Puget Sound Taxpayer Accountability Account

Strategy Assessment Report

A report to the King County Council

Ken Thompson Consulting
October 2018

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Table of Contents

Introduction

Background

The Puget Sound Taxpayer Accountability Account (PSTAA) was created as an amendment to the 2015 Transportation Revenue Package by the Washington State Legislature.[1] The Legislature created PSTAA to direct certain funds into a protected account that is to be paid to the counties in the Sound Transit taxing district, and directs that the funds be used for educational services to improve educational outcomes in early learning, K-12, and postsecondary education.

Goals and principles for the use of PSTAA funds in King County, Washington were approved by the King County Council on December 11, 2017 as Motion 15029 (see Appendix A for the full text of the motion), and were used to inform this Strategy Assessment Report. The Council's motion identified specific populations that PSTAA might support, and put forth other goals and objectives for the use of the funds.

In June of 2018, the King County Council selected Ken Thompson Consulting ("the consultants") to create three reports, including this Strategy Assessment Report. The work of the consultants was guided by the King County Council Initiatives Director, but the analysis contained herein is solely the independent assessment of the consultants. The consultants also produced a separate Needs Assessment Report, which is referenced in portions of this report.

Purpose of This Report

This report is meant to be one source of information that can aid King County in making decisions about potential uses of PSTAA funding in the future. King County is currently expected to receive approximately $315M total, in irregular annual amounts, between the years 2019 and 2034 (see Appendix B for details).

Prior to contracting with the consultants, the County created a list of nine 'strategy areas' (listed on page 5) which were preliminary ideas of how PSTAA funding could be used. The County contracted with the consultants to assess each of the nine strategy areas on four different dimensions:

- Potential for **Impact**
- **Affordability** (cost) of the strategy area
- The strategy's ability to address education **Needs** in King County
- A preliminary sense of **Implementation Feasibility**

The consultants were charged with gathering and assessing information related to the above four dimensions, for each of the nine strategies, so that the County could better understand the strengths and opportunities, as well as the potential weaknesses and challenges, associated with each of the strategy areas.

Guidance to Readers

As you review the briefs we've prepared on each of the nine strategies, please keep the following context in mind:

This Report Is:	This Report Is Not:
An initial, **high level assessment** of each strategy area, meant to help County decision-makers understand, in a **broad, directional sense**, the opportunities and challenges within each strategy area.	An authoritative, complete, final assessment of each strategy area or specific ways of meeting strategy area goals. Nor does it contain recommendations for how PSTAA funds should be spent.
Based on a **limited, non-exhaustive review** of existing meta-studies; it is therefore limited by whatever limitations those meta-studies may have.	A complete literature review of any topic, nor does it contain any original research.
A general assessment of what's known about the strategy areas **based on national research and reports.**	An assessment of any specific existing or planned local efforts related to each strategy area. We note, as illustrative examples, some local efforts related to the strategy areas; however, we do not assess those examples.
An assessment of each strategy area against **a common standard**.	An assessment that compares strategy areas to each other.
Focused on assessing **education-related outcomes**, impacts and opportunities.	Meant to assess non-education-related impacts, though we do note these as supplemental information.
A **limited look at equity-related student outcomes**, when such findings were available, focusing on whether interventions are known to decrease opportunity gaps.	A full-on review of the County's PSTAA approach or strategy areas with a racial or social justice lens or toolkit.

The Nine Strategy Areas & Structure of This Report

The main part of this report contains a briefing on each of the nine PSTAA Strategy Areas developed by King County.

1. Increasing access and success in postsecondary, via a "promise scholarship" program with a focus on:
    a. Supportive services in high school to help students prepare for and persist in college;
    b. Advisory support, completion coaching, or other necessary services at community or technical colleges;
    c. Scholarships that target the highest-need students and programs serving low-income youth, youth of color, youth aging out of foster care, or homeless youth; and
    d. Re-engaging youth who have dropped out of high school in education and employment.
2. Supporting career-connected education in K-12 schools, including through expansion of career academy models at the middle or high-school level to combine academic and career content from industries like technology or health care.
3. Support elementary and middle schools in planning and launching innovative teaching methods that emphasize problem-based learning and connect classroom learning to careers;
4. Constructing, maintaining and renovating facilities to support early learning programs;
5. Collocating early learning centers with affordable housing, including flexible, mixed-use space to meet the multiple needs of children and youth with limited access to services;
6. Programming or facilities to support children and youth who are homeless, in the foster care system, in the child welfare system, involved in the juvenile justice system or otherwise vulnerable or underserved;

7. Supporting asset-building strategies for youth, including children's educational savings accounts;
8. Identifying innovative strategies to empower students to be change agents in their schools and communities, who can identify and address social and racial injustice through advocacy and organizing; and
9. Training educators in the effects that economic status and institutional racism have on educational outcomes and economic mobility.[2]

The main part of this document contains a brief addressing each strategy area. Within each brief, we generally present information in the following sequence:

- **Strategy Area Description:** a brief summary of what the assessed strategy area is.
- **Overall Rating:** for each assessment dimension (Impact, Affordability, Need, Implementation Feasibility) we give a high-level, summary rating. (see the next section and Appendix C for a description of how we arrived at these ratings).
- **Highlights for Each Assessment Dimension:** the highlights for each assessment dimension that informed our rating.
- **Community Input:** a list of organizations that provided input related to the strategy area.
- **Detailed Assessment** -- additional, highly detailed information regarding:
  - o Impact
  - o Affordability
  - o Need
  - o Implementation Feasibility
- **Methodology:** notes on any assessment methods used in particular for this strategy area.

There are three exceptions to this structure:

- Due to underlying similarities between **Strategy Areas 4 and 5** (both on early learning facilities) they are combined into one brief.
- **Strategy sub-area 1D** (opportunity youth) is addressed in and combined with the brief for Strategy Area 6 (underserved youth), as opportunity youth have many similarities to the youth Strategy Area 6 addresses.
- The brief for **Strategy Area 6** (underserved youth) has a different organizational structure and content due to that strategy area statement being focused on population groups' general needs, more so than a specific approach or solution to meeting their needs. Because of the breadth of potential interventions that can support this group, our assessment does not include ratings, unlike the other seven strategy areas we rate.

Assessment and Rating Approach Methodology

The County's request was that, to the extent possible, we create an assessment and rating method that allowed for 'apples to apples'-type comparisons across the nine PSTAA strategy areas they had identified. As written, these strategy areas vary in specificity, breadth, and potential scope; it was challenging to arrive at a standard and fair method for evaluating all nine strategies within a single assessment and rating approach. While the strategy areas differed greatly amongst each other, we established an approach to treat them equally, and assess all of them against the same set of metrics.

We used rubrics to assess each dimension (Impact, Affordability, Need, and Implementation Feasibility), and created an approach, based on the information we gathered in completing those rubrics, to assign a rating to each dimension – for example "high," "medium" or "low" impact. The assessment metrics are drawn from the goals and objectives stated in the County's Motion 15029 on PSTAA, as well as common funding-related decision-making review criteria. Our assessment rubrics and rating method are detailed in Appendix C.

As noted previously, all strategy areas were assessed based on a common set of metrics; the strategies are not assessed in comparison to each other, but against the same standards. Because the wording of the nine strategy areas is frequently broad and open to some interpretation, in most cases we more narrowly defined the range of what our assessments would cover (we note this in the "Description" section of each brief).

A brief summary of our approach to each assessment dimension follows.

Assessment Dimension	Description
Impact	For the Impact section of each brief, we look at the evidence base for each strategy area. We primarily focus on and preference education-related impacts, but also secondarily consider non-education impacts where education-focused research has found those. We particularly note education impacts directly on school readiness, high school graduation and postsecondary completion, but also detail a wide range of other education-related outcomes that are known to be correlated with those direct education impacts (examples might be reduced absences, social-emotional development, reduced racial bias, college enrollment, etc.). We look at size and kinds of impacts, when possible on which groups of students, and note the rigor of the research.
Affordability	For affordability, we look at various financial considerations of the strategy area, including sustainability and whether the strategy area's funding needs fit to the irregular annual funding flow for PSTAA. We try to arrive at a sense of average costs, but also try to note if higher impact approaches also have higher costs. Unfortunately, because most strategy areas could be implemented at different scales, in most cases it is impossible to ascertain total potential costs until more implementation design choices have been made.
Need	This section relies on information in the consultants' Needs Assessment Report (a separate report, published concurrently with this Strategy Assessment Report). We reflect on whether that report surfaced community interest *specifically* in the named strategy area; we also assess whether the strategy can more generally meet noted needs in the County in a more general sense. We also look at the potential size of the need (numbers of students, in particular underserved students) the strategy area might address.
Implementation Feasibility	Our assessments in this area should be considered preliminary and very general; no specific implementation plans have been set and so the assessments are based on limited available information as well as lessons learned from available national research and commentary on implementation approaches used nationally. Although we additionally collected information on planning efforts in King County specific to each strategy area (through an Information Request sent to community organizations and groups as determined by the County), our assessment is **not** of the plans and information responses provided by community members and stakeholder groups. We only assess the potential of the County's 'generic' strategy area statements, not any specific existing efforts or planning processes underway. Each strategy area brief does, however, note these specific community plans and information provided from stakeholder groups as a way of illustrating some of the potential ways to implement PSTAA strategies in King County.

Rating Methodology

For each assessment dimension, we established a rubric by which we sought to collect a wide range of information; these rubrics can be found in Appendix C - Tables C1a-d. For each assessed dimension, we

selected key criteria on which to base our ratings, based on the information collected in our rubrics. We then set a uniform method to create a standard rating for each assessed dimension.

We use the following rating schema for the four dimensions assessed, and use the color shading technique shown here, where darker colors indicate a higher rating:

Rating	General Description	Dimensions Using This Rating
High	Meets all rating criteria	Impact, Affordability, Need, Implementation Feasibility
Promising	Specific to Impact rating – strategy area showing promise but research still emerging or early results are small	Impact only
Medium	Meets some rating criteria	Impact, Affordability, Need, Implementation Feasibility
Low	Meets few or no rating criteria	Impact, Affordability, Need, Implementation Feasibility
Unclear	Unrated. At least 2 rating criteria can not be answered; rating is not possible	Impact, Affordability, Need, Implementation Feasibility

The specific criteria used and rating method is described in the table which follows.

Dimension	Criteria	Rating Method
Impact	1. A majority of studies agree there are substantial positive impacts on education outcomes (either directly on, or on factors known to be correlated with these major education-related outcomes: K readiness; HS grad; postsecondary completion) 2. Studies note multiple positive direct or indirect impacts (education- and/or non-education-related) 3. Studies are rigorous (there is at least one positive comparison group-based analysis) 4. Studies demonstrate positive results for underserved students	**High**: meets all 4 criteria **Promising**: does not meet either criteria 1 **or** 3, but meets all other three criteria (i.e. only does not meet only one of #1 or #3) **Medium**: meets 2 or 3 criteria (and does not qualify for 'Promising') **Low**: meets no or 1 criteria **Unclear**: not enough research has been done to assess against most criteria (at least 2)
Affordability	• Within average cost per student parameters for programs with known impacts (under $5K/student/year) • Funding need consumes less than 50% of PSTAA funds • Need for PSTAA funds can fit within current PSTAA funding	**High:** meets all 4 criteria **Medium:** meets 2 or 3 criteria **Low**: meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at

	• availability timeline • Funding is one time or has strong potential for sustainability	least 2)
Need	• Strategy was specifically called for in Community Input section of Needs Assessment Report • Strategy impact is related to education gaps noted in Data section of Needs Assessment Report • Strategy is likely to impact meaningful numbers of underserved students	**High:** meets all 3 criteria **Medium:** meets 2 criteria **Low:** meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at least 2)
Implementation Feasibility	• Models and other information exist about the strategy area from which implementation approach can be designed to create high impact programs • Local capacity exists or can be easily built to execute strategy • No major potential local barriers or challenges to implementation identified	**High:** meets all 3 criteria **Medium:** meets 2 criteria **Low:** meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at least 2)

Please see Appendix C for detailed information on our dimension assessment rubrics, and further detail of our rating method.

1

King County PSTAA

College Promise

Strategy Assessment Brief

Full Text of Strategy Area #1: *Increasing access and success in postsecondary, via a "promise scholarship" program with a focus on:*

A. *Supportive services in high school to help students prepare for and persist in college;*
B. *Advisory support, completion coaching, or other necessary services at community or technical colleges;*
C. *Scholarships that target the highest need students and programs serving low-income youth, youth of color, youth aging out of foster care, or homeless youth.*

[Note: Strategy area 1, as originally written, includes an item D: *Reengaging youth who have dropped out of high school in education and employment.* In this document, 1(D) will be discussed in the context of the strategy area 6 brief]

Strategy Area Description

College Promise programs are most typically guarantees of payment of college costs (tuition, fees, and books at minimum) to a group of recent high school graduates within a set geographic area. This approach has been around for at least two decades and differs from other scholarship programs, which typically use 'merit'-based criteria (restricted eligibility based students' academic or other qualities), a competitive application process is used to qualify, and scholarships are awarded immediately prior to college entrance.

Conversely, College Promise programs make a promise, many years in advance, to large groups of students within a set geography that they can, with minimal or no eligibility criteria, gain access to a 'free' postsecondary education. That said, there are many different ways to construct a College Promise program, and these decisions have a large impact on who is served by them, what the associated costs are, and what the impact on educational outcomes are.

Locally, examples of College Promise programs include the Washington State College Bound Scholarship, and also the Seattle "13th Year" Scholarship, which originally focused on Chief Sealth HS (Seattle Public Schools) students attending South Seattle College.

This analysis primarily assesses a College Promise approach that **combines** the three 'sub-items' in the County's strategy area statement: scholarship funds; high school supports; and in-college supports. In the Detail Brief section that follows, we provide some information on each of the three 'sub-items' independently.

Strategy Area Assessment Summary:

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and definition of terms.

Strategy #1: College Promise	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**Promising**	Program design matters a lot for outcomes, but some research shows direct positive impacts of CP on education and other outcomes for underserved students; separate research on individual components of strategy area 1 show positive impacts; maximum impacts would come from doing all three elements together.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Unclear**	Total and per student costs are completely dependent on design choices; but to implement to known high impact standards for all underserved students, strategy could be relatively expensive. Strategy would need significant sustained funding from elsewhere, and 'promise' approach is a poor fit to current PSTAA funding structure.
Need *Criteria: matches identified needs; serves underserved students.*	**Medium**	Could impact large numbers of underserved students seeking to complete college, which is a significant community need. Strategy not specifically referenced in Needs Assessment Report.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**High**	Models exist to learn from, and local implementation capacity exists; ultimately much is dependent on design and implementation approach, but barriers appear low.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts:**
  - o Per the chart below, impacts for underserved populations depend heavily on CP program design choices. Options in the left column produce better outcomes for underserved students, in general, and particularly in combination together, than those in the right column.

Design features MORE likely to have a positive impact on low income, students of color, and other underserved students	Design features LESS likely to have a positive impact on low income, students of color, and other underserved students
Means-tested (only financially needier students qualify).	Universal (all students, regardless of need, get it).
No/few eligibility criteria; no post-college criteria.	Has eligibility criteria (eg. high minimum GPA; no criminal record; etc.); and/or has post-college criteria (grant converts to loan; state residency required; etc.).
Aid can be used for living expenses/other needs.	Tuition/fees/books costs only.
"First dollars" (other aid can be added on top of award).	"Last dollars" (only kicks in after all other aid taken into account).
Can be used at all institutions (2 year and 4 year, public and private) in a large geographic area.	Only 2-year colleges; or only single institutions.
Also provides linked supportive services (such as enhanced advising).	Provides no linked support services.

  - o Based on rigorous studies of differing College Promise program models, it's necessary to design College Promise programs well, or you may have no impact, or even potentially have negative impacts on students or exacerbate completion gaps for low income and/or students of color.
  - o For well-designed programs, strong direct education impacts are possible. Rigorous research shows up to 10% increases in college completion.
  - o Studies of high school support programs and college student support programs (studied independently of scholarships) have found positive direct and indirect education impacts. New research on models that combine scholarships with in-college supports show, preliminarily, very strong education impacts.
- **Rigor of Assessments**: A handful of rigorous (comparison group) evaluations exist; but these are for specific combinations of program design elements, and so results are hard to generalize to all possible CP designs.
- **Non-Education Impacts**: Studies of high school support programs (independent of scholarships) have found positive non-education impacts, such as health, income/workforce, reduced justice involvement, and more.
- **Other notes**:
  - o All three elements of strategy area 1 would optimally be done together, on the same students, to maximize impact. At minimum, evidence would suggest combining promise scholarships with in-college supports such as advising, to maximize impact.

Affordability Assessment:

- **Cost per student:** Cost is very dependent on CP program design; if one followed the components in the chart above that tend to have better outcomes for underserved students, the cost could be large per student due to: covering 4-year college costs (for 4 years); doing 'first dollars' financing; funding non-financial supports; and being willing to cover living costs in addition to tuition/books/fees.
- **Total Cost:** Would depend entirely on geographic scope and program design and eligibility criteria set, as well as the number of years the county wished to operate the program. Depending on design, the total cost of a county-wide program of limited focus could be relatively affordable; a design that covered all underserved students with maximum flexibility and supports could exceed the entire PSTAA budget.
- **Fit to PSTAA funding flow:** The flow of funding currently available for PSTAA over time may be challenging for this strategy area; the need for funding for this strategy would differ from when PSTAA funds are expected to be available, unless very few students were to be served.
- **Sustainability:** Potentially very large costs would need to be picked up by another source post-PSTAA funding. A critical piece of CP programs in the "Promise" part; breaking the promise (due to lack of funds or perception that the CP program could be cancelled) could decrease student outcomes.
- **Other notes**:
    - o Efforts to decrease costs by changing program structures to less costly approaches may decrease the amount and kind of positive impacts, particularly for low income and other vulnerable populations.

Need Assessment:

- **Matches identified need by community:** A CP strategy was not specifically referenced in the community input section of the Needs Assessment Report.
- **Does it address education needs and disparities in the county:**
    - o This strategy area directly acts on and could fulfill a known need in the county for more postsecondary completions.
    - o The strategy area addresses college affordability, which is a general community concern.
    - o The strategy can effectively meet the needs of underserved students, if it is designed with them in mind.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: Dozens, if not hundreds, of CP programs exist, as well as decades of research and commentary on implementation of students support services at the high school and college levels.
- **Existing capacity and partners**: A CP program is implementable in the County through existing partners. There is interest in such programs by various coalitions at the local and state level.
- **Known barriers and challenges:** We did not find any significant barriers to potential implementation. However, evidence would point to how the three elements of the strategy should be additive to each other – which means the same student should receive all three benefits (they should not be randomly distributed throughout the population), which could increase implementation challenges.

Community input received related to this strategy:

- Primary source:
  - Puget Sound Educational Service District / College Promise Coalition
- Secondary sources:
  - King County: Council staff
  - Treehouse/College Success Foundation

Strategy Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts:**
  - Per the chart below, impacts for underserved populations depend heavily on CP program design choices. Options in the left column produce better outcomes for underserved students, in general, and particularly in combination together, than those in the right column.

Design features MORE likely to have a positive impact on low income, students of color, and other underserved students	Design features LESS likely to have a positive impact on low income, students of color, and other underserved students
Means-tested (only financially needier students qualify).	Universal (all students, regardless of need, get it).
No/few eligibility criteria; no post-college criteria.	Has eligibility criteria (eg. high minimum GPA; no criminal record; etc.); and/or has post-college criteria (grant converts to loan; state residency required; etc.).
Aid can be used for living expenses/other needs.	Tuition/fees/books costs only.
"First dollars" (other aid can be added on top of award).	"Last dollars" (only kicks in after all other aid taken into account).
Can be used at all institutions (2 year and 4 year, public and private) in a large geographic area.	Only 2-year colleges; or only single institutions.
Also provides linked supportive services (such as enhanced advising).	Provides no linked support services.

