

**Ingredients of a Successful Summer Learning Program: A Case Study of the
Building Educated Leaders for Life (BELL)
Accelerated Learning Summer Program**

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I. Overview

In previous work (Chaplin and Capizzano 2006), we conducted an evaluation of a summer learning intervention and found it to be effective using the gold standard of research methods, random assignment. Given those positive results, this new paper describes the specific elements of the successful program so it can be replicated, and investigates potential barriers to implementation and replication. As with most evaluation studies our study only estimated impacts of the program overall. This means that we cannot distinguish which elements caused the positive impacts. However, we can say that the elements described here were present in this successful program and thus of potential importance.

This observation and interview-based process study describes activities that occurred during the summers of 2004 and 2005 in an academically-oriented summer program that receives both federal and private funding: the Building Educated Leaders for Life (BELL) Accelerated Learning Summer Program. The BELL program is an innovative, academic summer program with a strong, asset-based youth development approach. It employs well-developed curricula in both reading and math and contains features of positive developmental settings outlined by the National Research Council and Institute of Medicine in the report, *Community Programs to Promote Youth Development* (2002). Most importantly, as noted above, the program has demonstrated effectiveness in reducing summer learning loss among low-income children based on both a rigorous random assignment external evaluation (Chaplin and Capizzano 2006) and two internal evaluations (T. Cooper 2002, 2003).

This report serves two purposes. First, it allows researchers to examine whether BELL's program components are implemented with fidelity (i.e., as they said they would be in program documents). This examination allows the research team to better understand the nature of the BELL intervention in practice and assist with the interpretation of outcome study results. Second, this report describes implementation issues that may affect whether the BELL program can be replicated in other sites. Issues that affect program replication often include difficulty in obtaining sustainable funding, high-quality program staff, and physical space, among others. In addition, it is also important to understand if there are any unique characteristics associated with the existing BELL sites that may not be easily reproduced. These characteristics may include an abundance of partners in the community from which to draw resources, a lack of competing programs, or other environmental characteristics that help to support the program.

This process report was developed as part of a larger study that included a random assignment impact evaluation of this summer program. Students were randomly assigned to treatment and control groups. Only the treatment group was given access to the BELL summer program. Impacts were estimated by comparing outcomes for the treatment and control groups.

Random assignment was done in both the summers of 2004 and 2005. However, student survey response rates were very low in 2004 so the impact report cited above is based on the 2005 data. This background is important for two reasons. First, random assignment in 2004 had some impacts on program operations, as noted below. Second, the impact results reported above are based on the 2005 program, which differed somewhat from the 2004 program. This report describes both the 2004 and 2005 BELL summer programs and how they differed.

II. Background

Over the past decade, an emerging body of research has shown that low-income children experience a decline in academic progress during the summer months. While higher-income children may also experience some decline, the test scores of low-income children drop significantly both in absolute terms and relative to their higher-income counterparts during the summer (Entwisle and Alexander 1992; Cooper et al. 1996). This evidence suggests that income differences are related to a disparity in the opportunities that children have to hone and maintain their academic skills over the summer months. Perhaps more importantly, this learning loss likely contributes to the dramatic overall differences in long-term educational achievement between low- and higher-income children.

In recent years, a significant amount of public funding has been used to provide enriching summer programs for low-income children. For instance, a number of 21st Century Community Learning Center (CCLC) grantees use their federal funds to run summer programs. Title I funds may also be used to fund summer programs. Moreover, additional funds for summer programs are available because of provisions in the new federal education legislation, the *No Child Left Behind Act of 2001*, which sets aside Title I funds for supplemental education services (SES) for students in low-performing schools. These funds can be used to fund summer programs that are approved by the state education agency, though in practice most SES funds are used for school year activities.

III. Process Study Methods

The findings from this process study are based on data collected from program documents, a phone interview with the BELL CEO, and site visits to the BELL sites taking part in our study.¹ During the site visits, site managers were interviewed, focus groups were held with teachers and teaching assistants, and structured observations of a randomly-selected sample of classroom lessons were conducted. We discuss these methods in detail below.

Review of Program Documents

In order to determine whether the BELL program was implemented with fidelity, program materials including informational booklets, parent guides, summer schedules, and internal evaluation documents were obtained and reviewed to gain a strong working knowledge of the day-to-day operations of the program. In addition, sample materials from the BELL reading/writing and math curricula were obtained, along with teacher lesson plans for the day of each site visit. These documents were used to describe the overall goals and administration of the

¹ In the summer of 2004, we visited one site in New York (PS 125) and one site in Boston (Trotter Elementary school). In the summer of 2005, we visited a different site in New York City (PS 33) and in two sites in Boston (Trotter and Greenwood Elementary schools). The program also operated in a few other sites during these years. These additional sites were not included in our study either because of commitments to school principals that a targeted group of students would be served or, in one case, because some students who had been long-term participants in BELL had been promised that they could participate in the summer program.

program, as well as to develop observation and interview protocols to determine whether the program components and curricula were implemented as intended.

