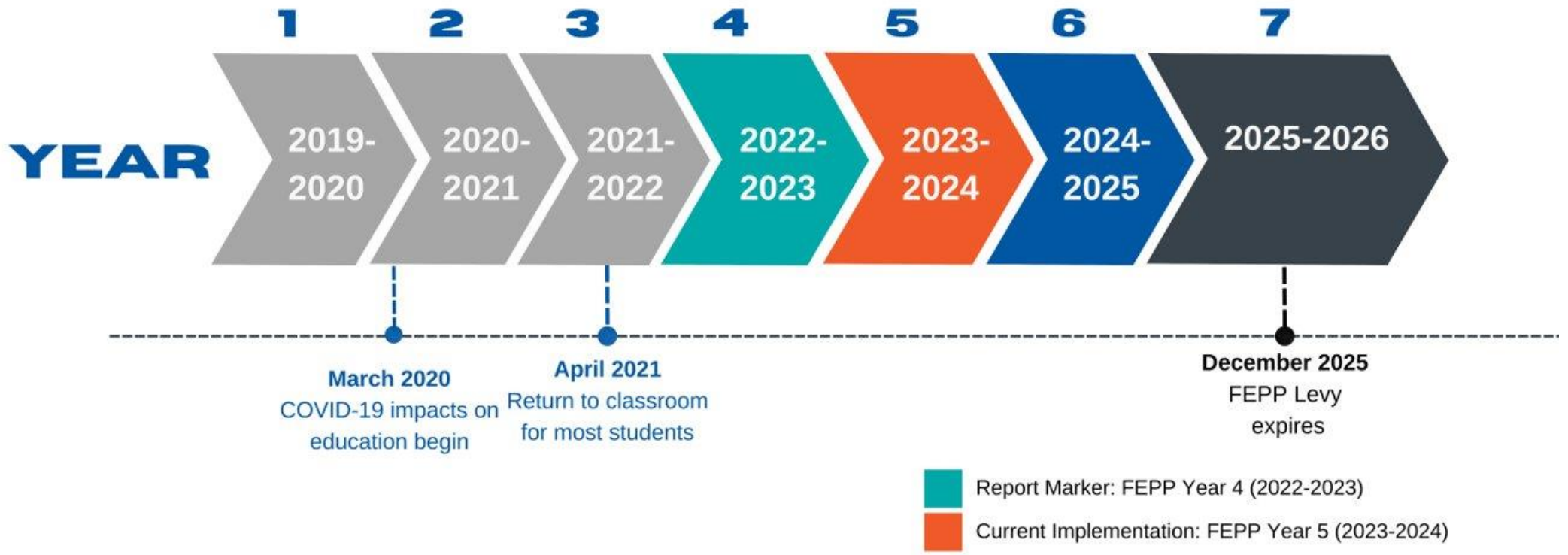
Families, Education, Preschool, and Promise (FEPP) Levy Investment Evaluation Overview

City of Seattle

Meeting Purpose

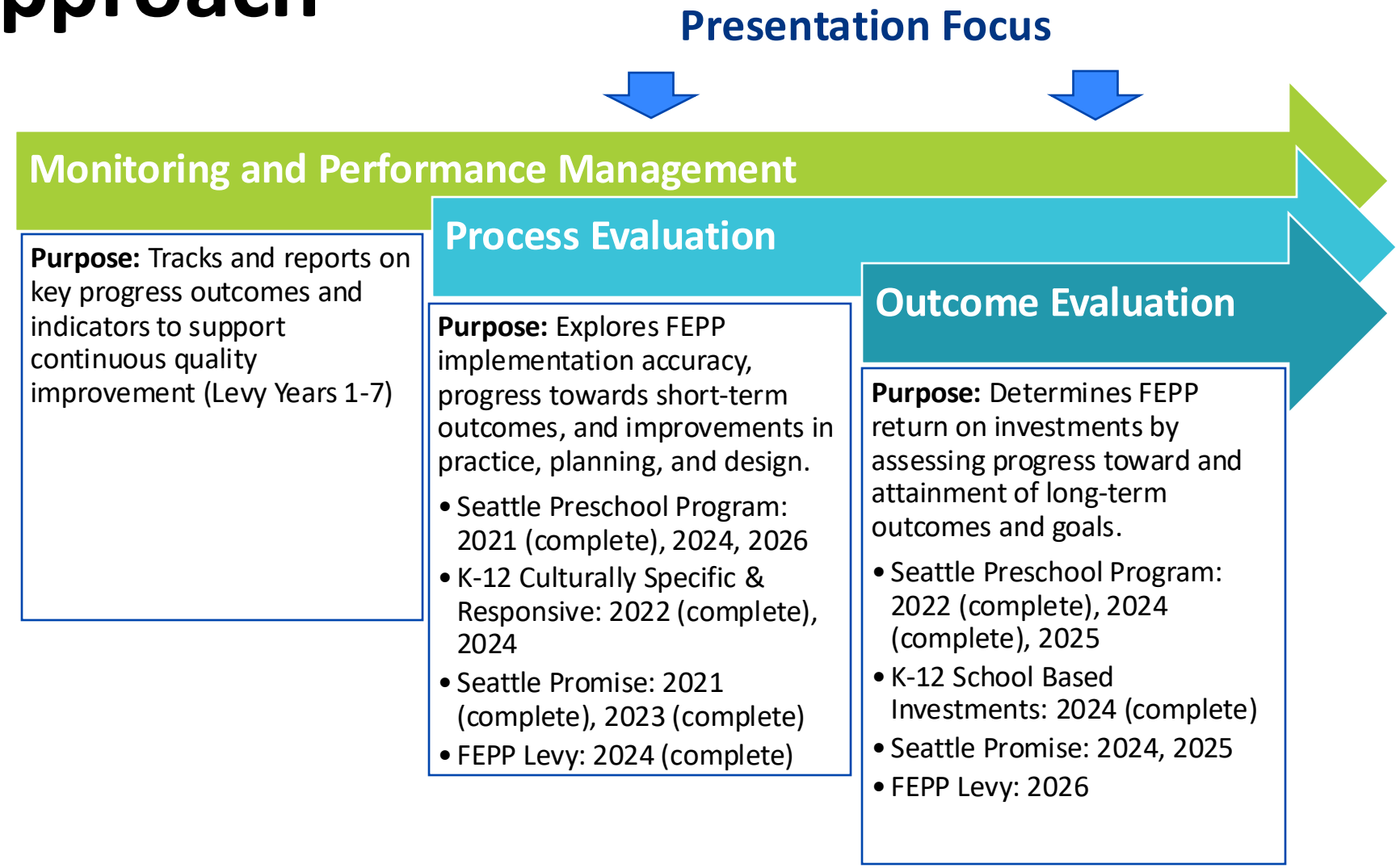
- Provide City Council LEN Committee an update on FEPP Levy evaluation activities

