

Equipping schools for the future

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Abstract

This Research Area investigates how schools, particularly serving **students from marginalised backgrounds** can systematically develop **capacity for high-quality, equitable education**. Combining basic research with applied research projects, multi-wave survey studies, interview studies, and the scientific accompaniment of major national programmes, the group advances both: **scientific knowledge and practical guidance**.

Key theoretical foundations include **recognition justice** as a normative principle, **organisational learning capacity** as a prerequisite for sustainable improvement, and the understanding of schools as social spaces embedded in and shaped by their **socio-spatial context**. Current and recent projects span from *Schule macht stark* and *Talentschulen NRW* to the *CHANCEN-Verbund* accompanying the *Startchancen-Programm*, as well as research on **culturally responsive** leadership and teaching and organisational support for school authorities.

Background & Key Theories

- **Recognition justice** (Stojanov, 2011) as normative foundation — beyond meritocracy and distributive justice (Klein et al., 2026)
- **Quartary effects of social origin**: place-based educational inequality beyond family background (Boudon 1974; Forell et al., 2024)
- **Organisational learning capacity** as key to sustainable school improvement (Klein et al., 2026)
- **Deficit thinking vs. cultural-responsive practice** as competing professional orientations (Klein et al., 2026)
- **Design-Based School Improvement (DBSE)** as a framework for collaborative, iterative, evidence-informed school development (Mintrop 2016; Czaja, et al. 2026)

Overarching Research Questions

1. How can schools in socially disadvantaged areas systematically develop capacity for high-quality, equitable teaching and learning — despite structural and social constraints?
2. What support structures, development strategies, and resources prove effective in high-need contexts — and under which conditions?
3. How do leadership (e.g. culturally responsive), school supervision, professional collaboration, data use, and socio-spatial orientation interact in shaping school development trajectories?
4. How can teacher education, recruitment, and school authority support be designed to strengthen equity-oriented school development?

Prominent Methodological Approaches

- **Standardised surveys** of school leaders, teachers, multiprofessional teams, students
- **Case studies**: observations, semi-structured and phenomenological interviews, focus group discussions, at multiple time points
- Analysis of **school administrative data**
- Design-Based School Improvement (DBSI): collaborative, iterative, evidence-informed development with **schools as co-researchers**
- **Socio-spatial analysis**, programme evaluations, and **cross-state policy analysis**

Social Relevance

1. Understanding what makes schools in deprived settings succeed **generates knowledge** that can break the cycle of educational disadvantage
2. **Diversity-focused training and culturally responsive leadership** equip schools and school systems to serve all students equitably
3. Evidence on **needs-based resource allocation** informs fairer, more effective education policy across all German states
4. **Equity-focused student teacher programmes** build a generation of professionals committed to high-need schools
5. **Supporting intermediary actors and multipliers**, e.g. in the Startchancen-Programm enables research-based concepts and materials to reach ~4,000 schools nationwide

Examples of Related Research Projects and Network

CHANCEN-Verbund scientific accompaniment of the Startchancen-Programm, since 2024 — BMBFSFJ (UDE, RUB, TU Do; in total 20 research institutions nationwide; cooperation with UC Berkeley)

Schule macht stark (SchuMaS) school development at disadvantaged schools nationwide, 2021–2026 — BMBFSFJ (RUB, TU Do, UDE; overall 13 research institutions nationwide; cooperation with UC Berkeley)

Schulversuch Talentschulen NRW scientific accompaniment of a state-wide programme, 2019–2025 (TU Do, UDE, FAU, U Siegen)

Lehrantsstipendium Ruhr scholarship programme targeting educational equity (over 200 pre-service teacher education students), curriculum design and evaluation, since 2024 — RAG-Stiftung, MSB NRW (RUB, TU Do, UDE)

OER-Integration process and organisational support for municipal school providers, 2025–2028 BMBFSFJ (TuDo, RUB) — BMBFSFJ (TuDo, RUB)



Future Perspectives

The research area is committed to a future in which the link between social background and educational success is systematically weakened — through better schools, better support structures, and better-prepared teachers.

- Achieving this requires advances on multiple fronts:
- ✓ deepening **basic research** on organisational learning, and the conditions of equitable school development;
 - ✓ generating **robust evidence on what works** under which conditions and for whom;
 - ✓ strengthening culturally responsive leadership, teaching and school supervision as systemic levers;
 - ✓ supporting school authorities as key agents of evidence-based change;
 - ✓ and embedding findings durably in teacher education, school policy, and practice across all levels of the education system.

Key Literature

van Ackeren-Mindl, I., Göbel, K. & Ropohl, M. (Hrsg.) (2025). *Bildungsforschung in der Metropole Ruhr* [Educational Research in the Metropolis Ruhr]. Waxmann.
 Czaja, S.J., Muslic, B., Klein, E.D., van Ackeren-Mindl, I. et al. (Hrsg.) (2026). *Designbasierte Schulentwicklung* [Design-based School Improvement: Concept, Experiences, and Materials of a Research-Practice Collaboration] Waxmann.
 Klein, E.D., Proskawetz, F.S., van Ackeren-Mindl, I. et al. (Hrsg.) (2026). *Schulentwicklung an sozialräumlich benachteiligten Standorten* [School Development in Socio-Spatially Disadvantaged Settings]. Waxmann

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