Semi-structured Interviews with the BELL CEO and Site Managers

To obtain information from senior staff about the implementation of the BELL program, semi-structured interview protocols were developed for a phone interview with the BELL CEO and in-person interviews with BELL site managers. These protocols were designed to collect information on some of the broad implementation issues associated with the program, including the acquisition of the physical space to house the program, staffing issues, funding issues, and partnerships with other community organizations. These respondents were also asked about the prevalence of competing programs in the community, as well as about major benefits of the BELL program that could potentially go unmeasured by the outcome study.

Focus Groups of BELL Teachers and Teaching Assistants

Focus group protocols were developed to collect data from teachers and teaching assistants about the day-to-day implementation of the BELL program. The participants were asked a range of questions including their assessment of the general administration of the program, the curricula used, and issues related to the varying skill levels of the students, behavior management, and parental involvement.

Classroom Observations

Two observational instruments were developed to record teacher and student activities for randomly selected BELL lessons. The first observation instrument recorded teacher activities within the classroom and how teachers dealt with common issues like varying skill levels, lack of engagement, and student misbehavior.

The second instrument was an observational matrix designed to record student activities at 10-minute intervals throughout the class period. Trained observers recorded the percentage of students in class doing one of the following activities at each time interval: listening to the teacher lecture; working independently; working in groups; participating in a class activity; daydreaming, otherwise disengaged, or misbehaving; and other. These protocols were used to observe the math and reading classrooms in the morning and the enrichment activities in the afternoon.

IV. Findings

BELL In Theory: The Program on Paper

Overview

The BELL summer program is designed as a six-week accelerated learning program operating Monday-Friday from 8:30 a.m. to 4:30 p.m. The overarching goal of the program is to “dramatically increase the academic achievements, self-esteem and life opportunities of elementary school children living in underserved communities...” (T. Cooper 2003, pg 1). BELL’s philosophy is to serve the whole child: it aims to not only increase academic success by improving basic math and literacy skills, but also works to assist in social and emotional development by exposing program participants to positive role models, and by building self esteem and encouraging parents to become more involved in their children’s lives.

In both summers, the program operated from Tuesday after July 4th through mid-August. In 2004, the program ran for a total of 25 days in one site and 27 in the other. In 2005, the program ran for a total of 28 days at two sites and 29 at a third. In both years, Monday through Thursday consisted of academic instruction in the morning and enrichment activities in the afternoon. On Fridays, students, referred to as scholars, listened to guest speakers from the community in the mornings and in the afternoons took field trips that were designed to teach the importance of community involvement.

A Typical Week

Monday-Thursday, scholars spend their mornings clustered by grade in classrooms normally taught by one teacher and one teaching assistant (most often a college student pursuing a career in education). Class sizes have a low student to teacher ratio—1 teacher and 1 TA for every 15 students as reported by BELL (T. Cooper 2002).² Each week students are scheduled to receive approximately eight hours of literacy (reading and writing) instruction (two hours per day, four days per week), four hours of math instruction (one hour per day, four days per week), 12 hours of various enrichment activities, such as art, music, dance, and gym time (three hours per day, four days per week), and two hours of community time (thirty minutes per day, four days per week).

BELL’s afternoon activities include music, dance, art, theatre and physical education. Depending on the site, the scholars rotate to either two or three different activities during the afternoon where they work on projects that culminate at the end of the 6-week program. For example, in the dance class, each group will work on a particular routine throughout the summer to be performed at the closing ceremonies. Furthermore, each enrichment activity is curriculum-based and contains educational components.

² In May 2007, BELL staff informed us that in 2004 and 2005 their goal was to have 16 to 18 students in each class with two adults.

On Fridays, program participants listen to a guest speaker in the morning and go on field trips in the afternoon. Guest lecturers are members of the local community and their presentations are intended to make scholars aware of the opportunities afforded by education. The guest speaker may be a local author, musician, professor, or artist. The program seeks to teach children the importance of community involvement and to also show the community the promise of the BELL participants. The field trips serve to expose the children to cultural resources and fun activities within or nearby their communities. In the past, students have visited aquariums, museums, professional sports games, and historic sites.

Curricula

BELL changed their math and reading curricula during the course of our study. In both years the math and literacy interventions were based on nationally recognized curricula. In 2004, the reading and writing portion were drawn from a culturally sensitive curriculum developed by Voices for Love and Freedom (VLF), a nonprofit educational organization affiliated with the New American Schools. This curriculum was designed to explore various themes, such as democracy, through the use of multicultural literature. In addition, this curriculum was aligned with several national and state learning standards as well as some standardized assessments.

