

«Two-Way Immersion in Switzerland: Evaluation of a Pilot Project in a Swiss Public School»

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Conference

*„Immersion 2012: Bridging
Contexts for a Multilingual
World“*, CARLA,
University of Minnesota,
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Program

- Introduction to the Project FiBi (*Filière Bilingue*)
- Part I: Theoretical Background
- Part II: Study
 - a) Methodological Framework
 - b) Research Design
 - c) Research Questions
 - d) Quantitative Analysis
 - e) Qualitative Analysis
- Part III: First Results
- Perspectives

Introduction to the project

- **FiBi (*filière bilingue*): Swiss public school situated on the linguistic border (French/ German)**
- **Evaluation of the development of linguistic competences in the children's two classroom languages (French/ German)**

- **Two-way immersion program:**
50/50-model (presence of approximately equal numbers of native speakers of both classroom languages)
- **Goal: bilingualism in addition to grade-level academic achievement for all learners**
- **Amount of instructional time: equal in the two languages at all grade levels**

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Part I: Theoretical Background

Linguistic Landscape

- Europe: 230 spoken languages,
23 official languages of the European Union
- Switzerland is NOT a member of the EU



Reference:

http://en.wikipedia.org/wiki/Ethnic_groups_in_Europe

Switzerland: 4 national languages (German, French, Italian & Romansh)

Geographical distribution of the languages of Switzerland (2000)

German

French

Italian

Romansh

bilingual areas and cities*

* Areas with changing majorities, traditionally strong minorities of other official languages (over 30%) and officially bilingual communities.

Officially bilingual are the cantons of

- Berne / Bern (German majority)
- Fribourg / Freiburg (French majority)
- Valais / Wallis (French majority)

Officially trilingual is the canton of

- Graubünden / Grigioni / Grischun (German majority)