FEPP Timeline



Evaluation Approach

- The Annual Report focuses on **Monitoring and Performance** data to provide a *snapshot in time* and *trend data* for outcomes associated with FEPP Levy Investments
- **Process and Outcome Evaluation Reports** are published on DEEL's website and provide deeper analysis



Evaluation Commitment and Selection

- All FEPP investment areas will participate in ongoing monitoring and performance management activities as part of the Continuous Quality Improvement process
- A subset of strategies/programs will be selected for process and/or outcome evaluations during the lifetime of the Levy based on a set of criteria.

- Designs for process and outcome evaluations will be informed by a set of criteria including, but not limited to:
  1. Stakeholder feedback
  2. Quality of data
  3. High potential to see impact
  4. Ability to provide new evidence to fill a gap in knowledge
  5. Evaluation resources identified

Evaluations Reviewed Today

FEPP Levy	Early Learning	K-12	Postsecondary
• Mathematica external process evaluation of FEPP Levy (published Aug 2024) • FEPP Levy Process Evaluation Report	• Education Northwest & American Institutes for Research external impact evaluation of Seattle Preschool Program (published Mar 2024) • SPP Impact Evaluation 2024 Report	• DEEL internal evaluation of K-12 School Based Investments (published Aug 2024) • FEPP SBI Implementation and Impact Analysis Report	• DEEL internal process evaluation (published Fall 2023) • Seattle Promise Report • *Preview* Westat Insight & Washington Student Achievement Council external impact evaluation by (expected 2025)

Data Details & Key Terms

Qualitative Data	non-numerical information captured through observation, interviews, and focus groups
Quantitative Data	numerical data that can be measured, counted, and analyzed to uncover insights using statistical methods
Descriptive Analysis	Descriptive evaluation designs aim to describe a strategy, process, or procedure. This information provides an observational snapshot or a trend analysis of investments on progress towards outcomes. Descriptive designs do not allow claims that an intervention directly produced observed outcomes
Causal Inquiry	An evaluation design that determines to what extent an intervention produced (caused) intended outcomes by taking into consideration other influencing factors
Statistical Significance	The degree to which the relationship between variables (for example, the difference in average outcomes between two groups) differs from the relationship predicted by random chance
Chi-Squared Test	A test to determine if the correlation between two categorical variables is statistically significant
Regression Analysis	A statistical method that calculates the relationship between one or more independent variables (such as demographic characteristics or participation in a program) on an outcome variable of interest
Quasi-Experimental Design (QED)	Used when randomized control trials are not feasible or ethical, quasi-experimental methods support causal inquiry by isolating the relationship between an intervention (treatment) and outcome of interest. • Example of QED is **Propensity Score Matching (PSM),** a statistical technique used to balance treatment and comparison groups on confounding factors. PSM reduces selection bias to compare outcomes between similar individuals across the two samples

FEPP Levy Process Evaluation

Mathematica, Inc

Evaluator Selection and Focus

- Mathematica, Inc. selected through a competitive bidding process
- Evaluation focus:
  - Levy implementation across the preschool to postsecondary continuum
  - Levy implementation principles & system capacity
  - K-12 investments
- Timeframe: 2023 - 2026
- Mathematica Evaluation Advisory Committee
  - Advised on evaluation design, data collection, and reviewed findings
  - 10 members included representatives from the Seattle Public Schools (Levy coordinator, school principal, research and evaluation director), Seattle Preschool program, Levy-funded community partners, and Public Health.

Evaluation Questions

1. Did the implementation of FEPP Levy funding adhere to DEEL's implementation principles?
2. Were key system conditions in place to support the levy's implementation?
3. Were FEPP Levy programs implemented as intended to support Seattle youth and families?
4. What are the key learnings from implementation of the FEPP Levy that could inform future citywide efforts to support Seattle youth and families?

Methods

Data Sources

- 10 interviews with school administrators (6) and levy-funded partner organizations (4)
- Survey of leaders of Levy-funded partner organizations (59% of 91 funded partners responded)
- 6 focus groups with staff, families, and high school students at Levy-funded schools
- Document review: 20 documents randomly sampled across contracts, investment strategy documents, and funding process documents
- SPS administrative data on students, teachers, academic records, and school climate data

Analysis

- Generation of themes and descriptive statistics from interviews, surveys, and focus groups
- Trend analysis of high-level K-12 outcomes since Levy implementation began
- Limitations: Interviews and focus groups are limited to participants in K-12 investments. Responses represent only a small share of Levy implementation contexts and finding are not generalizable to all funded programs. Did not include Preschool and Promise.

Equity-Focused Investments

A majority of students served by Levy-funded programs were students furthest from educational justice, and culturally responsive programs and practices were enhanced under the Levy.