  - Based on rigorous studies of differing College Promise program models, it's necessary to design College Promise programs well, or you may have no impact, or even potentially have negative impacts on students or exacerbate completion gaps for low income and/or students of color.
  - For well-designed programs, strong direct education impacts are possible. Rigorous research shows up to 10% increases in college completion.
  - Studies of high school support programs and college student support programs (studied independently of scholarships) have found positive direct and indirect education impacts. New research on models that combine scholarships with in-college supports show, preliminarily, very strong education impacts.
- **Rigor of Assessments**: A handful of rigorous (comparison group) evaluations exist; but these are for specific combinations of program design elements, and so results are hard to generalize to all possible CP designs.
- **Non-Education Impacts**: Studies of high school support programs (independent of scholarships) have found positive non-education impacts, such as health, income/workforce, reduced justice involvement, and more.
- **Other notes**:
  - All three elements of strategy area 1 would optimally be done together, on the same students, to maximize impact. At minimum, evidence would suggest combining promise scholarships with in-college supports such as advising, to maximize impact.

Findings Detail

The amount and kinds of impacts one can see from College Promise programs can vary significantly based on design of the program -- and it should be noted that poorly designed programs have been found to have negative impacts on college completion, particularly for low income students. Strategy area 1 implies not only a means tested (needs-based) scholarship component (to fit the goals of the PSTAA Motion), it also calls for additional non-monetary supports for college students, as well as college-going supports for high school students. We were not able to find research on models that combine all three of these for the same students; we are not able to comment definitively, accordingly, on expected impacts of the strategy area's combined three-element approach. However, there is substantial evidence to report on regarding CP scholarships generally, some information on scholarships combined with college supports, and a separate research base on HS and College level supports. The research base on these interventions shows a very wide range of student outcomes: from no impacts or small impacts generally, to in some cases moderate to strong impacts (for well-designed and -implemented programs).[3]

The only 'meta-study' found of rigorous CP research (evaluations that included comparison groups) looked at 14 studies across 7 CP programs (half the studies focused on one site – the Kalamazoo Promise), but none of which we believe included non-financial supports.[4] They concluded that the evidence is 'suggestive' of positive impacts, including community development[5] K12 and postsecondary outcomes; but also indicate that differing program designs can impact outcomes, and that some programs were found not to produce any outcomes. The studies showing the largest postsecondary outcome were on the Kalamazoo Promise and its 10% percentage point increase in college completion (almost entirely due to increases in BA attainment and gains by women).[6] Additional research into needs-based (means-tested) scholarships in general has returned mixed results – some showing no positive benefits, others showing benefits.[7]

Turning towards the few studies that show the impacts of combining scholarships with college-level supports, they mostly show promise for educational outcomes but not yet for college completion. Some studies show that neither the scholarship nor the supports, *when done alone*, produce educational outcomes. In North Carolina a study at a 4 year institution, after finding that grants alone had no impact on increased completion, stated that "our results highlight the capacity of non-financial supports to improve the postsecondary progress and performance of low-income, underrepresented students at highly competitive institutions when layered on top of need-based, grant-heavy aid. We find suggestive, though ultimately inconclusive, evidence of positive effects of Covenant (CP) eligibility on college graduation."[8] Early analysis of the Detroit Promise Pathway has found an 11 percent point increase in second semester enrollment vs. control; and a 15 percent point increase in full time attendance vs. control.[9] Although not a CP program per se, a "scholarship plus supports" approach is similar in many ways to CP is the CUNY ASAP model, which conjoins financial aid with other supports, and which found an 18 percentage point increase in college completion amongst participants at CUNY colleges.[10]

As noted, this research paper did not look extensively into the impacts of HS college-going supports as an independent activity (and could find no impact assessments of combining them with CP scholarship and in-college supports), however, there is a substantial research base that shows positive impacts from such activities.[11],[12]

In summary, while there's no explicit research on the impacts of combining all three of the Strategy 1 elements, it's likely that students who receive all three kinds of support would increase their chances of college completion.

Relatively little research has been done to disaggregate outcomes for different groups or types of students. We found no information about CP programs impact on homeless students, foster youth, or justice-involved youth. There are very few program evaluations disaggregated by sex, race, and income. Outcomes in one program heavily favored women; in another it was men who benefited more. One program found no difference in outcome by race or income level (presumably meaning that previously existing gaps remained). Some researchers have noted that in two statewide CP programs – in Tennessee and Oregon – larger amounts of funding, due to universal (non-means tested) approaches meant that greater sums of financial support were flowing to wealthier students (Oregon later changed

their program design).[13] The Tennessee Promise program also found that while proportional numbers of Black and Hispanic HS graduates were applying for their program, proportionally fewer of them were accepted into the program and so did not receive funding. In TN as well, much wealthier students ultimately receive scholarships; *applicants* had an adjusted gross income (AGI) of $39K while *recipients* had an AGI of $54K.[14] The net result of more financial aid going to non-minority and wealthier students could be to increase the college completion gap – but more research is needed to clarify this. The Education Trust recently produced a report, based on some of the research cited here, and mirroring the findings of this assessment, indicating which approaches to CP appear to be more equity-focused than others[15]. Other researchers have argued that we do not yet know the full positive impact of universal/all student approach of some college promise programs, as they may substantially increase college-going motivation and access, and decrease college under-matching for underrepresented students, or have other benefits for more disadvantaged students.[16]

Finally, when considering the impact of CP financial supports on low income students, it's important to understand that low income students, for the most part, already have 100% of their tuition/fees/books covered by existing need-based forms of financial aid (in King County, primarily through Pell grants, the Washington State need grant (SNG), and the College Bound Scholarship (CBS)). However, the vast majority of expenses related to being a college student (particularly, a 2 year college student) are living expenses, not academic-related expenses. Therefore, the greatest impact that CP programs can have on low income student needs would be by covering living expenses; this can be done by making the CP a first dollars promise or other mechanisms allowing its use outside of tuition/fees/books.

Related Community Plans

As part of our Information Request process, we received one community response that most directly addressed Strategy Area #1 – from the Puget Sound Educational District (PSESD). Their plan addresses all three components of strategy area 1.

Their approach to the scholarship component allows for all students up to median income to qualify for the scholarship, which would mean that most scholarship funds would likely go to those between 70-100% of median income ($60K-$96K) – the 'lower middle class,' rather than low income students (low income students would already have had their tuition/fees/books costs paid for). Their scholarship is last dollar, which excludes most low income students from receiving it as well. It is useable in any public institution in the state. The net outcome of these three design choices could lead to most of the scholarship resource being claimed by lower middle income students attending 4 year public institutions in WA.

However, they have also added a second scholarship component to their plan, which is a $1000 annual grant to all low income college students, which could be used for needed living expenses. Oregon uses such an approach as well; however, are not aware of any studies of impacts of such approaches in a CP context.

The PSESD approach to supports in HS focuses on providing services to high schools with the largest numbers of low-income students, however, they estimate that 60% of students who'd be helped by these supports are not low income. Conversely, their approach does allow them to serve nearly 90% of all low income students in the county, and 80-90% of all underrepresented minority students. Supports would be provided by both schools and community organizations.

Their approach to college supports focuses on Pell-eligible students, and provides enhanced advising supports and small amounts ($250 on average) for emergency grants for struggling students. As noted, advising supports in some models have been shown to increase student retention and completion. Emergency aid is currently being studied, and shows promise for supporting student retention and completion, particularly when combined with targeted advising supports.

Finally, PSESD's current approach does not seem to guarantee that the same student who receives the high school supports will receive either the scholarship or the college supports. All three supports may or

may not overlap on one individual to some degree; their current model does not appear to intentionally 'triple down' on individual students to receive the whole package.

Affordability Assessment

Summary:

- **Cost per student:** Cost is very dependent on CP program design; if one followed the components in the chart above (see Impact section) that tend to have better outcomes for underserved students, the cost could be large per student due to: covering 4-year college costs (for 4 years); doing 'first dollars' financing; funding non-financial supports; and being willing to cover living costs in addition to tuition/books/fees.
- **Total Cost:** Would depend entirely on geographic scope and program design and eligibility criteria set, as well as the number of years the county wished to operate the program. Depending on design, the total cost of a county-wide program of limited focus could be relatively affordable; a design that covered all underserved students with maximum flexibility and supports could exceed the entire PSTAA budget.
- **Fit to PSTAA funding flow:** The flow of funding currently available for PSTAA over time may be challenging for this strategy area; the need for funding for this strategy would differ from when PSTAA funds are expected to be available, unless very few students were to be served.
- **Sustainability:** Potentially very large costs would need to be picked up by another source post-PSTAA funding. A critical piece of CP programs in the "Promise" part; breaking the promise (due to lack of funds or perception that the CP program could be cancelled) could decrease student outcomes.
- **Other notes**:
    - Efforts to decrease costs by changing program structures to less costly approaches may decrease the amount and kind of positive impacts, particularly for low income and other vulnerable populations.

Findings Detail

Until key design decisions are made, it's difficult to know costs and affordability of this strategy. The cost to implement this strategy with fidelity to approaches with known positive impacts would be relatively high per person served. A CP approach could be implemented with relatively low cost, but based on the research, it would be hard to predict whether it would have any positive benefits at all on education outcomes, particularly for underserved students. This assessment is based on the County being the sole funder of such activities; jointly funding a CP approach with others could improve affordability.

The cost of the scholarship component of College Promise programs can vary wildly depending on design and eligibility, with different CP communities offering different 'packages' (and still different average amounts being actually claimed by students). The County's strategy statement and PSTAA goals seem to imply that, at minimum, low income recent high school graduates would have their tuition/fees/books (at minimum) covered at (at minimum) public 2 and 4 year universities in the State. Because most low income students' academic costs for 2 year colleges are already met through Pell/SNG/CBS funding, the cost of 'filling in' through a last dollars scholarship would be a relatively modest cost. The cost to completely in fill needs for low income students at 4 year colleges would be larger. If the County chose to offer "first dollar" scholarships to all low income students, the two and four year costs would be quite large for a County the size of King County. For reference, the Kalamazoo scholarship (serving the relatively small community of Kalamazoo), which has been well studied and is one of the few CP programs known to have an impact on college completion, is a universal, first dollar scholarship useable at 2 and 4 year institutions. To serve a total of 1400 students currently drawing scholarship costs their CP program about $10M/year. The 'total' lifetime scholarship for an Associates-focused student in their program is $18K; the

total lifetime scholarship for a Bachelors-focused student is $33K.[17] (Note these costs are specific to the cost of postsecondary education in MI.)

However, even larger costs for a CP program would be incurred related to the provision of student supports, as called for in strategy area 1 parts B and C. High school level supports have not been studied or costed out specifically in relationship to a CP approach. From prior research and experience, we estimate that high quality college-going supports (as provided by community organizations) for low income students, with positive documented impacts, typically cost between $3K-$6K per student per year, and typically last 2-4 high school years, though we are also aware of one senior year only intervention with positive impacts that cost $250 per student.[18]

High quality college-level supports that have impact are better studied, though cost information is limited. The CUNY ASAP program, which combines scholarship with supports and has large impacts on college completion, estimated that the program cost about $5K/student/year more than what CUNY usually spent (but because ASAP increased completion rates substantially, created a lower cost per student per completion).[19]

MDRC, a research and evaluation organization, offers a "college promise cost calculator" on its website. Using typical tuition/fees for King County 2 year college students, and offering modest additional advising supports, their calculator yields about a $7K/student/year cost.[20]

We therefore roughly estimate the cost of high quality supports that are *highly likely* to increase high school and college completion at about $5K/year/student. To optimally increase college completion rates, you would combine these supports with scholarships that eliminate costs related to tuition/fees/books *and* which fill in missing needed student living expenses (for low income students). Thus a CP program focused on getting the largest impact for low income students is likely to have fairly high cost per person.

The strategy fits the County's PSTAA goals related to sustainability to a somewhat limited degree. Implementation would primarily happen through large education institutions, rather than local community organizations. The project does not focus on 'one time' uses of funds, as the nature of a "Promise" program is to make the promise early, and then commit to fulfilling it over a long period of time – the potential impact of it is tied to the long term nature of the promise.

A challenge for strategy area 1 may be in regards to where the total project funding would come from, the amount of it, and the timing of such funding. These challenges are greatly reduced if the County is the sole funder of a CP program – it would not be dependent on needing to align other funders (likely predominantly private) for new large funding streams and 'hostage' to the uncertainties of raising such large sums privately. However, there could be substantive benefits to working with other funders on the CP effort, including the ability to serve more students, securing long term commitments beyond the County's PSTAA funding availability, and evening out the irregular flow of PSTAA funds. On this last note, if the County does pursue a CP effort without any partners, the irregular flow/availability of PSTAA funds could be a barrier for effective, impactful implementation, as it's critical to make such a promise of funding early, and keep the commitment to fund it when students who have been promised need it.

Only one, very limited, estimate of ROI is available for a single CP program (Kalamazoo, again), it puts the rate of return for the Kalamazoo Promise at 11.3% (but only takes into account individual financial benefits – not other benefits to the individual or any community benefits, which would likely greatly increase the ROI calculation).[21]

Related Community Plans

The PSESD plan estimates support costs using a similar model to the MDRC calculator, primarily assuming costs will be derived from hiring additional high school and college level counselors/advisors. Because of their assumed ratios of staff to students (eg. 250:1), they attain substantially reduced costs on a per student served basis. It is unknown, however, this can drive impacts such as CUNY ASAP has seen; their cost per student appears to be substantially less than the CUNY approach's cost ($500 vs. $5000). However, because they plan to serve very large numbers of students through their intended

approach (50K high school students), they still calculate a fairly large annual budget for supports provision – about $21M annually.

At the time of the writing of this report, PSESD had not provided cost estimates for the provision of the scholarships component of their CP approach.

The PSESD's plan states their intent to raise substantial funds in addition to PSTAA funds from other sources, in order to implement their vision. They both call for creating a very large endowment and raising substantial funding simultaneously for endowment plus ongoing operations and program expenses. It appears that their overall CP plan could be implemented, if needed, on a smaller scale than currently envisioned, so that overall expenses could align to available funding, and their ambitions to serve large numbers of students could scale over time.

Need Assessment

Summary:

- **Matches identified need by community:** A CP strategy was not specifically referenced in the community input section of the Needs Assessment Report.
- **Does it address education needs and disparities in the county:**
  - This strategy area directly acts on and could fulfill a known need in the county for more postsecondary completions.
  - The strategy area addresses college affordability, which is a general community concern.
  - The strategy can effectively meet the needs of underserved students, if it is designed with them in mind.

Findings Detail

Overall, we find there is good potential for strategy area 1, if focused on low income students, to address significant education needs in King County. The strategy seeks to directly address the need for increased college completion (as well as increased high school completion) in King County, by acting directly on the institutions and the students seeking such outcomes, and it does so by directly addressing two kinds of common needs for low income postsecondary students – more financial aid and increased advising supports. Additionally, it has the potential, depending on implementation choices and amount of funding available, to scale to serve very large numbers of King County students – into the 10s of thousands per year.

Our Needs Assessment Report noted the desire by King County students to attain a postsecondary credential, in much larger numbers than actually do complete such credentials; also that a major concern is college affordability. The strategy's potential impacts also match well with the Needs Assessment Report's data analysis showing that students from King County are not attaining postsecondary degrees to the extent that the local labor market needs significantly more degree holders (particularly Bachelors level) than the local education system is currently producing. While community input noted in our Needs Assessment Report did not specify a "college promise" approach as a desired solution, such an approach could, if well implemented, meet some of the goals of students and parents.

The County outlines several specific underserved populations it seeks to aid in use of the PSTAA funds. In general, we find that for typical implementation of College Promise programs, most of those vulnerable populations may well be incidentally served, but for the most part, typical CP approaches do not intentionally focus on them. The exception would be low-income students; some CP initiatives intentionally focus on low-income students (through means-tested eligibility). See the Impact section of this strategy brief for more discussion of impacts, and potential unintended consequences, on vulnerable populations. Potentially, the Strategy Area 1 implementation approach could be made to intentionally

focus on its named vulnerable populations (youth experiencing homelessness, foster youth, justice-involved youth, etc.), if the County so chooses.

Scaling up a CP program (starting with small numbers and getting larger) could be tricky but possible. Because of program design features, the main viable option for starting small and growing would be to start with specific schools or districts that are eligible for the strategy.

Related Community Plans

The PSESD's plan related to student supports takes a broad approach, and therefore estimates that it will impact very large numbers of students in King County. At the high school level, it focuses on schools with the largest numbers of low income students, and would provide funding support to schools serving 57K students (of which 23K are low income); these schools serve, for example, 87% of all low income students in the County, and 87% and 80% of Black/African American and Hispanic/Latinx students (respectively) in the County. This approach, while it does provide resource for many non-vulnerable students, makes sure large numbers of the County's underserved population is covered. The approach to supporting college-level students is less clear, but the effort estimates that its efforts will support 64K public two-year college students, of which 11K are low income.

The main scholarship/financial aid component of the group's plan may lead to nearly all scholarships to go to lower middle class students, rather than low-income students. It does supply additional $1K scholarships to each low income student; presumably this would serve some part or all of the total 11K low income 2-year college students in the County they identify.

Their project does not specify individualized approaches to other vulnerable populations the County has identified, other than opportunity youth (see the Strategy 6 brief for discussion of that effort).

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**: Dozens, if not hundreds, of CP programs exist, as well as decades of research and commentary on implementation of students support services at the high school and college levels.
- **Existing capacity and partners**: A CP program is implementable in the County through existing partners. There is interest in such programs by various coalitions at the local and state level.
- **Known barriers and challenges:** We did not find any significant barriers to potential implementation. However, evidence would point to how the three elements of the strategy should be additive to each other – which means the same student should receive all three benefits (they should not be randomly distributed throughout the population), which could increase implementation challenges.

Findings Detail

We preliminarily find implementation of the general strategy to be very feasible, but with much being dependent on final design choices and implementation approach. In particular, the size and cost of the effort and the extent to which a CP program is a joint effort requiring multiple funders to align, agree, and fund it over a very long time period could add complexity to implementation (see Affordability section for further discussion).

Because there are a large number of CP programs nationally, there is much information available to learn from in terms of how to best implement CP programs, though the codified 'best practices' summary research is nascent.[22] Because the County's approach to Strategy 1 diverges from most CP implementations in regards to adding high school supports, there may be less to rely on for that element, if it's integrated with other components. (The Seattle 13th Year Scholarship is one effort to learn from in

that regard.) Because the approach largely relies on existing large institutions to implement it, local capacity is deemed strong to implement such a plan. It has the potential to build on related efforts happening in secondary and postsecondary education locally, and local secondary/postsecondary coalitions are supportive of such a plan. We do not see any policy barriers to implementation.

The CP scholarships component very effectively leverages existing need-based aid programs for low-income students (Pell, SNG and CBS); and for relatively small additional investment has the potential to increase outcomes for low-income students. There is also much local work happening to improve the quality of advising in high schools and colleges that this effort can capitalize on.

Related Community Plans

The PSESD's current plan is backed by K12 and postsecondary leaders, and has the support of a broad range of community organizations. The City of Seattle may approve funding for a college promise-type effort in November 2018, and lessons can be learned from that work.

As noted in prior sections, the PSESD plan is ambitious in scope of the numbers to be served in the service provision elements. Raising the funds to serve those students plus the added costs of scholarships could be a significant task.

Methodology Notes for this Strategy Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We had existing expertise on our consulting team related to this topic and so relied on prior research we had done. We examined existing reports and resources, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research. Strategy area 1, in its broadest potential interpretation, encompasses many potential areas for research; for the most part, we restricted our research to looking at *the combination* of elements the County put forth, rather than trying to evaluate them as independent program elements.

