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Making children ready for school
A German example for the cooperation between research, policy, and practice

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Talk presented at the EIPPEE Conference 2013 in Frankfurt, March 5, 2013

Education in kindergarten: Starting position in Germany

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- One of the biggest problems in the educational system in Germany: large heterogeneity in school-related skills and abilities at school entry
- About 20% of the children are not ready to go to school
  - delayed language development
  - low levels of literacy as well as math precursors
  - problems to concentrate

→ high probability to fail already in the first years of schooling

Project „School Prepared Child“ in the German state Baden-Württemberg

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- Basic ideas:
  - Identification of children at risk 1 ½ years before school entry
  - Focussed compensatory training to children at risk for poor educational outcome to achieve school readiness for all children at the end of the kindergarten
- Aim:
  - Successful transfer of the additional support to children’s acquisition of reading, spelling, and math in elementary school

Implementation

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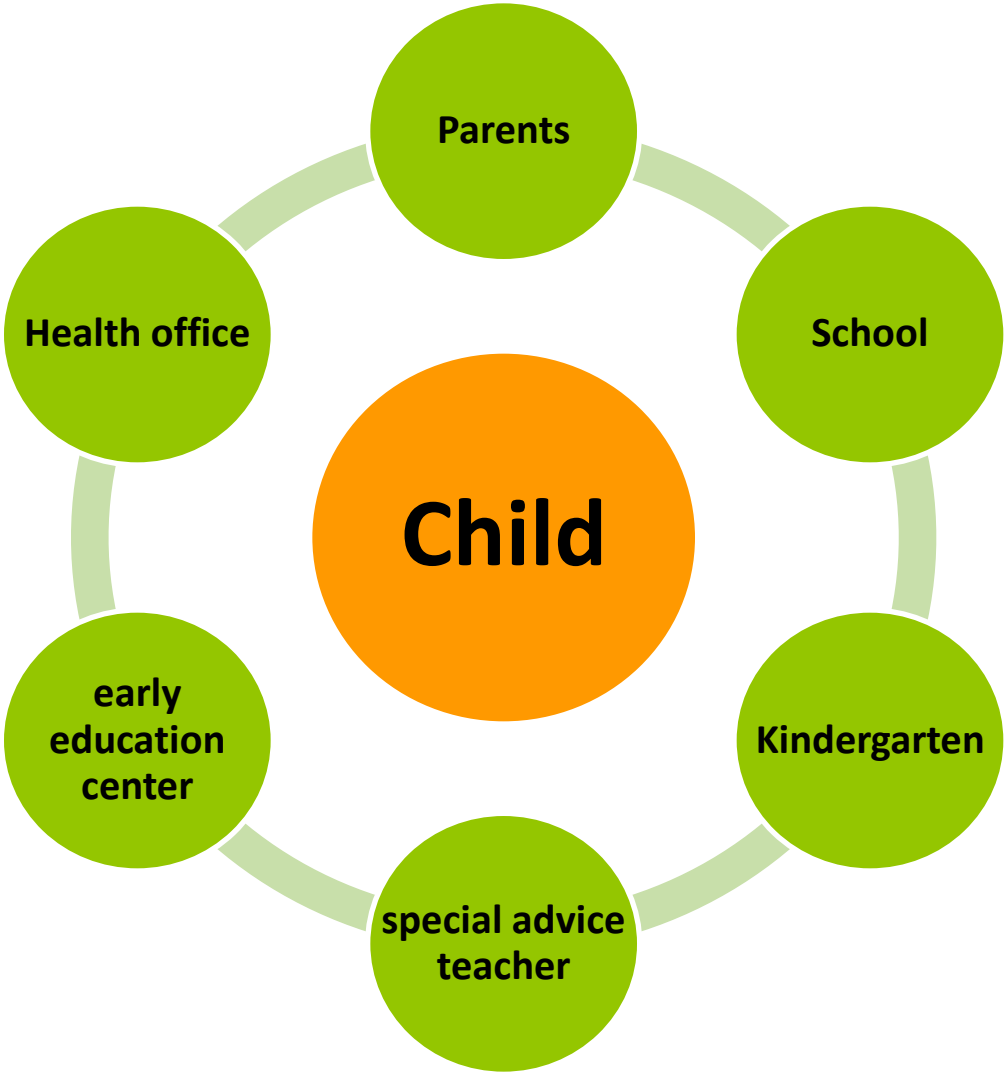
- Main steps
  - Early examination of the child‘s developmental progress in school-relevant skills
  - „Round Tables“ of experts decide whether additional compensatory support should be given to an individual child
  - Focused additional compensatory support in small groups is provided during the last kindergarten year

Implementation
Round Tabels

- Close cooperation between educational professionals and parents



Implementation

Main focus of support

- language development
- phonological awareness
- basic math skills
- concentration skills

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Research question

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(1) Does the additional compensatory support in small groups during the children's last year before school entry contribute to develop sufficient levels of school relevant precursor skills?

(2) Is the probability of school readiness for children at risk enhanced by the project implementation?

(3) Are there transfer effects of the additional compensatory support on the acquisition of reading skills and mathematics during the first year of schooling?