- 76% Levy-funded partners reported primarily serving Black students, 53% Latinx students, 29% Asian students, 31% other students of color, and 33% immigrant & refugee populations
- 98% of partners agreed that their agency had strengthened its capacity to provide culturally responsive services
- Strategies such as Levy-funded family support workers and instructional assistants who speak Spanish increased their capacity to provide linguistically responsive and targeted interventions

Levy Implementation Accuracy and Capacity

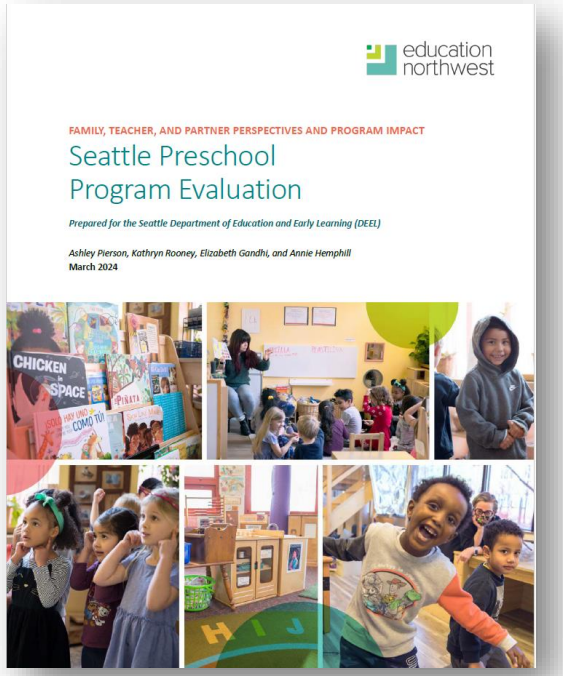
- **Competitive Funding Processes**
  - DEEL allocated funding through competitive RFI processes and incorporated community voice in funding application review panels.
- **Data-Informed Decision-making and Continuous Quality Improvement (CQI)**
  - Levy funded organizations reported incorporating data into their decision-making processes and engaging in performance-based contracts with DEEL.
- **System Conditions and Capacity**
  - DEEL supports funded partners through strategic advising, technical assistance, and professional development opportunities; however, partners reported mixed capacity to implement programming as intended.

Looking Ahead

- In 2025-2026, a Mathematica-led impact evaluation will investigate the impact of FEPP investments towards closing educational equity and closing opportunity gaps across the pre-k to postsecondary continuum
- Mathematica's analysis will focus on K-12 outcomes using quasi-experimental design

Seattle Preschool Program Impact Evaluation

Education Northwest (EDNW) and American Institutes for Research (AIR)



Evaluator Selection and Focus

- DEEL selected an evaluation team from Education Northwest (EDNW) and American Institutes for Research (AIR) through a competitive process
- **EDNW and AIR** are both well-regarded nonprofit research & evaluation organizations with track records evaluating government preschool programs
- Evaluation focused on assessing Seattle Preschool Program (SPP) child, program, and system outcomes quantitative and qualitative methods
- Timeframe: 2021 - 2025
- SPP Evaluation Advisory Committee
  - Engaged quarterly on evaluation design, data collection, and findings
  - 16 members included representations from FEPP Levy Oversight Committee, SPP directors, preschool teachers, SPP parents, Seattle Colleges early childhood education department, and DEEL coaches and frontline staff

Evaluation Questions

1

- What is the impact of SPP participation on kindergarten readiness (as assessed by WAKIDS state testing) among SPS kindergarten students over time?

2

- What is the impact of SPP participation on grade 3 reading and math assessment scores and kindergarten attendance?

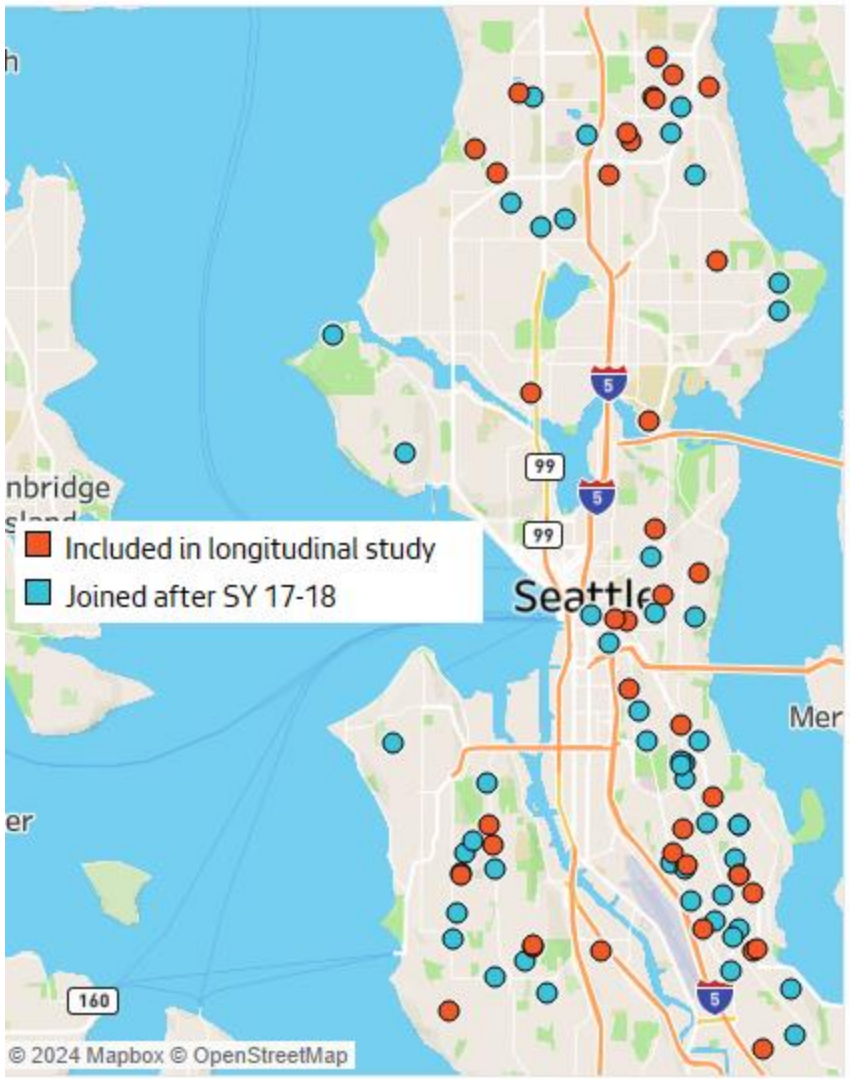
Descriptive Sample: Seattle Preschool Program

