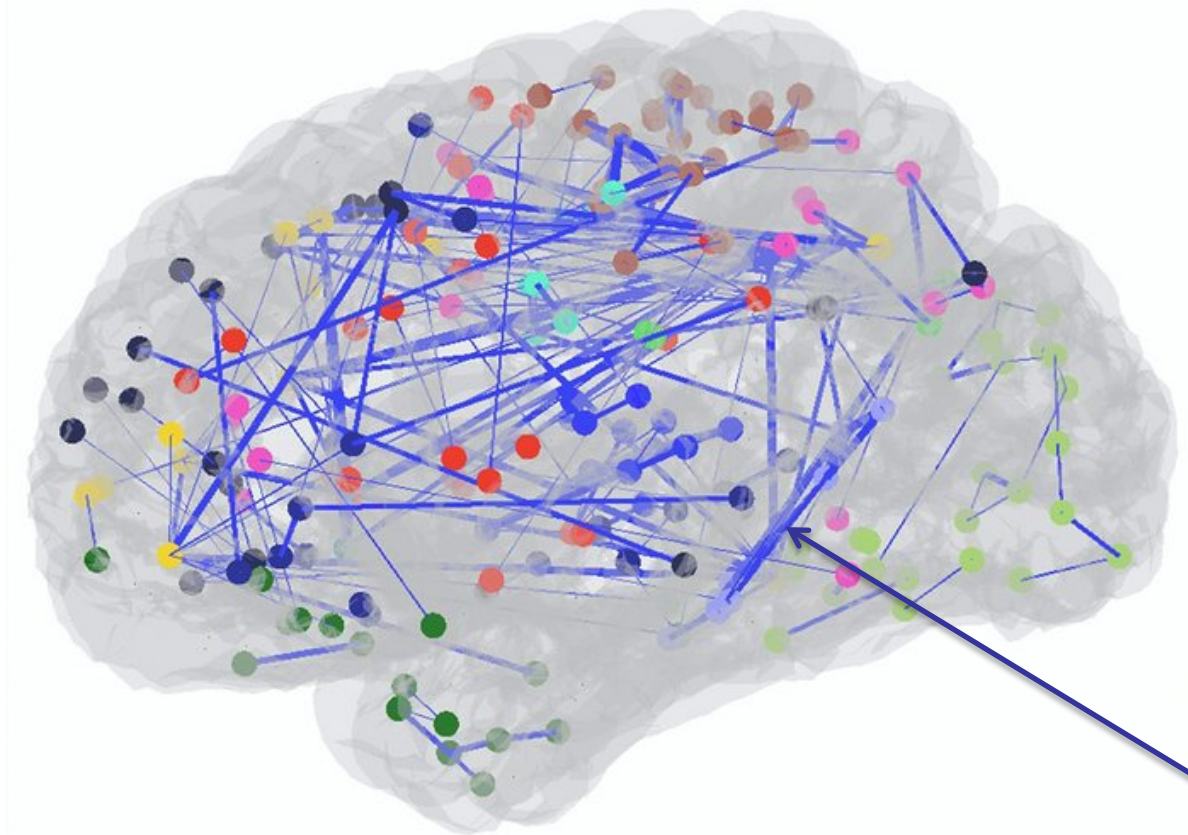


# DEVELOPMENTS IN MULTILINGUAL EDUCATION



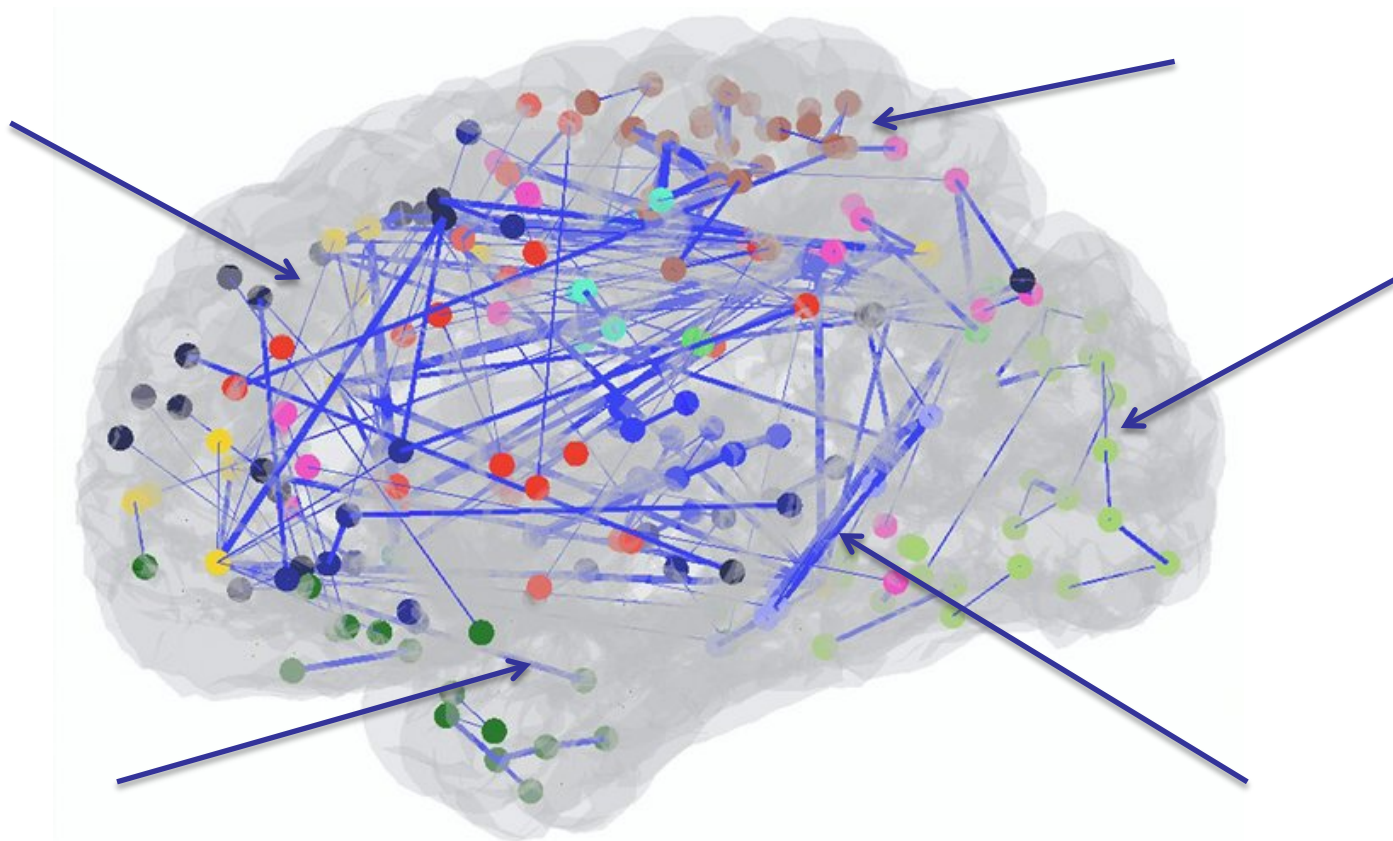
The brain of a new born baby (left), a six-year-old boy/girl (middle), a 25-year-old adult (right) (cf. Carter 1998: 18)

# DEVELOPMENTS IN MULTILINGUAL EDUCATION



**Strong connections in a human brain**

# DEVELOPMENTS IN MULTILINGUAL EDUCATION



**Strong and weak connections in a human brain**

What, if anything, is sustainable education?

***‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’*** (Our Common Future, The Brundtland Report 1987:41)

Implications : ***foresight, to plan in advance, to look beyond the horizon,...***

On the level of education ***insight in / knowledge of learning processes...***

- ***Sustainable education*** refers to those forms of education that take into account ***the most successful learning strategies...***
- ***Sustainable learning*** refers to those learning strategies that ***guarantee success...***

For example: ***equity*** (learning for all), ***values*** (learning that matters) and also ***sustainability*** (learning that lasts) (Graham *et al.* 2016)

- Learning that lasts means ***creating strong connections...*** How to do that?



