



Research Brief

Investing in Excellence: Elevating Teacher Effectiveness for Student Success in Beech Grove City Schools



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NIET

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Background

In the fall of 2021, Beech Grove City Schools (BGCS) was awarded a federal Teacher and School Leader (TSL) Incentive Program grant called Accelerating Beech Grove Learning through Equity (ABLE). The ABLE project is strengthening BGCS's human capital management system and creating opportunities for professional growth using the TAP System for Teacher and Student Advancement (TAP System). The overarching goal of the project is to raise educator excellence and student performance. Through the ABLE project, BGCS is working with the National Institute for Excellence in Teaching (NIET) to recognize and compensate effective educators through providing performance-based compensation, offering educators career pathways, addressing learning gaps by improving classroom instruction, and building supportive school cultures. This research brief examines the progress made in enhancing educator effectiveness, retaining effective educators, and improving student performance during the first two years of the grant.


Beech Grove City Schools

Beech Grove City Schools, located in the Indianapolis, Indiana, metropolitan area, serves a population of about 15,000 residents from around 6,100 households (National Center for Education Statistics, n.d.). The district enrolls about 2,800 students, with roughly one-third being students of color and about 70% eligible for free or reduced-price meals (Indiana Department of Education, n.d.). The district has about 180 full-time equivalent teachers and school leaders across five schools (National Center for Education Statistics, n.d.).

In the years prior to receiving the grant, BGCS lost many teachers to retirement resulting in an average teacher experience of less than eight years. Additionally, about 55% of all teachers and two-thirds of elementary teachers had less than ten years of experience, compared to the statewide figure of 42%. This younger teacher workforce contributed to a consistently high turnover rate, averaging 17% over the three years before receiving the grant. The teacher retention rate for BGCS was a few percentage points below the average for traditional school districts in Indiana. The instability and inexperience within the teacher workforce had an impact on student performance. In the year prior to receiving the grant (the 2020-21 school year), the percentage of BGCS students performing at proficient level or above was about 19 percentage points below Indiana students statewide on the grades 3-8 math assessments and about 14 percentage points below on the English/Language Arts (ELA) assessments. Recognizing the need to address these challenges, BGCS sought to develop and provide continuous support to all teachers and retain them within the district through enhancing their implementation of the TAP System.

TAP System

The TAP System is an educator effectiveness model to assist school and district leaders to attract, develop, motivate and retain high-quality educators through its four elements of success: multiple career paths, ongoing applied professional growth, instructionally focused accountability, and performance-based compensation. The TAP System promotes teacher collaboration, improves



instructional practice, and builds the school leadership capacity to improve student achievement. For further information about the TAP System, please visit the TAP System webpage.

Evidence of the Impact of the TAP System

NIET's TAP System has been shown to increase educator effectiveness, increase educator retention, and improve student performance. The impact of the TAP System is apparent during both the initial grant implementation and the subsequent sustained implementation period. During the grant implementation period, multiple studies found increases in the percentage of effective teachers and the retention of those effective teachers in TAP System schools (Leutscher & Barnett, 2020; Logis et al., 2022). Studies have further found that the TAP System increases retention of school administrators and improvement in retained administrators' effectiveness year-over-year (Hudgens & Barnett, 2017) and advancements in student performance (Mann et al., 2013; Schacter & Thum, 2005; Springer et al., 2014). After the initial, grant-funded implementation, Leutscher et al. (in press) found that TAP System schools continued to improve in student performance and outperform matched comparison schools. A recent study also found long-term impacts for students who experience the TAP System (Cohodes et al., 2023). Specifically, the TAP System improved educational attainment and reduced both criminal activity and dependence on government assistance in early adulthood.

Findings

TAP System schools employ both career teachers and teacher leaders. Career teachers deliver daily classroom instruction to students, while teacher leaders support career teachers by providing observations, feedback, coaching, and organizing professional learning meetings. Evaluating the instructional skills of career teachers helps measure the effectiveness of the TAP System, which focuses on supporting these teachers' instruction. The following section highlights key findings from the first two years of the grant for career teachers and students.