SPP Growth

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Number of children served	269	612	970	1,386	1,751	1,660	1,953	2,046

Longitudinal comparison for 3rd grade outcomes (2021-22)

SY 22-23 SPP Sites



Methods

Data Sources

Quantitative data:
- Administrative data on children and teachers
- Teaching Strategies Gold (TSG) and WaKIDS Assessment data
- Washington state preschool (ECEAP) demographic and assessment data, obtained from Education Research Data Center (ERDC)
- Surveys of SPP families, teachers, and administrators

Qualitative data:
- Focus groups and interviews, including SPP teachers, administrators, families, and DEEL coaching staff

Analysis

Mixed methods outcome analyses:
- Qualitative coding for themes
- Descriptive statistics of survey and focus group data
- Multivariate regression analysis

Quasi-experimental impact analysis:
- Used statistical techniques to compare children in SPP to those enrolled in state-funded preschool (ECEAP)
- Analysis meets standards of rigor to make causal claims about SPP impacts on outcomes

Limitations:
- Child-level individualized education program (IEP) data not available
- Missing comparison group assessment data in some cohorts in ERDC data

Descriptive Sample: Longitudinal Comparisons

Child characteristics of children enrolled in SPP and state-funded preschool in 2017–18

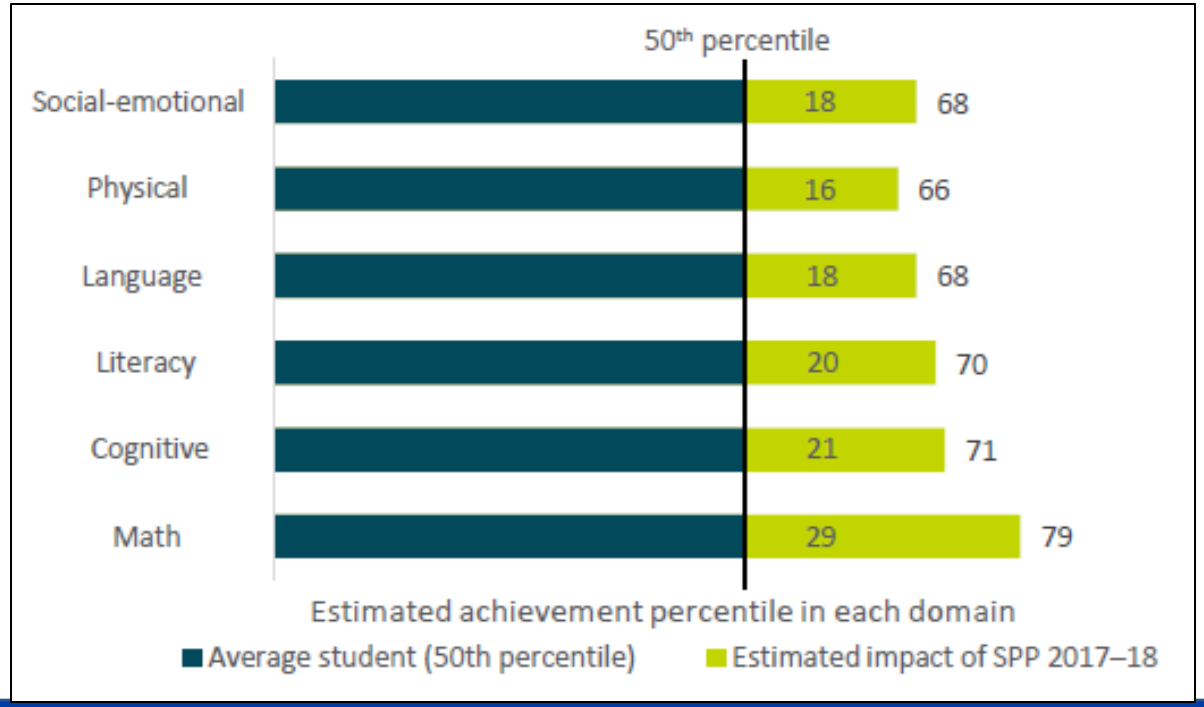
Characteristic	State Preschool	SPP	State Preschool	SPP
	Original Sample		*Analytical Sample*	
Male	53%	53%	53%	52%
Female	47%	47%	47%	48%
Asian	11%	22%	11%	25%
Black	23%	20%	23%	34%
Latinx	33%	14%	33%	17%
White	20%	28%	20%	10%
Received English learner services	49%	28%	50%	42%
Eligible for free/reduced-price lunch	*97%*	*29%*	*100%*	*100%*
Total Number of Children	**718**	**472**	**694**	**256**

Kindergarten Readiness & Attendance

SPP SY 2017-18 participants had higher SPS kindergarten attendance rates and higher WaKIDS scores in all domains compared to state-funded preschool children.

- Statistically significant finding that SPP participants had 1.9% higher K-attendance rates than comparison group ($p<0.01$)
- Statistically significant finding that SPP participants were more K-ready than comparison group across all 6 WaKIDS domains ($p<0.01$)
- Large effect size in Math (0.83) and medium effect size in other domains (0.43-0.56)

Kindergarten Readiness among SPP SY 2017-18 Participants



Longitudinal Academic Impact

SPP SY 2017-18 participants had higher 3rd grade math and ELA assessment scores compared to state-funded preschool children.

- Statistically significant finding that SPP participants had higher 3rd grade Math and ELA scores than comparison group ($p<0.01$)
- These results indicate that participating in SPP may be expected to improve elementary school outcomes.

Looking Ahead

- EDNW conduct additional analyses to understand the impact of SPP in more recent years and with more students (in progress)
- DEEL will leverage the set of recommendations
  - Develop system to share information about children in SPP with kindergarten teachers and families to support the kindergarten transition
  - Offer more training opportunities for both directors and teachers to support the needs of multi-language learners and children with special needs
  - Consider supports to help teachers access both planning and release time

School-Based Investment (SBI) Impact Evaluation (2024)

DEEL Performance and Evaluation Team

Evaluator Selection and Focus

- DEEL performance and evaluation team conducted an internal analysis
- Evaluation focused on two areas: (1) student interventions and (2) school-level impact
  - Explore intervention-level outcome trends to identify promising practices and opportunities for future analysis
  - Evaluate longitudinal impact of SBI investment on Levy priority outcomes using quasi-experimental methods with available data
- Timeframe:
  - Evaluation conducted in 2024
  - Leveraged implementation data from school year 2022-23

Evaluation Questions

1

- What interventions does DEEL fund at SBI schools?
- Are SBI investments associated with student achievement?
- Which student-level SBI interventions are most effective?

