The Ingenuity Project Middle School Advanced Math Program (September 2021 - June 2022)

Program Overview
- Genome: K-12 Student Achievement
- Beneficiary Type: Individuals
- Budget: $1,220,159 USD

Program Description
The Ingenuity Project middle school math program takes place during the school day in place of the standard curriculum, with ongoing enrichment and support. Accepted students transfer into one of four Baltimore City public schools (Hamilton, James McHenry, Mount Royal, and Roland Park) to participate in the program for the duration of grades 6-8. Ingenuity math begins in 6th grade with Singapore Math, pre-Algebra in 7th grade, and High School Algebra I in 8th grade.

Program Logistics
- Location: United States (Maryland)
- Beneficiaries: Baltimore City Public School students located within four elementary/middle schools of the district.
- Age: Early Adolescents (age 10-14 or middle grades) 100%
- Sex: Male 53%, Female 46%
- Race: Black or African American 54%, White or Caucasian 24%, Bi/Multiracial 10%
- Additional Characteristics: First-Generation College Students 21%, Low-Income or Economically Disadvantaged 52%

Impact Genome Insight (March 2023)
The Ingenuity Project is a three-year, in-school program designed to provide rigorous coursework in math for middle-school students. Students apply to participate in the program and are accepted based on grades and proficiency tests. The program uses baseline and end of school-year standardized testing, which a sample of nearly 96% completed, to determine the number of students who achieved the outcome. Of note is that 68% of students demonstrated 'growth above typical' on the assessment, and 37% demonstrated 'stretch growth', above the average of 25-35% of students achieving that distinction through the nationally-recognized assessment tool, i-Ready Math.

Outcomes
- Primary Outcome: Z06.03.03: Improved Academic Performance
- This outcome is satisfied if an individual has demonstrated at least one of the following within the past year:
  - Improvement or growth in scores or level of proficiency on standards-based or norm-referenced assessments (e.g., tests, quizzes, rubrics, standardized tests, etc.)
  - Higher course grades or overall GPA
  - New or increased enrollment in rigorous coursework (e.g., taking a new AP, IB, or Honors course, dual enrollment)
- Secondary Outcome(s): Attendance and Persistence in School, STEM Proficiency

Verified Impact
<table>
<thead>
<tr>
<th>Efficacy Rate</th>
<th>Program Reach</th>
<th>Actual Outcomes</th>
<th>Cost per Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>521</td>
<td>467</td>
<td>$2,612</td>
</tr>
</tbody>
</table>

Supporting Evidence
- Nonprofit's description of their evidence: 89.6% of (447 of 499) middle school students in Ingenuity whom had both beginning and end of year i-Ready Math data available demonstrated an increase in their scaled score in 2021. This implies an additional 20 of 22 students for which data were not available would have demonstrated growth also.

Intervention Component Analysis
- Most Emphasized Components (e.g., Activities) in this Program
  - A06.03.05.05 Provide Access to Rigorous Coursework
  - A06.03.03.01 Utilize Strategies to Challenge Youth Academically
  - A06.03.03.02 Incorporate Academic Problem-Solving Activities
  - A06.03.02.02 Incorporate Collaborative/Cooperative Learning
  - A06.03.02.05 Incorporate Social Problem-Solving Activities

Program Intensity
- Contact Hours: 180 hrs
- Duration: > 3 yrs
- Frequency: Once or more per day
- Dosage: 1 hr - 3 hrs

Our math program is taught during the school day 180 days. The daily total time ranges across our four schools, but we used 1 hour per day as the basis.

Sector Benchmark Data
<table>
<thead>
<tr>
<th>Program Name</th>
<th>Efficacy Rate</th>
<th>Cost Per Outcome</th>
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</thead>
<tbody>
<tr>
<td>Middle School Advanced Math Program</td>
<td>90%</td>
<td>$2,612</td>
</tr>
<tr>
<td>Impact Genome Benchmark for this Outcome</td>
<td>70% - 79%</td>
<td>$2,124 - $3,552</td>
</tr>
</tbody>
</table>

* The average Efficacy Rate and Cost Per Outcome of all programs in the Impact Genome database that target the same outcome as of March 2021.