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# “Why multilingual education makes a difference: Educational programs and their contribution to integration”

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# Structure of the talk

- Multilingual education and the role of biliteracy
- From bilingualism to multilingualism
- Multilingual education and integration
- Three examples from Germany

# Multilingualism and multilingual education



- Multilingual education is one of the key factors in fostering multilingualism and multiculturalism
- This includes both the **promotion of linguistic abilities and intercultural competence** in minority and majority language speakers
- Programs that aim at maintaining and developing minority languages along with other languages are associated with **positive academic outcomes**
- In this context, the **acquisition of literacy** in the minority language is a decisive factor

# The role of biliteracy



- There are life-long benefits in becoming bilingual and biliterate: cognitive advantages and increased language awareness (Bialystok 2007; Bialystok 2012)
- Student underachievement is linked to the failure to teach literacy long enough in the language best understood by the students (Heugh 2013)
- First-language (L1) literacy is related to literacy development in the second language (L2) (August & Shanahan, 2006; Solteró-Gonzales et al. 2012)
- Early bilingual literacy also fosters literacy in a third language (L3) (Rauch, Neumann & Jude 2012; Fleckenstein, Möller & Baumert 2017)



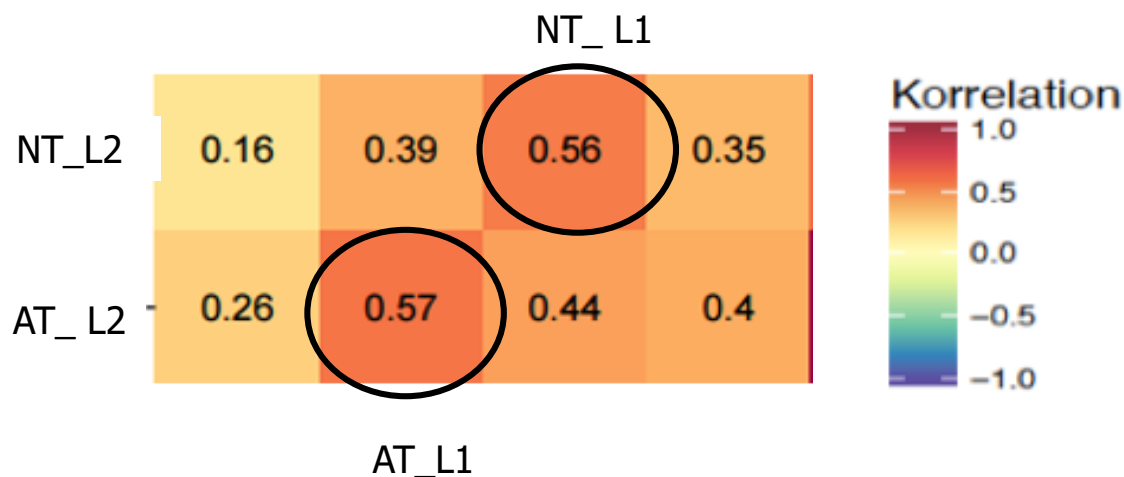
# The interdependence of writing abilities in L1 and L2

- Our studies demonstrated that writing abilities in L1 and L2 are **interdependent** (Riehl 2013; Woerfel, Koch, Yilmaz Woerfel & Riehl 2014; Riehl, Barberio, Tasioupolou & Yilmaz Woerfel 2018; Riehl forthc.)
- Project: „*Mehrschriftlichkeit*“ (*Multiliteracy*): *The interdependence of writing abilities in L1 and L2 and external factors*
- Subjects:
  - 174 bilingual 9<sup>th</sup> and 10<sup>th</sup> graders (mean age 14.9)
  - Family languages Turkish, Italian and Greek (L1) and German as an (early) second language (L2)
- Instruments:
  - Narrative and argumentative texts in L1 and L2
  - Sociolinguistic interviews in L1 and L2
  - Language awareness test in L1 and L2