2

- Are Levy-supported SBI students who enter elementary, middle, and high school below standard on baseline indicators more likely to move to proficiency in outcomes compared to similar non-Levy school students?

Methods

Scope	Methods & Analysis		Data Source(s)
Student Intervention Outcomes	Correlational	Descriptive Chi-square tests (pre/post study period, compared to non-participant trends)	1-Year of Intervention Data (SY 22-23)
School-Level Impact	Longitudinal, cohort analyses Causal	Propensity score matching (PSM) Hierarchical Linear Regression	3-and 4-year academic outcome data[1] • 1-3rd grade • 6-8th grade • 9-12th grade

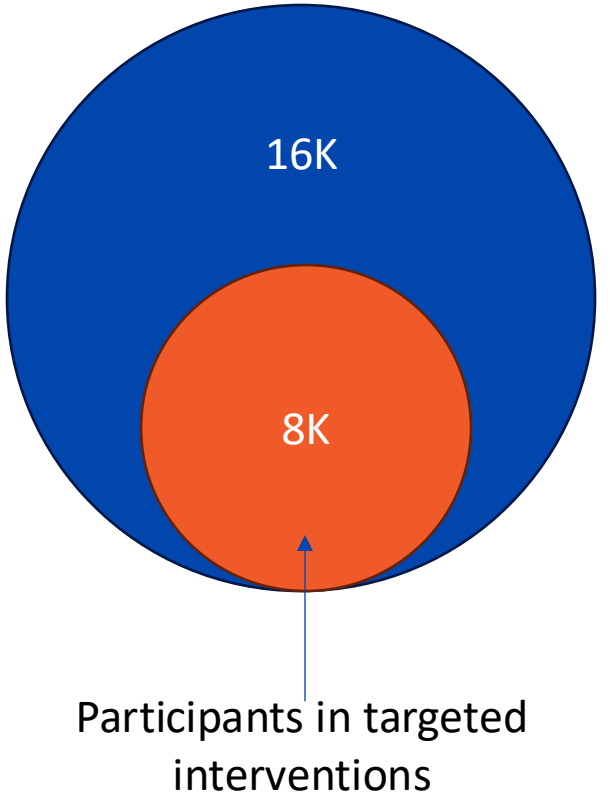
1 Academic impacts for 3rd-5th grade age group cohorts were not evaluated due to missing assessment data during the pandemic years

School Based Investments (SBI) Sample

SBI supports 30 SPS schools with a total population of ~16,000 students. SBI complements other Levy investments such as school-based health centers, wraparound, and culturally-specific & responsive programming.

SBI has two main investment strategies:

1. **Student-level interventions**: Provided by school and community-based organizations to support attendance, academic performance, and college/career readiness
2. **School-level strategies**: capacity-building and continuous improvement efforts such high-quality instructional practices, effective leadership, school climate, and family engagement



Student-Level Interventions

Students often receive more than one intervention, with majority accessing academic interventions.

Intervention Categories	% of Total Participants SY 22-23*	Intervention Description
Academic Interventions	**59% (4,652)**	Targets competencies in **core academic subjects** such as math and ELA/literacy
Enrichment	**46% (3,665)**	Focused on **cross-curricular learning** such as **21st century skills** such as leadership, teamwork, critical thinking, and social-emotional learning or **college and career readiness**
Integrated Supports (Wraparound)	**23% (1,815)**	Supports students and their families facing **barriers to attendance and engagement** with services such as student case management and referral programs for families to connect them to basic needs

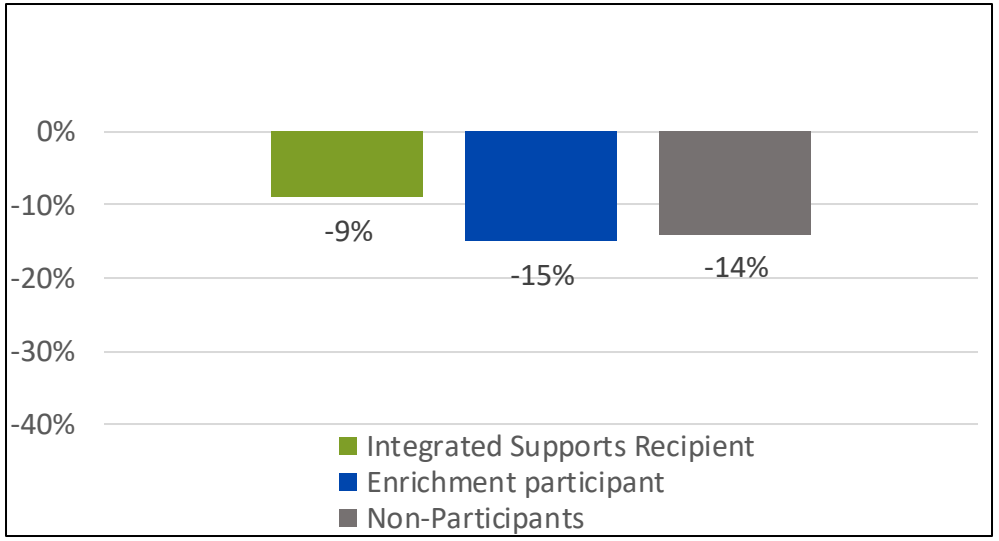
*7,918 participated in targeted interventions

Attendance

Despite low attendance rates districtwide, high school students receiving integrated support interventions experienced lower declines in attendance than non-participants.