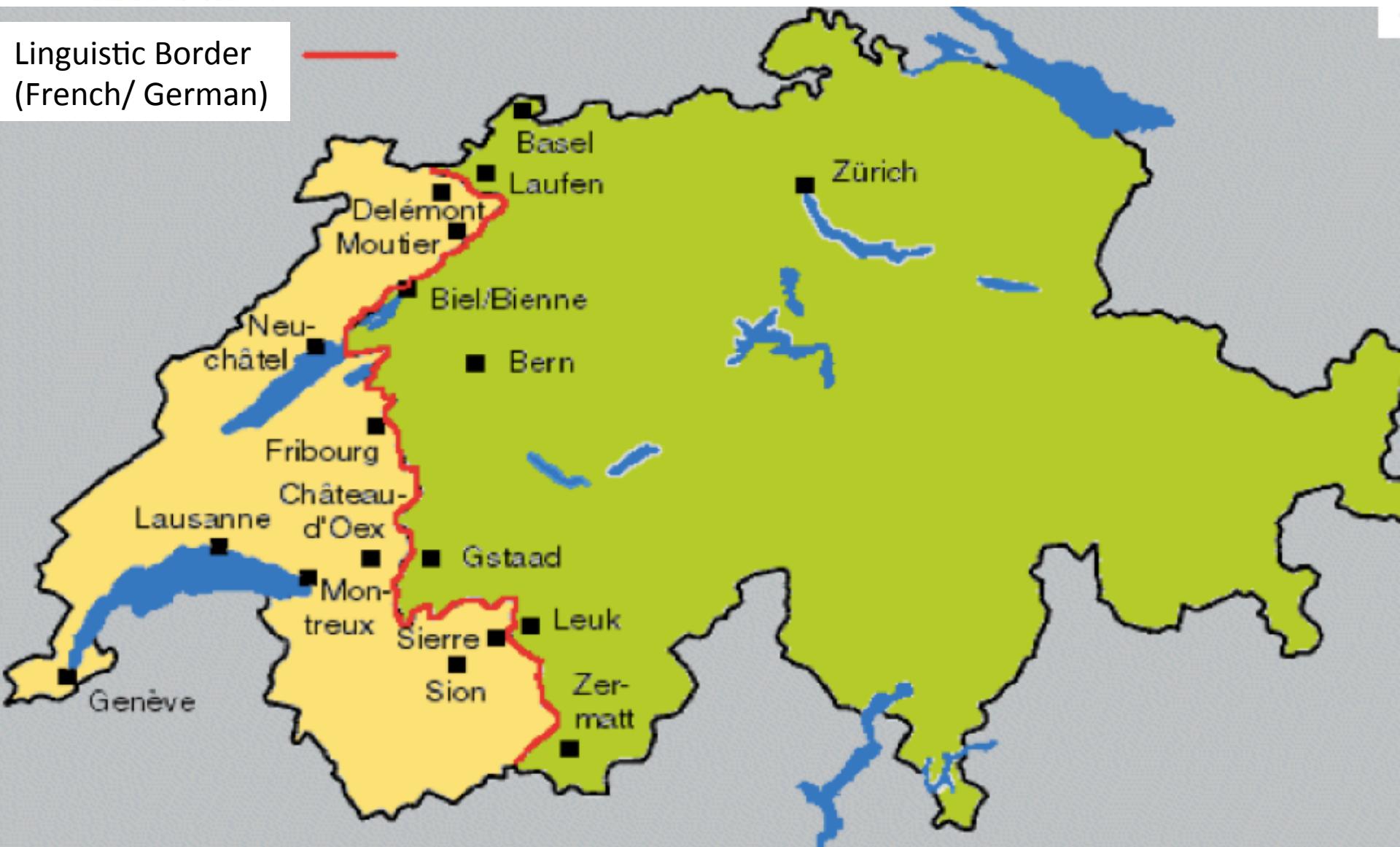
De facto bilingual are the cantons of

- Jura (French majority)
- Ticino (Italian majority)



Diglossic situation in Switzerland: results in the French-speaking students learning both the dialect and the standard language (German)

Linguistic Border
(French/ German)

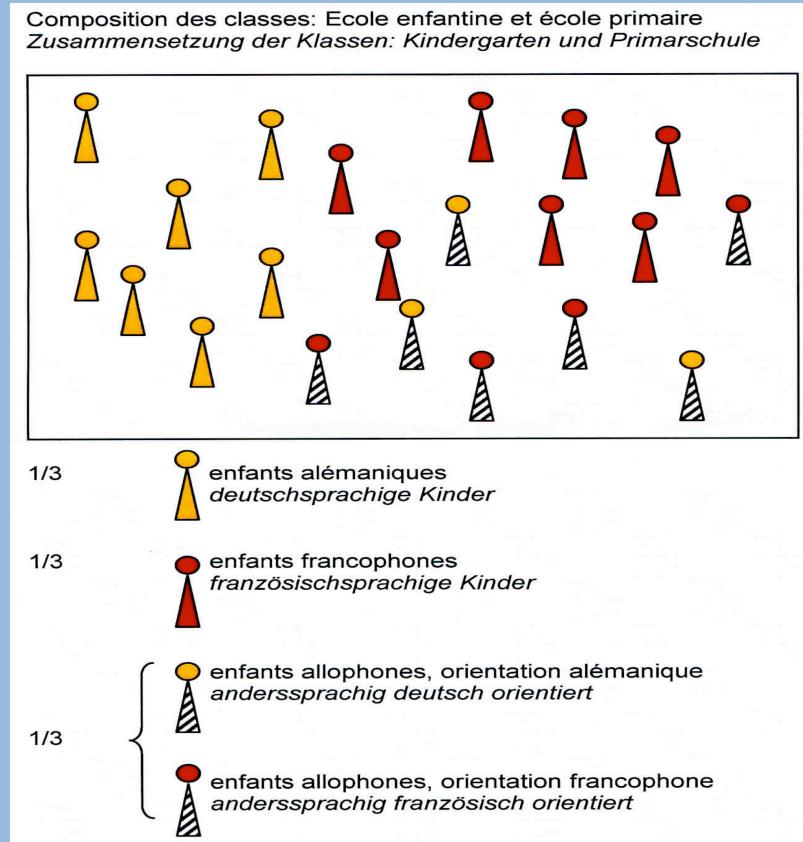


FIBI:

Composition of Classes

- 1/3: French-speaking students
- 1/3: German-speaking students
- 1/3: *allophone** students

* Definition «*allophone* students»:
This is the term to describe the pupils
who have neither French nor German
as their first language (L1).