## One explanation:

- **Learning success is the fruit of *deliberate practice...*** (Ericsson *et al.* 1993, Ericsson & Pool 2016)
- **Deliberate practice**
  - *Is a very specialized form of practice...*
  - *A teacher or coach assigns practice techniques...*
  - *Draws from a highly developed body of knowledge...*

(Ericsson & Pool 2016:100)
- **Furthermore: DP seems to work only *for the happy few...***
- **Is this the only way?**

If anything *deliberate practice* is also controversial

- only 4% of the variance can be *explained* by it one meta-analysis claims... (MacNamare *et al.* 2014)
- it refers only to *expert learners*... education has *other goals* than forming experts...
- DP underestimates the role of another form of learning, usually treated rather shabbily, namely *implicit learning*...



## What does actually happen in a CLIL school?

- *the curriculum is split up into two (three languages)...*
- *subject matter is taught by subject matter teachers in the target language(s)... perhaps 20, 30 or 50%... It is a flexible system...*
- *preferably starting in Kindergarten... or primary... no later than 12-13 years old...*
- *content is the focus of attention...*
- *in the beginning no attention is paid to formal aspects of language learning (vocabulary, grammar...) if it is done in a scaffolding-like way...*
- *code-switching is allowed not encouraged but treated as translanguaging that should not be frowned upon... (cf. Garcia & Wei 2014)*

***Implicit learning: “[complex information] is [learned] without complete verbalisable knowledge of what is learned”*** (Seger 1994:164).

***Characteristics of implicit learning are...*** (Reber 1993)

- ***robust...***
- ***less prone to variation...***
- ***more adapted to group learning...***
- ***IQ independent...***
- ***age independent ...***

(cf. learning how to play an instrument...)

# DEVELOPMENTS IN MULTILINGUAL EDUCATION



# Implications for Language Pedagogy

The European Union has adopted multilingual education as one of its ***core policy items*** (cf. Commission 2005, High Level Group 2007, Group of Intellectuals 2008).

***Content and Language Integrated Learning (CLIL): a dual approach whereby the curriculum is taught in two languages*** (Coyle *et al.* 2010).

Research issues such as ***the processes underlying CLIL learning and the effects of CLIL learning at different levels of education, is a recent challenge*** (Van de Craen 2007 *et al.* a,b,c).

## Effects of CLIL education have been remarkable...

- ***Target language*** skills improve...
- ***Mother tongue*** skills improve...
- ***Subject matter*** is better mastered...
- ***Attitudes*** and ***motivation*** improve...
- ***Cognitive effects*** can be measured...
- ***Brain effects*** can be measured and made visible...

(Jäppinen 2005, Van de Craen *et al.* 2007a,b,c, 2013, 2014, 2015, Lorenzo *et al.* 2010, Murray 2010, Linares *et al.* 2012)

# Implications for Language Pedagogy

The CLIL success explained... Two aspects:

- **Communicative** approach...

Remark: *meaningful* and *contextualized*

- **Implicit learning** effects...

Remark : *later on in the learning process explicitness will gain ground*

*It is not an exaggeration to say that in Europe CLIL is the most important and significant change in language pedagogy in the past twenty years...*



# Implications for Language Pedagogy

## Five principles...

### 1. *The principle of addition...*

- Reinforcing linguistic and meta-linguistic potential...

### 2. *The principle of repetition*

- There exists no learning without it...

### 3. *The principle of transfer*

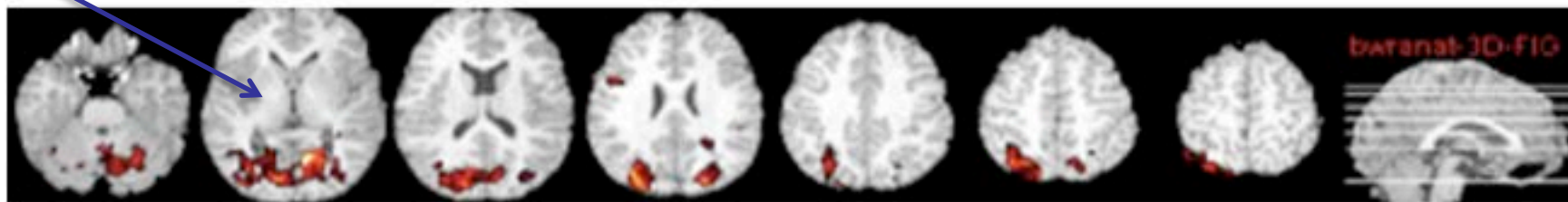
- Knowledge transfer from one language to another...

