



Evaluating the Impact of Summer Learning: Student-Level Outcomes & Implementation Research

BELL seeks to generate strong evidence that the BELL Summer program increases student achievement and in-school performance. To achieve this goal, BELL is partnering with the research firm MDRC. This study will be similar in theme to an earlier random assignment study, completed by the Urban Institute in Boston and New York City, which found that participation in the BELL Summer model increases students' reading achievement and parental engagement in education. Successful completion of the proposed independent, rigorous study would contribute new evidence on the program model's impact on math achievement, and include new insight on how participation in summer learning experiences impacts in-school performance in terms of test scores, grades, attendance, and promotion rates.

Study Design: We propose a framework for rigorously evaluating the impact of the BELL summer program on students' summer learning and their school-year academic outcomes. The evaluation will focus on students rising into grades 3-5, and possibly grade 6 (depending on the location and type of methodology), and include the following key design elements:

- **Student-Level Impacts:** This study will measure the impact of BELL Summer on the achievement of high-need students who attend low-performing schools. Research questions related to student level impacts will include:
 - What is the impact of BELL on students' summer learning?
 - What is the impact of BELL on students' engagement and academic performance during the school year?
- **Implementation Research:** The study will include an implementation research component to measure the impacts of qualitative factors such as program fidelity, dosage, and service contrast. Additional analyses will also be used to examine the implementation conditions in which student impacts are greater.
- **Exploratory Research:** The study will also explore school-level impacts of summer learning, considering whether or not the program has an impact school-wide on student achievement and whether or not summer learning enhances a district's efforts to turn around low-performing schools.

Research methodology: To rigorously evaluate BELL's impact on student-level impacts, the proposed evaluation will use one or both of the two following research methods:

- **Random Assignment (RA):** RA is considered a "gold standard" research method and requires over-enrollment of interested students. In this approach, a subset of students are randomly selected to fill BELL Summer program slots while the remaining students are assigned to a control group that represents "business as usual" summer activities. Random assignment would work best in a BELL region or school district where participation in BELL is open to various groups of students; is not based on a quantitative variable such as grades or test scores; and/or is voluntary. If all participating BELL sites were use the RA approach, ~1,500 students will be needed, with half in the treatment group and half in the control group.

- **Regression Discontinuity Design (RDD):** RDD is also considered a “gold standard” research method and involves admitting only the “neediest” students based on a quantitative variable such as test scores. Students below a pre-specified cut-off are admitted to the BELL program while those above the cut-off represent the comparison group. Use of RDD would work best in a BELL region or district where participation in the BELL program is compulsory and/or selection for the program based on a known quantitative variable. If all participating BELL sites were to use the RDD approach, ~5,000 students will be involved in the study. Larger number of students are needed for an RDD design due meet the study’s desired statistical power.

In addition, to explore the school-level impacts of the BELL Summer model, the study will use a Comparative Interrupted Time Series (CITS) design to analyze the impact of BELL on spring test scores of all students within a school. Researchers will compare the school-wide performance of 24 BELL sites and 24 non-BELL sites for the years leading up to, and following, the implementation of the BELL Summer model. The CITS approach will enable BELL to explore theory that by reaching strategically selected low-performing students, the BELL Summer model can change instruction during the regular school year and have a spillover effect on the achievement of all students at the school.

Data Collection: The previous evaluation of BELL conducted by Chaplin and Capizzano (2006) found statistically significant end-of-summer impacts on reading achievement. Based on these findings, a logical next step is to examine whether (a) these summer learning gains persist during the school year, and (b) whether the BELL program also affects mathematics achievement. Thus, the proposed evaluation will look at the impact of BELL on two primary student outcomes:

- **Summer Achievement:** This will be measured using students’ scores on local math and reading assessments (state test or district assessment) administered in Fall 2011. In schools that do not administer a fall test, standardized assessments in math and reading will be administered by the evaluation team.¹
- **School Year Achievement:** This will be measured using students’ scores on local math and reading assessments (state/district tests) administered in spring 2012.²

Secondary outcomes examined in the evaluation will include subtest scores on the spring and fall assessments, grade promotion and attendance (from school records), attitudes towards schooling and self-esteem (from a student survey administered in Spring 2012). Information will also be obtained on students’ characteristics and achievement before their participation in the program.

Location: The evaluation design will be partially determined by its location(s). In some districts, strategic partnerships between BELL and host schools and districts require that BELL enroll targeted students. In those districts, BELL must use an RDD design given that one or more specific factors determine compulsory enrollment. In other districts, BELL has an open enrollment process. In those districts, BELL may use an RA design and assign some students to a control group. The location of all or part of the study may be influenced by available funding and whether funds come from donors with a local or national focus. Locations currently under consideration include Baltimore, Boston, Detroit, New York, Richmond (CA), and Springfield (MA), and additional sites may also be considered.

¹ To mitigate some of the burden associated with this testing, students’ scores on the tests will be given to their teachers as a “formative” assessment tool.

² Test scores (fall and spring) will be standardized (z-scored) by district to make it possible to pool scores from different local assessments.

Funding: This study will be funded by independent private donors. The cost of this study is estimated at \$2M - \$3M, depending on location and design. In general, the longer the study takes, and the more schools and communities are involved, the more expensive the cost. At minimum, BELL is committing to generating funding to complete the student-level outcomes and implementation components of the proposed study.

Timeline:

<u>Nov-Dec 2010</u>	Explore feasibility of design(s) with MDRC and current district partners
<u>Dec 2010</u>	Evaluation Advisory Board meeting to review design (done)
<u>Jan – Feb 2011</u>	Finalize design & begin fundraising efforts (in progress)
<u>Mar 2011</u>	Determine whether to proceed for Summer 2011, based on results of fundraising efforts and district partnership discussions
<u>May-Jun 2011</u>	Identify “treatment” and “comparison” scholars/sites
<u>Jun-Aug 2011</u>	Implement BELL Summer model for treatment group
<u>Sep-Oct 2011</u>	Conduct post-test with treatment group and comparison group
<u>Mar-Apr 2012</u>	State tests or other follow-up assessments administered
<u>Sep 2012</u>	State tests or other follow-up assessment results available

The proposed study has the potential to transform educational practices nationwide. School district leaders, funders, and policy makers throughout the country believe that summer learning can and should play an important role in children’s development. Some evidence exists that high-quality models, such as BELL Summer, are effective. But more evidence is needed to justify changes in the status quo such that high-quality models are available, effective, and sustainable as long-term fixtures in American education. Evidence from this study will help more schools, districts, and community-based organizations deliver the educational experiences kids need to thrive.