The 2004 math curriculum was Math Steps, a research-based, sequential program produced by the Houghton-Mifflin publishing company, one of the major educational publishing companies in the U.S. The curriculum was arranged so that teachers can follow a grade-specific, step-by-step plan that can be tailored to varying levels of achievement. Beyond the core lesson, Math Steps provides worksheets and materials for teachers to further assist students who are behind and also to provide additional, more challenging work for those who are advanced.

In 2005, BELL's literacy intervention included a new curriculum—Houghton Mifflin's *Summer Success: Reading*—a curriculum aligned with the No Child Left Behind legislation and the Reading First program. This curriculum uses engaging, grade-level appropriate activities in the areas of fluency, comprehension, vocabulary, and word study. As a supplement to these programs, BELL has an extensive library with multicultural literature known as the BELL Reading Club. This library provides culturally-relevant titles that engage scholars' interest, provide on-level structure to allow scholars success in reading and facilitate development of pro-social values. Finally, BELL's literacy approach included phonic instruction aligned to the recommendations of the National Reading Panel.

The changes to the literacy curriculum were driven largely by BELL's desire to better address teaching and learning needs in the classroom, including providing resources for English Language Learners, incorporating an explicit, integrated phonics component, and ensuring adequate test preparation. In addition, the *Summer Success: Reading* curriculum provided additional supports important to the BELL program including better alignment to national and state learning standards.

The BELL program also made a small change to its math curriculum, moving from *Math Steps* to Houghton Mifflin's *Summer Success: Math*. Aligned with the National Council of Teachers of Mathematics (NCTM) standards, this math curricula provides grade-level appropriate activities

to give students practice in many areas of math, develop basic problem-solving strategies, and prepare students for state assessments. The BELL staff explained that the math curricula used in 2004 and 2005 are very similar, but the 2005 curriculum is organized in a much more efficient way, laying out clear daily and weekly plans for teachers to follow. The 2005 math intervention also included more manipulatives and related activities to support mathematical development.

The BELL program also provided a customization guide to teachers. This guide covered a number of issues ranging from assessment and homework to how to fit a five-day-a-week curriculum into BELL's four-day instruction week.

The BELL Program in Practice

Program Characteristics

Class Size

The average class size in 2004 was nearly 19 students at the Boston site and 14 students at the New York site. In 2005, the class sizes were similar with an overall average of 19 again, 17 in the New York site and around 21 in each of the Boston sites.

In 2004, class sizes ranged from as small as 13 students to as high as 25 students in Boston, and from 9 to 17 students in New York. This includes both the morning and afternoon classes. The range grew in 2005 going from a minimum of 9 to a maximum of 37 across the three sites with around 20 percent of the classes having more than 25 students each. BELL staff noted that this range is somewhat larger than normal because of the random assignment process.³ More importantly, however, each class had one teacher and at least one teaching assistant present, making the average student to adult ratio much lower. This ratio was 9.5 in Boston and 7 in New York in 2004. The student/adult ratios were similar in 2005 with an overall average of 8 and a range from a low of 4.5 to a maximum of 17 by classroom. Also the largest morning class (math or reading) had only 18 students in 2005.

Staff Characteristics

In 2004 all six of the New York teachers and 7 of 10 Boston teachers participated in our focus group discussions. In addition, all 17 of the Boston teaching assistants and all 6 of the New York assistants participated. Information sheets passed out prior to the focus groups asked participants to record the number of years they have served as a BELL teacher or teaching assistant, their school-year occupation, and the highest degree earned. BELL teachers who taught during the school-year were also asked the number of years they have been a teacher and the certifications they hold, if any.

All teachers participating in the 2004 focus groups had either a Bachelor's or graduate degree. All but 1 summer teacher is a current or former school-year teacher, and the group had an

³ In particular, BELL did not replace students who dropped out of the program as much as they would normally as that might have interfered with the evaluation study.

average of roughly 7.3 years of teaching experience. Slightly over half of the teachers in the focus groups were certified (7 of the 13), while a majority (8 of the 13) had more than one year of experience working in the BELL program.

Most of the teaching assistants in the BELL program in 2005 (17 of the 23) were college students pursuing degrees in education or related fields. Of the six not currently enrolled in college, three had already obtained a college degree and one was a retired teacher. Only two of the teaching assistants had neither obtained a college degree nor enrolled in college. Unlike the teachers, most of the teaching assistants were new to the program. Sixteen of the 23 teaching assistants were in their first summer of the BELL program. However, 18 of the 23 did serve as tutors in the BELL after-school program during the previous school year, making only 5 of the 23 teaching assistants completely new to the BELL program.