# Results of the quantitative analysis

- **Writing abilities are genre-specific:** Text level scores (1-5) in L1 and L2 were significantly higher in narrative than in argumentative texts
- There are significant **correlations between writing abilities** in L1 and L2 and the overall scores in **metalinguistic awareness**
- **Text level scores in L1 and L2 are highly correlated**



Pearson correlation coefficient:  
 $r=0.57$  ( $p < 0.001$ ) for  
 argumentative texts;  
 $r=0.56$  ( $p < 0.001$ ) for narrative  
 texts



# Results of the qualitative analysis

- To explore whether those students who reached high scores in L1 also achieved high scores in L2
- Comparison of text productions of **individual subjects across languages**

## Results:

- Students who achieve a high text level score in L1 (level 4 or 5) produced at the same level or even at the highest level (= 5)
- **Textual competences in L1 and L2 are interdependent**
- **There is a transfer of competences** (textual procedures, macro structure, discourse stance, discourse mode)

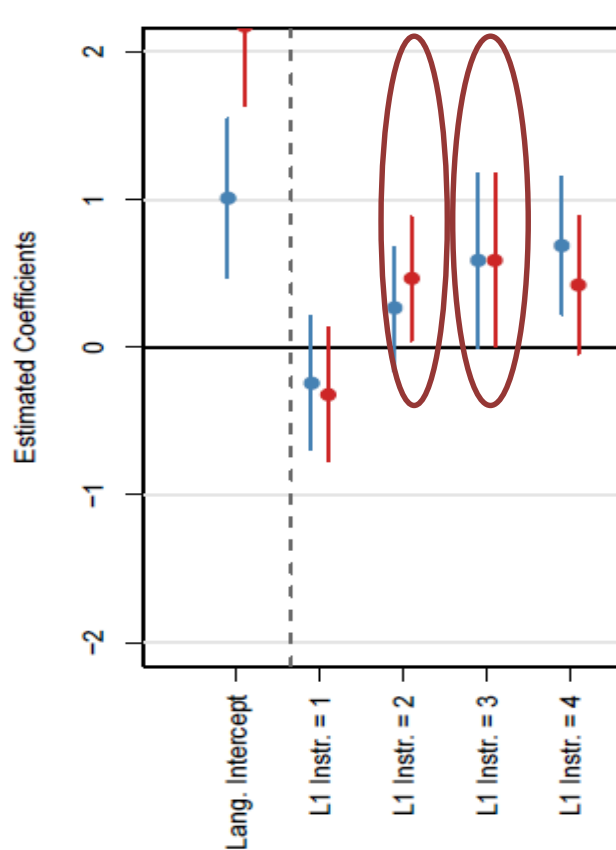
# The effect of heritage language instruction

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■ L1  
■ L2

1. Heritage language instruction has a positive effect when lasting longer than 6 years. This effect is even higher for L2 ( 0. 26 vs. 0. 46) ( $p < 0.05$ )
2. There is a positive impact in L1 and L2 when students attended a schooling program in the mother tongue in primary years (0.58 on L1 and 0.59 on L2) ( $p < 0.05$ )



# General conclusions from the study



- Heritage language speakers largely benefit from writing abilities in their L1 also in their L2
- L1 instruction has no negative impact on the development of writing abilities in L2
- High competence in both languages is correlated with high metalinguistic awareness
- Competences in L1 can be transferred to L2 and vice versa

# From bilingualism to multilingualism



- In multilingual learning transfer of competences plays an essential role (Riehl 2018, forthc.)
- Language users can mentally dock on already known patterns
- Learning across languages leads to a sustainable entrenchment since it links concepts via multiple accesses (Franceschini, 2014)
- Speakers use the scaffolding function of their multilingual repertoire when learning additional languages (Cenoz & Gorter 2019)
- Consequences for teaching strategies and activities in the language classroom:
  - Implicit learning (learning in a naturalistic setting)
  - Translanguaging
  - Cross-cultural learning