Career Academies

Strategy Assessment Brief

Full Text of Strategy Area #2: *Supporting career connected education in K-12 schools, including through expansion of career academy models at the middle or high-school level to combine academic and career content from industries like technology or health care.*

Strategy Area Description

Career Academies (CAs) are career-themed (eg. Health Care, Technology, etc.) programs usually embedded within comprehensive high schools (or sometimes as stand alone schools) that use a focus on career exploration to engage students in school and prepare them for transitions to postsecondary education and employment. Typically these are voluntary, opt-in programs; students can choose whether to participate in their school's CA(s) or stay in the standard high school curriculum.

Usually serving between 30 and 200 students per grade level through the last 2-3 years of high school, Career Academies, in the officially described model, must meet three criteria: be organized as small learning communities; combine academic and technical curricula around a career theme; and establish partnerships with local employers to provide work-based learning opportunities. Some schools implement parts of or variations on this model, and may be colloquially referred to as 'career academies' as well.

A local example of a high school that has a career-orientation focus is Aviation High School, though it may not follow all the components of the CA model.

This assessment focuses on Career Academies of various kinds (both the stricter defined CA model, as well as similar approaches), and mentions some related career connected learning models frequently done in conjunction with Career Academies. It does not seek to address the full range of all potential programs and approaches that could be considered to be career connected learning or education.

Strategy Assessment Area Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and additional definition of the terms used.

Strategy #2:		
Career Academies	**Rating**	**Commentary**
Impact *Criteria: size and kind of impacts; certainty of research.*	**Medium**	Older studies of Career Academies (CAs) show no education outcomes; newer studies and some individual studies of CA-like models show some educational outcomes. CAs are shown to have some earnings benefits for males.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**High**	Additive cost (on top of existing K12 funds) is modest on a per student basis; several CAs could be implemented in the County well within the PSTAA budget and timeline.
Need *Criteria: matches identified needs; serves underserved students.*	**Medium**	Would impact a modest # of County high school grads per year. Career-oriented education was specifically identified in Needs Assessment Report. It may be difficult to focus a CA exclusively on underserved students.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**Medium**	Many CAs exist and there are models to be followed; many County and State players are interested in CAs. Reconfiguring high schools can be challenging, however.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts**:
    - A rigorous 2008 study found no impact of Career Academies (CAs) on high school completion or postsecondary attainment compared to a control group.
    - Newer approaches to CAs are more focused on academics -- for example those combining CAs with Early College programs (which on their own are known to

substantially increase high school and college outcomes) -- and are currently under evaluation.

- o Other less rigorous studies of approaches similar to career academies have demonstrated some education outcomes, including increased graduation rates, credit accumulation, college-related course taking, and academic motivation.
- o We did not find sufficient information to comment on the education impacts of CAs specifically on underserved students.
- **Rigor of Assessments**: only one rigorous assessment exists, it found no education impacts; less rigorous and newer/in process research is finding some education impacts.
- **Non-Education Impacts**: The rigorous 2008 study found an 11% increase in wages earned ($16K total over 8 years), and other positive social impacts. The economic impacts were mostly found in males, and the group studied was predominantly Black and Hispanic students.

Affordability Assessment:

- **Cost per student:** The basic CA model from the early 2000's appears to cost an additional $700-$1200/student/year over the typical cost for a high school student (2008 $s). One time start up costs are estimated to be $1500/student (2012 $s). This cost does not take into account the potential need for additional new or renovated facilities.
- **Total Cost:** The additional ongoing cost for one CA with 100 students in each of 3 years of the CA model would add up to $360,000/academy/year plus $300,000 per school start up (approximate 2018 $s). If the County supported 5 CA's for the lifetime of the PSTAA grant, it would cost approximately $27M (not inflation adjusted), plus any facilities costs.
- **Fit to PSTAA funding flow:** Good fit; timing of start up of individual CA's can be aligned to start according to when PSTAA funding is available.
- **Sustainability:** Likely largely dependent on schools/districts taking on incremental additional costs per student; these costs are meaningful but not large compared to existing per student expenditures.
- **Other notes**: Newer models that combine CAs with Early College programs or other intensive academics may have additional costs.

Need Assessment:

- **Matches identified need by community:** Community input in the Needs Assessment Report frequently referenced more career-oriented education approaches, however, CAs specifically were not mentioned.
- **Does it address education needs and disparities in the county:**
    - o Each academy might typically impact 100 high school graduates per year; even 5 or 10 such academies would not add up to be a large proportion of King County's high school graduates. Note that the research is still not completely clear that CAs will positively impact high school graduation rates.
    - o Due to the nature of the public school system and the likelihood that attending academies would be option/choices for students, it may be challenging to focus them mostly on underserved students.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: The elements of the CA model are known and stable, and the model is in wide replication across the US; there are many implementation approaches to learn from.
- **Existing capacity and partners**: There are many parties in King County and Washington State interested in supporting and building academy-type models. Existing key entities (mainly school districts) have the ability to create CAs; some CA-like models already exist in the county.

- **Known barriers and challenges:** The process of substantively changing an existing high school, or creating an entirely new one, is not simple, nor always welcomed by schools, students, or parents. School change processes can be very slow.

Additional Assessment Notes:

- This strategy area may overlap to some extent with strategy area 3 (Project-based learning), as some CAs may use project-based learning approaches.

Community input received related to this strategy area:

- Directly related to career academies:
    - Career Connect Washington
    - King County – Executive office
- Addresses career academies in part:
    - Washington STEM

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts**:
    - A rigorous 2008 study found no impact of Career Academies (CAs) on high school completion or postsecondary attainment compared to a control group.
    - Newer approaches to CAs are more focused on academics -- for example those combining CAs with Early College programs (which on their own are known to substantially increase high school and college outcomes) -- and are currently under evaluation.
    - Other less rigorous studies of approaches similar to career academies have demonstrated some education outcomes, including increased graduation rates, credit accumulation, college-related course taking, and academic motivation.
    - We did not find sufficient information to comment on the education impacts of CAs specifically on underserved students.
- **Rigor of Assessments**: only one rigorous assessment exists, it found no education impacts; less rigorous and newer/in process research is finding some education impacts.
- **Non-Education Impacts**: The rigorous 2008 study found an 11% increase in wages earned ($16K total over 8 years), and other positive social impacts. The economic impacts were mostly found in males, and the group studied was predominantly Black and Hispanic students.

Findings Detail

MDRC's rigorous 2008 study of 9 different career academies that adhered closely to the accepted framework for CAs found there was no impact on high school or postsecondary outcomes, compared to a control group. There were no differences across subgroups of students, either, on education outcomes. Follow up studies are underway, but we do not have results yet. Some CA advocates speculate that the original CA model focused far more on careers than academics, but that in the past ten years, CA model high schools have focused more on progressing to college and so greater education outcomes are anticipated. Some people also speculate that because all students in both the MDRC control and experimental groups graduated high school (~95%) and completed college (~50%) it was less possible to notice differences. This, however, would also indicate that fairly advanced students tended to self-select into CAs (very few districts mandate participation in CAs by all students).

On the positive side, the data has been interpreted to mean that participating in a CA does not suppress college attendance and completion. However, about one-third of students who begin in the CA academy model leave it before graduation, indicating that the model may not 'work' for all students. About 85% of students in the MDRC studied CAs were Black or Hispanic, indicating that these students of color are successful in this intervention, at least in terms of earnings.

MDRC's study found a meaningful 11% increase in income level for students, post graduation, compared to non-CA students. CA involved students earned about $2000 more per year, over each of the 8 years of the post-graduation study period. These income gains were limited to males; females saw no gains. CAs have been heralded as one of the few rigorously studied interventions that have been found to increase the earnings of young men of color.

Other than the study that found increased earnings for young men of color, we could find no other evidence on whether CAs would specifically increase outcomes (education or otherwise) for low income students, homeless students, foster students, justice-involved students. To the extent they may enroll in a CA, these students may be helped to the extent the general student population is; we found no evidence that CAs close education opportunity gaps.

Other less-rigorous studies of approaches *similar* to career academies have demonstrated some education outcomes:

- A variation in California on the CA model saw a 10% boost in high school graduation rates, though selection bias was not totally accounted for in these findings.
- The "Linked Learning" approach saw impacts on credit accumulation and college-related course taking; also academic motivation.

Additionally, Early College high schools saw large (15 percentage point) increases in high school graduation, and very large (20 percentage point) increases in postsecondary completion. Some new CAs are also Early College models.[23]

Related Community Plans

Community groups have suggested there could be a benefit from instituting career academies in the County, in addition to other career-academy like approaches as well as broader career connected learning. Some plans suggest closely following the established and tested 'official' model for Career Academies; other take looser approaches to integrating components of career academies and supporting high schools to have a specific career track focus – one group references work already underway in the Seattle Public Schools to build a health care pathway. One plan specifically calls for CAs to be created in schools that primarily serve underserved student populations and where the gaps in high school completion and postsecondary access are the largest. Other than an approach that calls for an exact replication of the evaluated CA model, it's not yet possible to say what the education or other impacts of these approaches would be.

Affordability Assessment

Summary:

- **Cost per student:** The basic CA model from the early 2000's appears to cost an additional $700-$1200/student/year over the typical cost for a high school student (2008 $s). One time start up costs are estimated to be $1500/student (2012 $s). This cost does not take into account the potential need for additional new or renovated facilities.
- **Total Cost:** The additional ongoing cost for one CA with 100 students in each of 3 years of the CA model would add up to $360,000/academy/year plus $300,000 per school start up (approximate 2018 $s). If the County supported 5 CA's for the lifetime of the PSTAA grant, it would cost approximately $27M (not inflation adjusted), plus any facilities costs.
- **Fit to PSTAA funding flow:** Good fit; timing of start up of individual CA's can be aligned to start according to when PSTAA funding is available.
- **Sustainability:** Likely largely dependent on schools/districts taking on incremental additional costs per student; these costs are meaningful but not large compared to existing per student expenditures.
- **Other notes**:
  - Newer models that combine CAs with Early College programs or other intensive academics may have additional costs.

Findings Detail

Two different analyses coalesce around the $700/student/year (2008 $s) cost benchmark for CAs. The estimated cost of a related model, Linked Learning, was calculated to be about $1200 (2010 $s) on average. This is the additional cost to operate such programs, on top of standard district per pupil costs. CAs would need additional funding for planning and other start up costs; we could not find those figures but the estimates of start up costs for Linked Learning programs (which have some similarities to CAs) was put at $1500/student.[24]

The potential need for new or renovated facilities is not included in this cost, and could add expense depending on the kinds of academies created. Career themes in some academies may imply greater costs than others (eg. the need for lab equipment for science-focused academies).

Total cost of the academies in King County would vary based on how many academies the County and schools decide to open, and the number of students in each academy. We roughly estimate that funding of the additive cost of five 3-year academies in the County would cost about $27M (plus any facilities costs).

We did not calculate the additional potential costs of incorporating other models, such as Early College High Schools, on top of CA costs.

Aided by moderate costs, the PSTAA funding structure and the PSTAA's intended purpose to support pilots could logically and feasibly support this strategy area. Sustained funding, post-PSTAA, may be a challenge for some school districts; however, the cost per student is not large compared to existing per pupil allocations.

We could find no existing ROI studies, but given that CAs are show to have economic benefits (for men) post-high school, it seems probable that within some few years CAs would show a positive return on invested funds.

Related Community Plans

Different community plans calculate total cost in different ways, based on the target total number of CAs to create (between 6 and 10), and assumptions about the numbers of years students might be served. Different models could range from 3 years, to 6 (4 years of high school plus up to two years to attain an Associate's degree). For example, creating 10 six-year academies would be four times more expensive than 5 three-year academies. Community plans for the most part also reference the same cost per student numbers we reference.

Need Assessment

Summary:

- **Matches identified need by community:** Community input in the Needs Assessment Report frequently referenced more career-oriented education approaches, however, CAs specifically were not mentioned.
- **Does it address education needs and disparities in the county:**
  - Each academy might typically impact 100 high school graduates per year; even 5 or 10 such academies would not add up to be a large proportion of King County's high school graduates. Note that the research is still not completely clear that CAs will positively impact high school graduation rates.
  - Due to the nature of the public school system and the likelihood that attending academies would be option/choices for students, it may be challenging to focus them mostly on underserved students.

Findings Detail

Career academies typically do not serve large numbers of students, as the creation of more intimate learning communities are part of the design. They range from 30 student per class year, to 200 at the top end. By nature they are supposed to be more personalized so may have limits on total numbers that can be served in one academy. Therefore, a significant percent of King County high school students are never likely to be served by this strategy, unless CAs were to become ubiquitous in the dozens and dozens of high schools in the County, or mandatory in some districts.

Additionally, because to date rigorous studies have not found education impacts from CAs, it can not be said that CAs would necessarily help serve a general need to increase high school and college completion in King County. As noted, newer, less studied approaches to CAs may have stronger education impacts.

It does not appear that CAs are typically intentionally structured to serve the neediest or most vulnerable students; in fact, most models operate as an 'opt-in' model. Additionally, one third of students who do opt-in to a CA in their high school leave the CA before graduation. However, it would be possible to intentionally locate CAs specifically in high schools that already serve larger numbers of underserved students.

Community input we reviewed in our Needs Assessment Report very frequently mentions the need for more career-focused education options. CAs specifically are not mentioned.

Related Community Plans

One community plan calls for very intentionally supporting CAs only in schools that serve high numbers of underserved students. Different plans suggest different total numbers of students in each class; from 50 per class to 200 per class (or 200 to 800 per academy).

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**: The elements of the CA model are known and stable, and the model is in wide replication across the US; there are many implementation approaches to learn from.
- **Existing capacity and partners**: There are many parties in King County and Washington State interested in supporting and building academy-type models. Existing key entities (mainly school districts) have the ability to create CAs; some CA-like models already exist in the county.
- **Known barriers and challenges:** The process of substantively changing an existing high school, or creating an entirely new one, is not simple, nor always welcomed by schools, students, or parents. School change processes can be very slow.

Findings Detail

Career Academies have had a stable high level program framework for the past 20 years. A few CAs have been well evaluated, and several hundred are now in existence in the US, and there is energy and enthusiasm for them at the national, state, and local levels. Existing institutions (districts, partners) in King County are relatively well positioned to implement this strategy.

Implementation feasibility is helped by the relative affordability of CAs. Sustaining CAs once they are set up is a relatively moderate cost; presumably school districts (or other funding partners) would need to agree to take on funding after PSTAA funding runs out. This strategy would leverage fairly large sums of K12 funding, as the PSTAA funds would pay the relatively small added cost of CAs; this leveraged funding is stable public funding.

PSTAA funding could be structured as initial support for initial pilot/growth years, meeting a criterion of the County's funding. The flow of the PSTAA funding over the multi-year period could create some challenges, and potentially cause delays in starting up CAs until peak PSTAA funding is available somewhat late in the funding cycle.

We note that implementing new approaches to high school can be challenging. While the County would undoubtedly look for willing district partners, modifying existing high schools can be very complex, requiring the buy-in of all involved.

Related Community Plans

Various community groups have already been working on CA-like activities or are currently actively planning for how to bring more CAs to Washington state in addition to other career connected learning opportunities. The state coalition focused on these broad opportunities has many varied members. In King County, other related coalitions and processes more focused on workforce and employment issues could provide closer connections to, and integration of, the business community and employers, which are an important component of the CA model. Many community leaders and organizations are focused on supporting CAs in particular around the most in-demand job sectors in the County.

Methodology Notes for this Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. In our research, we primarily relied on meta-studies and research summaries, but read individual program research as available, and contacted national researchers on this topic. We utilized community-provided input to discover additional research. Strategy area 2, in its broadest potential interpretation, encompasses many potential areas for research; for the most part, we restricted our research to looking only at career academies as a singular intervention.

Project-Based Learning

Strategy Assessment Brief

Full Text of Strategy Area #3: *Support elementary and middle schools in planning and launching innovative teaching methods that emphasize problem-based learning and connect classroom learning to careers.*

Strategy Area Description

Project Based Learning (PBL) is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. One of the central goals of PBL is to facilitate the deeper learning process and support students' acquisition of "21st century skills," including complex cognitive competencies such as rigorous content knowledge, critical thinking skills, and real-world applications of knowledge and skills.

PBL is grounded in cross-cutting "design principles" often related to what is taught, how it is taught, and how students should be evaluated in a PBL classroom. PBL design principles emphasize the importance of the project as the central vehicle of instruction and of students as active participants in the construction of knowledge.

PBL can be introduced into classrooms in a number of ways: Teachers and schools can make use of externally developed PBL curricula, they can develop their own PBL approaches, or PBL can be part of a whole-school reform effort.

For example, in King County, Cleveland STEM High School in Seattle is part of the New Tech Network's Project-based learning "whole school" model. Cleveland is an option school with a STEM program that has a focus on PBL and 1:1 technology. The school also partners with area businesses to introduce students to real-world work experiences and skills.

Our central question when assessing this strategy was: does providing project-based learning contribute toward education outcomes such as high school graduation and postsecondary completion? We looked at project-based learning models in K-12. This assessment focuses on PBL in the various forms noted above, which can include career-connected project-based learning modules. However, this assessment does not analyze all forms of career-connected education in general, which are numerous.

Strategy Area Assessment Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and greater definition of terms.

Strategy #3: Project-Based Learning	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**Promising**	There is no uniform model for PBL; many studies have been done, but only a few have used evaluation designs that allow for causal inferences and show positive learning outcomes for certain curricula/models. Research is inconclusive on education outcomes for vulnerable students, but some curriculum models have raised student achievement in certain subjects.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Unclear**	PBL approaches vary widely from whole school models to external curricula to teacher-developed curricula, with a range of associated costs at both the per pupil and school level, and in total. Ongoing training is needed, so sustainability beyond PSTAA timeframe would require other sources of funding.
Need *Criteria: matches identified needs; serves underserved students.*	**Low**	PBL approaches can be difficult to implement at large-scale countywide. Addresses education gaps identified in Needs Assessment, but not specifically identified in that report's summary of community input as a need.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**Medium**	PBL can be challenging to implement at larger scales, as it requires a culture shift among teachers, PBL-specific assessment tools, as well as ongoing professional development. PBL implementation is strongest in whole school models due to more supportive school leadership; several high schools in King County are implementing PBL whole school approaches effectively.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts:**
  - PBL is a promising teaching approach but varies widely in how it is designed and implemented. While many studies identify a positive relationship between PBL curriculum and student learning in certain subject areas (as well as intra- and inter-personal competencies), only a few models use rigorous evaluation designs that can demonstrate improved learning outcomes from PBL for certain subjects as compared to more traditional teaching methods.
  - A few school-level randomized control trials have assessed the effects of externally developed PBL curricula and found positive effects using specific curriculum models, particularly in science and social studies. For example, the Project-Based Inquiry Science curriculum showed substantial effects on student proficiency in certain science units for students in a large urban school district. A 2nd grade social studies and literacy curriculum implemented in a high-poverty school district has shown large effects on student learning in social studies. Teacher-initiated PBL is more difficult to assess.
  - Research evidence on the effects of PBL on specific student subgroups (lower-achieving students, special education students, English Language Learners) is not robust enough to support any conclusions for specific subgroups.
  - Some "whole school" PBL models have shown promise in improving college and career readiness through higher graduation and postsecondary persistence rates, but since PBL is only one facet of their comprehensive reform model, it is not known if the PBL curriculum is the driving force. These schools do have a clear definition of PBL in their schools, which is helpful for best practices.
  - The "design principles" most commonly used in PBL approaches align well with the overall goals of preparing students for deeper learning, higher-level thinking skills, and intra/interpersonal skills – i.e. "21st Century skills."
- **Rigor of Assessments**:
  - A few assessments use research methodologies that allow for causal inferences and show positive relationships between PBL and student learning. Many other studies show positive student learning but the rigor of the comparison group methodology is low, and/or the evaluation designs leave open the possibility that factors and services other than PBL were responsible for the outcomes found (i.e. whole school reform models; poor research design).
  - The lack of a uniform model for PBL complicates efforts to determine whether PBL is being implemented with fidelity and to evaluate its effects/outcomes.
- **Non-Education Impacts**: None found.