In 2005, 12 of the 14 New York teachers, 9 of the 14 Trotter teachers, and 12 of the 14 Greenwood teachers participated in our focus group discussions. In addition, 13 of the 14 New York teaching assistants, 12 of the 14 Trotter teaching assistants, and 13 of the 14 Greenwood teaching assistants participated. Information sheets passed out prior to the focus groups asked participants to record the number of years they have served as a BELL teacher or teaching assistant, their school-year occupation, and the highest degree earned. BELL teachers who taught during the school-year were also asked the number of years they have been a teacher and the certifications they hold, if any.

All but one teacher participating in the focus groups had either a Bachelor's or graduate degree. With the exception of one paraprofessional and three substitute teachers, all summer teachers were also school-year teachers. The group had an average of roughly 4.9 years of teaching experience. Only five of the 33 teachers participating in the focus group lacked some kind of certification. None of the focus group participants had ever taught in the BELL summer program before.

Most of the teaching assistants in the BELL program (25 of the 38) were college students. Of the 13 not currently enrolled in college, all but one held either a Bachelor's (eight participants) or an Associate (three participants) degree. Only one of the teaching assistants had not gone beyond high school education. Like the teachers, most of the teaching assistants were new to the program. Thirty-three of the 38 teaching assistants were in their first summer of the BELL program. However, 22 of the 33 did serve as tutors in the BELL after-school program during the previous school year, making 11 of the 38 teaching assistants completely new to the BELL program.

Student Attendance Rates

As noted earlier, the BELL 2004 summer program was open for 27 days in Boston and 25 in New York. We estimate that students were given around two hours of reading and one hour of math on approximately 20 of these days (Monday through Thursday), for a total of 40 and 20 hours of reading and math instruction, respectively. This excludes any additional academic activities that may have occurred during the afternoon enrichment periods. In 2005, the program was open for 28 days in two sites and 29 days in one site, meaning BELL students could receive

slightly more instruction (22 or 23 days). This translates into around 44 hours of literacy instruction and 22 hours of math instruction over the summer.

BELL staff provided us with attendance rolls by classroom for the days we attended their program (7/27/04 and 7/25/05 in NYC and 8/3/04, 7/26/05, and 7/27/05 in Boston). We observed slightly more students in attendance in the classrooms we observed than BELL reported (165 vs. 160 in 2004 and 208 vs. 200 in 2005).⁴

BELL staff also provided us with data on attendance rates by day for all of their students across the full summer for both 2004 and 2005. Those data showed that the programs were closed for two days during the first week in Boston and for four days during the third and fourth weeks in New York in 2004. These disruptions may have lowered student attendance in subsequent days. In 2005, the site that had an extra day started one day earlier than the other two sites. For the remaining days in 2004, the data suggest that attendance rates among those who attended the program at all averaged around 74 percent in Boston and 64 percent in New York. In 2005, the rates were again generally in this range, except that at one site, the rates dropped to around 15 percent during the last week.⁵ The 2005 rates were around 76 and 69 percent in the first two sites and around 65 percent over the entire summer at the site with low attendance during the final week. It is also interesting to note that attendance was generally lowest on Fridays suggesting that many parents valued the academic activities more than the non-academic ones.

These rates are lower than those typical during the school-year (usually well over 80 percent) but much higher than for many out-of-school time programs. Also it should be noted that these rates include students who dropped out after the program started.

Focus Groups of Teachers and Teaching Assistants

Summer 2004: In 2004, the teachers and teaching assistants participating in New York and Boston focus groups discussed numerous aspects of the program including the program's philosophy and curricula, as well as the challenges faced in implementing the BELL model. Morale among the two groups was quite high in both sites, with both teachers and teaching assistants discussing at length their high regard for the program. Among teachers, smaller class sizes and increased discretion in the classroom provided a welcome change from their experiences with the public school system. Most believed that the increased flexibility made them more effective teachers. Teaching assistants emphasized the program's nurturing philosophy and emphasis on treating the whole child as fundamental strengths of the program.

⁴ These numbers apply only to the classrooms where we obtained attendance data (12 classrooms in 2004 and 15 in 2005). The counts by classroom were very close in all but seven of these 27 classrooms. The remaining discrepancies between our observations and the BELL rolls (one positive and one negative in 2004 and all positive but small in 2005) could be due to students coming and going during the day.

⁵ In 2005, over 90 percent of those students who attended at all were in the program for at least 8 days and 75 percent were there for at least 16 days.

In discussing the curricula used by BELL, nearly all the teachers in both sites spoke positively about the Voices of Love and Freedom (VLF) reading and writing curriculum. The focus group participants felt the curriculum's emphasis on diversity and culturally-appropriate issues were particularly relevant to the students' lives. As one teacher noted, "[The] stories are about them or someone they know, and the pictures are of people who look like them." Participants thought that these characteristics of VLF worked to keep students engaged, which increased its effectiveness as a teaching tool. Those who offered criticisms of VLF noted that, while the curriculum encourages free thinking about important concepts, there was not enough focus on mechanics. Some teachers felt, for example, that generally there were not enough writing exercises and more specifically, that fundamentals of grammar and sentence structure were not adequately addressed.