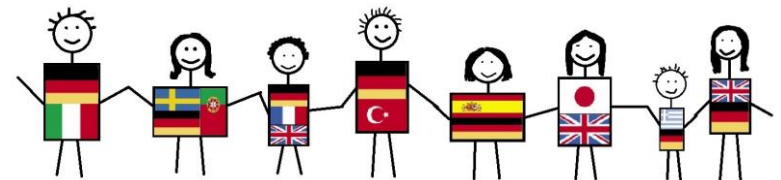
# The role of implicit learning



- Evidence from neuroscience:
  - Learning a language implicitly leads to more native like brain patterns in language processing (Morgan-Short, Steinhauer, Sanz & Ullman, 2012)
- Multilingual programs should include implicit learning
- CLIL (*Content and Language Integrated Learning*):  
Different content subjects are taught in a second or foreign language
  - Immersion programs:  
Type of CLIL programs with at least 50 % of the teaching conducted through the second or foreign language (Cenoz & Gorter 2019)

# Multilingual education and integration

- Multilingual education should focus both on “natural bilinguals” (heritage and minority language speakers) and children growing up in monolingual settings
- Programs should integrate all students in the process of multilingual learning
- The focus should be on *translanguaging* and the use of the whole linguistic repertoire
- Students should be enabled to interact in different cultures in an adequate manner (*multiculturalism*)



# Best practice: Three examples from Germany

# Example 1: Koordinierte Alphabetisierung (coordinated alphabetization, KOALA)

- Parallel alphabetization in heritage language (L1) and school language (L2 = German)

## Concept:

- Tight collaboration of L1 and L2 teachers
- Facilitation of L2 acquisition by providing translation equivalences in heritage language classes
- All languages in the class-room are included using rituals, generative writing, singing and rhyming (intercultural learning)
- School philosophy:
  - High esteem of L1 competences
  - High visibility of multilingualism

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# Evaluation (Reich 2015)



- At the end of grade 4:
- KOALA students achieve significantly higher scores than same background peers in German-only programs
- This includes structure and length of their written texts, variety of verbs and adjective used, complexity of syntax (in L2 German)
- KOALA students achieve highly balanced bilingualism
- Open-mindedness towards linguistic variety and interculturality among the teaching body has a positive impact on language education

# Example 2: Bilingual Learning (Cooperation of European Primary Schools, Cologne)



- Additional lessons in a so-called partner language (Italian, Spanish, Turkish, French, English): 5 hours a week

## Concept:

- In the language classes students are divided into two groups (but not according to their L1s but in mixed groups)
- Social studies (*Heimat- und Sachkundeunterricht*) is taught bilingually (both teachers in the class-room)
- Composition of the student body:
  - 1/3 monolingual in the partner language
  - 1/3 monolingual in German
  - 1/3 bilingual



# Example 3: Staatliche Europaschulen Berlin (SESB)

- Public schools offering bilingual education from primary school to high school graduation (double degree)
- To date the programs includes nine different partner languages (English, French, Spanish, Italian, Portuguese, Turkish, Russian, Polish, Greek) at 33 different sites in Berlin

## Concept:

- Dual immersion and cross-cultural education
- Equal representation of the respective languages: 50 % of subjects in each language
- Subjects taught by native speakers of the respective languages
- Composition of the student body (ideally):
  - 1/2 monolingual in the partner language
  - 1/2 monolingual in GermanIn reality: The highest percentage are early bilinguals in both languages



# Evaluation

(Möller, Hohenstein, Fleckenstein, Köller & Baumert 2017)



- At the SESB schools students acquire competences in the partner language that highly exceed the levels typically achieved in L2 classrooms
- Almost 50% of the students achieve a native-like competence in the partner language (C2)
- Students at SESB demonstrate equal achievements in German, mathematics and science as students in monolingual programs
- Language skills in L3 English are significantly higher than those of similar background peers in monolingual schools
- At SESB schools integration takes place in a particular way showing that students have equal bonds to two different cultures

# General conclusions

- Early bilingualism and biliteracy foster multilingual competences
  - Early promotion of two languages has a positive impact on the acquisition of a third language (English)
  - Using the whole linguistic repertoire and capacities of transfer has a positive impact on the learning of additional languages
  - Dual immersion programs which include minority and majority language speakers are not only successful tools for language education but also for cross-cultural learning
- They are the best way to integrate linguistic minorities and to educate responsible European citizens



