How an app can help to improve the assessment of children's communicative capacities in the L2 in authentic communicative settings?

Nicole Weidinger, Svenja Uth, Christian Meyer, Jörg Roche, Moiken Jessen, Stefanie Haberzettl, Natalia Kapica, Giulio Pagonis, Maike Schug, Sarah Faidt & *Team*





















Ladenburger Kolleg:

Max Planck Institute for Psycholinguistics Nijmegen: Wolfgang Klein (Initiator)

LMU München: Jörg Roche (Principal Investigator), Christoph Draxler (since 12/2016), Sarah Faidt (since 01/2017), Moiken Jessen (until 07/2017), Christian Meyer (since 02/2017), Elisabetta Terrasi-Haufe (until 12/2015), Svenja Uth (since 12/2017), Nicole Weidinger (since 01/2016)

Universität Heidelberg: Natalia Kapica, Giulio Pagonis

Universität des Saarlandes: Stefanie Haberzettl, Maike Schug (until 02/2018)

Universität Mannheim: Jan Delcker (since 01/2017), Dirk Ifenthaler

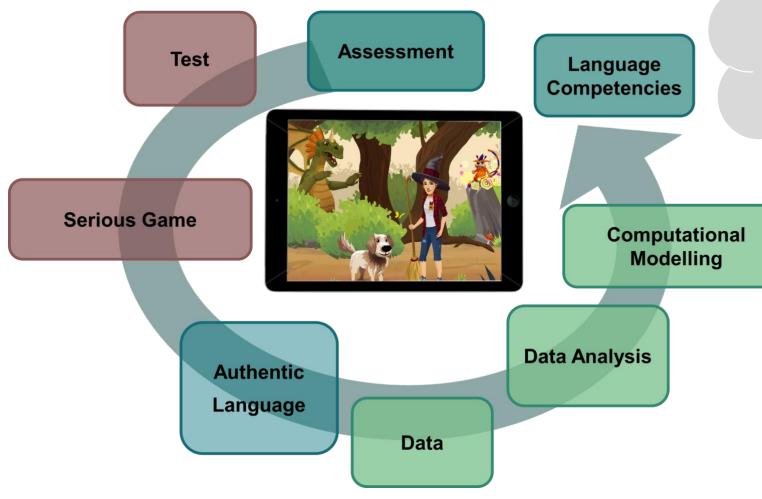
DIPF Frankfurt: Marcus Hasselhorn, Wolfgang Woerner (since 06/2016)

TestDaF Institut Bochum: Gabriele Kecker

Universität Basel: Heike Behrens (until 08/2018), Karin Madlener (until 10/2016), Katrin Skoruppa (until 09/2016)

Hochschule für Medien Stuttgart: Frank Thissen (until 10/2015)

Daimler und Benz Stiftung Objectives & Overview

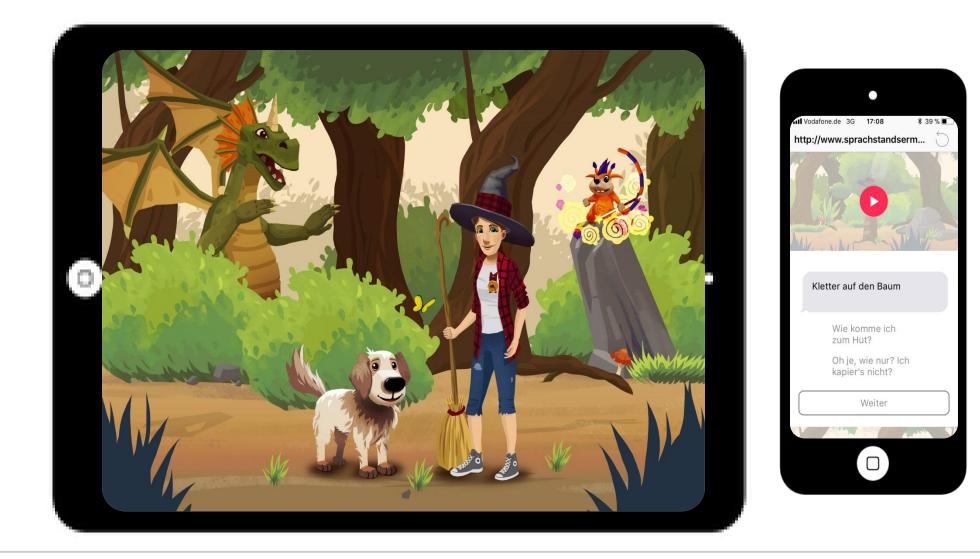


Assessment of the proper communicative potential & need for language learning support of 4- to 5-year-old children in German

