



The Impact of Language Proficiency on Academic Achievement of German 'Hauptschüler'

Context

Academic Language Proficiency

- Academic Language: Linguistic characteristics of school language (Schleppegrell 2004, Gogolin & Lange 2011; Gantefort 2013)
 - Features: Reference to complex facts; complex grammatical forms, specific macrostructure of text-types and discourse-units
- Connection between language and learning: Academic Language Proficiency as 'tool' and prerequisite for subject-specific learning
- Educational Disadvantages in the German educational system
 - Multilingual students acquiring German as a second language
 - Monolingual students with low socioeconomic status or cultural capital, respectively
- Educational concepts of language promotion
 - 'Inclusive': Language across the curriculum, continuous linguistic education (Gogolin et al. 2011)
 - 'Segregative': Additive training courses

Programme Evaluation

- Additive training-courses for immigrant pupils attending 'Hauptschule' designed to promote development in Academic Language Proficiency ('Ergänzender bildungssprachlicher Unterricht')
- Curriculum/Concept developed by a working team of a German public authority
- Implementation of courses from 2009-2010 in 4 German federal states
- Summative evaluation by a team of the UoC (Hans-Joachim Roth, Lisa Rosen, Christoph Gantefort, Sabine Roeber, Indra Röglin (Gantefort et al. 2012)
- Design: Pre-post measurement of both academic language proficiency in German and grades of pupils in a treatment group and a control group (quasi-experimental design); additional collection of qualitative data (interviews of teachers and pupils)

Study

Research Questions

1. How strong is the association between the pupils' Academic Language Proficiency and their grade point average, with respect to a) reading and writing, and b) monolingual and multilingual pupils?
2. Does the association between language proficiency and academic achievement differ with respect to particular subjects?
3. Do type of language acquisition and cultural capital influence grading while controlling for language proficiency in reading and writing?

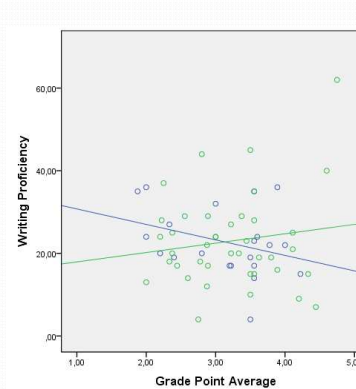
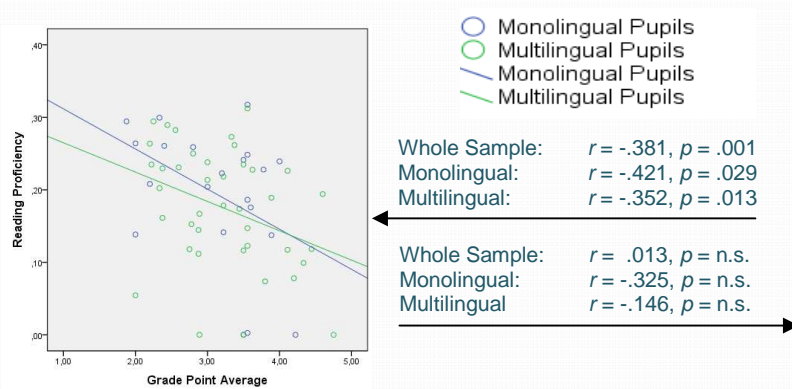
Sample

- Data-record collected in the programme evaluation
- 63 pupils (all nine-graders of the sample)
 - 66% of whom are multilingual with an immigrant background
 - 58% of whom are female
- HISEI : $M = 38,05$; $SD = 10,89$
- Number of books per household (6-staged scale): $M = 3,23$; $SD = 0,97$

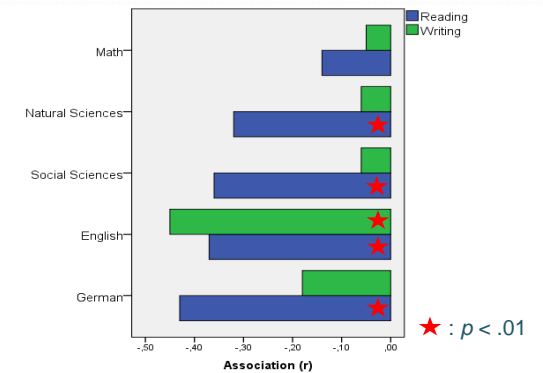
Measures

- Independent variables (collected in the pretest)
 - Reading-proficiency (Cloze-Test; weighted rate of solved items; $M = .18$; $SD = .09$)
 - Measure of writing proficiency (types of academic/technical lexemes collected by two writing tasks; $M = 22.80$; $SD = 10.20$)
- Dependent variables (collected in the posttest)
 - Grade point average ($M = 3.19$; $SD = .71$)
 - Grades in single subjects (German, Math, English, Natural Sciences, Social Sciences)

Results Research Question 1



Results Research Question 2



Results Research Question 3 (Regression)

Dependent Variable: Grade Point Average

	B	SE(B)	β	p
(Constant)	3.349	.400		.000
Multilingual	.106	.189	.070	.576
Number of Books	.047	.094	.063	.614
Writing Proficiency	.011	.009	.158	.225
Reading Proficiency	-3.507	1.070	-.425	.002

$R^2 = .175$

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Discussion

- **Research Question 1:**
 - Only reading proficiency is considerably and significantly associated with the grade point average.
 - The pattern of association is similar with respect to monolingual and multilingual learners.
 - *Should promotion in Academic Language Proficiency address both first- and second language learners?*
 - *Does writing proficiency play a marginal role for grades or grading, respectively?*
- **Research Question 2:**
 - Reading proficiency is considerably and significantly associated with grades in all subjects but Math.
 - Writing Proficiency is only associated with grades in the subject English.
 - *Should Academic Language Proficiency be promoted in all school subjects?*
- **Research Question 3:**
 - Controlling for academic language proficiency, features of social background do not predict the pupils' grades, while the prediction of grades by reading proficiency persists.
 - *Is grading in the German school type 'Hauptschule', contrastive to earlier research (Maaz et al. 2011), not affected by 'secondary effects of social background' (Boudon 1974), or 'Institutional Discrimination', (Gomolla & Radtke 2009), respectively?*