- Districtwide attendance trends have declined since the pandemic
- Chronic absence rates for all students enrolled in SBI schools increased sharply across all grade levels between SY 21-22 and SY 22-23
- However, statistically significant negative association between integrated supports participation and attendance outcomes for students who were previously chronically absent
- Statistically significant findings that high school students receiving an integrated support intervention had smaller attendance declines (5% difference) than non-participants ($p<0.001$)

Change in Regular Attendance (90% days+) among SBI High School Students; between SY 21-22 to SY 22-23

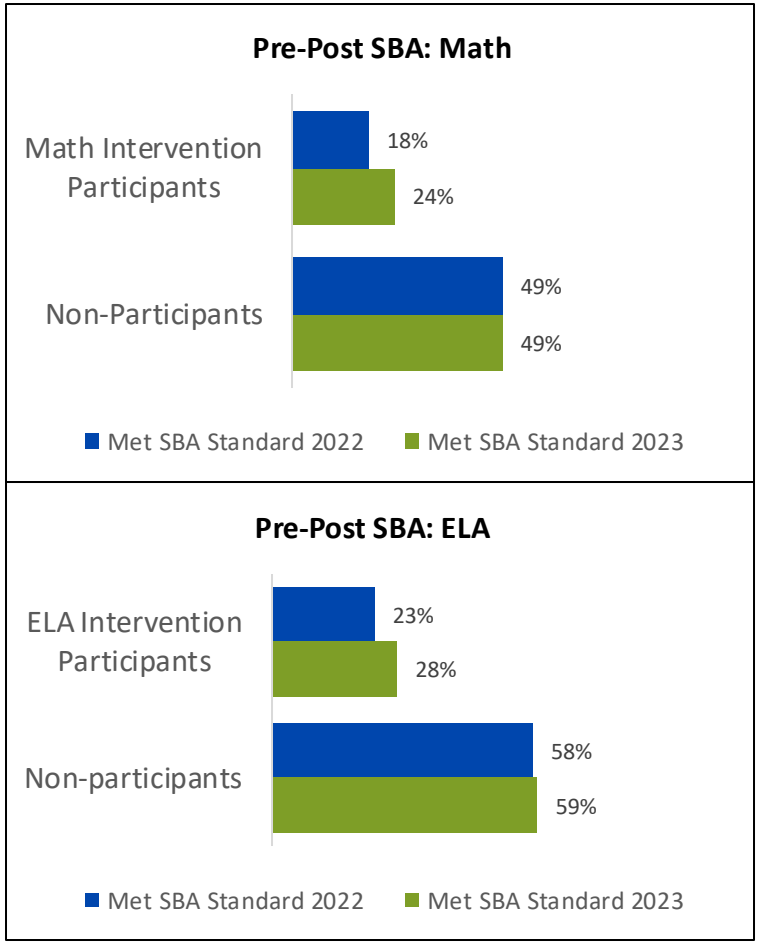


Differences for intervention participants stat sig at p<0.001

Academic Progress

Participants in SBI-funded academic interventions saw 5-6% gains in Smarter Balance Assessment (SBA) results after one year compared to no change for non-participants.

- Statistically significant findings that elementary and middle school participants receiving SBI-funded **academic interventions** demonstrated higher gains in SBA assessment results after one year, compared to non-participants ($p<0.001$)



Differences for intervention participants stat sig at p<0.001

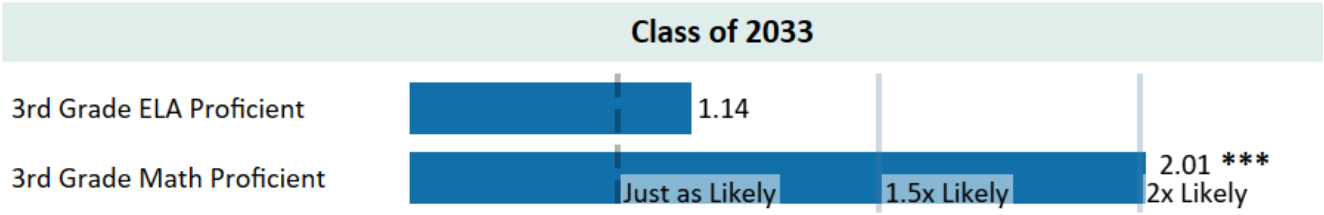
School Level Impact: Elementary School

- For SPS students who entered at 20 elementary schools in SY 2019-20 (Class of 2033) and were below kindergarten readiness standards, we analyzed Math and ELA 3rd outcomes

- Statistically significant finding that students at SBI elementary schools are **twice as likely to achieve 3rd grade math proficiency** ($p<0.001$)

- The effect of SBI enrollment on 3rd grade reading proficiency was positive but below statistical significance

The Class of 2033 analysis found positive findings for effect of SBI school attendance on math proficiency.

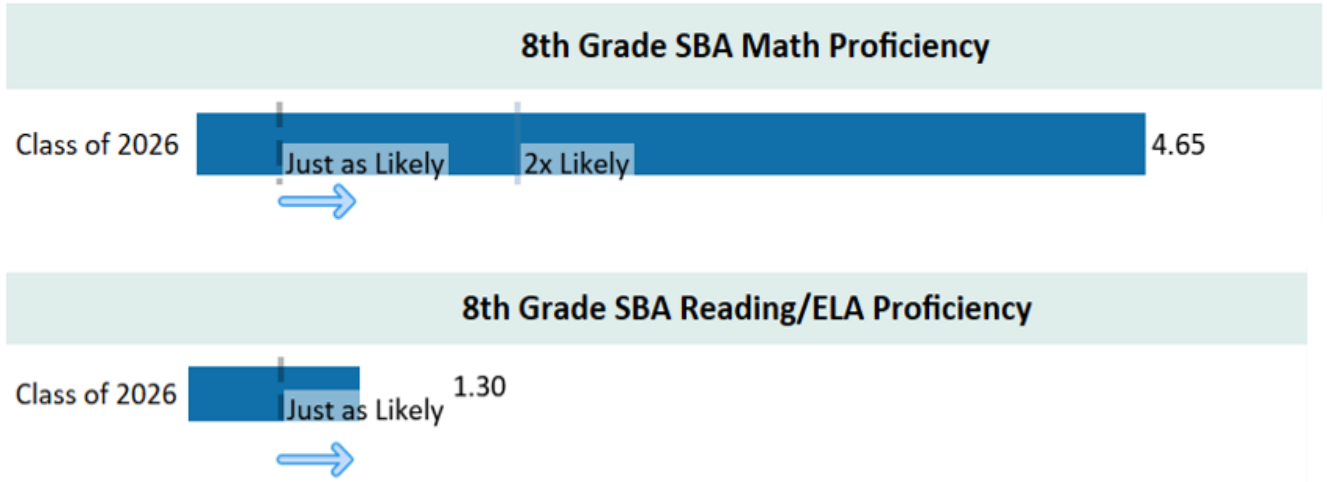


The analysis controlled for student demographics and school-level free and reduced lunch
**** indicates statistical differences at p<0.001.*