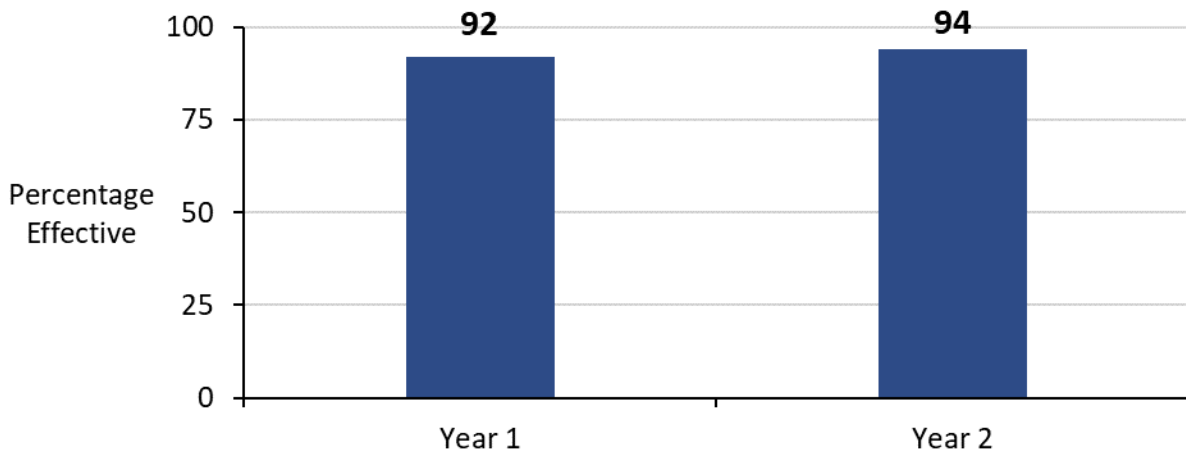
Finding 1: Increase the Percentage of Effective Teachers

By implementing the TAP System, BGCS has utilized teacher leaders to both advance teacher effectiveness and retain effective teachers in the district, which has resulted in promising outcomes. BGCS career teachers are observed multiple times each year by trained and certified observers, including school and teacher leaders using the NIET Teaching and Learning Standards Rubric. Each career teacher receives an evaluation score combining the observations and responsibility indicators (see the Technical Appendix). In this analysis, effective teachers are defined as those who receive a rating 3.0 or above on a 1 to 5 scale.

Figure 1 shows the percentage of effective career teachers for each grant year. In Year 1, BGCS supported 92% of career teachers to achieve an effective evaluation score, and this percentage increased to 94% in Year 2.



Figure 1. The percentage of teachers rated effective, Year 1 and Year 2.