Method

Sample

- 754 children from 65 different kindergartens partcipating in the federal state programme
- All children‘s compulsatory school entry was September 2009
- Mean age at t1 (spring 2008): 4 years, 9 months
- Additional compensatory support was provided to 195 of the participating children (26%)

Overview of measurement points (t1 to t6)

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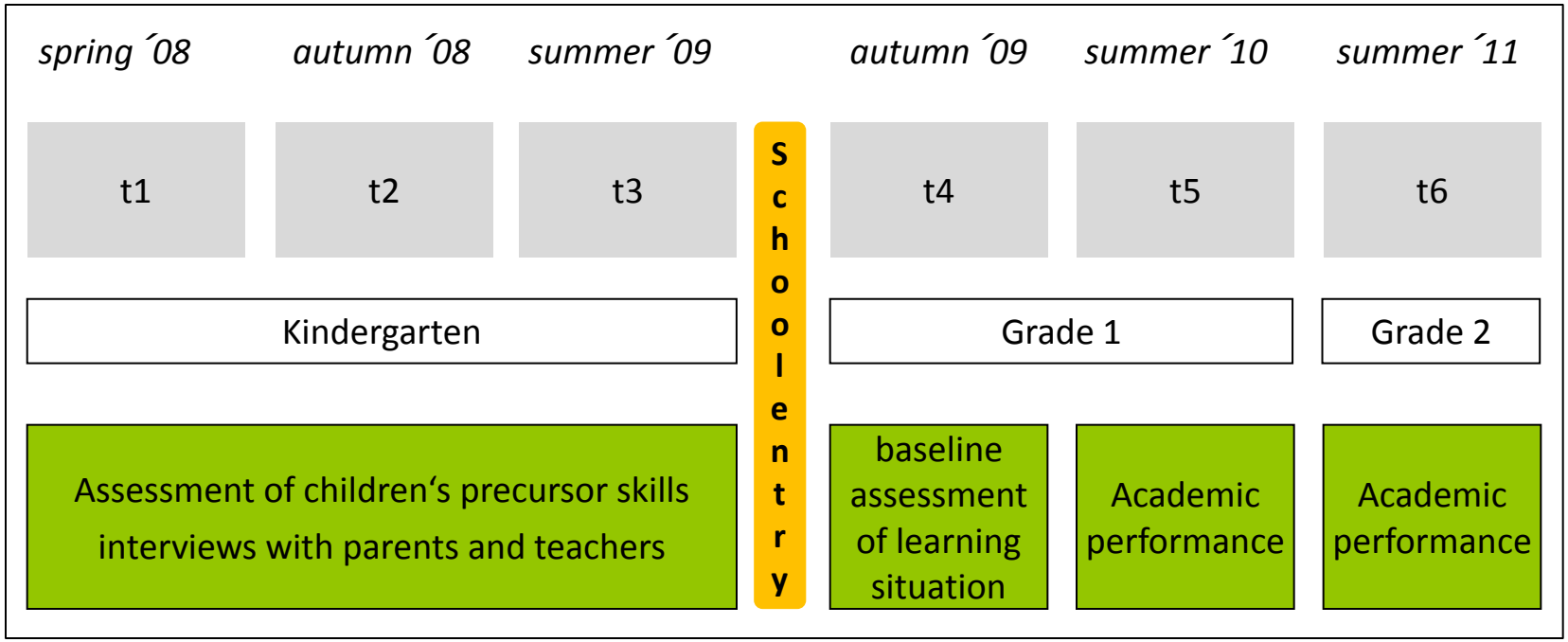

Method

achievement assessment

- Assessment in kindergarten:
  - vocabulary
  - sentence repetition
  - phonological awareness
  - basic math skills
- Assessment in school
  - reading
  - math

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Classification

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- Children at Risk (Risk):

  T-values < 40 at t1 and/or t2 in two of the four assessed school-relevant skill areas (language, phonological awareness, early math skills, concentration)

- Children allocated to additional compensatory support (ACS)

Sample Distribution

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		Additional Compensatory Support: *yes*	Additional Compensatory Support: *no*
At RISIK	*yes*	10 %	7 %
	no	16 %	67 %

Results

Development in kindergarten

	t1		t2		t3	
	ACS		ACS		ACS	
	no	yes	no	yes	no	yes
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
vocabulary	26.6 (8.0)	20.8 (9.5)	27.7 (7.2)	23.3 (8.4)	30.9 (5.0)	27.4 (6.6)
Sentence repetition	6.6 (2.4)	5.2 (2.6)	7.3 (2.2)	5.7 (2.6)	8.1 (1.8)	6.6 (2.2)
phonological awareness	5.6 (3.6)	3.4 (3.8)	6.6 (3.5)	4.5 (3.7)	8.1 (2.6)	7.0 (3.2)
basic math skills	18.3 (6.9)	14.6 (7.3)	21.7 (6.4)	18.6 (8.4)	26.3 (3.6)	24.9 (4.2)