School Level Impact: Middle School (MS)

Student attendance at 5 SBI MS was associated with higher likelihood of math and ELA proficiency by 8th grade.

- For students who entered 6th grade below grade level proficiency in SY 2018-19, enrollment in an **SBI middle school showed positive effects (not statistically significant**) on 8th grade math and ELA proficiency

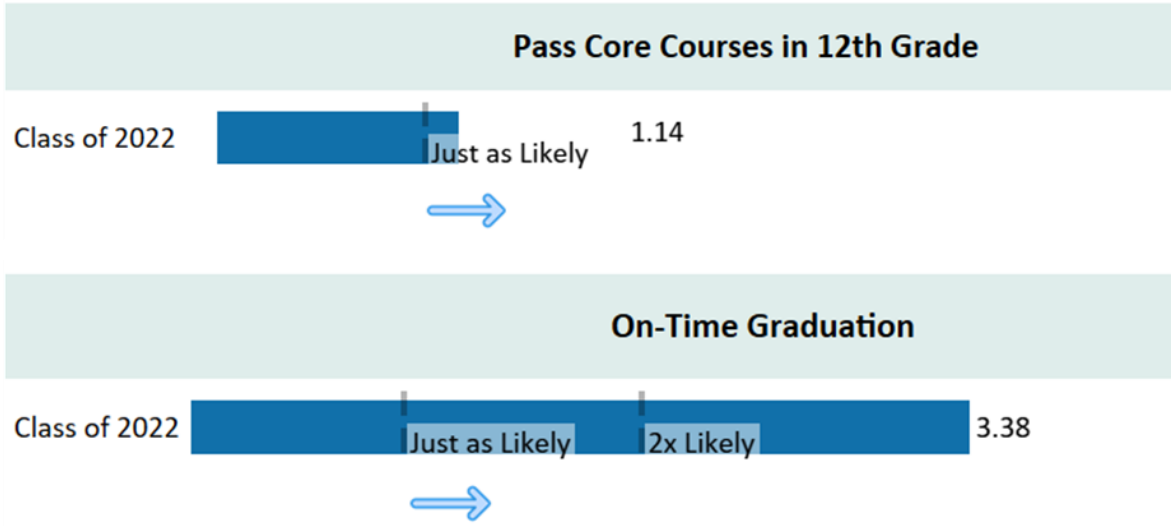


The analysis controlled for student demographics and school-level free and reduced lunch

School Level Impact: High School (HS)

Students at 5 SBI HS who entered below grade level were more likely than similar non-SBI students to graduate on time, though findings not statistically significant.

- Outcomes assessed for 9th graders in SY 18-19 or Class of 2022
- Students at SBI schools entering **high school below standard credit accumulation had higher odds of on-time graduation than their non-SBI peers (not statistically significant)**
- Class of 2022 9th graders not passing all core courses had slightly higher odds of passing all courses in 12th grade if they attended an SBI school



The analysis controlled for student demographics and school-level free and reduced lunch.
**** indicates statistical differences at p<0.001.*

Seattle Promise Process Evaluation

DEEL Performance and Evaluation Team

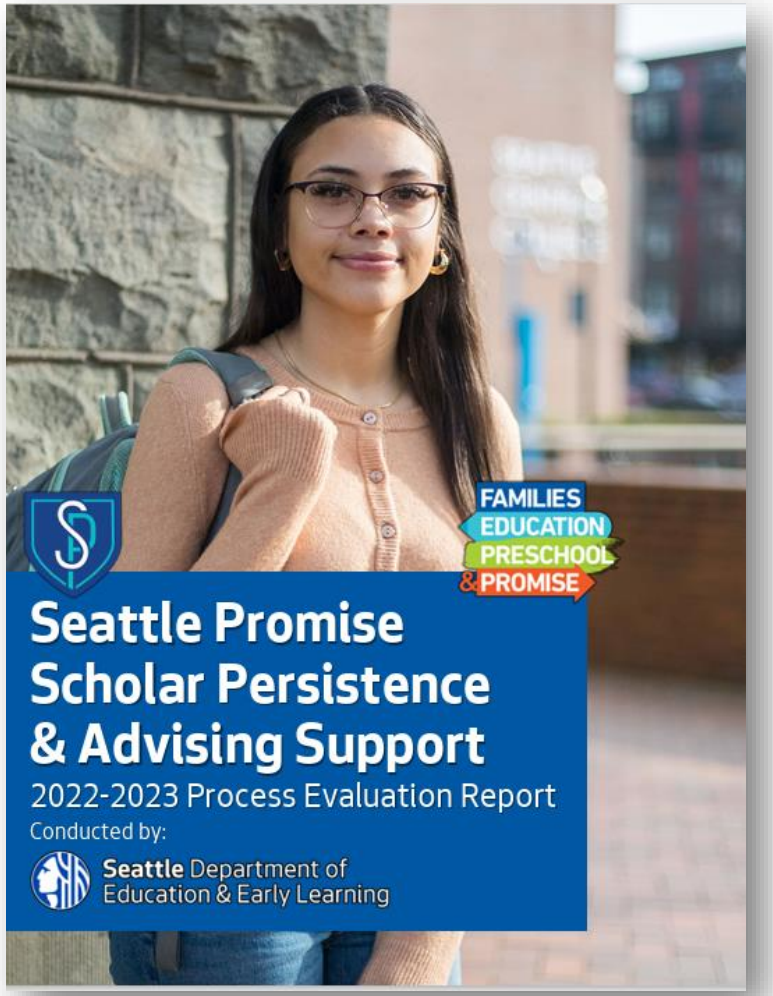
Evaluator Selection & Data Sources

- DEEL performance and evaluation team conducted internal analysis
- Evaluation focus on school year 2022-23 student experience and preliminary results for operational improvements implemented in response to COVID-19
- Data sources include quantitative program data as well as qualitative asset-based student survey and student/staff focus groups
- Timeframe:
  - Evaluation conducted in 2023
  - Leveraged implementation data from school year 2022-23