Daimler und Benz Stiftung The Potential of Serious Games for Assessment

- Promoting user engagement in assessment
- Providing more valid assessments compared to traditional approaches
- Providing meaningful and authentic (e.g. ecologically valid) contexts for assessments through interactive immersive environment
- Reducing the players test anxiety through a "stealth approach"
- Applying innovative technology \rightarrow Advantages of digital software environment

Daimler und Benz Stiftung Interactive App(s) for Language Assessment



Daimler und Benz Stiftung Serious Game & Authentic Language

- Game versus examination
- Childfriendly background story incorporating inspiring characters
- Player's quest \rightarrow Children are asked to help the game's character.
- To accomplish this task, the child talks to the character on the tablet.
- Inherent motivation
- Test items are embedded in communicatively relevant situations.

Realistic Setting									
speaker		addressee							
me	essa	ge							

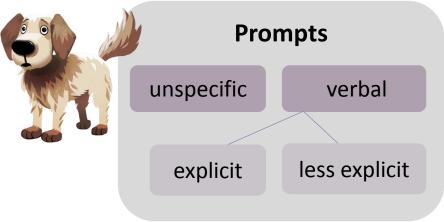
Daimler und Benz Stiftung Language Learning Studies

Corpus Studies: Spontaneous speech recordings of four children aged 4;0 to 4;11 years from German longitudinal corpora in CHILDES (MacWhinney 2000)

• Questions and answers:

Children do not give full answers at once

- ightarrow Elaboration on a topic takes several turns
 - Providing specific follow-up questions helps the child to focus on the precise information that is requested.
- Spatial expressions are highly frequent (approx. 30% of utterances contain spatial information)





- Languages show strikingly different lexicalization patterns in the expression of motion events (e.g. Slobin 1996; Talmy 2000).
- Cross-linguistic differences affect the speakers' focus of attention (*Thinking-for-Speaking:* Slobin 1996, 2004).
- When verbalizing a motion event, speakers choose among several means of expressions those which are typical of their native language.

Implications for early L2 acquisition (Bryant 2012)

- L2 learners produce spatial descriptions deviant from target language norms.
- Even with a contact time of 24 months, children with L2 German differ from L1 children.

Daimler und Benz Stiftung Domain Space: Testsystematics



Discourse Type	(Figure) Ground	Relation	Event	Event Type	Canonicity	Complexity	
instruction	(Du) Gras (you) grass	durch through	springen to jump	motion	path		
narration	(Hut) großer Korb (hat) big basket	in in	legen to put	placement		ground	
description	(Flasche) Tisch (bottle) table	auf on	stehen to stand	position			

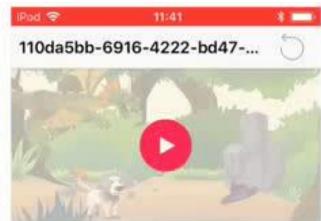
Daimler und Benz Stiftung L1: Arabic, Age: 5;3, Contact Time: 10 Months



- Why are you afraid, dog?
- How do I get to the hat?
- You can swim yourself, too? Can't you?
 - Or you jump onto the stone? Or are you afraid?
- But how?
- You can [uh] swim yourself.
- ✤ Mhm.
- ✤ Or jump on the stone then.
- Okay. I'm gonna try that.
- Good job, dog! You made!

Daimler und Benz Stiftung App Demonstration





Hüpf/spring über das Feuer

Wie komme ich zum Hut?

Wie denn jetzt genau?