### 4. *The principle of enhanced cognition*

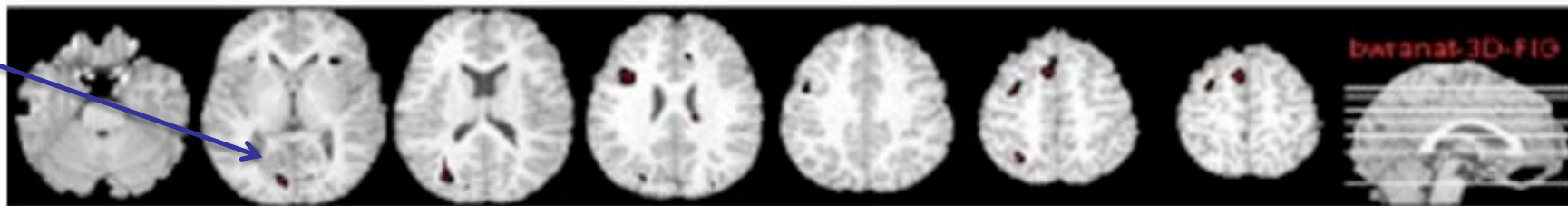
- 'Weak students become strong and strong students remain strong'  
(Principal in a CLIL school)

### 1. *The principle of a different brain organization...*

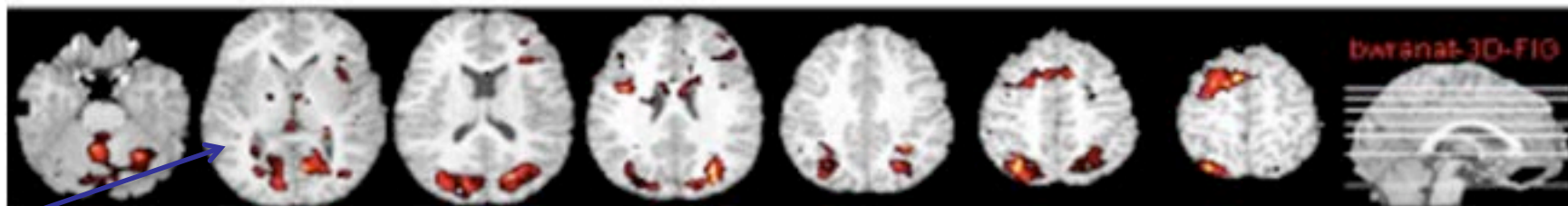
# Implications for Language Pedagogy



Monolinguals 8-9-years old



Bilinguals from home onwards 8-9-years old



School bilinguals 8-9-years old

(Data from Mondt *et al*, 2008, 2011)

## Other major findings *regarding the implementation of CLIL in education...*

- Teachers have *to be made aware of the benefits* of such an approach...
  - training subject matter teachers...
  - focus on teacher collaboration...
  
- It is *not a miracle approach* but one in line with *the most recent language pedagogical and neuroscientific principles* on learning
  - enhancing team work and whole school involvement...
  
- Since some principles are *counter-intuitive* it is often wise to prepare its introduction...

## ***This kind of multilingual education is sustainable because...***

- The learning capital it builds up ***is strong...***
  - guaranteed by implicit learning...
  - strengthened by explicit learning...
- ***Anybody*** has access to this kind of learning...
- It ensures ***teacher collaboration*** and as such it has been a major ***driver for change*** in European schools...
- The CLIL approach has been ***a major source of enthusiasm*** among teachers and children alike...
  - everybody profits...
  - clear signs of empowerment...

# Sustainable Education



# Sustainable Education





感谢您的关注

**Thank you for your attention**

**pvdcaen@vub.ac.be**