Evaluation Questions

1. To what extent did persistence and completion rates change for students enrolled in 2021-22?

2. What do Program scholars and staff attribute to their persistence and completion?



Persistence and Completion Rates

Standard FEPP model/Pre-pandemic
Expanded supports in 3rd year only
Supports in 2nd and 3rd year
Supports all 3 years

Scholars from cohort 2021 who received 3 years of supports from COVID-time operational improvements demonstrated the highest 2-year retention rates to date

- Cohort 2021 who received the most supports (3-years) had a higher 2-year retention rate, exceeding pre-pandemic levels
- Cohort 2020 had a 32% 3-year completion rate, a 6% decline from the pre-pandemic cohort 2018

Cohort (Entering Class)	Retention		Completion (within 3 years)	
	1-Year	2-Year	All Students	BIPoC Students
2018	57%	42%	38%	41%
2019	51%	36%	31%	34%
2020	54%	42%	32%	31%
2021	50%	46%	TBD	TBD

Note: Cohort definition refers to year entering Promise. 1-year retention refers to scholars enrolled in their first fall to spring and 2-year retention refers to scholars enrolled in their second fall to second spring. 3-year completions include students that received degree or credential by the end of third Spring after high school. Completion data (conferred degrees) as of Fall 2024.

Early Operational Improvement Results

BIPOC students were more likely to utilize COVID-time operational improvements and reported satisfaction with the enhanced supports

- 70% of students utilizing the re-entry pathway in Fall 2021 identified as BIPOC (34/44)
- 70%+ of scholars surveyed felt the **re-entry** process was clear
- Students who engaged with Path to UW Transfer Pathway were admitted to and enrolled at UW-Seattle at **higher rates** than Washington community colleges overall at 86% vs. 71%

"[Re-entry] It was a very easy process and I felt supported after a hard time."
–Promise Scholar

"[Path UW staff] she really helped me figure out how or figure out the transfer process for UW nursing and I learned a lot about requirements I'd need when I start the application next school year…"
-Promise Scholar

Student Identified Motivators

Promise scholars cited tuition, career goals, and supportive adults as leading reasons to persist and complete college.

- Promise scholars identified access to **tuition support (95%), personal or career goals (85%), and family, friends or community (66%)** as to reasons to continue with Seattle Promise
- 85% or more of all scholars surveyed noted that supportive adults in their lives encouraged them to continue in their education
- Over 33% of multilingual scholars felt knowing more than one language helped them understand academic concepts

Supportive adults in my life encourage me to continue in my education

All Scholars Surveyed	First-Generation	Continuing Generation	BIPOC	White
85%	**85%**	**89%**	**85%**	**85%**

Percentages indicate the share of students who agreed or strongly agreed with the statement.
Survey sample: 272 students, 22% of Promise student population

Seattle Promise Impact Evaluation- *Preview*

Westat and Washington Student Achievement Council

Evaluator Selection & Data Sources

- DEEL contracted with Westat and Washington Student Achievement Council (WSAC) to understand Seattle Promise outcomes and impact
- Evaluation focus has two phases:
  - **Phase I:** Evaluate cohort 2018-2021 outcomes (e.g., application to enrollment, persistence and completion)
  - **Phase II:** Estimate program impact on student outcomes
- Timeframe:
  - Review of implementation data from Jan 2023 -Dec 2025
  - Evaluation ongoing; final report anticipated Dec 2025

Evaluation Questions

1

Phase I - Outcome Evaluation

- Who has Seattle Promise served?
- What applicant characteristics are associated with persistence?
- What are applicants' rates of college enrollment, progress, retention, and completion?
- What applicant characteristics and program components are associated with college enrollment, progress, retention, and completion?

2

Phase II - Impact Evaluation

- Does Seattle Promise increase college enrollment, progress, retention, and completion for SPS students compared with non-participants?
- Does Seattle Promise help close race-based opportunity gaps?

Methods

Outcomes

Correlational

- Descriptive
- Chi-square tests & logistic regression
- Qualitative focus groups

Impact

Causal

- Quasi-experimental design (QED)
- Multilevel OLS Regression
- Propensity score matching (PSM)

Projected Insights

- Assess to what extent Seattle Promise scholars differ from SPS high school graduates overall
- Estimate the extent to which program components are associated with Seattle Promise applicants' college enrollment, progress, retention, and completion outcomes
- Complete longitudinal outcomes for Promise cohorts 2018-2021[1]
- Estimate whether a causal relationship exists between Seattle Promise program and key outcomes[2]

[1]Data collection ongoing till Q4 2025; Cohort 2022 3-year completion data collected through Q4 2025
[2]Matched sample of SPS students who did not apply for Seattle Promise during their senior year of high school

SUMMARY: What does this mean to DEEL?

1. Findings are highly encouraging to DEEL despite cohort data limitations due to COVID disruptions in data collection

2. SPP participants continue to be more Kindergarten ready than peers who attend other preschool programs; exciting new evidence for SPP impact on 3rd grade proficiency

3. Promising statistical results for K-12 evaluation show elementary academic interventions increase math proficiency, while both middle and high school interventions showed improvement in school outcomes, however not statistically significant

4. Seattle Promise data shows progress toward closing racial opportunity gaps due to high utilization of re-entry pathway as well as increased UW admission and enrollment among BIPOC scholars


Questions?

Image: Rainier Beach High School graduation ceremony for the class of 2024