Results

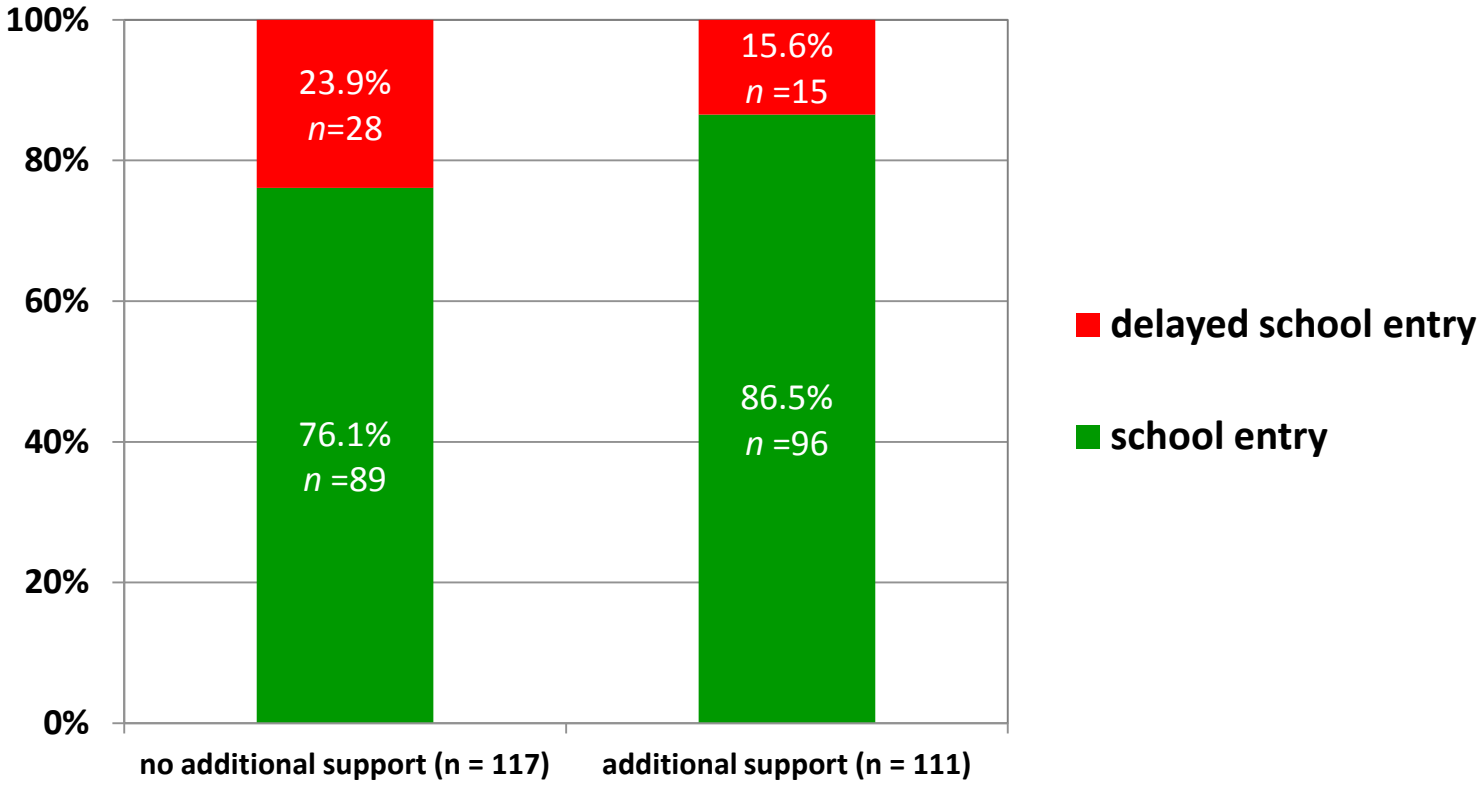
School entry

- rate of children with delayed school entry: 10.3 % (*n* = 81)
- Postponement from regular school entry did not differ between those with or without additional compensatory support :

Additional Compensatory Support	
No	Yes
58 (10.5%)	23 (9.9%)

Results

School entry for children at risk



- Higher rate of postponement from regular school entry in the group of children with no additional support (χ^2 = 4.0, $p < .05$).

Results

reading and math achievement at the end of Grade 1

	Additional Compensatory Support	
	No	Yes
poor reading and poor math	5.5 %	14.3 %
either poor reading or poor math	20.2 %	29.9 %
neither reading nor math problems	74.2 %	55.8 %

Conclusion and Discussion

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- ACS has positive effects on the development of school relevant precursor skills during the last year before school entrance
- ACS enhances the probability of being identified as a school ready child for children at risk (in the sense we defined it)
- The question whether ACS will produce long-term transfer effects on school achievement remains an open question (not at least because of missing adequate controls)
- A short term coaching of the compensatory support teachers increased the effect sizes significantly

Thanks to the Team

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Würzburg
University of Würzburg
Wolfgang Schneider, Robin Segerer & Marie Pröscholdt



Heidelberg
Heidelberg University of Education
Hermann Schöler, Eva Randhawa & Beatrix Kron



Frankfurt:
German Institut for International Educational Research (DIPF)
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Process from examination to school enrolement