# Indiana Academic Recovery:

## An Investigation of 2023 1008 Program Efficacy

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October 31, 2023

## Background

More than three years since the inception of the COVID-19 pandemic, it is undeniably evident that this unprecedented event has wrought the most profound upheaval in the history of public education in the United States. Robust empirical evidence drawn from diverse national and Indiana-specific datasets unequivocally attests to the substantial academic repercussions of the pandemic on student achievement. In response to this monumental challenge, both state and federal authorities have acted swiftly, committing substantial resources to finance initiatives aimed at mitigating the pandemic's educational impact.

In the state of Indiana, House Bill 1008 introduced the Student Learning Recovery Grant Program, earmarking up to $150 million for its establishment. This legislation created two critical components: the Student Learning Recovery Grant Program itself and the Student Learning Recovery Grant Program Fund. Eligible entities seeking grant funding were required to formulate and submit comprehensive Student Learning Acceleration Plans. Given the magnitude of financial investment and the unparalleled academic circumstances confronting students, Indiana, along with other states, has a vested interest in ascertaining the efficacy of these recovery programs in accelerating student learning and facilitating their academic resurgence in the wake of the pandemic's adverse effects.

This report meticulously examines the outcomes of four 1008 programs, primarily focusing on the 2022-2023 academic year. It provides a thorough analysis of academic recovery data for these programs, alongside comparable groups of students associated with the four grant recipients. These recipients include Boys & Girls Club of St. Joseph County, Boys & Girls Clubs of Greater Northwest Indiana, Marian - Orton Gillingham, and United Way of Central Indiana, Inc. The primary objective of these 1008 programs was to expedite student learning and counteract the deceleration in academic progress resulting from pandemic-induced disruptions. Given the inherent variations among these programs, our analyses are geared towards discerning whether any of these initiatives have indeed succeeded in fostering accelerated learning among participating students.

Previous scrutiny of statewide outcomes in 2022 did not reveal a widespread positive impact on accelerating student learning attributable to general participation in 1008 programs. This report, building upon the 2022 analysis, now presents the latest findings for the year 2023 concerning the four programs under investigation. Regrettably, these updated findings reaffirm the absence of any discernible evidence indicating an increase in student learning rates resulting from program participation. This persistence of unimproved learning outcomes underscores the need for critical examination and potential refinement of the strategies employed within these programs to better fulfill their mis-

sion of accelerating student learning in the face of the formidable educational challenges posed by the ongoing pandemic. As we delve deeper into the subsequent sections of this report, we will explore these findings in detail and propose recommendations for addressing this critical issue.

## Data & Results

To examine the educational impact of the 1008 program, we combined grant recipient data from the four programs with Indiana ILEARN data from both 2023 and previous years. This allowed us to assess whether participation in 1008 program activities led to the desired improvements in student achievement. All academic data used in our analysis came directly from the Indiana Department of Education, maintaining the highest data quality standards. Importantly, this report strictly adheres to privacy protocols, and no personally identifiable information is included. All data preparation was carried out using the R statistical software environment (R Development Core Team, 2023; Betebenner, Iwaarden, Domingue, & Shang, 2023), known for its reliability and analytical capabilities.

Grant recipient participation data for the four grantees contained student information for 4,653 students.

**Grantee 1: Boys & Girls Club of St. Joseph County** 682 Students

**Grantee 2: Boys & Girls Clubs of Greater Northwest Indiana** 1,540 Students

**Grantee 3: Marian - Orton Gillingham** 354 Students

**Grantee 4: United Way of Central Indiana, Inc.** 2,077 Students

This dataset was particularly rich, as it included participation minutes for both English Language Arts (ELA) and mathematics. However, it's important to note that the data was not complete for all students and exhibited variations in data quality. Consequently, these participation minutes were not incorporated into our analytical processes, as the incompleteness and variability could potentially introduce biases or inaccuracies into our findings. Our focus was on ensuring the reliability and integrity of the data used for our analyses.

### Participant Demographics

Students participating in 1008 programs demonstrated similarities as well as some marked differences to student demographics statewide. Table 1 shows demographic 2023 1008 participation for the four grantees juxtaposed against state values. For most demographic subgroups, demographic percentages between 1008 participants and the state were comparable.

| Group | State | Grantee 1 | Grantee 2 | Grantee 3 | Grantee 4 |
|---|---|---|---|---|---|
| Free/Reduced Lunch | 48.4% | 70.8% | 56.9% | 53.4% | 79.0% |
| Non-white | 35.7% | 58.5% | 58.5% | 54.2% | 87.8% |
| Asian | 3.1% | 0.3% | 0.6% | 6.2% | 0.3% |
| African-American | 12.6% | 31.8% | 33.7% | 18.6% | 59.7% |
| Hispanic | 14.2% | 12.0% | 19.0% | 21.8% | 22.4% |
| Special Education | 16.4% | 18.0% | 20.1% | 26.3% | 22.1% |
| ELL | 13.0% | — | — | — | 23.2% |

Table 1: Demographic percentages for 1008 participants and Indiana students overall.