Affordability Assessment:

- **Cost per student:** Depends on model, but generally low. For example, estimates for the STEM Externship/Fellows program are approximately $160 per student per year (the additive cost on top of "normal" per pupil expenditures). Some estimates of whole school models of PBL (such as New Tech Network) estimate program costs at approximately $120,000 per year for each school. This fee includes support, training, professional development, and access to the network of schools.[25] Costs for curricula vary, as does start-up costs, facilities renovations (when needed), and ongoing training/technical assistance.

- **Total Cost:** Cannot be calculated at this time, as total cost is highly variable based on implementation/design choices and scale.
- **Fit to PSTAA funding flow:** Unclear at this time, depends on the PBL curriculum (externally developed or teacher-generated), other associated costs (particularly in whole school change models), implementation design, and scale. A smaller project could likely fit into PSTAA's funding flow; harder to know at larger scales.
- **Sustainability:** PBL approaches require ongoing investment for each class of students (assuming ongoing professional development for PBL, in addition to standard school PD budgets) and support for teachers to learn how to teach and assess students using PBL approaches; curricula costs may be one-time or limited.

Need Assessment:

- **Matches identified need by community:** Project-based learning was not specifically identified in the Needs Assessment Report.
- **Does it address education needs and disparities in the county:**
  - Implementing PBL curricula for certain subject areas could reach significant numbers of students in high-poverty districts if they invested in curricula, teacher training, and ongoing professional development, but this can be difficult to scale and sustain within traditional school models.
  - Similarly, whole school model approaches can be effective in encouraging and supporting PBL teacher practices, but may be difficult to scale county-wide.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: Some evidence-based curricula, and many models exist that are aligned to grade-level standards for certain subjects. As a whole, the field does not have a common definition of PBL, and there are many PBL approaches and models that have not been evaluated or that are teacher-generated and difficult to replicate. As such, fidelity to certain types of PBL models is important for raising student achievement at scale.
- **Existing capacity and partners**:
  - Depends on the PBL model chosen to implement. Several "whole school" PBL models exist in King County.
  - Several non-profit organizations and websites provide support to the field, such as curricula and resources.
  - Individual teachers and schools implement PBL for certain subject areas/classes, but it is not clear at what scale in King County.
- **Known barriers and challenges:**
  - Implementing PBL is often challenging as it requires teachers to modify their roles (from directors to facilitators of learning) and to tolerate not only ambiguity but also more noise and movement in the classroom. Teachers must believe that their students are fully capable of learning through this approach, which may be challenging if they were not taught or trained in this pedagogy.
  - There is also currently a lack of valid, reliable, and readily usable measures of the kinds of deeper learning and interpersonal and intrapersonal competencies that PBL aims to promote.
  - No known regulatory or policy barriers in place.
- **Other notes**:
  - Professional development - both initial training and continuing support - is essential to the successful implementation of PBL. Technology can be a useful tool in supporting PBL approaches, but also requires relevant PD.
  - Whole school models are more likely to influence a teacher's belief in using PBL because school leadership supports this approach.
  - Done well, PBL can be effective and highly engaging for students when teachers are well trained and supported in the approach and curriculum.

Community input received relating to this strategy

- Pacific NW Center for Education Innovation (Rachel Klein Consulting)
- Washington Alliance for Better Schools (WABS)

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- o PBL is a promising teaching approach but varies widely in how it is designed and implemented. While many studies identify a positive relationship between PBL curriculum and student learning in certain subject areas (as well as intra- and inter-personal competencies), only a few models use rigorous evaluation designs that can demonstrate improved learning outcomes from PBL for certain subjects as compared to more traditional teaching methods.
- o A few school-level randomized control trials have assessed the effects of externally developed PBL curricula and found positive effects using specific curriculum models, particularly in science and social studies. For example, the Project-Based Inquiry Science curriculum showed substantial effects on student proficiency in certain science units for students in a large urban school district. A 2nd grade social studies and literacy curriculum implemented in a high-poverty school district has shown large effects on student learning in social studies. Teacher-initiated PBL is more difficult to assess.
- o Research evidence on the effects of PBL on specific student subgroups (lower-achieving students, special education students, English Language Learners) is not robust enough to support any conclusions for specific subgroups.
- o Some "whole school" PBL models have shown promise in improving college and career readiness through higher graduation and post-secondary persistence rates, but since PBL is only one facet of their comprehensive reform model, it is not known if the PBL curriculum is the driving force. These schools do have a clear definition of PBL in their schools, which is helpful for best practices.
- o The "design principles" most commonly used in PBL approaches align well with the overall goals of preparing students for deeper learning, higher-level thinking skills, and intra/interpersonal skills – i.e. "21st Century skills."
- • **Rigor of Assessments**:
  - o A few assessments use research methodologies that allow for causal inferences and show positive relationships between PBL and student learning. Many other studies show positive student learning but the rigor of the comparison group methodology is low, and/or the evaluation designs leave open the possibility that factors and services other than PBL were responsible for the outcomes found (i.e. whole school reform models; poor research design).
  - o The lack of a uniform model for PBL complicates efforts to determine whether PBL is being implemented with fidelity and to evaluate its effects/outcomes.
- • **Non-Education Impacts**: None found.

Findings Detail

A 2017 meta-analysis by MDRC on the research literature for PBL found the evidence for PBL's effectiveness in improving students' outcomes to be "promising but not proven." The working paper built on a seminal literature review of PBL published in 2000, and found that evaluations of PBL's effectiveness have been hampered by the lack of valid, reliable, and readily usable measures of the kinds of deeper learning and inter- and intra-personal competencies that PBL aims to promote. Many studies also have used weak evaluation designs, making it difficult to measure impact.[26]

However, several studies have found positive effects associated with the use of PBL curricular models in science and social studies classes (there is less evidence for math and literacy effectiveness, due to the relative lack of studies of PBL in these subjects). For example, certain curricula such as the "Project-Based Inquiry Science (PBIS)" were developed by leading experts in PBL and curriculum design, and some units of the curriculum were rigorously evaluated for measures of student achievement (school-level randomized control trial) on a sample of 42 middle schools in an urban district. For context, the gap

in achievement at various points during the school career between children in poverty and others is an effect size of between 0.50 and 1.00. Therefore, effect sizes in this range can be considered quite large. Effect sizes of 0.25 (if persistent) are substantial. The researchers found positive effects on students' proficiency in certain science subjects (.22 for the physical science unit and .25 for the earth science unit).[27] Other examples include positive effects found from a randomized control trial (RCT) in Iran on vocabulary recall and retention from a PBL approach to teaching English as a Foreign Language;[28] and an ongoing RCT in Michigan of a social-science curriculum for low-income second graders found gains in social studies (.48) and informational reading (.18).[29]

"Whole school" PBL models have shown promise in improving college and career readiness. Since PBL is only one facet of their comprehensive reform model, it is not known if the PBL curriculum is the driving force. These schools do have a clear definition of PBL in their schools, so it is hard to determine what PBL best practices are happening. Examples of whole school PBL models include networks such as: Expeditionary Learning Schools (EL), New Tech Network, High Tech High, and Envision Schools. For example, the New Tech Network, which works with 200 K-12 schools in 28 states, including Cleveland High School in Seattle, published data that shows a 92% high school graduation rate from network schools (9% higher than the national rate of 84%) and that students persist in college at a rate of 83% (5% higher than the national rate of 78%).[30] While these schools have promising evidence on student achievement, since PBL is only one facet of the reform model, it does not provide a basis to infer that PBL is the driving force behind the school's effectiveness.[31] The literature pointing to the effectiveness of whole-school reform models that include PBL as a central component/approach have suggested the importance of supportive school leadership and a school culture that aligns with a PBL approach.

Overall, there is currently little consensus among developers of PBL design principles about how PBL fits in with other instructional methods, how long a PBL unit should last, the roles of student choice and collaborative learning, and how learning should be assessed. The lack of a uniform vision complicates efforts to determine whether PBL is being implemented with "fidelity" and to evaluate its effects/impacts more definitively. That said, the "design principles" most commonly used in PBL approaches align well with the overall goals of preparing students for deeper learning, higher-level thinking skills, and intra/interpersonal skills.

Related Community Plans

As part of our Information Request process, we received two community responses that most directly addressed strategy area 3 – from 1) Pacific Northwest Center for Educational Innovation, and 2) Washington Alliance for Better Schools (WABS).

The Pacific NW Center for Education Innovation is an emerging organization in the startup phase that would provide support and professional development for innovative school models (which could include PBL models, but is not specifically focused on PBL approaches). The Center, which has not yet been launched, would build school leader and teacher learning networks and facilitate public engagement about innovations in education. It would provide programmatic support for schools and teachers looking to reimagine the learning experience (through learning opportunities, planning and design processes, funding, and program evaluation supports). As such, the Center could be a valuable resource for PBL professional development, best practices, and supports for teachers. Significant research has been done into the impact of Networked Improvement Communities – which, similar to the Center, bring cohorts of change-oriented professionals together to solve a common, well-defined problem with an intentional process and intensive research and data support.[32] However, there is no known systematic study of impacts for an organization with exactly the pieces the Center is trying to put together.

Meanwhile, the Washington Alliance for Better Schools (WABS) is a collaborative of school districts that is proposing to expand an existing PBL/Career-connected learning program, called the STEM Externship and STEM Fellows program. One of the goals of the WABS is to build teachers' skill and capacity to provide powerful learning opportunities, including introducing teachers to the problem-based learning (PBL) model. Teachers, in partnership with industry will create a PBL unit connected to Next Generation Science Standards and/or Common Core State Standards that helps teach students more about our

regional career pathways and the importance of 21st Century skills in the current and future workforce. Through their year-long professional development programs, teachers write industry-based PBL units, integrate 21st Century skills into the classroom, introduce industry voice through career connected learning for students, and collaborate with other school staff and regional efforts to advance college and career readiness. The STEM Externship and STEM Fellows programs are already in existence and work with teachers in grades 4-12, who in turn bring a vetted unit to their students. These programs impact approximately 2,000 students in King County each year.

WABS has evidence around what makes effective teacher professional development, and meets all these criteria with their PBL programs. However, they do not have studies directly about the efficacy of the STEM Externship and Fellows programs (i.e. partnering with industry and higher education to bring more career-connected learning to the classroom). WABS has collected evidence of educators shifting their practice to be more student-centered and to providing more career-connected learning opportunities as a result of participating in the programs. They collect qualitative data from programs using pre and post surveys for students and teachers. They also collect personal experience (stories), and utilize observational analysis without a comparison group.

Affordability Assessment

Summary:

- **Cost per student:** Depends on model, but generally low. For example, estimates for the STEM Externship/Fellows program are approximately $160 per student per year (the additive cost on top of "normal" per pupil expenditures). Some estimates of whole school models of PBL (such as New Tech Network) estimate program costs at approximately $120,000 per year for each school. This fee includes support, training, professional development, and access to the network of schools.[33] Costs for curricula vary, as does start-up costs, facilities renovations (when needed), and ongoing training/technical assistance.
- **Total Cost:** Cannot be calculated at this time, as total cost is highly variable based on implementation/design choices and scale.
- **Fit to PSTAA funding flow:** Unclear at this time, depends on the PBL curriculum (externally developed or teacher-generated), other associated costs (particularly in whole school change models), implementation design, and scale. A smaller project could likely fit into PSTAA's funding flow; harder to know at larger scales.
- **Sustainability:** PBL approaches require ongoing investment for each class of students (assuming ongoing professional development for PBL, in addition to standard school PD budgets) and support for teachers to learn how to teach and assess students using PBL approaches; curricula costs may be one-time or limited.

Findings Detail

Some estimates of whole school models of PBL estimate program costs are approximately $100-120k per year for each school. This fee includes support, training, professional development, and access to the network of schools, but not for additional staff that may be required, technology that accompanies the program, or facility redesign that is often required to foster more collaborative spaces.[34] This is the additive cost of PBL on top of 'normal' per pupil expenditures.

Given the various ways in which PBL can enter the classroom (PBL as a part of a whole-school approach; externally developed PBL curricula; teacher-initiated PBL), there are a wide range of costs associated with different approaches. As such, it is difficult to estimate potential costs for King County without more specifics about the PBL approaches of interest. In general, PBL requires ongoing professional development, so sustainability of the program would require ongoing funding beyond the time duration of the PSTAA funds.

Related Community Plans

The PNW Center for Educational Innovation estimates an annual cost to operate at approximately $3.3M after a two year ramp up period. The Center would serve approximately 17,600 students per year by Year 3, making the per/student cost approx. $200/student/year when fully ramped (accounting for other funding sources as well). While the Center would provide support and guidance on PBL methods and approaches, this would not be the only innovative teaching or school method that is supported by the Center.

WABS estimates the cost for the combined STEM Fellows and STEM Externship programs at approximately $325,000 per year. They plan to serve approx. 2,070 students/year, for a total cost/student of approx. $150 ($65 per student for PSTAA funds). Their plan will leverage resources from corporate and foundation partners.

Need Assessment

Summary:

- **Matches identified need by community:** Project-based learning was not specifically identified in the Needs Assessment Report.
- **Does it address education needs and disparities in the county:**
    - Implementing PBL curricula for certain subject areas could reach significant numbers of students in high-poverty districts if they invested in curricula, teacher training, and ongoing professional development, but this can be difficult to scale and sustain within traditional school models.
    - Similarly, whole school model approaches can be effective in encouraging and supporting PBL teacher practices, but may be difficult to scale county-wide.

Findings Detail

Far too few students of color and low-income students in King County feel connected to their school, are achieving academically at the same rates as their white peers, or are graduating high school and attending college and going on to high-income jobs. PBL is a possible approach to addressing these inequities while equipping students with "21st century skills" such as critical thinking, content knowledge, and real-world applied learning. The Needs Assessment Report included community feedback about the growing need for innovative approaches to better inform students of career-based education opportunities, as well as a need for communication to inform students about high-demand jobs within the region. There was no mention of project-based learning approaches specifically.

PBL could be implemented as a whole school model or via curricula in specific subjects and professional development/trainings at the school or district level. Given the noted implementation challenges in instituting a PBL approach in a traditional classroom without school leadership support and ongoing training and assessment tools for teachers, it may be difficult to institute PBL at sufficient scale to reach a significant number of students in the county. Similarly, whole school models would need to be adopted by many individual schools to reach a meaningful number of students, which could be logistically (and politically) challenging. Currently, the schools that offer PBL whole school approaches are "option" schools for those students that are interested in attending, so self-selection is possible. If whole school models became widespread, it could be problematic for some students (and teachers) who aren't interested in PBL approaches, or the "focus area" of the school (many have a STEM focus). Also, given the focus on projects and teamwork, it can be challenging to assess individual student contributions, especially when standardized instruments are not available to measure higher level learning outcomes.

Related Community Plans

As noted above, the PNW Center for Education Innovation could affect 17,600 students per year by Year 3, and continue over the duration of PSTAA funding.

For WABS, the STEM Externship and Fellows program could impact 2,070 students/year over a 10-year period.

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**: Some evidence-based curricula, and many models exist that are aligned to grade-level standards for certain subjects. As a whole, the field does not have a common definition of PBL, and there are many PBL approaches and models that have not been evaluated or that are teacher-generated and difficult to replicate. As such, fidelity to certain types of PBL models is important for raising student achievement at scale.
- **Existing capacity and partners**:
  - o Depends on the PBL model chosen to implement. Several "whole school" PBL models exist in King County.
  - o Several non-profit organizations and websites provide support to the field, such as curricula and resources.
  - o Individual teachers and schools implement PBL for certain subject areas/classes, but it is not clear at what scale in King County.
- **Known barriers and challenges:**
  - o Implementing PBL is often challenging as it requires teachers to modify their roles (from directors to facilitators of learning) and to tolerate not only ambiguity but also more noise and movement in the classroom. Teachers must believe that their students are fully capable of learning through this approach, which may be challenging if they were not taught or trained in this pedagogy.
  - o There is also currently a lack of valid, reliable, and readily usable measures of the kinds of deeper learning and interpersonal and intrapersonal competencies that PBL aims to promote.
  - o No known regulatory or policy barriers in place.
- **Other notes**:
  - o Professional development - both initial training and continuing support - is essential to the successful implementation of PBL. Technology can be a useful tool in supporting PBL approaches, but also requires relevant PD.
  - o Whole school models are more likely to influence teacher's belief in using PBL because school leadership supports this approach.
  - o Done well, PBL can be effective and highly engaging for students when teachers are well trained and supported in the approach and curriculum.

Findings Detail

MDRC's literature review looks at case studies on PBL implementation, and finds that teachers' beliefs are strongly influenced by their school context. For example, some studies found that it was easier to implement PBL when most, if not all, of the teachers in a building tried it at the same time.[35] The literature also found that PBL implementation is particularly challenging because it changes student-teacher interactions, demands a shift from teacher-directed to student-directed inquiry, and requires non-traditional modes of assessment. Additionally, the research has strongly suggested that it will be difficult for any PBL model to be implemented with fidelity to a particular curriculum model if it does not include professional development.[36]

Locally, several "whole school" PBL models exist in King County, including the Cleveland STEM High School and Louisa Boren STEM K-8 in Seattle, Raisbeck Aviation High School in Tukwila, Big Picture School in Bellevue, and Tesla STEM High School in Redmond, among others. Individual teachers and schools implement PBL for certain subject areas/classes, but it is not clear at what scale in King County.

Additionally, non-profit organizations such as Educurious provide a project-based learning curriculum that is aligned to high standards and learning science research, as well as professional development

workshops and career-connected learning opportunities. Other organizations that provide support to the field, such as curricula and resources, include the Buck Institute for Education and Edutopia (George Lucas Educational Foundation), among others.

Related Community Plans

The PNW Center for Educational Innovation is not yet created, but looking for startup and operational funding. Once launched, the Center could be a source for ongoing professional development and peer-support for PBL and other innovative teaching methods. The Center currently has the following pieces lined up: candidates to help with fiscal sponsorship, staff (currently mainly flexible consultants) for key roles, and school and district partners positioned to support school and district outreach.

WABS' STEM Externship and Fellows program is already operational. WABS has existing partnerships (over the past 3 years) with corporations and organization such as: Challenge Seattle, Boeing, Institute for Systems Biology, McKinstry, Amazon, Blue Origin, Microsoft, PATH, PSE, Kaiser Permanente, Weyerhaeuser, Oxbow Farms, Expedia, Port of Seattle, King County Airport, Fred Hutch, Nordstrom, The University of Washington, and Renton Technical College.

Methodology Notes for this Strategy Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research.

Early Learning Facilities

Strategy Assessment Brief

Full Text of Strategy areas #4 and #5:
4. Constructing, maintaining and renovating facilities to support early learning programs.
5. Collocating early learning centers with affordable housing, including flexible, mixed-use space to meet the multiple needs of children and youth with limited access to services.

Note: Strategy areas 4 and 5 were combined for this assessment because we primarily seek to understand the underlying features common to both approaches for providing facilities to support early learning programs.

Strategy Description

This strategy would finance facilities for early learning programs – which typically require indoor classrooms, bathrooms, kitchen and office space, and indoor/outdoor play space (to particular square footage requirements, as mandated by state licensing rules). Facilities expansion can be accomplished through renovation, tenant improvements, or new construction; the goal is to accommodate additional early learning programs for young children in the county. PSTAA funds would not be used for the operating costs of early learning programs and services. PSTAA funds could be used to create and/or utilize an existing financing structure for renovation, commercial tenant improvement, and/or construction of new facilities. One approach under this strategy area is to invest in facilities that co-locate early learning centers within affordable housing developments, and to include flexible, mixed-use space in these developments to provide a variety of services to vulnerable families.

