Research on CLIL – where do we stand?
Outline

1. CLIL goals & rationales
2. research perspectives
3. results on outcomes
4. results on processes
5. the future…
On terminology

- Content and language integrated learning (CLIL)
- Content Based Instruction (CBI)
- Immersion Education
- Bilingual Teaching
- EMI, EAC
- EaA, FsaA ....

medium of instruction ≠ L1
CLIL goals

- Develop intercultural communication skills
- Prepare for internationalisation
- Provide opportunities to study content through different perspectives
- Access subject-specific target language terminology
- Improve overall target language competence
- Develop oral communication skills
- Diversify methods & forms of classroom practice
- Increase learner motivation

(www.clilcompendium.com)
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(www.clilcompendium.com)
Pro CLIL arguments

- efficiency, 2 for 1
- naturalistic learning, language bath
- meaningful, real communication
- primacy of meaning over form
- fosters communicative competence
- affective gains

high face validity but little evidence
Research perspectives on CLIL
Research perspectives on CLIL

- **MACRO**
  - e.g. general CLIL guidelines and descriptions of established CLIL programmes

- **PROCESS**
  - e.g. case studies/reports on the implementation of CLIL
  - e.g. studies on classroom interaction, language functions

- **MICRO**
  - e.g. outcome studies (on language and/or content knowledge)
  - participant beliefs/attitudes

- **PRODUCT**
  - e.g. general CLIL guidelines and descriptions of established CLIL programmes
Research results

PRODUCT
1. Content outcomes
2. Language outcomes

PROCESS
3. Classroom language
Language & content outcomes

Problems with comparisons

- Different sociolinguistic contexts (FL, L2...)
- Different benchmarks
  - native speakers (French Immersion in Canada)
  - conventional FL learners (Europe)
  - lack of standardised testing in many European countries
- Different educational cultures (national & subject)
- Different types of CLIL programmes
- Self-selection in CLIL-classes
Content outcomes

CLIL students possess same content knowledge as peers

- If tested in L1, immersion students outperform peer controls.
- If tested in L2, their advantage only shows in maths (Day/Shapson 96, deCraen et al 2006).
- CLIL students work more persistently on tasks, show higher tolerance of frustration, have higher procedural competence (Vollmer et al 2006).
- Code-switching on task is a symptom of conceptual problems but does not lead to their solution (Bonnet 2004).

BUT: also some contrary evidence e.g. Washburn 1997, Nyholm 2002.
Language outcomes

Significantly higher levels of L2 than in conventional FL
(e.g. Wesche 2002)

Positive effects on communicative competence
(e.g. Wode 1994, Klieme 2006)
Language outcomes

+++ 
Vocabulary 
Morphology 
Receptive skills 
Creativity, risk-taking, fluency, quantity 

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Syntax (complexity) 
Writing (discourse skills – cohesion, coherence) 
Informal/non-technical language 
Pronunciation 
?Pragmatics?
Language outcomes

Writing

1. Vollmer *et al.* 2006
   Subject-specific competence in CLIL learners
   (= subject matter knowledge+reflective, procedural strategic & communicative competence)

2. Llinares and Whittaker 2006
   spoken and written production in CLIL
   (as evident from post-teaching elicitation)
Example 3. THE ECOSYSTEM IN THE TROPICAL RAIN FOREST – NUTRIENT CYCLE
Characterize the living conditions in the three layers of the tropical rain forest with the help of Figure 3. Start with the giant trees.
If *you* stand on the earth of the tropical rain forest, the incidence of light is very low, because the trees catch it. The temperature decreases also, but it is already very hot. The air humidity is very high and the number of animals seems to be very high. This wet and hot air can cause a high diversity of plants and animals, but if you live there, it is very difficult to live there. (Learner 3008)
The giant trees have the best living conditions because they are the winners in the *fight competition* of light. They are very tall (about 50 – 60 m) and so get 100 % of light and a very high temperature. *Due to this temperature, there is a higher activity of (Enzyme) so that these trees can build up a lot of organic material.* Usually tall trees are both big in height and in size of their roots so they have also the chance to win in the competition for nutrients. The number of animals there is not too high and so the trees *doesn’t* aren’t too don’t have too many an insects which would eat *them their leaves*. The only bad thing is that the trees have The tree top layer with closed canopy gets less light and warmth and so has worse living conditions than the giant trees because they’re standing in their shadow.  