In general, the four 1008 grantees demonstrate higher percentage of free/reduced lunch status, non-white, and special education students than the state overall.

### Analysis of Academic Impact

The 1008 program participation for the year 2023 had a timeline spanning from the autumn of 2022 through the summer of 2023. As highlighted earlier, the primary goal of engaging students in the 1008 programs was to stimulate the acceleration of their learning. The overarching aspiration was that these programs would play a pivotal role in counterbalancing the deceleration in student learning experienced during the initial year and a half of the pandemic. In essence, by participating in these programs, students were expected to regain lost ground and swiftly progress on their educational journey, thus mitigating the adverse effects of the pandemic on their academic growth.

To investigate whether acceleration of student learning did in fact occur, we investigate student ILEARN data in two ways:

**Approach 1** We compare student learning, quantified as baseline student growth percentiles (SGPs), for program participants versus their historical growth to see whether growth accelerated for those students coincident with their 1008 program participation.

**Approach 2** We compare student learning, quantified as baseline student growth percentiles (SGPs), in 2023 for students participating in the program versus students not participating in the program but attending the same schools as program participants.

Baseline student growth percentiles indicate the rate of growth (i.e., learning) for a student relative to others in the state. Having this baseline allows us to investigate both overall rates of learning as well as whether learning has accelerated. In these analyses, the norm-group for the comparison derives from pre-pandemic cohorts of students. Baseline growth norms were calculated using 2017, 2018 and 2019 ILEARN data.

Heuristically, baseline SGPs are a speedometer, scaled to pre-pandemic rates of learning. This speedometer can be used to investigate rates of learning as well as changes in rates of learning (i.e., acceleration and deceleration of learning). Specifically here, annual growth of students on the ILEARN from 2018 to 2019 is used to norm student growth from 2021 to 2022. For more information of the student growth percentile methodology, please see Betebenner (2008)

Table 2 presents growth outcomes for both Approach 1 and Approach 2. In this table, you will find a critical indicator (represented twice) related to student learning during their participation in the 1008 program: "Approach 1 2023" and "Approach 2 1008 Participants." This quantity represents the median Student Growth Percentile (SGP) values associated with student learning, with the baseline being the state median SGP (pre-pandemic) set at 50.

In general, when the median SGPs surpass 50, it is considered a positive indicator, signaling favorable progress. Conversely, median SGPs falling below 50 tend to raise concerns, although the extent to which they deviate from this baseline warrants careful consideration. This metric serve as valuable marker in our assessment of the impact of the 1008 program on student learning, shedding light on the effectiveness of different approaches in fostering academic growth.

As evident from the median SGPs, the data across all four 1008 grantee programs and in both content areas consistently reveal median SGPs hovering around or slightly below the baseline of 50. This outcome strongly suggests that the programs are not yielding remarkable rates of learning for the students who participated. These rates of learning are not substantial enough to fully bridge the learning gaps accrued during the early stages of the pandemic, indicating the need for further examination and potential refinement of these programs to achieve their intended outcomes.

| Grantee | Content Area | Approach 1 | | | | Approach 2 | |
|---|---|---|---|---|---|---|---|
| | | 2019 | 2021 | 2022 | 2023 | 1008 Participants | 1008 Non-participants |
| 1 | ELA | 44.0 (46) | 36.0 (68) | 39.0 (289) | 45.0 (457) | 45.0 (457) | 45.0 (7,412) |
| | Math | 50.0 (45) | 33.0 (66) | 44.5 (286) | 49.0 (458) | 49.0 (458) | 46.0 (7,735) |
| 2 | ELA | 47.5 (158) | 30.0 (237) | 52.0 (689) | 46.0 (993) | 46.0 (993) | 47.0 (22,566) |
| | Math | 46.0 (159) | 19.0 (238) | 53.0 (689) | 51.5 (990) | 51.5 (990) | 52.0 (22,558) |
| 3 | ELA | 35.0 (15) | 32.0 (23) | 37.5 (90) | 33.5 (166) | 33.5 (166) | 49.0 (40,243) |
| | Math | 33.0 (15) | 32.0 (23) | 40.0 (89) | 44.0 (163) | 44.0 (163) | 49.0 (40,227) |
| 4 | ELA | 36.0 (246) | 28.5 (448) | 41.0 (1,124) | 40.0 (1,531) | 40.0 (1,558) | 46.0 (55,938) |
| | Math | 36.0 (248) | 19.0 (450) | 41.0 (1,127) | 45.0 (1,528) | 45.0 (1,555) | 48.0 (55,942) |

Table 2: Median baseline SGPs (and counts) for the four 1008 grantees across two analytic approaches.

