Lessons Learned in Conducting a Lottery-Based Study of Core Knowledge Charter Schools

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BACKGROUND/CONTEXT

• Lottery-based randomized control trial (RCT) of the effectiveness of Core Knowledge charter schools
• Core Knowledge (CK) is a comprehensive, content-specific, coherent, and cumulative K-8 curriculum
• There are more than 50 CK charter schools in Colorado alone and well over 200 in the U.S. Yet there are no experimental studies of the effectiveness of these schools.

INITIALLY PROPOSED DESIGN

• 18 CK charters meeting two criteria: in operation for at least 4 years and, due to oversubscription, using a lottery to admit students.
• One cohort of students followed from the lottery (pre-K) through grade 3.
• Pre-lottery and pre-treatment, researcher-administered tests of vocabulary, phonological awareness, and letter/word id.
• Annual individual testing of students in reading, vocabulary, and academic knowledge.
• Annual collection of implementation fidelity data, surveys and observations.
• Surveys of a sample of teachers of alternate-school (control) students.

MODIFIED DESIGN

• Our proposal included letters of commitment from 19 schools who told us they had more applicants than slots.
• During the first year and a half, we discovered that two thirds of these schools had extended an offer to all parents on their lottery list, so their lotteries did not meet eligibility criteria. Similarly, Gleason et al. (2010) found that following an initial screen, 68% of their charter schools did not maintain eligibility through the admissions period (they weren’t oversubscribed).
• We responded by attempting to recruit additional schools in the second year and adding a second cohort.
• The modified design includes nine CK charters with eligible lotteries. Two cohorts of students are being followed K-3.

MORE OBSTACLES: COLLECTING DATA FROM RESEARCHER-ADMINISTERED TESTS

• We found that pre-lottery recruitment and parent consent for researcher-administered tests was practically infeasible.
  ➢ Principals did not agree to embed study recruitment in the application process.
  ➢ Many applications were received a short time before the lottery.
• Post-lottery recruitment resulted in a low overall participation rate (32%) and an unacceptable treatment-control differential (52% vs. 25%).
• Our application to conduct research in the county where approximately 60% of our control group students are enrolled was rejected. Thus we could not test control group students in the (mostly) regular public schools where they were enrolled.
• In addition, control students were dispersed in more than 125 schools.

SIGNIFICANT PRACTICAL OBSTACLES

Initially Screened Schools Do Not Meet Lottery Criteria

Pre-lottery Recruitment and Parental Consent

Ensuring Equal Participation by Treatment and Control Students

District Cooperation

Wide Dispersion of Control Students

OVERCOMING THE OBSTACLES

Testing Feasibility Survey
• In the third year of the project we conducted a small parent survey to assess the feasibility of individually testing Cohort 1 students in a non-school setting.
• We offered a $50 gift card for participating in the survey.
• Results indicated that 96% of the parents would be willing to transport their child to a non-school site for individual testing if they received a $150 gift card incentive.

Parent Survey—Invitation to Test Child
• Encouraged by this result, we conducted a telephone survey of all Cohort 1 parents.
• A total of 552 parents responded, a 60% response rate, with a small treatment-control differential (62 vs. 59%).
• The survey focused on parents’ experiences with the lottery application process, not consent for testing.
• The last few items, drawn from the feasibility survey, explored the parent’s willingness to transport the child to a non-school site for individual testing.

Incentive for Testing: $150 Gift Card
• This required a waiver of university rules requiring the collection of social security numbers for gift cards over $50.

Testing in Non-School Venues
• A high percentage (85%) of the surveyed parents did in fact bring their child to one of five non-school sites (e.g., a community recreation center or library) where we had rented facilities suitable for testing.

LESSONS LEARNED

• Pre-lottery pretesting is probably infeasible.
• Be patient; wait a year or two, then talk with the parents. They are apt to respond to a survey that focuses on their experience in the charter application process, and they may also be willing to have their child tested at that point, whether or not they received an offer of admission.
• Expect that school districts will not support testing in alternate schools. Be prepared to implement costly (though logically simpler) testing in non-school settings.

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