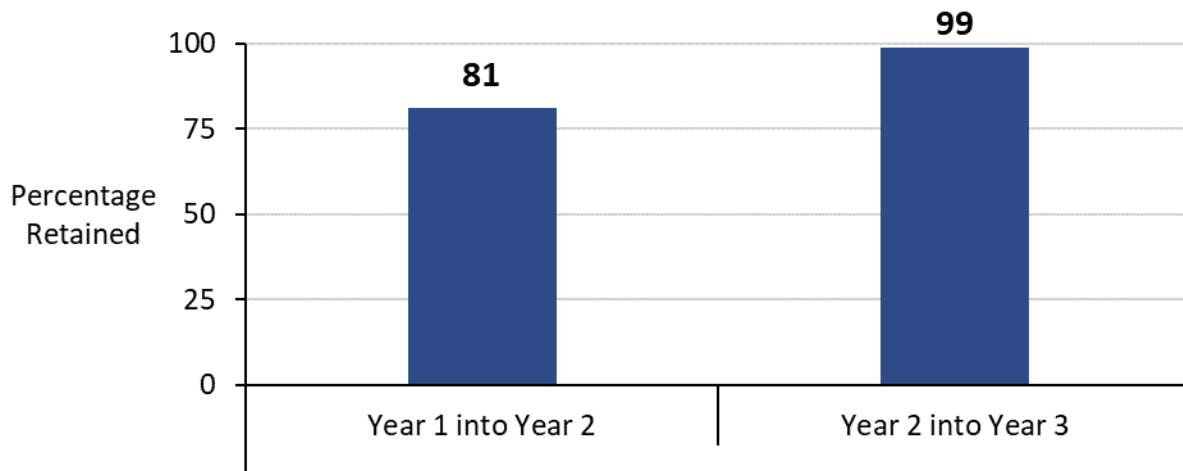


Additionally, when focusing only on the career teachers retained by BGCS as career teachers from Year 1 to Year 2, the percentage rated effective increased to 98%. These results show that the embedded professional learning and support provided by BGCS through the TAP System have influenced career teacher effectiveness.

Finding 2: Increase the Retention of Effective Teachers

The benefit of enhancing teacher effectiveness is realized when teachers choose to stay in the district. From Year 1 to Year 2, BGCS retained 81% of the career teachers rated effective (see Figure 2), with some of them advancing into teacher leadership positions. Through the enhanced support and development activities from teacher and school leaders, BGCS has not only improved teacher effectiveness but also kept almost all their effective teachers from Year 2 to Year 3 of the grant.

Figure 2. The percentage of effective teachers retained into the next school year, Year 1 and Year 2.



Finding 3: Improve Student Performance on State Assessments

Building effective teachers and retaining effective teachers should impact student performance. To assess the impact on student performance, change in the percentage of BGCS students proficient or above on the state ELA and math assessments is examined from baseline (the 2020-21 school year) to Year 2 of the grant (the 2022-23 school year). To put the BGCS results in context, BGCS's results are compared with the average percentage proficient of an analytic comparison group comprising school districts from across Indiana (see the Technical Appendix for the selection process), as well as with the average of other districts in Marion County, and the statewide results.

In ELA, the percentage of BGCS students proficient increased by 2 percentage points from baseline to Year 2. The analytic comparison group, other Marion county districts, and statewide showed no increase in ELA performance during that period (see Table 1). In math, BGCS students increased proficiency by 7 percentage points. The analytic comparison group, other Marion county districts, and statewide showed improvement by 3, 4, and 4 percentage points, respectively. Furthermore, BGCS achieved the third-highest growth in ELA among the 11 Marion county districts, while its math growth ranked second. These results provide evidence that the district's efforts to develop and retain teachers have had a positive impact on students during the first two years of the grant.

Table 1. The change in percentage of students proficient on ELA and math state assessments from baseline to Year 2, Beech Grove City Schools and comparison groups.

Subject	Group	Baseline	Year 2	Change
ELA	Beech Grove City Schools	26	28	2
	Analytic Comparison	26	26	0
	Marion County	30	30	0
	Statewide	41	41	0
MATH	Beech Grove City Schools	18	25	7
	Analytic Comparison	21	24	3
	Marion County	25	29	4
	Statewide	37	41	4

Conclusion

Through the support of the TSL grant, BGCS collaborates with NIET to raise educator excellence and student achievement by enhancing their implementation of the TAP System. Over the first two years of the grant, BGCS has achieved notable success in both teacher and student performance. This success is demonstrated by improvements in teacher effectiveness, high retention rates among effective teachers, and gains in student achievement. These outcomes underscore the effectiveness of BGCS in implementing a system and structure to sustain high levels of teaching and learning to accelerate student achievement.