(Learner 2001, *edited version* in *italics*)
Subject-specific discourse competence

Assessment Criteria:
- performance of required discourse function
- logic/structure of text as a whole (coherence)
- linking of clauses (cohesion)
- subject-specific register / conventions
- academic style
- general grammar and vocabulary
Some findings of Vollmer et al. 2006

- CLIL learners reach more often the limits of their expressive ability in L2 than ‘monos’
- This leads to
  a) avoidance/break-off (rarely) or
  b) intensified mental construction activity
- >> deeper semantic processing (elaboration, relating details, discover contradictions)
- Thus, L2 processing has a strong potential!!!
Language outcomes: writing

- Both groups (CLIL & L1) show considerable deficiencies in “academic literacy”: their conceptualisations are not (really) pre-scientific yet, nor is their language subject-specific and academic enough!!!
Classroom language

What are our underlying beliefs/theories about second language acquisition?
Classroom language

What do learners do in class?

- Answer questions
- Listen
- Read

*Students use much less English than expected and in very limited situations. Creative use of language is severely limited to non-existent.*

(Falk 2000, Mewald 2004)
Classroom language - Input

**Lesson** = predominantly oral event, whole-class discussion

**Input**
- teacher questions
- student answers
- student presentations
- reading aloud
- read written materials
- **no** extended teacher speeches („lecturing“!)

**listen**

**read**
Correction


- Difference from conversational repair a matter of degree, not in kind
- All content errors are repaired; T initiate, S complete
- Ss invite repair of lexical problems
- Language errors treated differentially; T initiate&compl. vocabulary > pronunciation > morphosyntax recasts rather than negative feedback
- EFL-CLIL teachers attend to form more than content teachers (contrary to self-reports)
- No attention to phenomena above sentence level
Classroom language - Output

Questions & answers (Dalton-Puffer 2006)

T questions condition student output in whole-class interaction
questions for facts >> minimalist answers (N, Det+N)
questions for reasons, opinions, beliefs >> extended answers

Facts (88%) > Other (12%)
Classroom language - Output

**CLIL vs EFL** (Nikula 2006ab)

- IRF sequence frequent in both, but more loosely structured in CLIL

**IRF sequence**

**INITIATION**
What time is it?

**RESPONSE**
Seven thirty

**FOLLOW UP**
Correct. now Tim.
CLIL vs EFL (Nikula 2006ab)

Extract EFL.

1 I T okay (.) how about you Ronja (.) your special skills
2 R L no shkills
3 F T no skills=
4 R L =no
5 F T ↑ nothing (.) okay none so (.)
6 I so Kirsti
CLIL vs EFL (Nikula 2006ab)

Extract CLIL

1 I T um you mentioned something important (x) but Laura do you have an answer.

2 R L the the the jet engine can’t work in space because there’s no air in [space.]

3 F T [that’s ] right cause the jet engine always needs air (7.8) ((teacher writes on the blackboard)) it needs air to work (4.0) and (.). I wasn’t actually sure about the second part um (2.6) why airlines are not (xx) by(xx) rocket engines (.). um (.)
Classroom language - Output

**CLIL vs EFL** (Nikula 2006ab)

- IRF sequence frequent in both, but more loosely structured in CLIL
- More conversational symmetry in CLIL-lessons
- Students in CLIL and EFL classrooms seem to be socialized into different kinds of identities as users of English

**But:** educational cultures differ nationally and subjectwise
CLIL vs. L1-subject (Gassner & Maillat 2006)

Role-plays in CLIL environmental studies:
- Higher involvement of Ss than in L1 role-plays
- L2 serves as a ‘masking device’ to distance oneself from what is said (creates *alter ego*)
The future ...

let's see what you find out
in your projects!!
Gracias
Danke
Thank you