1. INTRODUCTION

Competence and confidence in reading makes up the foundation for all educational achievement. Literacy is the cornerstone of school achievement, and Columbus Metropolitan Library (CML) is committed to contributing to the success of new readers. Third Grade Reading is one of three areas of focus in CML’s top strategy, Young Minds. CML invests heavily to support Third Grade Reading with one program in particular: Reading Buddies. Offered at all 23 locations at least two times per week, Reading Buddies provides 15 minutes of one-on-one reading practice with a buddy (staff or volunteer) for students in grades K-3. Since the goal is improved reading skills, CML took advantage of a grant opportunity to work with the Crane Center for Early Childhood Research and Policy at The Ohio State University (OSU) to gauge the program's impact on standardized reading scores. By matching program attendance numbers to assessment data, evaluators determined a correlation between Reading Buddies attendance and increased reading scores. These findings will inform decision-making about next steps for the program, including such issues as frequency and length of Reading Buddies sessions, staffing and communication to parents.

2. BACKGROUND

The Ohio Third Grade Reading Guarantee, enacted in 2012, requires all third grade students to pass a standardized reading assessment in order to be promoted to fourth grade. Fewer than half of the students in Columbus City Schools (CCS) passed the fall 2013 third grade reading test, signaling an urgent community need. In response, CML launched Reading Buddies in January 2014 to provide an afterschool reading opportunity for students. Enhancements were made over time to strengthen and structure the program. In 2014, OSU researcher Jill Pentimonti made recommendations that led to improved reading level identification and support of readers. In 2015, an online portal was built to track attendance, unique visits and reading level. In addition, program checklists were created to aid training and guide a more consistent experience across CML library locations.
These efforts resulted in a structured program with the ability to scale as needed.

Attendance at Reading Buddies gradually increased since its launch (see chart) indicating a need to evaluate the program. In 2016, CML received a Library Services and Technology Act (LSTA) grant to fund research to better understand the impact of the program on student test scores.

### 3. RESEARCH METHODOLOGY

The Reading Buddies evaluation was conducted using data compiled through matching attendance rates with student Measures of Academic Progress (MAP) reading scores supplied by Learning Circle Education Services. OSU conducted a rigorous formative subset evaluation to determine dosage response for reading progress. The evaluation cohort included 975 CCS students who participated in Reading Buddies during the 2015-2016 and 2016-2017 school years.

The purpose of this evaluation was:

1. To determine whether attending the CML Reading Buddies program was associated with improvements in students’ MAP scores.
2. To determine whether the association between students’ CML Reading Buddies program attendance and MAP scores varied by gender, grade level, race/ethnicity and/or the CML location attended.

### 4. RESEARCH FINDINGS

The evaluation determined a direct correlation between repeat attendance at Reading Buddies and gains on the MAP Reading Test. On average, each additional Reading Buddies session attended was associated with a 0.11 increase on the MAP. In other words, students who attended a Reading Buddies program one time per week for the duration of the academic year (i.e., 32 visits) gained approximately 3.3 additional points on the test.

**Chart:** Estimated MAP increases for all grade levels and test dates by number of CML Reading Buddies programs attended per week.
To illustrate these findings, the table below presents the MAP scores for two students similar in terms of gender, grade level, race/ethnicity and location attended. This comparison demonstrates that the student who attended Reading Buddies more often made higher gains on the MAP during the academic year.

<table>
<thead>
<tr>
<th></th>
<th>Child A</th>
<th>Child B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade Level</strong></td>
<td>Kindergarten</td>
<td>Kindergarten</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td>African-American</td>
<td>African-American</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td><strong>CML Library Location</strong></td>
<td>Martin Luther King</td>
<td>Martin Luther King</td>
</tr>
<tr>
<td><strong>CML Reading Buddies Program Attendance</strong></td>
<td>1 visit in August 2016</td>
<td>32 visits between September 2015 and September 2016</td>
</tr>
<tr>
<td><strong>MAP Reading Test Scores</strong></td>
<td>Winter 2015 – 153</td>
<td>Winter 2015 – 127</td>
</tr>
<tr>
<td></td>
<td>Spring 2016 – 157</td>
<td>Spring 2016 – 143</td>
</tr>
<tr>
<td><strong>MAP Reading Test Gain</strong></td>
<td>4 points</td>
<td>16 points</td>
</tr>
</tbody>
</table>

*Reading Buddies case study comparing two students from the Martin Luther King Branch.*

Finally, although some groups performed better on the MAP based on characteristics of gender, race/ethnicity, grade level or library location attended, the associations were not statistically significant when the students’ Reading Buddies attendance was accounted for. This suggests that Reading Buddies program attendance was equally important for all students, regardless of these individual characteristics.

5. MOVING FORWARD

Given the positive correlation between Reading Buddies sessions and higher MAP scores, CML is planning a strategy for sharing these results with parents and caregivers, schools and the community at large. In addition, in 2018, CML will use these findings to broaden Reading Buddies opportunities. However, there are challenges to expanding this program including:

- Communicating to caregivers when adults aren’t present at Reading Buddies sessions
- Additional staff and volunteer time required to expand hours and add sessions
- Motivating kids to participate in more reading
RECOMMENDATIONS

FOR PUBLIC LIBRARIES

• Library staff should effectively use standardized tools from the field of education to improve students’ reading skills (Guided Reading system, standardized tests).

• Public libraries should play an important role in a community’s learning ecosystem to contribute to improved reading skills for elementary-age children.

• Public libraries should evaluate programs and services for effectiveness and use results to make data-informed decisions.

FOR COMMUNITY LEADERS

• Communities should strive to connect the work of out-of-school providers with K-12 school data in order to measure impact on students’ achievement.

• Investments should always be made in evaluation to ensure there is more than perceived benefit.

• Organizations should come together to establish and work towards community level goals, rather than approach the work individually.