Participant opinions about the Math Steps curriculum were more mixed, with opinions varying quite dramatically across the two sites. Compared to the Boston participants, New York participants were not nearly as positive about the math curriculum. New York participants liked the basic structure of the Math Step lessons, but thought that they were generally uncreative, especially in comparison to VLF. Boston teachers, however, liked Math Steps because of its emphasis on concrete lessons and real-life examples involving money and time. One potential explanation for the dramatic differences between the Boston and New York participants may involve the fact that the Boston public school system has instituted the TERC teaching method for elementary grade math, which does not focus on standard computational skills, but instead on making connections between mathematical ideas.⁶ Some Boston teachers indicated that they welcomed the fundamentals-based structure of the Math Steps curriculum compared to the TERC method.

The groups also discussed a number of challenges in implementing the BELL program. The issue most often discussed involved meeting the needs of all students, who varied widely in academic performance. Participants mentioned that while they wished BELL could provide "resource rooms" for students in need of remedial assistance, the BELL philosophy emphasizes keeping all students in the classroom. As such, teachers found that while the teaching assistants were quite helpful with these issues, it was still difficult to retain the attention and enthusiasm of students with a range of capabilities within one classroom.

Teachers also mentioned the challenges of dealing with behavior problems in the classroom and the extent to which these problems took away from instruction time. While BELL explicitly recruits students with academic needs and the vast majority of learning disabilities can be served in their program, there are some severe special needs (including some emotional disturbances and some students with violent behavior) that they do not have the resources to serve. BELL staff typically refer these students to alternative programs that can better meet their needs. However, teachers in Boston who had been a part of the BELL program for multiple years noted that the 2004 group of children were the most challenging they had faced and one teacher noted that she often found herself "in the role of psychiatrist, parent and teacher." Teachers attributed this issue to the evaluation's random assignment of program participants, which bypassed

⁶ TERC math is a math curriculum developed by a nonprofit education research and development firm in Cambridge, MA. See <http://www.terc.edu/> for more details.

BELL's normal screening procedures. Some teachers went as far as to say that the current evaluation was not truly an evaluation of the effects of the BELL program because the screening process was the program's key to success. This was not mentioned as an issue among New York teachers, however.

National level BELL staff say that they are not aware of any noticeable changes in the type of students served during the summer of 2004 compared to earlier years. However, these issues were also discussed in the teaching assistant focus group in Boston. Teaching assistants who had been at BELL for multiple years also noted that the program had screened for behavior problems in the past and that they could see a difference in the children this summer. Teaching assistants discussed that the program could not serve those children well because they lacked the resources to deal with many of the medical and behavioral issues encountered, including ADD and ADHD. Teaching assistants noted that they were not given specific information about students' behavior disorders, which made it very difficult to know how to handle them properly. One participant stated, "At the very least, we need the IEPs [Individual Education Plan] for these kids so we know what is wrong with them." Another added, "We're drowning with all these issues."

Two other issues mentioned by focus group participants included poor communication between the teaching staff and executive office, and BELL's lack of a science curriculum. However, the national office staff noted that direct communication with program staff is not one of their goals—rather, program staff are managed directly by site-level directors.

Summer 2005: Morale and regard for the program were also high among teachers and teaching assistants in the summer of 2005. Teachers again mentioned the benefits of BELL's smaller class sizes, which provided an increased opportunity for "quality mentoring" of students. All focus group participants appreciated BELL's balanced approach of providing both academic and enrichment activities during the day. They felt that this approach addressed the needs of the whole child with a specific focus on self-esteem, and provided art and music activities that have been "lost" during the academic school year.

As discussed, BELL changed its math and literacy curricula in 2005, and as a result, the nature of the focus group discussion about curricula changed somewhat as well. Overall, teachers spoke highly of the new literacy curriculum, focusing on how much the children enjoyed the lessons. The teachers also appreciated the curriculum's "very well-designed" strategies for teaching literacy—visualization, prediction and games—and how they attempted to encourage the children to make a personal connection with the material. However, teachers noted that the literacy materials provided by Houghton Mifflin were theme-based and did not address multicultural issues. While BELL did provide supplemental materials designed for this purpose, these materials were not readily aligned with the primary curriculum and teachers found it difficult to "blend" them. In addition, teachers often found themselves running out of time and not being able to fit in the multicultural readings. Some teachers described incorporating both the curriculum and the supplement as a "challenge," especially considering that they were not trained to do so. This was an issue because they new that this was something that the BELL program expected of them.