Class Schedule

Ecole enfantine / Kindergarten:

Exemple d'un horaire:
Beispiel eines Stundenplans:

L1 Allemand Deutsch	L1 Allemand Deutsch	L1 Allemand Deutsch L2 Français Französisch*	L2 Français Französisch	L2 Français Französisch
L1 Allemand Deutsch			L2 Français Französisch	

L1 / L2: langue d'enseignement / Unterrichtssprache

* Change toutes les deux semaines / Alle zwei Wochen im Wechsel

1^{re} année / 1. Klasse:

Classes avec le programme français:

12 leçons en français

10 leçons en allemand + 2 facultatives allemandes (offre de l'école)

lire, écrire, calcul, musique = français
environnement, sport, ACM = allemand

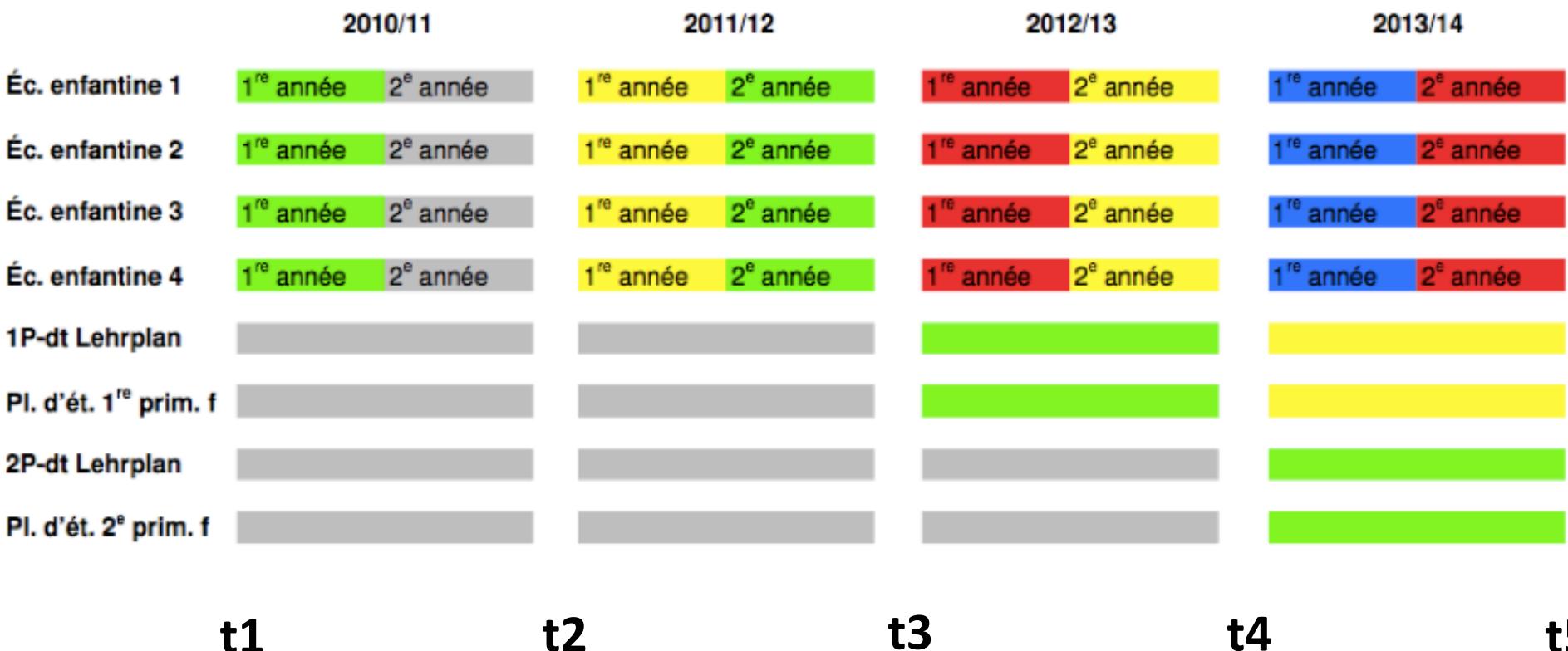
Klassen mit deutschem Lehrplan:

