The North Carolina Education Research Data Center

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Increased Demand for High-Quality Research in Education Policy

• Prior to 2000, studies in education policy had been plagued by poor-quality data with small, non-representative samples and no prospective follow-up.

• Era of evidence increased demand for better analysis.

• No Child Left Behind Act increased collection of high-quality data, for accountability purposes. In NC, data collection had started in 1990s with its ABCs program.
Establishment of the NC Education Research Data Center

• A partnership between Duke University and the NC Department of Public Instruction

• Established in January 2001, renewed through 2021

• Initially funded by Spencer Foundation, now fees

• 375 approved research projects, 50 dissertations
  – Half initiated outside of NC
  – All for research, not for political use or journalism
Basic Terms

• NCERDC acts as agent of NC DPI.
• DPI provides electronic data files to NCERDC.
  – 4,000 files per year; identifiers intact
• Legal authorization: “to improve education of children in NC”
• NCERDC cleans, stores, merges files.
• Researchers apply to receive customized, de-identified data files for a specific study.
• Four-person board establishes policy, ensures data security, and reviews requests.
Data Files in NCERDC

- Annual student files
  - 1,459,852 children in 2,592 charter & public schools
  - Test scores, special ed, graduation, discipline
  - Teacher and principal credentials; $$$ school information

- Merged longitudinally back to 1993

- Can be merged with other files
  - Birth records, child abuse registry, arrest, Medicaid, higher education
  - Can create peer context information
  - Add local context data, such as job losses and natural disasters
Examples

• Evaluate impact of funding for pre-kindergarten program
  – State funding varied (randomly) across 100 counties and 20 years
  – Find that: Children living in well-funded counties at age 4 have higher test scores in elementary school at least through grade 5

• Evaluate impact of lead exposure on student outcomes
  – Find that: Higher lead in housing walls associated w/ lower test scores

• Evaluate impact of middle school on student trajectories
  – 85% of districts have k-5, 6-8, 9-12 system (others have k-6 or k-8)
  – Sixth graders in k-5 system have more substance use infractions
    • Same students have worse outcomes in high school
National Opportunities

- NSF Network co-led by D. Figlio and K. Dodge
  - 60 scholars and state-level ed policy leaders
- Statewide Longitudinal Data Systems (SLDS)
  - > $600 million to states to develop databases
  - Little used for research, to date
- Race to the Top and Early Learning Challenge
- Barriers can be overcome
  - Legal, through statute
  - Data security, through standards
  - Relationships of trust, through incentives and careful use
  - Public will, through leadership