References

- Cohodes, S., Eren, O., & Ozturk, O. (2023). *Teacher performance pay, coaching, and long-run student outcomes* (Working Paper No. 31056). National Bureau of Economic Research. <https://doi.org/10.3386/w31056>
- Derrick, B., Russ, B., Toher, D., & White, P. (2017). Test statistics for the comparison of means for two samples that include both paired and independent observations. *Journal of Modern Applied Statistical Methods*, 16(1), 137-157. <https://doi.org/10.22237/jmasm/1493597280>
- Hudgens, T. M., & Barnett, J. H. (2017, May 27). *Stayers, movers, and leavers: Impact of an educator effectiveness system on retaining administrators nationwide* [Paper presentation]. American Education Research Association Annual Meeting, San Antonio, TX.
- Indiana Department of Education (n.d.). *Corporation Enrollment by Ethnicity and Free/Reduced Price Meal Status* [Data set]. <https://www.in.gov/doe/files/corporation-enrollment-ethnicity-free-reduced-price-meal-status-2006-24.xlsx>
- Leutscher, T., & Barnett, J. H. (2020, April 21). *Community ties: Building long-term partnerships as a pathway for improving human capital in rural schools* [Roundtable presentation]. American Educational Research Association Annual Meeting, San Francisco, CA.
- Leutscher, T., Hudgens, T. M., Logis, H., Serdiouk, M., & Barnett, J. H. (in press). Staying power: English language arts achievement after installation of an educator effectiveness system. *AASA Journal of Scholarship and Practice*.
- Logis, H. A., Hall, J. E., Leutscher, T., Barnett, J. H., Hudgens, T., & Serdiouk, M. (2022, April 22). *Staying and growing: Increasing equitable access to effective educators in high-need schools* [Paper presentation]. American Educational Research Association, Annual Meeting, San Diego (Virtual).
- Mann, D., Leutscher, T., & Reardon, R. M. (2013). *Findings from a two-year examination of teacher engagement in TAP schools across Louisiana*. Interactive, Inc. <https://www.niet.org/assets/ResearchAndPolicyResources/fedfc4c05c/interactive-louisiana-student-achievement.pdf>
- National Center for Education Statistics (n.d.) *Common Core of Data, District Directory Information (2022-2023 school year), Beech Grove City Schools*. <https://nces.ed.gov/ccd/districtsearch/>
- National Center for Education Statistics (n.d.). *Education Demographics and Geographic Estimates, ACS-ED District Demographic Dashboard 2017-21, Beech Grove City Schools, Indiana*. <https://nces.ed.gov/Programs/Edge/ACSDashboard/1800450>
- Schacter, J., & Thum, Y. M. (2005). TAPping into high quality teachers: Preliminary results from the Teacher Advancement Program comprehensive school reform. *School Effectiveness & School Improvement*, 16(3), 327-353. <https://doi.org/10.1080/13803610500146202>
- Springer, M. G., Ballou, D., & Peng, A. (Xiao). (2014). Estimated effect of the Teacher Advancement Program on student test score gains. *Education Finance and Policy*, 9(2), 193-230. https://doi.org/10.1162/EDFP_a_00129



Technical Appendix

Teacher Effectiveness. In the TAP System, a teacher receives an annual evaluation score known as a Skills, Knowledge, and Responsibility (SKR) score. The score is obtained through multiple teacher observation ratings by administrators and teacher leaders certified in using the NIET Teaching and Learning Standards Rubric and a responsibility survey which assesses a teachers' job responsibilities and is completed by the teacher leaders for each career teacher. The SKR score is computed by a weighted average of the observation ratings and responsibility survey indicators. The SKR scores range from a 1.0 (unsatisfactory performance) to 5.0 (exemplary performance). An overall score at or above a fixed benchmark (3.0 for the current analysis) signifies effective performance. The analyses include career teachers who appear on personnel rosters, that is, career teachers who were with the district for any grant year and received SKR scores.

Student Performance. Student performance is based on the percentage of students proficient or above (i.e., percentage passing) on the grades 3-8 Indiana state assessments in English/Language Arts (ELA) and math. These data are publicly available on the Indiana Department of Education website.

The selection of the analytic comparison schools is based on the percentage of economically disadvantaged students and percentages passing the ELA and math state assessments from the baseline year, 2020-21. Specifically, comparison districts must have greater than 25% of students eligible for the free or reduced-price lunch program and percentages of students passing the state assessments within 10 percentage points of the BGCS's percentages. Using these matches, the impact of the TAP System is estimated by comparing BGCS student performance and the comparison district average of student performance.

The Marion County comparison group is composed of all traditional school districts in Marion County, Indiana. The impact is estimated by comparing the BGCS student performance and the Marion County district (excluding BGCS) average of student performance.

The statewide percentage is the percentage of students passing the assessments statewide (all students passing the assessment statewide divided by all test takers statewide).