12 Lektionen Deutsch

10 Lektionen Französisch + 2 freiwillige Französisch (Angebot der Schule)

Lesen, Schreiben, Math, Musik = Deutsch
NMM, Sport, Gestalten = Französisch

Implementation Scheme



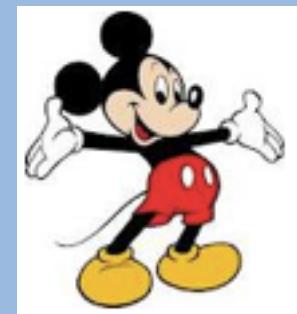
Data Collection: Longitudinal Study (t1 – t5)

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a) Methodological Framework

- **Linguistic development of learners:
Communicative Competence (CEFR)
> Oral Expression (Speaking)**
- **Outcomes of oral test interviews
in L1 and L2 of all bilingual learners**





- What is your name? Where do you live? Do you have a sister or a brother?**
- Look at Mickey: can you name some of the parts of his body? Point at them with the magic wand!**
- Mickey has brought his backpack with him: there are several objects in it. Now take the magic wand. I will give you a name and you show me the right object on the table.**
- There are cards with pictures on them. Mickey cannot see them. Now describe what you see in the picture... You cannot point with your fingers since Mickey cannot have a look at it. Try to describe it as precisely as possible.**
- Where is the ball? Where is the cat? Where is the clown?**
- Etc.**

**Oral interviews in L1 and L2 of all bilingual learners
(and in L1 of monolingual learners)**

b) Research Design

- **Oral test interviews will be recorded**
(MP3 & video recordings)
- **Transcriptions of the collected data of the *French L1 and L2 samples***
- **No written language in Swiss-German**

August 2010	June/ August 2011	June/ August 2012	June/ August 2013	June 2014	Treatment group
- 4 bilingual classes (kindergarten)	- 4 bilingual classes (kindergarten)	- 4 bilingual classes (kindergarten) - 2 bilingual classes (1 st grade)	- 4 bilingual classes (kindergarten) - 2 bilingual classes (1 st grade) - 2 bilingual classes (2 nd grade)	- 4 bilingual classes (kindergarten) - 2 bilingual classes (1 st grade) - 2 bilingual classes (2 nd grade)	
* August 2010 (n=46) n=46	* June 2011 (n=46) * August 2011 (n=80)	* June 2012 (n=80) * August 2012 (n=120)	* June 2013 (n=120) * August 2013 (n=160)	* June 2014 (n=160) n=160	
- 4 monoling. classes (kindergarten: 2 French/ 2 German)	- 4 monoling. classes (kindergarten: 2 French/ 2 German)	- 4 monoling. classes (kindergarten: 2 French/ 2 German) - 2 monoling. classes (1 st grade: 1 French/ 1 German)	- 4 monoling. classes (kindergarten: 2 French/ 2 German) - 2 monoling. classes (1 st grade: 1 French/ 1 German) - 2 monoling. classes (2 nd grade: 1 French/ 1 German)	- 4 monoling. classes (kindergarten: 2 French/ 2 German) - 2 monoling. classes (1 st grade: 1 French/ 1 German) - 2 monoling. classes (2 nd grade: 1 French/ 1 German)	Control Group
n=29	(n=61)	(n=91)	(n=121)	N=151	

c) Research Questions

*Proficiency: Overall achievement of French-speaking and German-speaking learners as well as *allophone* students (FiBi) compared to monolingual age peers*

Categories of Bilingual Learners (according to *registration* language)

<i>Categories of Bilingual Learners</i>	<i>L1</i>	<i>L2</i>	<i>L3</i>	<i>L4</i>
Simultaneous bilinguals	French* <i>and</i> German*	Any Language	Any Language	(Any Language)
Early sequential bilinguals/ French-speaking students	French*	German*	Any Language	(Any Language)
Early sequential bilinguals/ German-speaking students	German*	French*	Any Language	(Any Language)
Early sequential bilinguals/ allophone students**	Any Language	French*	German*	(Any Language)
Early sequential bilinguals/ allophone students**	Any Language	German*	French*	(Any Language)

c) Research Questions

***Proficiency: Adeptness in using language in
oral expression of French-speaking and
German-speaking learners as well as
allophone students (FiBi) compared to
monolingual age peers***