Our central question when assessing this strategy area was: does providing *facilities* for early learning programs contribute toward kindergarten readiness or other education outcomes? Our research found that "high quality" early learning can increase kindergarten readiness – and so our assessments assume that facilities would be provided for those programs that provide "high-quality" early learning services (i.e. models for which there are known educational outcomes, such as the state's Early Childhood Education Assistance Program (ECEAP), or childcare programs with quality ratings from the state).[37] Given that PSTAA funds are targeted toward low-income and/or vulnerable children, our assessment also assumes that facilities would be provided for programs that benefit low-income and/or vulnerable children. As such, we narrowed our analysis to ECEAP, Head Start, and private/non-profit childcare programs that serve children who receive public subsidy (through the state's Working Connections Child Care program, WCCC).

Strategy Area Assessment Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately

declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and greater definition of terms.

Strategies #4 & 5: Early Learning Facilities	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**High**	Getting to impact from funding facilities will be dependent on the quality of the early learning programs being housed - "high quality" programs have shown substantial effects on K-readiness among low-income children and children of color. Stable housing has positive effects on education outcomes, but impacts from co-location models are difficult to measure.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Medium**	Given the costly nature of renovating/constructing facilities, upfront costs can be high. However, facilities are used for many years and will serve many children. Several variables impact the actual cost/child over time; facilities can be scaled to fit the need, budget, and funding flow.
Need *Criteria: matches identified needs; serves underserved students.*	**High**	There is a well-documented need for expansion of facilities for early learning and affordable housing in the county. Needs Assessment Report specifies early learning as a need. Kindergarten readiness scores show clear disparities based on race and income, which high quality early learning can address.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**Medium**	Implementation best practices exist; facilities will endure and significantly leverage other efforts and funding streams. Legal barriers exist for facilities usage of funds but may be removed through 2019 legislation.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts:**
    - Multiple meta-analyses find average effect sizes for initial preschool program impacts of about .5 (quite large) on a wide range of outcome measures, including achievement and cognitive tests. (For context, the gap in achievement at various points during the school

career between children in poverty and others is an effect size of between 0.50 and 1.00. Therefore, effect sizes in this range can be considered quite large. Effect sizes of 0.25 (if persistent) are substantial).

- o Long-term educational impacts have shown improved achievement and behavior in grade school, and improved high school and post-secondary completion, employment, and median annual earnings.
- o Longitudinal studies indicate that every dollar invested in high-quality preschool for disadvantaged children from birth-to-five years delivers a 13 percent per annum return on investment.
- o Cost benefit analysis shows that state and district early childhood education programs have a $4.76 benefit to cost ratio, and an 89% chance that benefits will exceed costs.
- o Positive effects of high-quality, large-scale public programs have been found for language, literacy, math, executive function, and behavior; reduced school failure as indicated by grade repetition and special education placements. In general, more educationally intensive programs (which does not mean overly academic and didactic) have larger and more persistent impacts.
- o Where the quality of center-based early learning is high, increases in school readiness generally follow. In experimental research on high-quality programs, effect sizes typically ranging from 0.05 to 0.30 (substantial). In state program evaluations where quality delivery was high, effect sizes have been reported beyond this range and, at times, significantly beyond this range. Having children spend more time (dosage) in high-quality settings also appears to yield improved academic outcomes for children.
- o ECEAP is effective in producing gains in academic achievement for math and literacy in 3rd, 4th, and 5th grades. ECEAP's impact on test scores is almost twice as large as the average effect size The Washington State Institute for Public Policy (WSIPP) found when they reviewed research on early childhood education programs in other states.

- **Rigor of Assessments**:
  - o The amount of high-quality, rigorous research and program evaluations examining the effects of quality early learning and its impact on school readiness is substantial. Positive, long-term effects of high quality early learning and kindergarten readiness on child, youth, and adult outcomes are largely accepted by researchers[38], the focus now is more on what content, environment, and practice are best suited for high-quality early learning, particularly at scale.

- **Non-Education Impacts**:
  - o Secondary outcomes for the parents of young children include increased racial/ethnic equity in access to and completion of post-secondary education.
  - o Reduced delinquency, crime, and risky behaviors (including smoking and teen pregnancy) in adolescence; higher median annual earnings and employment rates.

- **Other notes**:
  - o Homelessness and housing stability have been shown to greatly affect a child's near-term growth and long-term development, and can have long-lasting effects on health, education and other social outcomes later in life. However, it is difficult to measure the specific impacts of co-location of early learning facilities with affordable housing.

Affordability Assessment:

- **Cost per student:** Varies greatly depending on many factors, including the type of facilities expansion (renovation, commercial tenant improvements, or new construction), financing terms, and the size and life of the facilities.
- **Total Cost:**
  - o Over the timeframe of PSTAA funds, potential mid-range cost estimates to meet the projected need for ECEAP facilities through 2035 are put at $61M; for children receiving public subsidy for child care at $142M; and for both at $203M. These costs are presented in 2017 dollars. The potential upper range estimate for both is at $373M. These cost estimates are preliminary and do not include the cost of land or capacity expansion

through family home child care, or the constraint of a state cap on funding for child care subsidies.

  - o To provide a point of reference, cost estimates (2017 $s) for an average-sized child care center facility (4 classrooms) would cost $3.2M per facility ($.8M per classroom), and serve approximately 72 children per year (18 children per classroom). Commercial Tenant Improvements would cost $1.6M per facility ($.4M per classroom). Renovation costs to expand existing facilities can range from $.18-$.3M per classroom. These cost estimates are preliminary and do not include the cost of land. Note that many ECEAP providers pay less than market rates for their space.

- **Fit to PSTAA funding flow:** Facility investments can be scaled up or down to fit within the irregular funding flow and limited time horizon.
- **Sustainability:** No funding sustainability issues known at this time.
- **Other notes**: This strategy significantly leverages other public and private resources.

Need Assessment:

- **Matches identified need by community:** The Needs Assessment Report did reference the need for affordable early learning, but not facilities as a specific means to that end.
- **Does it address education needs and disparities in the county:**
  - o This strategy addresses a known need in the county: disparities in kindergarten readiness among low-income students and children of color. It directly addresses this need by increasing the supply of affordable facilities for early learning services.
  - o ECEAP will be a statutory entitlement by 2022 and become available to all eligible children in WA state, which will require a large increase in enrollment slots (and new classrooms) in King County.
  - o There is a large gap between the supply of high-quality early learning services and the demand among high-needs populations in King County - in a single year 8,002 children under 5 years old who are eligible for Head Start, ECEAP, or Subsidy Child Care are un-served. This number is projected to increase over the life of PSTAA and afterward.
  - o To provide a point of reference, a typical pre-k classroom (ECEAP or private) serves 18 children (infant and toddler classrooms serves 12). A four classroom configuration produces a cost effective and manageable early learning facility, although some centers have many more classrooms (6+), and some have just one, especially in rural areas. One typical pre-k center with 4 classrooms might serve 72 children per year; over 15 years, such a center could serve up to 1,080 children.
- **Other notes**:
  - o There is also a large gap in the need for affordable housing in King County (KC) which is projected to increase (KC requires 156,000 affordable homes in 2017; the County will need 244,000 new homes to address the affordable housing need by 2040).

Implementation Feasibility Assessment:

- **Models/replication supports exist**:
  - o There are models and best practices for child care facilities funds nationally.
- **Existing capacity and partners**:
  - o Significant capacity exists within the community via partnerships, technical assistance, and private funders.
  - o A technical plan that documents best practices is in development by coalition stakeholders.
- **Known barriers and challenges:**
  - o There are potential legal/policy issues with utilizing PSTAA funds for facilities costs, but this could be addressed by legislation in 2019. Child care facility funds are an accepted practices in many other states, counties, and cities nationally.

Community input received relating to this strategy

- Early Learning Facilities Stakeholders Group (3SI and Elty Consulting)

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts:**
  - Multiple meta-analyses find average effect sizes for initial preschool program impacts of about .5 (quite large) on a wide range of outcome measures, including achievement and cognitive tests. (For context, the gap in achievement at various points during the school career between children in poverty and others is an effect size of between 0.50 and 1.00. Therefore, effect sizes in this range can be considered quite large. Effect sizes of 0.25 (if persistent) are substantial).
  - Long-term educational impacts have shown improved achievement and behavior in grade school, and improved high school and post-secondary completion, employment, and median annual earnings.
  - Longitudinal studies indicate that every dollar invested in high-quality preschool for disadvantaged children from birth-to-five years delivers a 13 percent per annum return on investment.
  - Cost benefit analysis shows that state and district early childhood education programs have a $4.76 benefit to cost ratio, and an 89% chance that benefits will exceed costs.
  - Positive effects of high-quality, large-scale public programs have been found for language, literacy, math, executive function, and behavior; reduced school failure as indicated by grade repetition and special education placements. In general, more educationally intensive programs (which does not mean overly academic and didactic) have larger and more persistent impacts.
  - Where the quality of center-based early learning is high, increases in school readiness generally follow. In experimental research on high-quality programs, effect sizes typically ranging from 0.05 to 0.30 (substantial). In state program evaluations where quality delivery was high, effect sizes have been reported beyond this range and, at times, significantly beyond this range. Having children spend more time (dosage) in high-quality settings also appears to yield improved academic outcomes for children.
  - ECEAP is effective in producing gains in academic achievement for math and literacy in 3rd, 4th, and 5th grades. ECEAP's impact on test scores is almost twice as large as the average effect size The Washington State Institute for Public Policy (WSIPP) found when they reviewed research on early childhood education programs in other states.
- **Rigor of Assessments**:
  - The amount of high-quality, rigorous research and program evaluations examining the effects of quality early learning and its impact on school readiness is substantial. Positive, long-term effects of high quality early learning and kindergarten readiness on child, youth, and adult outcomes are largely accepted by researchers[39], the focus now is more on what content, environment, and practice are best suited for high-quality early learning, particularly at scale.
- **Non-Education Impacts**:
  - Secondary outcomes for the parents of young children include increased racial/ethnic equity in access to and completion of post-secondary education.
  - Reduced delinquency, crime, and risky behaviors (including smoking and teen pregnancy) in adolescence; higher median annual earnings and employment rates.
- **Other notes**:
  - Homelessness and housing stability have been shown to greatly affect a child's near-term growth and long-term development, and can have long-lasting effects on health, education and other social outcomes later in life. However, it is difficult to measure the specific impacts of co-location of early learning facilities with affordable housing.

Findings Detail

The amount of high-quality research and program evaluations examining the effects of quality early learning and its impact on school readiness is substantial. Positive, long-term effects of high quality early learning and kindergarten readiness on child, youth, and adult outcomes are largely accepted by researchers[40], the focus now is more on what content, environment, and practice are best suited for high-quality early learning, particularly at scale.

Public early learning programs have smaller effects than more intensive model programs, while state-funded programs tend to outperform Head Start (a federal program).[41] WA State Institute for Public Policy (WSIPP)'s cost benefit analysis shows that state and district early childhood education programs have a $4.76 benefit to cost ratio, and an 89% chance that benefits will exceed costs.[42] Positive effects of high-quality, large-scale public programs have been found for language, literacy, math, executive function, and behavior, as well as reduced school failure as indicated by grade repetition and special education placements. In general, more educationally intensive programs (which does not mean overly academic and didactic) have larger and more persistent impacts.[43] Longitudinal studies, such as the Lifecycle Benefits study by Heckman et al. indicate that every dollar invested in high-quality preschool for disadvantaged children from birth-to-five years delivers a 13 percent per annum return on investment.[44]

For context, the gap in achievement at various points during the school career between children in poverty and others is an effect size of between 0.50 and 1.00. Therefore, effect sizes in this range can be considered quite large. Effect sizes of 0.25 (if persistent) are substantial. In their longitudinal research,[45] the Washington State Institute for Public Policy (WSIPP) finds that ECEAP is effective in producing gains in academic achievement in 3rd grade (.14 Math; .17 Literacy), 4th grade (.16 Math; .26 Literacy), and 5th (.16 Math; .23 Literacy) grades. ECEAP's impact on test scores is almost twice as large as the average effect size WSIPP found when they reviewed research on early childhood education programs in other states. Kindergarten readiness for ECEAP is impacted by the number of years a child attends the program (55% of 4 year olds are K ready with one year of ECEAP; 67% are K ready with two years of ECEAP participation).[46] The 2016-2017 ECEAP Outcomes Report shows WaKIDS readiness scores (6 of 6 domains) are approximately 5 percentage points higher for very poor children in ECEAP (family incomes < 110 percent of the federal poverty level [FPL]) compared to children with higher family incomes who are not in ECEAP (> 185% FPL).

A meta-analysis of pre-k impact studies found that "high-quality" programs are the minimum quality level necessary to reliably increase children's school readiness outcomes.[47] Having children spend more time (dosage) in high-quality settings also appears to yield improved academic outcomes for children, as seen in ECEAP.[48]

Washington State has mandated that all ECEAP programs, Head Start programs, and child care early learning programs that accept children on a Working Connections Child Care Subsidy (i.e. children under 200% FPL) must meet minimum quality early learning standards (Early Achievers Quality Rating Level 3 or higher) by December 31, 2019.[49] For child care providers that serve children on subsidy, these classrooms may also include children that are not low-income. That said, the evidence suggests that program effects on disadvantaged children may be larger when programs serve children from diverse backgrounds.[50] ECEAP providers were required to rate at a Level 4 by March 1, 2016 (or to reach a Level 4 rating when they renew their rating within 3 years). [51]

Therefore, state regulations are aligned with and support implementation fidelity of all quality programs that would serve low-income children (through state funded programs) and use these facilities. If the county funds facilities for early learning programs that aren't rated or don't meet a quality level of 3 or higher, these investments may not result in improved educational outcomes, such as kindergarten readiness. To give a sense of current quality ratings through Early Achievers, the vast majority of private child care providers that have been rated scored at a Level 3 (on a scale of 2-5). For ECEAP, the vast majority of programs that have been rated have scored at a Level 4.[52] The Department of Children Youth and Families (DCYF) currently states that a score of "3" (with state-provided quality improvement supports) on a scale of 2-5 is considered "high quality."[53] DCYF has recently shared proposals for creating a quality distinction of Level 3+ (i.e. the minimum number of points and supports to assure "pre-k readiness"), called the "EA School Readiness Area of Specialization." While this specific point distinction

has not been implemented as of this writing, this or some other proxy could potentially be used to provide a more refined distinction of quality among providers who have rated at Level 3 (which has a large point range).

While we did not locate research specifically on the impacts of housing-based initiatives such as *co-location* of early learning in affordable housing, there is robust research that shows that housing stability and housing quality significantly affect a child's long-term health and well being. Research at Johns Hopkins University and elsewhere indicates the relationships between housing, school attendance, and costs. Homelessness and housing stability have been shown to greatly affect a child's near-term growth and long-term development, and they can have long-lasting effects on health, education and other social outcomes later in life. Studies have also shown that higher degrees of housing instability are associated with higher degrees of household stress, in particular maternal stress, resulting in greater levels of toxic stress for children. In addition to the importance of housing stability, housing quality and the living environment are also linked to children's outcomes. One concern is the degree to which children are exposed to housing-related environmental stressors, which, if chronic and in the absence of supportive buffers, can reach the level of "toxic stress," significantly affecting long-term education achievement and other outcomes.[54]

Furthermore, a variety of housing-related factors can affect children in different ways. For example, emotional and mental problems may result from housing instability (marked by frequent moves or lack of safe, stable, and affordable housing) and overcrowding. Housing quality, such as mold- and lead-free environments, are equally important for child health outcomes. Asthma may be caused by airborne contagions that often are prevalent in substandard housing. Research indicates that perceived safety and overall neighborhood quality also profoundly influence a child's stress response systems as well as physical health and wellbeing.[55]

Research also shows that childcare is a key leveler in economic mobility, allowing low-income parents to not be burdened by the ever increasing costs of childcare and instead focus on their job security, career development, or broader economic mobility.[56] In WA, 23% of all community and technical college students are parents of dependent children, and 41% of them are single parents. Approximately two-in-five student parents (38 percent) enrolled in Washington's CTC system are students of color). Black students are most likely to be parenting while attending community college (36 percent of all Black college students in Washington State are raising children), followed by American Indian/Alaska Native (33 percent) and Native Hawaiian/Pacific Islander students (31 percent), Hispanic (26 percent), and White (22 percent) students.[57] As such, addressing student parents' child care needs in WA State can contribute to achieving racial/ethnic equity in outcomes for postsecondary access and completion (in addition to K readiness outcomes for low-income children).

Related Community Plans

As part of our Information Request process, we received one community response that most directly addressed Strategy areas 4 and 5 – from the Early Learning Facilities Stakeholder group (ELFS). Their plan would involve funding facilities expansion, with a process for technical assistance for entities trying to expand high-quality early learning programs for low-income children and families. This may include a variety of facility types, including stand-alone facilities and co-location with affordable housing, including flexible, mixed-use spaces that could be utilized across age groups in the education continuum. Priority is on serving low-income (below 200% FPL), underserved children ages 0-5 in the county. This tracks with eligibility for Working Connections Child Care (subsidy) and encompasses the income eligibility for ECEAP (110% FPL). These eligibility levels may change over time, but will continue to be focused on low-income children.

Affordability Assessment

Summary:

- **Cost per student:** Varies greatly depending on many factors, including the type of facilities expansion (renovation, commercial tenant improvements, or new construction), financing terms, and the size and life of the facilities.
- **Total Cost:**
    - Over the timeframe of PSTAA funds, potential mid-range cost estimates to meet the projected need for ECEAP facilities through 2035 are put at $61M; for children receiving public subsidy for child care at $142M; and for both at $203M. These costs are presented in 2017 dollars. The potential upper range estimate for both is at $373M. These cost estimates are preliminary and do not include the cost of land or capacity expansion through family home child care, or the constraint of a state cap on funding for child care subsidies.
    - To provide a point of reference, cost estimates (2017 $s) for an average-sized child care center facility (4 classrooms) would cost $3.2M per facility ($.8M per classroom), and serve approximately 72 children per year (18 children per classroom). Commercial Tenant Improvements would cost $1.6M per facility ($.4M per classroom). Renovation costs to expand existing facilities can range from $.18-$.3M per classroom. These cost estimates are preliminary and do not include the cost of land. Note that many ECEAP providers pay less than market rates for their space.
- **Fit to PSTAA funding flow:** Facility investments can be scaled up or down to fit within the irregular funding flow and limited time horizon.
- **Sustainability:** No funding sustainability issues known at this time.
- **Other notes**: This strategy significantly leverages other public and private resources.

Findings Detail

Over the timeframe of PSTAA funds, preliminary mid-range cost estimates to meet the projected need for ECEAP facilities through 2035 are estimated at $61M; for private child care facilities rated Level 3-5 that serve children who qualify for child care subsidy at $142M; and for both ECEAP and children who qualify for subsidy at $203M. The preliminary upper range estimate for both ECEAP and children who qualify for subsidy is $373M. These estimates were taken from the Early Learning Facilities Stakeholder Group (ELFS)'s report to King County, are presented in 2017 dollars, and are considered preliminary.[58] They note that these estimates do not include the cost of land, capacity expansion through family home child care, or the current cap on the number of children that can receive Subsidy Child Care funding (WCCC) in the state. Under existing policy conditions, children will be placed on a waiting list once the cap is met; the cap on state funding for subsidy childcare has not always existed, and may be altered in the future. There is currently not a waiting list for the WCCC program, although this could be due to administrative barriers, or the lack of supply of early learning providers that accept subsidy could affect uptake of the subsidy program among low-income families.