# References

- August, D & T. Shanahan (eds.). 2006. *Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth*, Mahwah, N.J & Washington, D.C: Lawrence Erlbaum; Center for Applied Linguistics.
- Bialystok, E. 2007. Acquisition of literacy in bilingual children: A framework for research. *Language Learning Supplement* 57. 45–77.
- Bialystok, E. 2012. “The Impact of Bilingualism on Language and Literacy Development.” In *The Handbook of Bilingualism and Multilingualism*, 2nd ed., edited by T. K. Bhatia and W. C. Ritchie, 624–648. New York: John Wiley & Sons.
- Cenoz, J., & Gorter, D. 2019. Educational Policy and Multilingualism. In D. Singleton & L. Aronin (Eds.), *Twelve Lectures on Multilingualism* (pp. 101-132). Bristol: Multilingual Matters.
- Jessner, U. 2006. *Linguistic awareness in multilinguals: English as a third language*. Edinburgh: Edinburgh University Press.
- Franceschini, R. 2014. Neurobiologie der Mehrsprachigkeit und didaktische Umsetzungen: ein Spagat. In H. Böttger & G. Gien (Eds.), *The multilingual brain. Zum neurodidaktischen Umgang mit Mehrsprachigkeit* (pp. 208-220). Eichstätt: EAP.
- Möller, J., Hohenstein, F., Fleckenstein, F., Köller, O. & Baumert, J. (eds.) 2017. *Erfolgreich integrieren – die Staatliche Europa-Schule Berlin*. Münster: Waxmann.
- Morgan-Short, K., Steinhauer, K., Sanz, C., & Ullman, M. T. 2012. Explicit and implicit second language training differentially affect the achievement of native-like brain activation patterns. *Journal of Cognitive Neuroscience*, 24(4), 933-947.
- Rauch, D. Naumann, J. & Jude, N. 2012. Examining the contribution of metasyntactic ability to reading comprehension among native and non-native speakers of French. In: *International Journal of Bilingualism* 16 (4), 402–418.
- Reich, H. H. 2015. *Sprachstark : schriftsprachliche Fähigkeiten türkisch-deutscher Grundschülerinnen und Grundschüler in Köln*. Bezirksregierung Köln
- Riehl, C. M. 2013. „Multilingual discourse competence in minority children. Exploring the factors of transfer and variation“. In: *European Journal of Applied Linguistics*, 254-292.
- Riehl, C. M. 2018. Neurolinguistische und psycholinguistische Grundlagen der Mehrsprachigkeitsdidaktik. In M. Hepp & C. Nied (Eds.), *Plurilingual education: research, teaching and language policies*. Roma: Studi Germanici.
- Riehl, C. M. submitted. Multiliteracy in heritage language speakers – The interdependence of L1 and L2 and extra-linguistic factors. Submitted to *The Heritage Language Journal*.
- Riehl, C. M., Yilmaz Woerfel, S., Barberio, T. & Tasiopolou, E. 2018. Mehrschriftlichkeit: Zur Wechselwirkung von Sprachkompetenzen in Erst- und Zweitsprache und außersprachlichen Faktoren. In G. Mehlhorn & B. Brehmer (eds.), *Potenziale von Herkunftssprachen: Sprachliche und außersprachliche Einflussfaktoren* (pp. 93–116). Stauffenburg, Tübingen.
- Soltero-González, L., Escamilla, K., & Hopewell, S. 2012. Changing teachers’ perceptions about the writing abilities of emerging bilingual students: Towards a holistic bilingual perspective on writing assessment. *International Journal of Bilingual Education & Bilingualism*, 15(1), 71-94.
- Woerfel, T. / Koch, N. / Yilmaz Woerfel, S./ Riehl, C. M. 2014, „Mehrschriftlichkeit bei mehrsprachig aufwachsenden Kindern: Wechselwirkungen und außersprachliche Einflußfaktoren“. In: *LiLi-Zeitschrift für Literaturwissenschaft und Linguistik* 174. 44-65.