Similar to the 2004 focus groups, opinions were also mixed about the math curriculum in 2005. Staff at both Boston sites expressed concern about the amount of material covered with staff at one site noting that the math curriculum consisted of two-hour lessons that they had to fit into one hour. Staff in the other Boston site listed a variety of additional complaints. They felt that the curriculum was too scripted and focused on getting the answer right instead of how the answer is derived. Given that the curriculum required them to rush, many teachers in this site felt that they needed to forge ahead without allowing the children to master all of the objectives.

In 2005, teachers in the New York site and second Boston site described the math curriculum positively. They noted that it attempted to incorporate a number of math components—geometry, operations, numbers, and more—in every lesson, that it provided an “organized structure of learning” for math concepts, and that it provided a math foundation that the children could understand. Compared to the math instruction that children received in the New York public schools, some teachers thought the curriculum was much more engaging and interesting from the child’s perspective.

The focus groups indicated that a number of challenges existed in 2005 that were similar to the year before, but that they may pose less of an issue for the program. For example, teaching children with different abilities appeared to pose less of an issue compared to the summer of 2004. Some teachers felt that the range of skill levels of the BELL students was relatively narrow and the curricula used addressed this range. Another group of teachers who thought the skill range was wider mentioned that they received specific training on differentiated instruction to deal with the issue.⁷ Yet another group viewed the different skill levels as a strength where the higher achievers could model behavior for the other children. One set of teachers, however, did believe that there was a wide range of abilities and that the curricula did not allow for individualized teaching. Teachers in this group often felt that they had to move ahead even though many of the children did not understand the concepts. Some TAs also felt that the wide range of skill levels negatively affected the more advanced children who tended to be “bored out of their minds.”

Behavioral problems among the students continued to be a problem in the summer of 2005 although the strategies used to deal with this issue seemed to work fairly well. The program used a color coded “warning system” to alert children of their status. The system ranges from green to blue where green status indicates that a child is behaving well and blue means a call is going to be made to the child’s parents.

Classroom Observations

In all of the BELL sites observed in both 2004 and 2005, each classroom housed one grade-level of students, who remained in that classroom throughout the morning and received instruction in different subject areas. In 2004, each grade had three one-hour lessons: reading, writing, and math. In 2005, the reading and writing sessions were combined into one two-hour block followed

⁷ Indeed, national BELL staff informed us that in 2005 BELL added a three hour training module on how to differentiate instruction to meet a diverse range of student needs.

by one hour of math instruction. As part of the visits to each program site, a number of these BELL lessons were randomly selected for observation. Researchers rotated among classrooms observing the subjects being taught. In total, eight one-hour lessons were observed in New York and another eight were observed in Boston in 2004. In 2005, eight classrooms were again observed in New York. In Boston, five were observed at one site and three at another.

The research team had two goals for the classroom observation. The first was to observe whether BELL teachers were properly implementing the BELL curricula. The second goal was to measure the level of students' engagement in the classroom instruction. To meet these goals, the site visit team used two different observational protocols: one designed to capture teachers' adherence to specific aspects of the prescribed curricula; and the other to measure the level of engagement of students in classroom activities.

Teaching Practices

Summers of 2004 and 2005: Results from the observations indicate that, overall, teachers at both sites and in both years were following the relevant BELL curricula and were well-equipped to effectively teach the BELL scholars. The vast majority of observed teachers were enthusiastic, caring, and able to manage their classrooms. All classes were held in traditional classrooms, which seemed spacious due to the small average class size. All of the lessons began with full-class participation, but students were usually given time to work independently later in the period. There was only a moderate amount of group work assigned and even when the children were allowed to work with partners, the activities did not generally seem to be collaborative by design.

Academically, most of the classes followed lesson plans that were concurrent with the curricula. In all of the literacy lessons, stories were read or discussed and in some instances, writing exercises were assigned. Over half of the literacy classrooms observed participated in activities requiring the students to share personal experiences or relate the themes of the literature to their lives, a key component of the Voices for Love and Freedom curriculum. The math classes were also, for the most part, consistent with the intended program. Often, the teacher would present a lesson to the whole class, hand out worksheets to be completed independently, and then be available for guided assistance as necessary. In other instances, students were given hands-on tasks, such as working with money, or participating in a competitive, math-related game.

In 2004 the math periods seemed to be more disorganized than the reading periods and the children were less engaged. There are many reasons why this may be the case. One possibility—in both cities the math period is the third hour of academics, occurring right before the lunch break. In 2005 the math lessons did not appear to be less organized and students were no less engaged than in reading, but at two sites students had to collect their lunches during the math period creating a noticeable disruption in those lessons.