In that same preliminary analysis, cost estimates assumptions (2017 $'s) for new construction of an average-sized child care center facility (4 classrooms) are $3.2M per facility ($.8M per classroom), and serve 72 children per year (18 children per classroom). Commercial tenant improvements assumptions are $1.6M per facility ($.4M per classroom). Renovation cost assumptions to expand existing facilities (the typical number of classrooms added through renovation are two) range from $.18-$.3M per classroom, depending on the extent of renovations. These cost estimates do not include the cost of land purchase, commercial lease, or rent costs. Note that many ECEAP providers pay less than market rates for their space. [59]

One-time costs such as those for facilities improvements and new construction are appropriate given the time-limited nature of the PSTAA funds. This strategy leverages many other public and private resources, including:

- Current ECEAP funding and a state commitment to provide sufficient operating funds to serve all children eligible for ECEAP by 2022-2023.
- Working Child Care Connections Subsidies.
- Early Achievers state and federal funding.

- Potentially other public funding sources (such as the Seattle Preschool Program).
- Possible additional private financing depending on how the facilities fund is structured. This could include philanthropic and/or traditional financing with more beneficial terms.
- Current affordable housing development efforts, depending on partnerships.
- Publicly owned land made available under Bill 2382.
- New Markets Tax credits, as well as potential new funding made available through tax reform under Opportunity Zones.
- WA State Early Learning Facilities Fund, which requires matching funds or resources. County funds could be utilized as a match.

Related Community Plans

See detailed analysis above on projected costs to meet the need for early learning facilities in WA State was provided by the ELFS. The intervention could absorb all of PSTAA funds (if desired), which in turn could meet up to 98% of the need based on preliminary estimates, which will be further refined in the forthcoming technical report from the ELFS (Dec 2018).

The expected per pupil cost is highly variable, depending on what type of trade-offs King County decides to make regarding the investment. For example, investing in smaller facilities would increase the cost per child but possibly also increase King County's ability to reach the most vulnerable children. The forthcoming technical report (being developed by the ELFS in late 2018) will provide more information regarding a range of costs and associated trade-offs. The ELFS does not recommend calculating a cost per child at this time due to these and other complexities (e.g. such as how to treat capital versus operating expenses, the latter which King County would not pay for). The technical report from the ELFS will provide estimates of potential per pupil costs.

Need Assessment

Summary:

- **Matches identified need by community:** The Needs Assessment Report did reference the need for affordable early learning, but not facilities as a specific means to that end.
- **Does it address education needs and disparities in the county:**
    - This strategy addresses a known need in the county: disparities in kindergarten readiness among low-income students and children of color. It directly addresses this need by increasing the supply of affordable facilities for early learning services.
    - ECEAP will be a statutory entitlement by 2022 and become available to all eligible children in WA state, which will require a large increase in enrollment slots (and new classrooms) in King County.
    - There is a large gap between the supply of high-quality early learning services and the demand among high-needs populations in King County - in a single year 8,002 children under 5 years old who are eligible for Head Start, ECEAP, or Subsidy Child Care are un-served. This number is projected to increase over the life of PSTAA and afterward.
    - To provide a point of reference, a typical pre-k classroom (ECEAP or private) serves 18 children (infant and toddler classrooms serves 12). A four classroom configuration produces a cost effective and manageable early learning facility, although some centers have many more classrooms (6+), and some have just one, especially in rural areas. One typical pre-k center with 4 classrooms might serve 72 children per year; over 15 years, such a center could serve up to 1,080 children.
- **Other notes**:
    - There is also a large gap in the need for affordable housing in King County (KC) which is projected to increase (KC requires 156,000 affordable homes in 2017; the County will need 244,000 new homes to address the affordable housing need by 2040).

Findings Detail

Kindergarten readiness, as measured by the WaKIDS assessment, was 46% for all full-day Kindergartners across King County in 2015-16. As described in the accompanying Needs Assessment Report, children who were white, 2 or more races, or Asian were more likely to display readiness in all 6 areas than other racial minorities or low-income children (kindergarteners who qualified for the Free-and-Reduced-Price meals (FRP) program (185% of the Federal Poverty Line) had a 36% rate of kindergarten-readiness across King County).

This strategy directly addresses the disproportionality in kindergarten readiness in the County by investing in early learning facilities to meet the large gap between the supply of high-quality early learning services and the demand among high-needs populations in King County. In a single year, 8,002 children under 5 years old who are eligible for Head Start, ECEAP, or Subsidy Child Care are un-served, as estimated by the ELFS in their report to King County.[60]

Early learning centers often have several classrooms in one building, so a renovation expansion or new facility could potentially serve thousands of children over the course of the building's useful life. For example, a typical pre-k classroom (ECEAP or private) serves 18 children (infant and toddler classrooms serves 12). A four-classroom configuration produces a cost effective and manageable early learning facility, although some centers have many more classrooms (6+), and some have just one, especially in rural areas. One typical pre-k center with 4 classrooms might serve 72 children per year; over 15 years, such a center would serve 1,080 children. A typical building's useful life is 30+ years, so one facility could serve 2,000+ children.

It is worth noting that in practice, many ECEAP providers combine other early learning programs and services with ECEAP in a single facility. A facility that has four ECEAP classrooms serving three to four year olds may also have several infant and/or toddler rooms, resulting in a total facility size of six or more classrooms, for example. A facility needs assessment for ECEAP expansion conducted in September 2016 found that there is a need for an additional 7,377 ECEAP enrollment slots statewide by 2020 to meet ECEAP entitlement (now slated for 2022), which will necessitate approximately 400 new classrooms. Based on early learning provider feedback, it is estimated that 8-15% of the additional slots required to meet the demand can be accommodated through renovating existing early learning facilities; the remaining facilities will need to be developed through recruiting child care providers to provide ECEAP to eligible children in their care, creating new early learning facilities through renovation or tenant improvements in existing structures, or through new construction. [61]

Investing in affordable housing facilities that co-locate high-quality early learning programs (and provide space for multiple uses/services) is one approach to meet the demand for early learning facilities, while also addressing the gap in affordable housing shortages in King County (KC) which is projected to increase over the life of the PSTAA (KC requires 156,000 affordable homes in 2017; the County will need 244,000 new homes to address the affordable housing need by 2040). [62]

Context

Early learning programs serving children ages 0-5 are operated in King County by a mix of private-sector businesses and non-profits, family businesses (via the home), and state and local public agencies. These programs require a physical facility, and all programs licensed by the state are required to have a facility that meets specific health and safety standards, and provides adequate space for learning and play. Typically, early learning providers do not have the capital reserves or financial resources to fund facility renovations or construction, and limited revenue and organizational finances prevent many early learning providers from using debt to support facility development or expansion. At the same time, the public resources available to programs for needed infrastructure remain scarce and limited. Lack of financing for facilities and capital improvements restrict the ability for many programs to start or grow, limiting the number of children who can benefit from these services. Deep public subsidies, dedicated capital funds, and favorable loan terms provided by non-traditional banking entities will be critical to increasing the quality and supply of early learning facilities. These funds could be used to remodel existing buildings and build new facilities to meet demand, as well as to renovate existing facilities to meet quality and licensing standards.

The National Institute for Early Education Research (NIEER) states "the ability of centers serving lower-income communities to support debt is extremely limited." It goes on to point out that community-based providers have a very limited ability to mount successful capital campaigns. It concludes that in most cases, "the only way to fill the gap is with a significant public sector capital subsidy" which will need to cover a substantial part of total cost of most new early learning facilities. NIEER recognizes that there is not often the political will to provide sufficient resources for such stable and secure funding.[63]

The federal Head Start and WA state ECEAP programs provide publicly-funded preschool and childcare services for very low-income children (110% FPL), but unlike public schools which receive state funding for facilities, there are very few sources of public funds for preschool facility improvements or construction. Many ECEAP services are currently provided in space available to them at below market prices, such as public school facilities, donated space, community facilities, and other arrangements. ECEAP will be a statutory entitlement by 2022 and become available to all eligible children in WA state, which will require a large increase in enrollment slots (and new classrooms) in King County.

The availability of quality early learning services does not meet the current demand for those services, particularly for moderate- and low-income families. Most providers fully utilize their existing space and operate at full facility capacity and will not be able to serve the anticipated demand within their existing facilities. These facility constraints will be compounded by reduced availability of classrooms in public schools due to the expansion of full day kindergarten and kindergarten to 3rd grade (K-3) class size reductions. In addition, more classrooms will be needed as ECEAP moves toward increasing classroom time from an average of three hours per day (part day ECEAP slots) to six hours per day (full school day and extended day slots). In all, sufficient facilities do not exist to support the ECEAP entitlement.

ECEAP is provided by the Department of Children, Youth, and Families (DCYF) through biannual contracts with school districts, educational service districts, community colleges, local governments, and non-profit organizations. By contracting for services from these organizations, DCYF can focus on monitoring performance and ensuring quality. However, it also creates risks associated with long-term capital investments for early learning providers. The contracting cycle does not align well to long-term facility planning and expansion. Facility improvement and development require a long lead time prior to service delivery. Early learning providers may be reticent to make significant capital investments without reassurance of ECEAP funding once the facilities are built. Early learning facilities do not easily convert to other uses. Landlords may be reluctant to invest in tenant improvements for tenants whose revenue is reliant on contracts from a sole source. Lending institutions may be hesitant to provide loans given that providers' ECEAP funding is based on contracts that must be renewed every two years.

In addition to financial barriers, early learning providers typically do not have experience or skills in facility expansion or development. Current staffing models generally do not support the overhead costs of managing a significant building project. Outreach and technical assistance will be necessary to support those early learning providers that are interested in building or renovating facilities to expand their capacity. Current ECEAP providers alone cannot meet the anticipated demand for ECEAP by 2022. Continuing to support the mixed-delivery system of ECEAP from a range of provider types, including adding new providers, will facilitate rapid expansion of the program and encourage families to participate in ECEAP.

Related Community Plans

In a single year, 8,002 children under 5 years old who are eligible for Head Start, ECEAP, or Subsidy Child Care are un-served. The ELFS plan would meet a large percentage of this need depending on how much is invested, and this number would increase over the life of PSTAA and afterwards. The ELFS proposes the inclusion of mixed-use, flexible classroom space in early learning facilities expansion, which could meet the needs of school-age children who require out of school time services. Calculating total number of children served depends on both the number of facilities and the life of the facility. The ELFS will be expanding and updating analysis on this subject in more depth for a forthcoming technical proposal.

The ELFS anticipates that if funding is invested in facilities, the implementation would include criteria and a process to explicitly work to reach historically underserved communities, and would utilize data analysis to help identify where and how to effectively prioritize funds for that purpose.

With the advent of the new state Department of Children Youth and Families, early learning and child welfare stakeholders are working on ways to strengthen how early learning systems serve children in foster care. The upcoming legislative session will likely include a request from DCYF to have allocated slots for children in foster care in ECEAP and there are policy discussions regarding how to remove barriers to kinship providers who are caring for children to access ECEAP and/or Working Connections Child Care (subsidy).

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**:
  - o There are models and best practices for child care facilities funds nationally.
- **Existing capacity and partners**:
  - o Significant capacity exists within the community via partnerships, technical assistance, and private funders.
  - o A technical plan that documents best practices is in development by coalition stakeholders.
- **Known barriers and challenges:**
  - o There are potential legal/policy issues with utilizing PSTAA funds for facilities costs, but this could be addressed by legislation in 2019. Child care facility funds are an accepted practices in many other states, counties, and cities nationally.

Findings Detail

When determining implementation plans, there will be many complex decisions around financing mechanisms and implementation for early learning facilities, including what types of early learning programs will have facilities projects funded in what neighborhoods, who will own the facilities, and how many facilities will be renovated or constructed (through tenant improvements or new construction). There are currently legal/policy issues with utilizing PSTAA funds for facilities uses, but this could be addressed by legislation in 2019.

Related Community Plans

The ELFS will submit a final technical plan (on implementation and best practices) to King County in December 2018. A significant portion of the technical plan will be based on a benchmarking study that is currently in process and will assess and recommend adoption of best practices and lessons learned from child care facility funds nationally. Implementation will require technical assistance, and done well will involve leveraging of public and private resources, and collaboration to utilize any efficiencies. Child care providers would be the primary recipients, though a developer/owner could be a recipient if they were working in partnership with a provider for a long-term lease. The ELFS is still studying what type of financing is optimal (grant, loan, etc.). They estimate that in order to reach traditionally underserved communities, some early learning providers will require technical assistance, which will be incorporated into the implementation plan. They also estimate that some work needs to be done to assess the financial viability and sustainability of individual child care providers, but that this can be somewhat safeguarded by funding requirements, technical assistance, good underwriting for sound development and operational assumptions (including reserves), as well as contractual provisions for transition procedures, should a provider not be able to continue to provide services.

The ELFS has also identified either removing the specificity of "services" or adding the specificity of "facilities" to state statute as part of implementing this strategy. This may include language regarding bonding. This language is included in legislation that will be considered during the 2019 legislative

session. Child care facility funds are already an accepted practice in many other states, counties, and cities.

Methodology Notes for this Strategy Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We had existing expertise on our consulting team related to this topic and so relied on prior research we had done. We examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research.

Underserved Youth

Strategy Assessment Brief

Full Text of Strategy Area #6: *Programming or facilities to support children and youth who are homeless, in the foster care system, in the child welfare system, involved in the juvenile justice system or otherwise vulnerable or underserved.*

In addition this brief covers Strategy Area #1D: *Reengaging youth who have dropped out of high school in education and employment.*

Introduction:

Our assessment of Strategy Area 6 does not follow the format used to examine the other 8 strategy areas identified by King County. Given the very general approach named in the strategy ("programming or facilities") and the primary emphasis of the strategy area statement on the *populations* that the County seeks to serve (as named in King County Council Motion 15029)[64], we present here a short, non-comprehensive overview into general options for in-school and out-of-school programming approaches focused on underserved populations, and briefly look at look at a few examples of local programmatic options focused on increased education outcomes for the population groups specifically named in strategy area 6. Those groups are:
- Youth experiencing homelessness
- Foster youth and youth involved in the child welfare system
- Justice-involved youth

And additionally, we add to this brief's focus on specific populations the group known as opportunity youth, which can include youth named in the three above groups.

Opportunity youth (youth 16-24 years old who are neither in school nor working) were identified as a sub-area of focus under strategy area 1. Because these youth have specific characteristics and experiences that greatly overlap with the other named specific populations in this brief, and additionally did not fit clearly into typical College Promise programming (which is the main focus of strategy area 1), we present information on opportunity youth in this brief.

The County's Motion also names 'otherwise vulnerable or underserved' youth. There are many such groups of young people who could be named within those groups. Named specifically elsewhere in the County's motion are low-income students and students of color. Additional groups of students that many would include in a list of vulnerable or underserved students might include English language learners, special education students, LGBTQ students, and immigrant and refugee students (to name only some illustrative examples).

Due to limitations of time and space, this brief will only focus on the five named groups in strategy areas 6 and 1D, primarily limit our overview to the K12 years, and only touch the surface of potential interventions that could create education outcomes specific to those populations. As such, the goal of this brief, unlike the other eight briefs in this report, is not to <u>assess</u> a specific strategy area set by the county, but to show

that for each of these groups – as there likely are for many other groups of underserved and vulnerable students – a potentially large range of options exists to meet the education needs of these students.

Supports for underserved youth may be provided within schools, or in the community, most typically through community-based organizations (CBOs) via a wide range of out-of-school time, or "expanded learning opportunity" programs. We'll focus first here on a short exploration of in-school supports for underserved and vulnerable youth primarily as they are reflected in the County's 8 other strategy areas, then turn to looking at CBO-run out-of-school time programs, and end with short summaries of illustrative programs we received from community organizations related to this strategy area.

In-School Approaches to Serving Underserved Students

This brief can not do justice to the wide range of in-school approaches that exist, throughout the K-12 years, that are intended to improve education outcomes for vulnerable and underserved students.

Just a few of the possible approaches to better serving vulnerable and underserved students within the K-12 system could include:
- Efforts to increase attendance.
- Efforts to improve parent engagement and involvement.
- Efforts to provide physical and mental health services.
- Better use of data to identify students who needs supports.
- Improvement of school climate.
- Reform of disciplinary practices.
- Improved special education services.
- Improved English language learner services.

Again, this is a partial list, meant to be illustrative only of the large range of current ongoing efforts already underway in the K-12 system to improve education outcomes for underserved students.

Additionally, many of the other strategy areas profiled in this report focus on in-school educational approaches, and per the County's intent, those in-school options should be focused on improving education outcomes specifically for underserved students. To some extent, the County, then, has already named specific strategies of interest in regards to in-school approaches it seeks to assess. Please refer to the following briefs in regards to K-12-based in-school approaches intended to benefit vulnerable and underserved students:

- Strategy Area 1 (College Promise)
- Strategy Area 2 (Career Academies)
- Strategy Area 3 (Project-Based Learning)
- Strategy Area 9 (Equity Education)

Community Input on In-School Approaches

In addition to the community input received in the strategy areas named immediately above (see the strategy area brief for each of those strategies for a list of those organizations submitting input), we received one plan that focused on increasing physical education and physical activities in schools. This plan calls out the link between learning and physical health, and recommends following a nationally developed framework that is flexible and sensitive to local community needs. Among other potential approaches, examples given within such an approach could include training of K-12 staff on the importance of physical activity, support for CBO partners, and embedding physical activity into the teaching of various content areas.

Out-of-School Time Programs Serving Underserved Youth

There is a long and rich history of evaluation of out-of-school time/expanded learning opportunity (OST/ELO) programs available for review. In general, results of individual OST/ELO program evaluations have been mixed; some showing positive impacts, some showing none, depending on the metrics used and the program type and designed evaluated. Well designed programs have been found to have a range of impacts directly on education system outcomes, as well as impacts on other areas correlated with educational success.[65] These include:

- Education Impacts
    - General academic improvement[66]
    - Improved test scores[67]
    - Improved school grades[68]
    - Improved school attendance[69]
    - Increased engagement in learning[70]
    - Lower dropout rates[71]
    - School behavior improvement[72]
    - Homework completion[73]
- Impacts Associated with Educational Success
    - Decreases in juvenile crime[74]
    - Non-cognitive development[75]
    - Safety[76]
    - Health and wellness[77]
    - Skills development[78]

Nearly all meta-analyses over the past ten years, across multiple meta-studies and individual program evaluations, implementation and descriptive studies, tend to find a common set of program design elements that help to produce the best impacts for youth:

- Intentionality – is the program intentionally designed towards achieving specific outcomes, and according to generally accepted 'quality' design measures?
- Frequency and duration – is the youth attending frequently, for long enough?[79]

Much more detailed descriptions of the elements of program quality exist than the two items listed above; and there are program quality assessment rating tools and program capacity building programs now in place to support increasing quality of the OST/ELO field; the OST/ELO sector in Washington State is a national leader in this systematic program rating and improvement effort.

There are unique programmatic qualities of OST/ELO programs that distinguish them from in-school approaches, particularly as they relate to the needs of vulnerable and underserved students. OST/ELO programs tend to offer more personalized attention for youth, with greater adult-to-youth ratios, than schools can. OST/ELO staff tends to be more reflective of the diversity of communities served, and staff tends to be closer in age, and therefore more relatable, to students. OST/ELO programs can stay with students over many years, and help students attach to needed non-school supports, sometimes within the same CBO offering the youth program. Youth attend the OST/ELO programs voluntarily, so bring a different level of engagement and motivation to them than in-school programs, and these programs can be configured to address topics of most interest to youth.

Community Input on General OST/ELO Approaches

Nearly all the strategies referenced in this Report could include OST/ELO services provided to underserved youth by CBOs. In particular, the plans provided as input to this process for strategy area 1 (College Promise), and strategy area 8 (Youth Empowerment) explicitly reference and include OST/ELO programs and partners as critical components of success for those strategies. Strategy area 5 (Early Learning Facilities) explicitly addresses the needs of OST/ELO programs for facilities. Strategy areas 2

(Career Academies), and 3 (Project-Based Learning) while assessed primarily as in-school interventions, could certainly involve OST/ELO activities as well.