Common European Framework of Reference for Languages (CEFR)

Context
(content-based)

Communicative Language Competences

Competences (Descriptors: Can-do-statements)

- **Comparison to monolingual age peers**
- **Within-speaker comparisons:** a child's ability in one language is compared to his/ her ability in the other known language (according to registration language: German or French)

Dependent Variables

- ✓ **L1 (overall achievement)**
- ✓ **L2 (overall achievement)**
- ✓ **Speaking (Oral Production)**

Independent Variables

- ✓ age
- ✓ class (teachers)
- ✓ gender
- ✓ various linguistic backgrounds: *allophone* students
- ✓ various ethnicities: home literacy
(literacy level of parents or other persons)
- ✓ a range of income levels: socioeconomic background

d) Quantitative Analysis

Statistics:

The R Project for Statistical Computing - R
version 2.15.1 – June 2012.

Reference: R Core Team (2012). R: A language and environment for statistical computing.
R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0. On WWW at
<http://www.R-project.org/>.

Hypothesis: German-speaking Students

«Learners of the *two-way immersion* program with **German** as an **L1** are expected to achieve at similar or higher levels in tests of **French** compared to their **French-monolingual** peers until grade 2»

Hypothesis: French-speaking Students

«Learners of the *two-way immersion* program with **French** as an **L1** are expected to achieve at similar or lower levels in tests of **German** compared to their **German-monolingual** peers until grade 2»

> because of the *diglossic* situation in Switzerland, which results in the francophone students learning both the dialect and standard language (**German**)

e) Qualitative Analysis

Beispiel Inès (10D02L2)

[1]	Kris [v]	So *1* I bi der Mickey Juhu: Und wie heissich du↑	Mh: *1.5* allemand *1* Öh
	Inès [v]		
[2]	Kris [v]	Ja Wie heissisch de du↑	Wie heissisch du↑
	Inès [v]	français	*2* J'ai rien compris
	Inès [nv/ k]		Zuckt mit
[3]	Kris [v]	Inès↑	Gäll Inès *1* I bi Mickey und du bisch Inès
	Inès [v]	Mhm	
	Inès [nv/ k]	den Schultern	NICKT
			NICKT

Reference: Schmidt, Thomas and Wörner, Kai (2009). **EXMARaLDA** - Creating, analysing and sharing spoken language corpora for pragmatic research. *Pragmatics*. 19:4, 565-582. On WWW at <http://www.exmaralda.org/>.