To provide a deeper understanding of the 2023 median SGPs, Approach 1 offers historical context by presenting the median SGPs of program participants over time. This historical data helps us gauge whether these students historically exhibited growth rates that were below, above, or on par with the statewide norms. For instance, in the domain of English Language Arts (ELA), Grantee 3's 2023 median SGP stands at 33.5. This figure, generally speaking, signifies a relatively modest rate of learning for a substantial student cohort. However, when we consider the historical data for this same group of students, we observe that the 2023 result aligns with their historical median SGPs. This consistency suggests that the 2023 outcome is in line with their past performance and is not significantly influenced by their participation in the 1008 program.

Approach 2, on the other hand, contextualizes the 2023 median SGPs of program participants by comparing their growth to that of program non-participants attending the same school corporations. Across the majority of cases, this comparison demonstrates a remarkable parity, indicating that 1008 program participation did not yield substantial differences in student learning rates. These findings collectively underscore the limited impact of 1008 program participation in fostering remarkable rates of student learning.

Based on the available observational data, pinpointing the precise cause of these outcomes with absolute certainty remains elusive. It's important to recognize that 1008 programs exhibit variations not only across different corporations but also within individual schools. These differences encompass diverse program designs and varying levels of fidelity in implementation, resulting in a spectrum of outcomes.

Drawing upon historical knowledge concerning the impact of educational interventions, it is well-established that treatment effects, even in the case of impeccably executed programs, tend to be modest at best, typically falling below a positive effect size threshold of 0.15. Given this historical context and the fact that 1008 programs are implemented under conditions characterized by considerably less control, it is reasonable to anticipate that their overall impact would not surpass these historical benchmarks. Consequently, the data suggests that while these programs play a role in addressing educational challenges, they may not yield dramatic improvements in student learning outcomes. Further investigation and ongoing refinement of these programs are essential to enhance their effectiveness and better support students in their academic journey.

## Conclusion

As Indiana contemplates its future steps in aiding students in surmounting the academic deficits stemming from the pandemic, several valuable lessons emerge from the analysis of the 1008 program

results:

**There Are No Instant Solutions to Academic Recovery:** It is crucial to acknowledge that the recovery of substantial academic losses will not happen automatically or effortlessly. Learning demands time and dedication. Therefore, any efforts to facilitate learning recovery must be sustained and effective. Academic recovery is not a matter of chance but a deliberate, ongoing endeavor.

**Consistent Progress Matters:** Given the absence of quick fixes, academic recovery is most likely to be achieved through steady and persistent increases in learning rates over an extended period. Such consistent progress is key to bridging the educational gaps created during the pandemic.

**Permanently Elevate Learning Standards:** The goal of elevating student learning rates to support academic recovery should not be perceived as a temporary intervention. Pre-pandemic learning rates in Indiana, and indeed in many other states, were often inadequate for a significant portion of students to attain or maintain academic proficiency. Thus, if Indiana manages to exceed pre-pandemic learning rates, this should become the new educational norm for the state.

The pandemic's impact on the academic landscape of Indiana and the nation as a whole has been extensive and far-reaching. Restoring students to the academic levels they would have reached had the pandemic not occurred will likely necessitate effective, sustained, multi-year academic support. The 1008 grant programs represent a dedicated effort to aid students in their recovery journey.

It is important to emphasize that these results should not be interpreted as conclusive evidence of the efficacy (or lack thereof) of 1008 programs. Instead, they serve as valuable evidence that supports broader claims of potential causal efficacy.

Ideally, there is still improvement that can be garnered from academic recovery efforts. These efforts should serve as catalysts for positive transformations in the education system, fostering higher rates of student learning, particularly for those in need of academic catch-up. Indiana is currently implementing diverse initiatives, including early literacy programs aimed at preventing students from falling behind. Achieving the goal of academic recovery from the pandemic will likely require a combination of practices and strategies to effectively support students on their educational journey.

## References

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