In the next section of this brief, we profile a few example local OST/ELO and other youth supportive services organizations' plans on specific vulnerable populations: youth experiencing homelessness; foster youth, and justice-involved youth.

The Youth Development Executives of King County (YDEKC) is a coalition of over 100 youth serving CBOs in King County. The input they submitted related to the PSTAA process prioritized OST/ELOs in general, as well as the need for facilities, and the opportunities for CBOs to engage in career connected learning. They would prioritize place-based partnerships, and support for people of color-led CBOs. They note a recent landscape of youth programs in King County,[80] and just completed an assessment of gaps and opportunities for youth services provision in relationship to the King County Children and Youth Advisory Board's 2015 Action Plan. Among the recommendations in that report are increased funding focused on:

- Out-of-school time access to services that support educational success.
- Supports for high school completion and job/postsecondary readiness.
- Facilities, including collocated facilities.
- Transportation challenges.
- Addressing accessibility barriers for kids with disabilities and other special needs.
- Focusing holistically on a specific target population.
- Advocacy and organizing.[81]

Community Input: Population Specific Approaches

The examples given here are listed as illustrative examples; they are not meant to be read as recommendations or as an exhaustive list of options. The plans mentioned are drawn from a list of community organizations and coalitions that the County requested information from in the summer of 2018. We did not receive a community plan related to children involved in the child welfare system, so do not present information on that group here.

Opportunity Youth

Opportunity youth are young adults (aged 16-24) who are neither working nor in school or college. King County has approximately 40,000 opportunity youth, a number that has only gotten slightly better with the end of the Great Recession. About 12,000 of these young people have not completed their high school educations.[82] Research done by WA State DSHS shows that King County's opportunity youth have experienced other vulnerabilities: 5% have interacted with the justice system; 6% have been foster youth; 34% have been involved in the child welfare system; and 32% have experienced homelessness.[83]

Ideas presented by community members include funding a CBO-based support system for opportunity youth who want to attain a high school credential and continue on to college. In this approach, CBOs who know the OY population well would come together in partnership with K-12 reengagement programs and colleges to:

- conduct outreach,
- address education barriers with navigator supports,
- create college funding plans,
- do career planning,
- do college pre-skills training,
- build social-emotional skills and
- continue to offer navigation supports through the college years.

For students experiencing homelessness, another proposed solution involves establishing K-12 reengagement programs in youth homelessness drop-in facilities.

For students exiting the justice system, another proposed solution includes increasing case management services so that those youth may successfully complete a GED or other HS credential and move on to employment or postsecondary education.

Youth Experiencing Homelessness

Potential ideas from community input include putting dedicated education advocates for youth in all 'under 18' youth shelters in the county, as well as placing K-12 reengagement programs in every youth shelter/drop in facility in the county. Reengagement programs assist youth in completing a high school credential, and also offer college advising and navigation services to connect to postsecondary (see more discussion under Opportunity Youth about reengagement programs).

Foster Youth

A plan was presented for foster youth that involves supports from middle school through college. It begins in middle school with intensive student engagement and education planning. It recommends additional scholarship support for foster youth, and pre-college advising and college navigation supports, as well as continued supports into the college years. Supports throughout the time the youth is served include case management supports that address education and other needs and connections to services.

Justice-Involved Youth

The plan presented for this population would provide education and employment services to youth exiting detention, as well as assist youth with the barriers that prevent them from successfully engaging in education and employment services. Youth would be enrolled in case management services until they gain their high school diploma or GED and move on to post-secondary education and/or employment, in a program that could last, as needed, up to three years.

Community input received relating to strategy areas 6 and 1D:

- College Success Foundation/Treehouse
- Friends of Youth
- King County: Education and Employment Resources
- Puget Sound Educational Service District
- Sound Alliance
- Youth Development Executives of King County

Children's Savings Accounts

Strategy Assessment Brief

Full Text of Strategy Area #7: *Supporting asset-building strategies for youth including children's educational savings accounts.*

Strategy Area Description

Children's Savings Account (CSA) are long-term, incentivized savings accounts established for children and youth (ages 0-18) and allowed to grow until they reach adulthood. CSA program models differ, but the essential characteristics are that they:

- Are intended for a long-term asset-building purpose, most often postsecondary education (other possible uses include entrepreneurship, homeownership and retirement).
- Provide direct, monetary incentives (i.e. initial deposits, savings matches, additional deposits for program participation, prize-linked incentives or refundable tax credits).
- Restrict withdrawals from savings for non-qualified purposes (i.e., the funds must be used for a designated asset, which is usually higher education and associated fees/tuition/books, but can include other "asset" uses such as entrepreneurship or retirement as well). Emergency usage is sometimes allowed, depending on the goals of the program.

In addition to these characteristics, many programs also provide financial education**,** college preparation or academic supports, and other opportunities for children (and sometimes their parents) to build their financial capabilities and skills. CSA programs can be structured as universal (all children in geographic area) or targeted to low-income or vulnerable populations (i.e. foster youth). Many programs are targeted to low-income families by offering "progressive" savings incentives (dependent on income), which help low- and moderate-income participants build their account balances more quickly. The account structure can leverage existing state 529 plans[84] (tax-advantaged investment account for postsecondary education) or customize traditional savings accounts in partnership with financial institutions; both account structures have been used for large-scale CSA programs (i.e. municipal, county, and state-level) and have well-documented logistics and pros/cons regarding implementation, including considerations regarding growth/interest rates, ease of use, allowable uses, asset limits for public benefits, and options for automatic enrollment of large numbers of children, including undocumented children.

Locally, in 2015 the Tacoma Housing Authority (in partnership with Tacoma Public Schools) launched a CSA program in New Salishan, THA's mixed-income community and that region's most racially and ethnically diverse neighborhood. The program is available to all kindergarten students who live in the community or attend the local elementary school, as well as all residents that enter sixth grade at the local middle school.

Our central question when assessing this strategy was: does providing CSAs contribute toward education outcomes such as kindergarten readiness, high school graduation and postsecondary completion? We looked at CSA models that begin at birth and at kindergarten entry. This assessment focuses on CSAs

that begin in early childhood, although there are other asset-building programs and products that start in high school or early adulthood as well.

Strategy Assessment Area Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and greater definition of terms.

Strategy #7: College Savings Accounts	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**Promising**	Positive impacts on social-emotional development, regardless of amount saved in account; increased college savings and educational expectations. Non-education impacts such as reduced maternal depression and connection to financial institutions.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Medium**	Design features of accounts determine overall affordability; average CSA account features could serve all low-income children in county over course of PSTAA with room for other strategies; funding flow may affect total amount of initial deposit offered. Sustainability unclear once PSTAA funding ends.
Need *Criteria: matches identified needs; serves underserved students.*	**Medium**	CSAs could likely impact meaningful numbers of underserved students. Addresses education gaps identified in Needs Assessment Report, but not specifically identified as needed in that Report's summary of community input.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**Medium**	CSAs have been implemented nationally at the local, city, county, and state level. Data on best practices and implementation available. Some local capacity exists to execute strategy. Legislation for state-level CSA proposed for 2019.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts:**
  - Experimental evidence shows that an Oklahoma-based CSA improves disadvantaged children's early social-emotional (SE) development, regardless of parental savings behavior. CSAs mitigate about 50% of the negative association between material hardship and children's social-emotional development at age 4.
  - Indirect educational outcomes of CSAs include increased parent and child expectations for postsecondary education (i.e. "college-bound identity") and increased college savings behavior.
  - Improvements in 3rd grade reading/English scores among students have been seen in the Promise Indiana CSA and the San Francisco city-wide CSA, but only when savings contributions are made to accounts.
  - Analyses of secondary data from the Panel Study of Income Dynamics (a nationally representative data set) shows that low-income children with $1-$499 in savings accounts designated for college (not CSAs specifically) are 3 times more likely to enroll and 4 times more likely to complete college than those without an account.
  - Another study that analyzes national data (not CSAs specifically) found that 68% of teens whose parents had college savings were on track to attend college, versus 47% of teens whose parents did not have college savings for them. In addition, 75% of youth with their own college savings were on course for college, while only 45% of youth without college savings were on track.

- **Rigor of Assessments**: Only one experimental (randomized-control trial) exists, and is in process (children are not yet 18 years old): findings to date are promising on indirect educational outcomes (social-emotional development and increased parental educational expectations). Other evaluations with positive findings include quasi-experimental studies, qualitative (e.g., interviews), surveys, evaluations, and mixed-method studies of CSA programs. Analyses of secondary data (i.e. data from nationally representative data sets, not CSA programs) provides a theoretical link that CSAs increase postsecondary education outcomes, but not direct causal evidence.
  - **Non-Education Impacts**:
    - CSAs show impacts on mothers' psychological well-being – statistically significant decreases in symptoms of depression, where effect size was greater for mothers with lower income and education.
    - The experimental study also found an increased likelihood that parents open and contribute to their own college savings account (in addition to their child's CSA).
    - Pairing CSAs with financial education is associated with increased financial capability among elementary school students.

Affordability Assessment:

- **Cost per student:** Cost depends on account incentives provided and overall program administration costs. A basic CSA model could include approximately $200 in incentives per child (range of $100-$1,000+), as well as program and account management costs.
- **Total Cost:** The amount of incentives provided and levels of staffing for outreach/marketing are key cost drivers, as is the number of children served per year. Using a base assumption of $200 in account incentives, to serve all kindergartners in King County on Free and Reduced Price Lunch (FRP) - approximately 6,500 students per year - would cost $2.4M per year. Over the course of the PSTAA funding, the cost to fund 15 cohorts of 6,500 students would cost $36M (assuming approximately $1M/year in program and account administration costs and

$200/student in incentives; this number is not inflation adjusted). A universal strategy (serving all students regardless of income) would be more expensive.

- **Fit to PSTAA funding flow:** A CSA program could accommodate irregular PSTAA annual funding streams as long as the annual costs for initial deposits and program administration are covered by the PSTAA funds. Programs also require an upfront investment for start-up costs to fund staff, planning, etc. Depending on the design (and related costs) of the accounts, the irregular PSTAA funding flow could be problematic.
- **Sustainability:** CSAs require new investment for each cohort of children; once the PSTAA funds end, the program would not be able to fund additional cohorts (unless other funds become available).

Need Assessment:

- **Matches identified need by community:** CSAs were not specifically identified in the Needs Assessment Report.
- **Does it address education needs and disparities in the county:** CSAs could likely impact meaningful numbers of under-served students.
- **Other notes**: CSAs could serve all low-income newborns or Kindergartners in King County (approx. 6,500 children per year) over the course of the PSTAA.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: There are many studies/reports that document best practices for small and large-scale implementation of CSAs (regarding account structure, recruitment, savings incentives, etc.) Currently, there are 54 CSA programs nationwide that serve over 300,000 kids in over 30 states.
- **Existing capacity and partners**: The Washington State Budget & Policy Center is working with multiple community partners to advance CSAs; the coalition is new but growing. Partners include the WA State Asset Building Coalition, Partners for Our Children, the Statewide Poverty Action Network, and Prosperity Now (national policy development organization).
- **Known barriers and challenges:** Large-scale programs have used "custodial" account structures where a government agency owns the account, rather than the students, which exempts savings from asset limits when families apply for some public benefits (WA state still has asset limits in place for families to qualify for TANF supports, for example). However, these workarounds are costly to administer and can create confusion among participants.
- **Other notes**:
  - o A CSA program could leverage related investments and initiatives in the County such as existing or potential College Promise or early learning initiatives (these partnerships are implemented in other localities).
  - o A County program could serve as a pilot for a statewide CSA program, or as a match fund for a statewide program (legislation is proposed for 2019 session, but likelihood of passage is unknown).

Community input received relating to this strategy area:

- Washington State Budget and Policy Center

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts:**
    - Experimental evidence shows that an Oklahoma-based CSA improves disadvantaged children's early social-emotional (SE) development, regardless of parental savings behavior. CSAs mitigate about 50% of the negative association between material hardship and children's social-emotional development at age 4.
    - Indirect educational outcomes of CSAs include increased parent and child expectations for postsecondary education (i.e. "college-bound identity") and increased college savings behavior.
    - Improvements in 3rd grade reading/English scores among students have been seen in the Promise Indiana CSA and the San Francisco city-wide CSA, but only when savings contributions are made to accounts.
    - Analyses of secondary data from the Panel Study of Income Dynamics (a nationally representative data set) shows that low-income children with $1-$499 in savings accounts designated for college (not CSAs specifically) are 3 times more likely to enroll and 4 times more likely to complete college than those without an account.
    - Another study that analyzes national data (not CSAs specifically) found that 68% of teens whose parents had college savings were on track to attend college, versus 47% of teens whose parents did not have college savings for them. In addition, 75% of youth with their own college savings were on course for college, while only 45% of youth without college savings were on track.

- **Rigor of Assessments**: Only one experimental (randomized-control trial) exists, and is in process (children are not yet 18 years old): findings to date are promising on indirect educational outcomes (social-emotional development and increased parental educational expectations). Other evaluations with positive findings include quasi-experimental studies, qualitative (e.g., interviews), surveys, evaluations, and mixed-method studies of CSA programs. Analyses of secondary data (i.e. data from nationally representative data sets, not CSA programs) provides a theoretical link that CSAs increase postsecondary education outcomes, but not direct causal evidence.
    - **Non-Education Impacts**:
        - CSAs show impacts on mothers' psychological well-being – statistically significant decreases in symptoms of depression, where effect size was greater for mothers with lower income and education.
        - The experimental study also found an increased likelihood that parents open and contribute to their own college savings account (in addition to their child's CSA).
        - Pairing CSAs with financial education is associated with increased financial capability among elementary school students.

Findings Detail

Given the relative newness of CSA programs (the field is approximately 15 years old), there is limited research on the direct relationship between CSA participation and children's educational outcomes, particularly beyond the early childhood years. There are positive findings on indirect outcomes related to education, health, equity, and economic mobility. Some of this evidence is based on research from a randomized control trial of CSAs, while many other studies use quasi-experimental or qualitative designs. Several of the studies that look at postsecondary enrollment and completion data use bank savings accounts dedicated to educational purposes as a proxy for potential CSA program effects.[85]

The SEED for Oklahoma's Kids experiment, which began in 2007, is a large-scale randomized control trial of universal, automatic, and progressive CSAs. The CSA in SEED OK uses a state 529 account

automatically opened with an initial deposit of $1,000 at birth, a $100 account opening incentive, and a savings match over 4 years. To date, experimental evidence shows that the CDA improves disadvantaged children's early social-emotional (SE) development, regardless of parental savings behavior. Asset holding itself, not individual saving behavior, was associated with child social-emotional development. The effect size is similar to that of Early Head Start on child social-emotional development.[86] It also shows impacts on mothers' psychological well-being – decreased symptoms of depression, where effect size was greater for mothers with lower incomes and educations.

Three studies demonstrate that the CDA in SEED OK has positive impacts on social-emotional development for children at about 4 years of age, especially for children in some disadvantaged groups:

- At about age 4, disadvantaged treatment children score better than disadvantaged control children on a measure of social-emotional development.
- The CDA in SEED OK has a positive impact on the social-emotional development of children in families that have experienced material hardship and on that of the children of single mothers.
- The CDA also positively affects the social-emotional development of children whose mothers have low education levels, have low incomes, receive welfare benefits, or rent their homes. [87]

Additionally, mothers in the treatment group whose children received a CSA at birth were more likely than mothers in the control group to maintain or increase their expectations for their children's education.[88]

Several other studies on CSAs have found effects on parent and child expectations for postsecondary education (i.e. college-bound identity). Improvements in test scores have been found in preliminary research on large-scale (state and citywide CSAs): for example, improvements in 3rd grade reading/English test scores were seen in the Promise Indiana CSA and the San Francisco Kindergarten to College CSA, but only when savings contributions were made to the account (in SF, the average student with an "active" account was 53% more likely to meet grade-level expectations than the average student in the "passive" group).[89]

Other indirect educational effects include: Savings for postsecondary education, youth psychological well being, reduced student loan debt, increased financial capability, connections to mainstream financial institutions, higher savings and account ownership in young adulthood; and parents being more likely to open college savings account for themselves.[90] Overall, the provision of CSAs—and the supports and features that accompany them—results in family savings rates between 8% to 30% for opt-out CSA programs and about 40% to 46% for opt-in CSA programs.[91]

Analyses of nationally representative data from the Panel Study of Income Dynamics show that low-income children with $1-$499 in college savings accounts (not CSA programs specifically) are 3 times more likely to enroll and 4 times more likely to complete college than those without an account.[92] Another study that analyzes national data found that about 68% of teens whose parents had college savings (not CSA programs specifically) for them were on track to attend college, versus 47% of teens whose parents did not have college savings. In addition, 75% of youth with their own college savings were on course for college, while only 45% of youth without college savings were on track.[93]

Related Community Plans

As part of our Information Request process, we received one community response that most directly addressed strategy area 7 – from the Washington State Budget and Policy Center. Their plan includes a model for creating a statewide Child Savings Account program. PSTAA funds could be used to support this work in many ways including: funding the development of the program at the County level, implementing a pilot-test of the model, and/or providing a source of additional matching funds in addition to state funding or funding from private foundations. The Child Savings Account model they are developing would:

- Automatically enroll entering kindergarteners who qualify for free and reduced priced lunch in King County (185% of the federal poverty line, between 6,000 and 7,000 kids per academic year)

in a Guaranteed Education Tuition (GET) account, DreamAhead account or other savings account product administered by the Washington Student Achievement Council.

- Each CSA account would be started with an initial deposit of $200.
- Parents, guardians or other immediate family members could make additional deposits and receive matches to their saving funds up to an additional $200.
- Each child could receive an additional $100 in their account if their parents participate in financial literacy training.

Affordability Assessment

Summary:

- **Cost per student:** Cost depends on account incentives provided and overall program administration costs. A basic CSA model could include approximately $200 in incentives per child (range of $100-$1,000+), as well as program and account management costs.
- **Total Cost:** The amount of incentives provided and levels of staffing for outreach/marketing are key cost drivers, as is the number of children served per year. Using a base assumption of $200 in account incentives, to serve all kindergartners in King County on Free and Reduced Price Lunch (FRP) - approximately 6,500 students per year - would cost $2.4M per year. Over the course of the PSTAA funding, the cost to fund 15 cohorts of 6,500 students would cost $36M (assuming approximately $1M/year in program and account administration costs and $200/student in incentives; this number is not inflation adjusted). A universal strategy (serving all students regardless of income) would be more expensive.
- **Fit to PSTAA funding flow:** A CSA program could accommodate irregular PSTAA annual funding streams as long as the annual costs for initial deposits and program administration are covered by the PSTAA funds. Programs also require an upfront investment for start-up costs to fund staff, planning, etc. Depending on the design (and related costs) of the accounts, the irregular PSTAA funding flow could be problematic.
- **Sustainability:** CSAs require new investment for each cohort of children; once the PSTAA funds end, the program would not be able to fund additional cohorts (unless other funds become available).

Findings Detail

A detailed budget calculator for CSA programs is available (along with a CSA design toolkit[94]) that can provide projected cost estimates[95]. The total cost of a CSA program is typically dependent on the account incentives provided (i.e. initial deposit, savings matches, additional program incentives, etc.), the number of children served, and the program administration costs. The amount of account incentives can vary widely (i.e. an initial deposit of $50 vs. $1,000+; savings matches up to $100 or $10,000, etc.), as can the universality of the program (i.e. all children vs. low-income children). Some programs provide accounts for all children at birth or at Kindergarten but provide progressive incentives dependent on income, while some only provide accounts for low-income children. Assuming a basic account structure of a $100 initial deposit and up to $200 in savings matches, the program would need to budget approximately $210 per child (assuming a typical 55% "draw-down" rate - the % of total available match that is used by participants, on average). For a program that is targeted to low-income families serves 6,500 children per year (approximately the number of kindergartners on Free and Reduced Price Lunch in King County), the amount for account incentives would be $1.4M per annual cohort of children enrolled.