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Part III: First Results

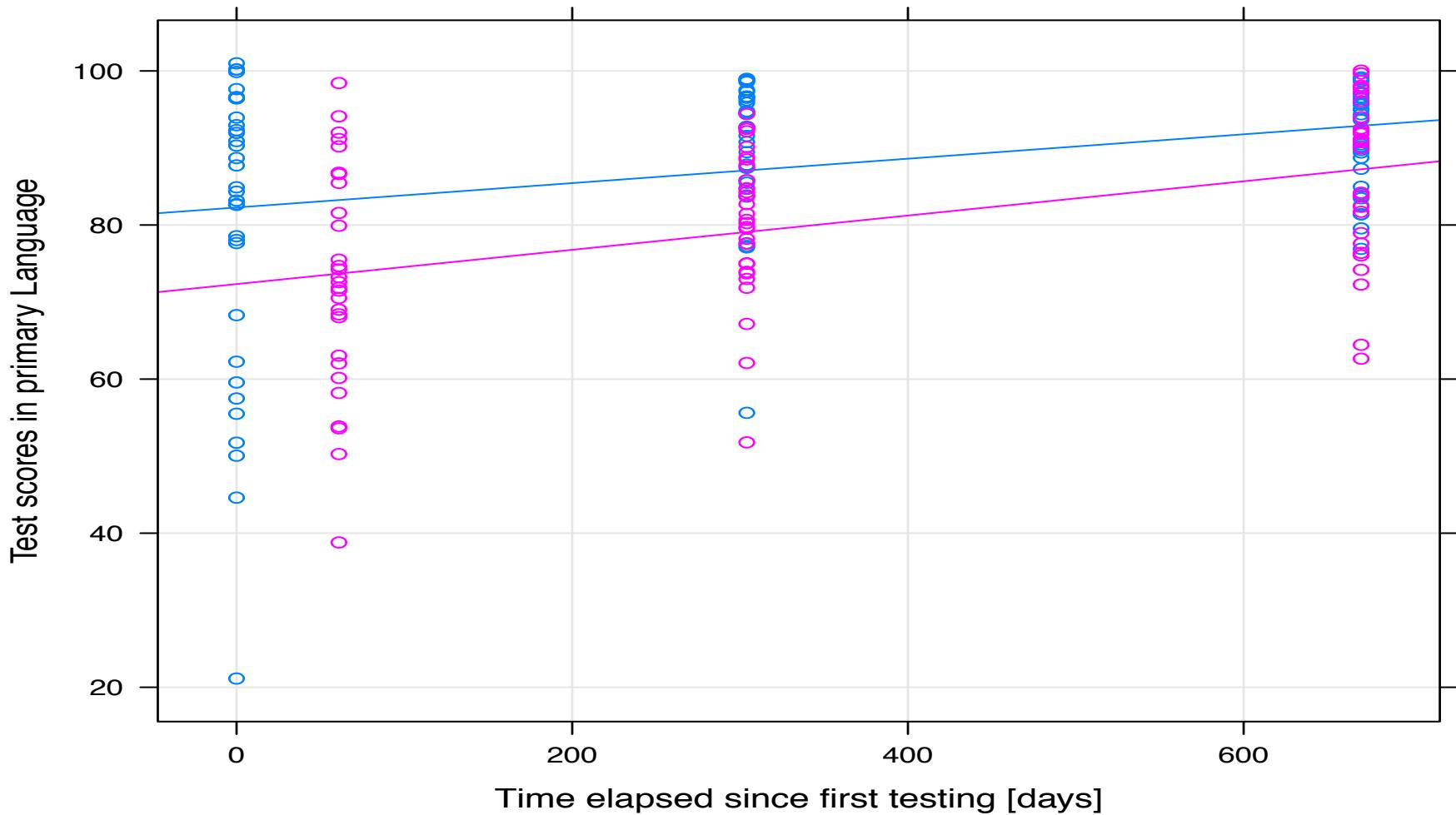
a) Development of the primary language L1* for monolingual and bilingual learners after 2 years (t1 – t3):

- 46 bilingual students (FiBi: Treatment Group)
- 29 monolingual students (Control Group)

* Either French or German: according to registration

Development of the proficiency in the primary Language (L1) for monolingual and bilingual children.

bilingual classes ○
monolingual classes ○



NOTES: The lines represent the linear Trend over time.

Values on the y-axis represent percentage of the maximally attainable test-scores.
The values are jittered slightly to reduce overplotting.