During our focus groups and interviews we also learned about the role the teaching assistants (TAs) play in the BELL program. While students transition between different teachers for literacy, math, and the afternoon enrichment activities, they remain with the same teaching assistant throughout the day. This constant presence may facilitate the ability of the TA to

maintain discipline. In the morning this teaching assistant often works hand in hand with the teachers and, in at least one instance, was even helping to write lesson plans. In the afternoon, when children become more disruptive, the TAs tend to focus on the discipline issues. The consistency of the lessons plans was likely impacted by the training and the regular interaction of the teachers with senior staff. All of the TAs and Teachers had at least 32 hours of training before the start of the program.⁸ In addition, during the summer the teachers had to submit their lesson plans for the following week each Friday to an instructional coordinator who would review them and provide comments. Staff also met on a weekly basis to discuss their curriculum and adjust it when needed. Finally, staff from the national office also conducted classroom observations.

Student Engagement

Summers of 2004 and 2005: In addition to observing teachers, the research team aimed to get a picture of the students' engagement and the extent to which discipline issues interfered with the flow of the lesson. Regardless of the quality of the lesson or misbehavior that took place, the children appeared to be generally well supervised in both years. There was variation in behavior in different classrooms as well as during different academic lessons. Naturally, the students seemed to become more restless as the morning sessions wore on; however, the teachers and TAs employed successful management techniques. It appeared that the children were well aware of the behavior expectations and also of the standard repercussions. For the most part, teachers and teaching assistants used minimally disruptive methods to manage discipline, such as speaking to the child individually, using a "behavior chart" mounted on each wall, and reminding the child that misbehavior is simply negative attention. In 2004, it appeared that the primary role of the teaching assistant in each classroom was to handle discipline issues, which allowed the teacher to teach. Perhaps because of this, the teaching assistants seemed to be less enthusiastic than the teachers and slightly less patient. This seemed less true in 2005. In both years, most of the teachers were effective in reengaging students who were not paying attention, although in some classrooms, students were allowed to disengage if they were not disturbing others.

National BELL staff noted that it is not the intention of the program model to have the teaching assistances focus on discipline issues. As with any of the patterns we observed, the staff behavior may have been affected by our presence. The national staff also informed us that they have added a training module called "collaborative teaching" where they communicate their expectations that the Teacher and TA will work together to leverage each other's strengths and weaknesses. Also the TAs are supposed to support teaching and learning by working with small groups of students, leading whole group instruction at times, and giving scholars feedback on their work.

To more precisely measure the engagement of BELL students, members of the site visit team used an observational matrix to record the activities of students during their literacy and math classes at 10-minute intervals throughout designated one-hour class periods. We observed a total

⁸ Some staff reported receiving 38 to 40 hours of training and one staff member even reported feeling that the BELL training was better than the regular summer school staff training in their city.

of 263 time intervals across both sites and years. About 61 percent of the observations were from 2005 and they were about evenly split between Boston and New York.⁹ Trained observers recorded the percentage of students in class doing one of a number of activities at each time interval, including both positive activities (listening to teacher lecture, working independently, etc.) and negative (daydreaming, misbehaving, etc).

Across all of these observations, 86 percent of BELL students, on average, were positively engaged in an academic activity at the observation points. On average, 33 percent of children were listening to a teacher lecture, while 22 percent were engaging in class discussion and 21 percent were working independently. Another 10 percent were working productively together in small groups. Only 2 percent of the children were misbehaving while 5 percent were engaged in other, non-academic activities (going to and from the bathroom, etc.) and 7 percent were disengaged for other reasons (i.e., day dreaming). We found no evidence of statistically significant differences in these numbers across subjects or program years.¹⁰

Barriers to Implementation

Obtaining and managing the physical space.

Each year, the BELL program must obtain a space to house its summer program. Obtaining, negotiating, and maintaining this space is one of most difficult aspects of running the summer program. In New York, for example, program staff noted that it is unclear until late in the spring which New York schools will be available to use as a program site. This issue creates a delay in planning and in the program's outreach efforts for the summer program. Administrators noted that they must negotiate every aspect of the program with the school principal, including accessible and off-limits areas within the building, drop-off, dismissal, and pick-up procedures, the use of air conditioners, and numerous other issues. In addition, working with school staff not under the purview of the BELL program—custodians, food service help, etc.—can also prove challenging.

Language Issues

BELL staff also noted that language barriers can be an issue, especially among those families who do not speak English or Spanish. While most students are proficient in English, communicating with parents who speak languages other than English or Spanish can be challenging. Often, students are used as translators, but these students are sometimes reluctant to translate information about their own school performance or behavioral issues. This is a relatively minor issue in the current BELL sites because most BELL families speak either English or Spanish and BELL has a number of Spanish speaking staff. This barrier is important to keep in mind, however, if one were to consider replicating the BELL program in additional sites. Indeed, in Boston there were a number of Vietnamese speakers.¹¹ On the other hand, if an

⁹ We did additional observations of the afternoon activities but those are not reported here.

¹⁰ The standard errors for these numbers are all under 3 percentage points.

¹¹ We hired a Vietnamese speaker to conduct interviews with these parents in 2004 for the impact component of our study.

area has a larger number of students that speak another language, it is likely that there will also be a larger pool of possible staff people who speak that language.