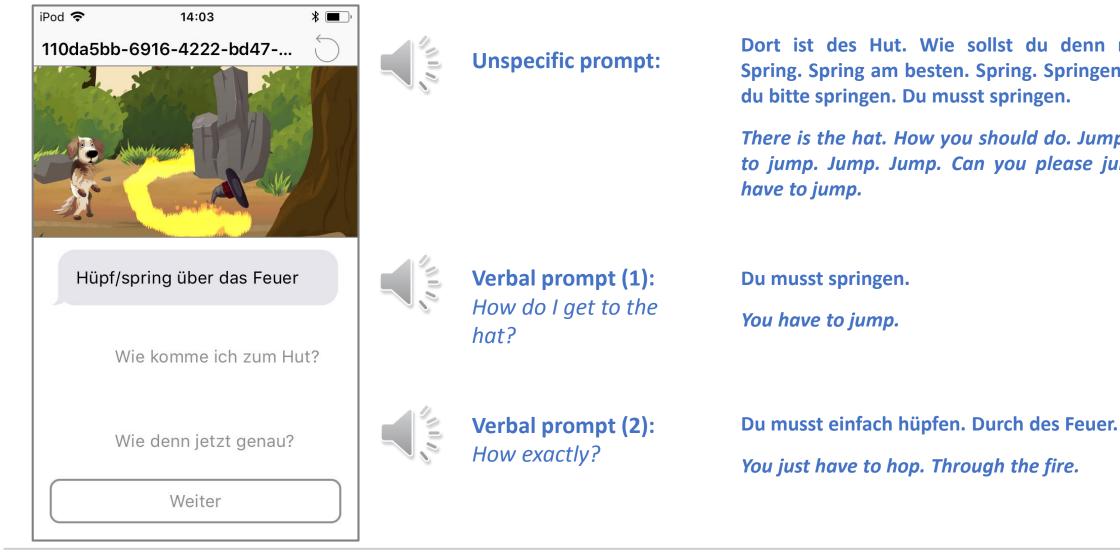
Weiter

Unspecific prompt: OOHHHHHHH

Verbal prompt (1): How do I get to the hat?

Verbal prompt (2): How exactly?

Daimler und L1: Turkish, Age: 5;8, Contact Time: 34 Months Benz Stiftung



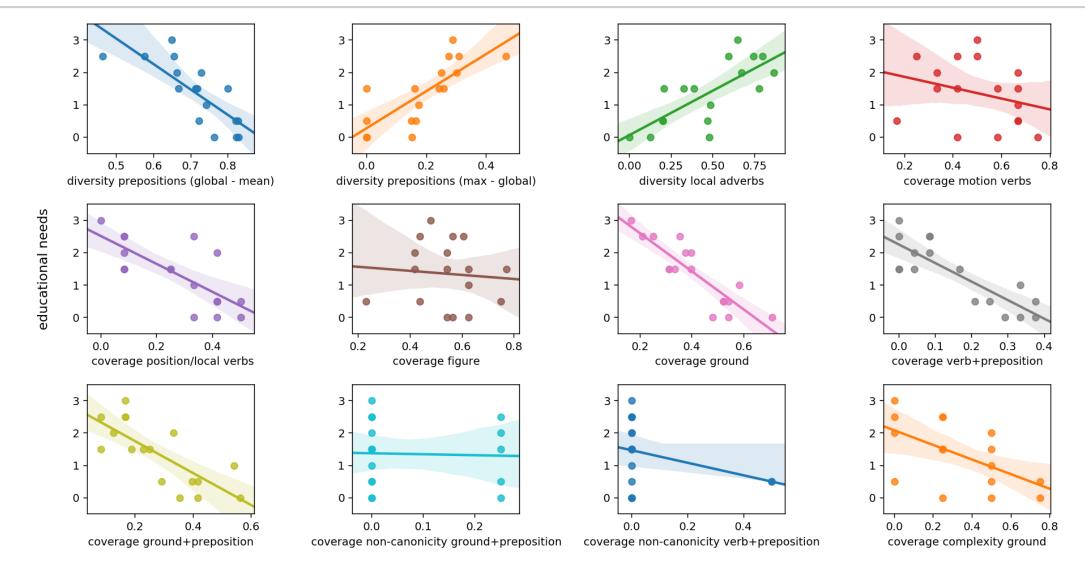
Dort ist des Hut. Wie sollst du denn machen. Spring. Spring am besten. Spring. Springen. Kannst du bitte springen. Du musst springen.

There is the hat. How you should do. Jump. Best is to jump. Jump. Jump. Can you please jump. You

Daimler und Benz Stiftung Data Analysis

- Measurements for analysis of language use are based on orthographic transcripts
- Expert ratings for
- a) language abilities (covered by test systematics)
- b) need for language learning support
- c) Analysis of linguistic features (e.g. diversity in use of prepositions, motion verbs)
- Are there differences in a), b), c) between groups with different e.g. L1, age, contact time with German?
- Which linguistic features are most discriminative to predict children's needs for language learning support?

Daimler und Benz Stiftung Overview Preliminary Features



- Pilot testing of the App: 120 children aged 4;6 to 6;0 years with German as a first and second language
- Validation studies: Expert ratings, correlations with existing tests, evaluations on the authenticity of language production (e.g. use of modal particles and ellipses, questions adressing the dog)
- Usability testing of the Apps
- Adding more domains to the assessment tool (discourse, definiteness, possession)
- Standard setting
- Incorporation of spoken language features



Thank you for your attention!







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Reference

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