Interpretation

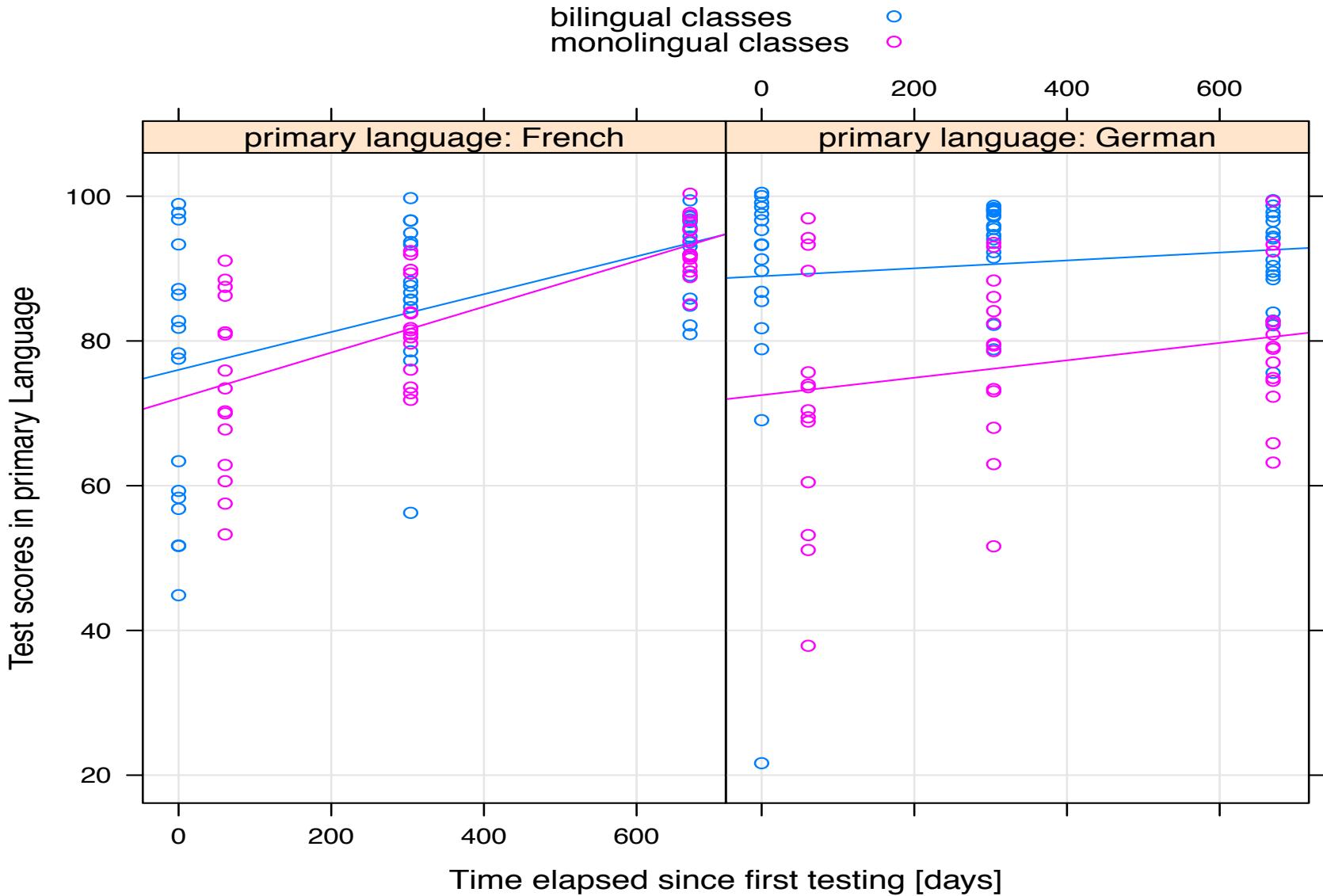
- Even though the bilingual children receive only half the input in each language compared to their monolingual peers, they are not twice as far behind monolingual peers in the overall achievement concerning L1 development > **Cross-Linguistic Transfer**
- The graphic is showing very little variation at t3 which means that the third language test was solved in a very similar way by subjects (difficulty of test)

b) Development of the primary language L1* for monolingual and bilingual learners after 2 years (t1 – t3) **by primary language:**

- 24 German bilingual students (Treatment Group)
- 22 French bilingual students (Treatment Group)
- 14 German monolingual students (Control Group)
- 15 French monolingual students (Control Group)

* Either French or German: according to registration

Development of the proficiency in the primary Language (L1) for monolingual and bilingual children by primary language.



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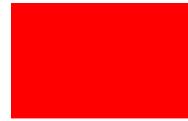
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Perspectives

- **Development of L3 of learners**
(Treatment and Control Group)
- **In Grade 5: English as an L3 (FiBi)**
- **«Bridging Contexts for a Multilingual World»**

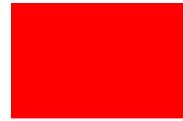


«Bridging Contexts for a Multilingual World»



English & French Summaries on:

<http://www.theses.fr/s69198>



Danke!
Merci!
Thank you!



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