Transportation

Unlike BELL's school-year program, which exists at many schools in each city, the BELL summer program operates from just a few central locations and draws students from throughout each city. While the sites chosen are generally close to public transportation, getting to and from the program was an issue for at least some BELL families. In Boston, administrators noted that parents had the option of paying for transportation provided by the program. No direct mention of transportation was made in New York City. However, administrators noted that the 4:30 pickup time in New York was problematic for many families because it was difficult for them to get off of work and make it to the program by that time. On the other hand, it should be noted that many summer programs operate for only four hours per day making transportation even more difficult for working parents.

Variation across Sites

In discussions with the BELL administration, two major implementation tensions surfaced pertaining to replicability. First is the challenge of promoting program growth while also maintaining consistency. Second is the difficulty in implementing the BELL model with fidelity while adapting the program to meet local needs. It is important to the program that each site meets the rigorous standards of the BELL model, but as one administrator noted, "we struggle with consistent execution across sites every time." Ideally, the organization strives to generate equally effective programs in each city and to have each child making similar academic gains. However, as new BELL after-school and summer sites take form, the leaders realize that many of the locations are exceptional while others still need to smooth out some operational kinks. As an organization wishing to replicate a specific curriculum, the BELL administration understands that adaptation is imperative as they expand; nevertheless, these alterations to the program model should not affect their high academic standards or their expectations for scholars.

V. Conclusions

This report summarizes results from a process study of the BELL Summer Learning Program. We focus on three sets of issues—program fidelity, program replicability, and implications for our impact study.

Program Fidelity

Overall, our observations suggest that the BELL staff were implementing the program with fidelity to the model. The teachers appeared to be following their curricula in both reading and math and exhibiting good classroom management skills. This is not surprising since student/staff ratios were low, almost all of the teachers had experience teaching during the school-year (with an average of over seven years), and most of the teachers had at least some experience teaching in the BELL program.

On the other hand, there were certain other aspects observed during our site visits that might temper or erode the impact of the program. These include issues related to student engagement, student attendance, teacher certification, and possible changes in the population served to facilitate the experimental design. While we found that student engagement was fairly high, about 14 percent were not engaged at a given point in time during the academic class-periods we observed. Attendance rates were probably higher than for many out-of-school time programs, but on average, well over a quarter of the students enrolled were not in attendance. The staff were generally well trained and experienced. Only about half of the teachers we spoke to were certified in 2004 but this number was up to 85 percent in 2005. Finally, some BELL staff reported that the children served in the summer of 2004 had more behavioral and attention problems than in previous years due to changes in BELL's screening process, which they attributed to the random assignment of applicants. This issue was not seen as a problem in 2005.

Program Replicability

In the area of program replicability, we found both reasons to be optimistic and reasons for concern. On the one hand, the staff at the national and local levels appear to be highly qualified, energetic, and committed to this work and successful in maintaining a funding stream. Their involvement in this study and the fact that they have worked to make BELL an accredited provider of Supplemental Education Services (SES) in New York and Boston suggests that they are getting much of the needed ground work done to expand their program. On the other hand, it appears that space is quite difficult to obtain even in the sites where BELL is already operating. Ideally BELL would be able to take advantage of public schools that are often underutilized during the summer but this has proven difficult (though not impossible) to arrange. In addition, while BELL has been very successful at getting SES funding for their afterschool program run during the regular school year, SES funding has not generally been made available for summer learning programs.

Implications for Impact Study

Our impact study focused on reading rather than math in part because we expected somewhat larger impacts in reading than math for a number of reasons. First, previous evidence suggests that low-income students lose more in reading than math during the summer relative to their higher-income counterparts. Second, BELL offers more hours of reading instruction. Third, reading was offered first in the morning, while math was second so students may have been more energetic and consequently learned more during the reading classes. The likelihood of finding larger impacts in reading than in math is further supported by our site visits. In 2005, math classes in two of the three sites in our study had to be interrupted each day so that the students could collect their lunches. The impact report did, in fact, find positive impacts on reading test scores (Chaplin and Capizzano 2006). In future research we hope to investigate whether or not similar impacts might be found for math.

Our earlier research showed that the BELL program improved summer learning among a group of low-income children. In this study we describe the components of this effective summer learning program. It is probably safe to assume that some of these components are necessary-for example reasonably good attendance rates of students. In other cases, however, it is more difficult to know whether or not the component identified mattered. For example, our results should not be used to suggest that the low child/staff ratio used at BELL is either necessary or ideal. Indeed, it might be more effective to have a higher ratio and use the extra funding to provide even more staff training. Further research on the impacts of variations of summer learning programs could help to better identify the optimal balance between these components and to thereby improve future efforts to reduce the summer learning gap.

VI. References

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