Program administration costs vary significantly as well - for larger-scale programs at the city or county level (i.e. approximately 3,000-5,000 children per cohort), programmatic costs can vary widely based on staffing levels, especially in regard to marketing/communications and community outreach support. For example, a program serving 3,000 children could have program administration costs of approximately $100,000 (with a very lean marketing and outreach budget). Larger programs (i.e. 4,500 children per cohort) that have been in operation for longer and thus serve many cohorts of children at once can have program administration costs of $700K+ per year (staffing, marketing/outreach, and partner sub-grants

make up the majority of these costs). Assuming a higher end program administration budget for 6,500 children per year (approx. $1M) and the base incentive assumptions above, the total cost would be approximately $2.4M per year. Over the course of the PSTAA (15 years), this would cost approximately $36M (not adjusted for inflation). Many factors could effect this rough total, including: amount of account incentives, level of program administration and outreach, complexity of the account structure and associated fees, data system costs, number of children served, amount of financial education and professional development, and program evaluation costs. A universal strategy (serving all students in King County, regardless of income) would be more expensive, especially if account incentives are provided.

With regard to the flow of PSTAA funds, generally CSA programs receiving public funds receive money each year (through budget appropriations or other allocation of public funding) for program administration and initial deposits based on the number of kids enrolled that year. They typically raise private funding for other incentives, which are raised over time. So depending on the mix of public and private funding streams (and the cost of the program), a CSA program could accommodate irregular PSTAA annual funding streams as long as the annual costs for initial deposits and program administration are covered by the PSTAA funds.

There is a growing body of research on the design features of CSA programs that are most conducive to participation, savings engagement, and account accumulation, which can help to inform these program choices.[96] For example, experimental evidence from an Oklahoma-based CSA program shows improvements in disadvantaged children's early social-emotional development regardless of parental savings behavior (i.e. just from owning the CSA account with an initial deposit).

Related Community Plans

WBPC indicates in their plan that there are several options for promoting this policy framework and model. County funding could be used for any of the following:

- Funding to develop the model, and engage state lawmakers to create a statewide Child Savings Account program.
- A demonstration or pilot project to test the model in King County. Assuming a $550 per child cost (for account incentives such as initial deposit, matches and savings incentives), the WBPC estimates that conducting a demonstration project county-wide would cost approximately $3.4 million per year for the accounts over a set period (to be determined.) This total does not include program administration costs (i.e. staffing, marketing, account fees, etc.). Additionally, they estimate that additional costs will need to be budgeted for by the Washington Student Achievement Council (likely under $100,000) for a research entity to develop a report to council. A demonstration project could also be scaled to particular school districts. They estimate that this is a high estimate, as not all parents will draw down the match.
- A commitment to provide an initial deposit or savings match to a statewide program, if legislation is approved by the legislature and included in the 2019-20 biennial budget. Costs would depend on the level at which the County would match state funds or families own savings in accounts.

Need Assessment

Summary:

- **Matches identified need by community:** CSAs were not specifically identified in the Needs Assessment Report.
- **Does it address education needs and disparities in the county:** CSAs could likely impact meaningful numbers of under-served students.
- **Other notes**: CSAs could serve all low-income newborns or Kindergartners in King County (approx. 6,500 children per year) over the course of the PSTAA.

Findings Detail

The focus populations for CSAs are typically low-income children (typically accounts are opened at birth or at Kindergarten entry, although programs have been opened for older youth as well). CSAs can be targeted to specific vulnerable populations (for example, CSA programs have focused on Head Start participants, or youth aging out of the foster care system).

The PSTAA Needs Assessment Report shows disproportionally low rates of postsecondary enrollment and completion among low-income students and students of color in King County. CSAs could likely impact meaningful numbers of under-served students, but it is not clear that they will reduce education gaps noted in the Needs Assessment since longitudinal data on these outcomes is not yet available for CSAs. That said, indirect effects noted in the Impact section are promising.

Related Community Plans

CSAs are proposed for all Kindergartners in King County who qualify for Free and Reduced Price Lunch (approx. 6,500 children per year), according to the WBPC.

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**: There are many studies/reports that document best practices for small and large-scale implementation of CSAs (regarding account structure, recruitment, savings incentives, etc.) Currently, there are 54 CSA programs nationwide that serve over 300,000 kids in over 30 states.
- **Existing capacity and partners**: The Washington State Budget & Policy Center is working with multiple community partners to advance CSAs; the coalition is new but growing. Partners include the WA State Asset Building Coalition, Partners for Our Children, the Statewide Poverty Action Network, and Prosperity Now (national policy development organization).
- **Known barriers and challenges:** Large-scale programs have used "custodial" account structures where a government agency owns the account, rather than the students, which exempts savings from asset limits when families apply for some public benefits (WA state still has asset limits in place for families to qualify for TANF supports, for example). However, these workarounds are costly to administer and can create confusion among participants.
- **Other notes**:
  - A CSA program could leverage related investments and initiatives in the County such as existing or potential College Promise or early learning initiatives (these partnerships are implemented in other localities).
  - A County program could serve as a pilot for a statewide CSA program, or as a match fund for a statewide program (legislation is proposed for 2019 session, but likelihood of passage is unknown).

Findings Detail

The CSA toolkit, among other resources, provides information and best practices for small and large-scale implementation of CSAs (regarding account structure, recruitment, savings incentives, etc.). Similar programs have been implemented elsewhere at the county level (for example, Cuyahoga County (OH) College Savings Account Program launched in fall of 2013, opening accounts for 15,000 incoming kindergarten students, seeded with $100 each. The funds are reserved for postsecondary educational expenses, though emergency withdrawals are allowed).[97]

There is a large body of behavioral economics research regarding savings behavior that applies to CSA programs (for example, research strongly supports "opt-out" enrollment in savings programs, direct deposit, etc.). Regarding account type, state 529 plans are well suited for CSA allowable uses, but can be more challenging to open and make deposits into vs. traditional savings accounts. Large-scale programs have used "custodial" account structures where a government agency owns the account, rather than the students, which exempts savings from asset limits when families apply for some public benefits (WA state still has asset limits in place for TANF). These workarounds are costly to administer, however, and can

create confusion among participants and make program administration more difficult.

The legal question regarding CSAs is whether state law prohibits public dollars from being transferred to private citizens in the form of college savings accounts. The WA State constitution has a "Gift of Public Funds Doctrine" that prohibits gifting public funds, however there is an express provision for providing "necessary support for the poor and infirm." As long as the public funds are dedicated to people with lower incomes - "poor" - it is within the constitutional authority of the state to make a "gift of public funds" to an individual or household. For example, automatically enrolling kindergarteners who qualify for free and reduced price lunch (below 185% of the federal poverty line) would meet the criteria for "poor" or low-income.

Many other states have constitutional prohibitions on public dollars being provided to private actors, and have been able to find past case law carving out an exception for college scholarships/state grant programs for residents to support the implementation of CSAs. In WA, there is precedence for this type of program, as WA State's Individual Development Account (matched-savings account program for youth and adults) program was in effect from 2005 up until the late 2000s. This program matched savings for low-income families who had incomes up to 80% AMI or 200 percent of the federal poverty line who enrolled in the program. There was a clear gift of public funds in that case up to that level of eligibility (definition of "poor") for a family.

With regard to financial aid decisions upon college application/enrollment, if the CSA account is owned by a 3rd party (i.e. non-parental) custodian, such as a city agency, then it is not considered an asset of the student or family. However, when the money from the account is spent, it may be considered in the next year's financial aid. If the account is in the parent or student's name, then it is considered their asset. A 529 account owned by a dependent student, or by a custodian for the student, is reported on the FAFSA as a parental asset (up to 5.6% of the value of the 529 is included with parental assets). However, for many low-income families, assets are not considered at all when determining federal financial aid.

Special Implementation Considerations for Large-Scale Programs
Large CSA programs require not only the basic account features, but also additional features that allow for streamlined operations at increased scale. In particular, the willingness and ability of the financial institutions to open accounts automatically -- without affirmative parental consent and without children's Social Security numbers -- is critical. To accommodate automatic account opening, the financial institution will need to use an existing account structure or create a new structure that allows for custodial ownership of the accounts on behalf of participants or an omnibus account structure (for State 529 accounts, funds are held on behalf of participants by the program). In addition, the ability of the financial institution to either take on all back-end account tracking or to seamlessly interface with a CSA program's database system is important for a large-scale program.

Regarding other local efforts in the County, it is unclear how a CSA program would leverage related initiatives given the lack of information about how the program would be structured. Given the structure and intent of CSA programs, it could link with existing or potential College Promise or early learning initiatives underway. For example, there are current efforts to integrate College Promise Programs with CSAs in several locations (Oakland Promise, Lansing MI Promise) in order to improve children's outcomes along the "opportunity pipeline" from early education to post-college financial health.[98]

A countywide CSA program could serve as a pilot for a statewide program, provide a match to a statewide program (which currently does not exist but is being proposed in the 2019 legislative session), or be structured in some other way. It is unclear as of this writing what the likelihood is that legislation will pass in 2019 for a statewide CSA. Overall, there are many unknowns about the long-term sustainability of a CSA program beyond the PSTAA duration, and what other funding sources might be available to sustain this strategy. It is also unclear how this work would leverage other efforts in the county, or other funding sources, or which entities would be responsible for managing the program and administering the accounts, although the community plan (below) provides some ideas.

Related Community Plans

The plan suggests that King County funds would be directed to the Washington State Student Achievement Council (WSAC,) which is the administering agency for Washington's two 529 savings programs, the Guaranteed Education Tuition (GET) Program and DreamAhead. WSAC would create the accounts; distribute educational materials (which are already translated into multiple languages) and issue matching funds when parents save in accounts for their kids. The agency is capable of administering the accounts as they have already created the infrastructure and would only need to auto-enroll children by social security number, upon receipt of contact information from school districts, who already collect information on students who qualify for free and reduced lunch to the federal government.

For students who do not have a social security number (usually immigrant or refugee children), WSAC has indicated that they could create a contract with a credit union to create a standard savings account product, and ensure their participation. The only downside is that they would not reap the tax benefits of a 529 account when the account matures and they draw down funds.

Methodology Notes for this Strategy Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We had existing expertise on our consulting team related to this topic and so relied on prior research we had done. We examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research.

Youth Empowerment

Strategy Assessment Brief

Full Text of Strategy Area #8: *Identifying innovative strategies to empower students to be change agents in their schools and communities who can identify and address social and racial injustice through advocacy and organizing.*

Strategy Area Description

Youth empowerment education and organizing for middle and high school age youth is designed to provide skills, knowledge, and abilities to address the challenges experienced by youth of color and low-income youth. Typically, students advocate for their own needs, participate in civic engagement, and integrate community issues into the classroom. Community organizers and educators view teaching as an act of justice and a corrective to societal inequities, and is the basic distinguishing character of youth empowerment approaches. The bi-cultural and intercultural experience often presents challenges in racial and ethnic identity development.

There are two approaches to youth empowerment education, advocacy, and organizing. Out-of-school approaches vary in implementation structure, and center on neighborhood youth experiencing a variety of challenges. Community-based organizations run leadership or engagement programs emphasizing racial and ethnic identity awareness, involve youth in youth-based advocacy of local issues, and provide opportunities for youth to speak and engage with the community and represent their ideas on local boards, enact service projects, participate in activism, and in public hearings.

The other youth empowerment approach is in-school or classroom-based strategies, which also vary from co-curricular clubs or events to curricular-based approaches, and/or instructional models. For example, African American females, Latino students, and Pacific Islander students might participate in empowerment conferences on overcoming challenges and building resilience; and/or students of color might share in the leadership of a conference or event. Local issues are integrated into the curriculum by teachers and allow students to share how a social issue impacts racial and ethnic identity. Students work towards providing solutions and are encouraged to act locally.

Local examples include SHOUT, a program of the Bellevue School District, which is designed for females of color grades 7-12. Lead and taught by women who also racially identify like them, students learn and engage around race, leadership, and self-empowerment. Kingmakers, a program nationally modeled after a similar program in the Oakland school district, currently runs in three middle schools in the Seattle Public Schools. Taught by men of color, middle school African American boys learn about their heritage. They are taught self-empowerment, community accountability, and leadership. Teachers learn culturally responsive teaching methods and include a diversity of voices within the curriculum. Additionally, several school districts have formed equity offices that direct teacher and scholar training on issues of diversity and inclusion.

The program structure, number of students participating, and costs vary depending on the community, school, and school district. The youth empowerment education, advocacy, and activism model is often described in iterative terms, meaning it is responsive to culture and community issues. It tends to be organic and reflective of the community narratives on justice and inequality. And, it is often led by charismatic community leaders and educators, often requiring support from school and district administrators.

The focus of the impact assessment is whether attributes or skills closely associated with empowerment (such as agency, self-efficacy, leadership skills, etc.), lead to increased K-12 educational attainment, particularly for marginalized and vulnerable students. We include both in-school and out of school efforts to change these attributes. We looked for impacts that lead to increased student organizing/advocacy on K-12 issues and other topics, and at impacts on racial or social justice issues as well as others.

Strategy Assessment Area Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and greater definition of terms.

Strategy #8: Youth Empowerment	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**Promising**	Evidence-based results for positive social-emotional development, self-esteem, and self-efficacy. Improved school bonding, attendance, general academic improvement, graduation, and college attendance. Impact on civic engagement and employability.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Medium**	Costs fit the PSTAA funding amount and flow, with sustainability support from partnering organizations. Cost per student varies based on size and scale of program. Research on cost per service hour varied greatly between low-impact models and academic enrichment programs.
Need *Criteria: matches identified needs; serves underserved students.*	**High**	Youth empowerment would likely impact large amounts of underserved students and possibly contribute to the reduction in achievement gaps. Specifically referenced in the Needs Assessment Report.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**High**	Youth empowerment programs have been implemented at the city, state, and national level. Out-of-school and in-school models vary in implementation by community. National models replicated and best practices established. There are few barriers and multiple partners exist.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the Introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment

- **Education Impacts:**
  - A rigorous 2013 comprehensive program evaluation of the One Voice program (not a race/ethnicity specific program), used a quasi-experimental research design. The evaluators selected two 6th grade classes in Dover Middle School as a comparison group. Scores across 21 variables included study-time hours outside of school and improved self-efficacy. No direct student achievement outcomes were found, but the program empowered students to make positive changes in their community. A total 217 middle school students participated in the evaluation with pre- and post-test surveys conducted.
  - A review of qualitative studies of racial and ethnic identity development instructional methods found some indirect outcomes for K-12 students when teachers employed cultural responsive teaching methodologies. Social-emotional development, resilience, healthier identity, self-efficacy, engaging civic service, and leadership skills are a few of the outcomes named in reports and studies analyzed. Such indirect impacts are reported to improve school attendance, school conduct, improve test scores, and lower dropout rates.
  - A 2010 meta-analysis of after-school programs noted an overall positive and statistically significant impact on feelings and attitudes, indicators of behavioral adjustment, and overall school performance. Specifically, the meta-analysis reported bonding to school, school grades, and achievement test scores were 12 percentile points better between the after-school group and control group.
  - A California-based 2013 study of 410 youth organizing alumni examined their educational and civic trajectories and compared them with a group of 2200 young adults who did not participate in youth organizing. Students in youth organizing were significant more likely to attend a four-year college and more likely to attend a selective four-year college or university. Researchers noted students in youth organizing most likely improved academically due to their over-all well being in the face of poverty, improved critical thinking skills, and exposure to data and research methods.
  - Size of impacts were often reported as short term, intermediate, and long-term effects. Several comparison group studies noted similar long-term educational outcomes – college acceptance and employability.
- **Rigor of Assessments**: A 2016 report by Education Northwest noted a lack of experimental and quasi-experimental research that ties culturally responsive practices and youth empowerment to student achievement outcomes. Noted previously, a 2013 rigorous quasi-experimental study using comparison groups was conducted on a youth empowerment model. Direct student achievement outcomes were found to be promising and required further research. This is consistent with 2008, 2010 (meta-analysis), and 2011 systematic reviews of rigorously studied youth empowerment programs; findings for non-education and general achievement outcomes were found to be promising, requiring further research. Recent (2017) international research specific to youth organizing for students of color and low-income students, using comparison groups, reports positive and direct impact on graduation rates, grades, and college acceptance.
- **Non-Education Impacts**: As a national youth empowerment model, the 2013 One Voice study noted the following outcomes were found to have increased: feelings of acceptance, supported by peers, increased engagement in pro-social activities such as volunteer service, increased self-efficacy and empowerment, improved presentation skills, and improved decision-making. Similar findings were noted by the Funder's Collaborative on Youth Organizing (2018), in a 2010 meta-analysis of after-school programs, and a 2011 systemic review of youth empowerment programs.

Affordability Assessment:

- **Cost per student:** Two organizations prepared a cost benefit analysis of youth empowerment programs debating whether cost per service hour is a better measurement for program models of this kind. Rand Education, in a peer-reviewed paper, estimated after-school models vary in cost per service hours from $1.17 to $2.57. Academic enrichment models were reported to vary from $3.32 to $8.36. A 2011 economic impact study of the Valley of the Sun Boys & Girls Clubs reported for every $1 spend, $19.33 in positive economic impacts were realized.
- **Total Cost:** Funder's Collaborative For Youth Organizing's Landscape Map and 2013 National Field Scan of youth organizing groups, reported 57% of youth organizing groups budgets were under $500,000, 21% over $500,00, and 22% over 1 million. Reports indicate cost benefit analysis must take into consideration gifts-in kind, which lower the overall cost for many out-of school programs. Other factors include the experience of the staff, numbers of youth to be served, and need to develop additional administrative support.
- **Fit to PSTAA funding flow:** The flow of funding currently available can support the strategy fairly easily given the flexibility of program options.
- **Sustainability:** There are no large facility or structural costs, and costs for curriculum development are typically not exorbitant as many strategic partnerships are formed within communities during the development of youth empowerment strategies.

Need Assessment:

- **Matches identified need by community:** The need for youth empowerment education was frequently referenced in the community input section of the Needs Assessment Report.
- **Does it address education needs and disparities in the county:** This strategy area directly addresses an identified need to increase the cultural relevance of curriculum and instruction, to improve the sense of well being and community for youth of color. Low-income youth are also known to benefit from youth empowerment models that access social issues as the source of learning. The most recent research reports that youth empowerment will indirectly improve student achievement such as school attendance, belonging, and grades; and directly impact outcomes such as resilience, self-efficacy, and leadership. There is limited research to suggest that graduation rates and overall academic achievement of vulnerable and marginalized youth will directly improve due to youth empowerment.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: Multiple models exist with strong trends nationally for growing numbers of youth empowerment models and programs. Locally, national program models like My Brother's Keeper and Kingmakers are two to four years old in the Seattle Public Schools and preparing to expand.
- **Existing capacity and partners**: There are many community-based organizations who have signed on to implement a collective or collaborative youth empowerment model. On the school district side, schools implementing youth empowerment curriculum and instruction often require and seek out outside support from local organizations as experts in ethnic social and cultural history.
- **Known barriers and challenges:** Challenges are not the same across the County, as noted in the Needs Assessment Report. Barriers to participation are influenced by the demographics of the school district; predominantly white districts report resistance at several levels -- parents, staff, and administration. In more diverse districts, barriers are lower and challenges vary dependent upon the cultural competence of the administration. Barriers and challenges for out-of-school programs are much lower and require fewer administrative hurdles to implement effectively. Collective impact approaches to youth empowerment are readily available and shared by community non-profits.
- **Other notes**:

- In-school programs and events are optional for students and teachers, and use of culturally responsive instruction is often optional for teachers. Uptake of this approach may have scaling challenges for this reason.
- Not all institutions are equipped to deliver racial and ethnic identity development programming. Capacity-building supports may be needed.

Additional Assessment Notes:

- For students of color within less diverse schools, the direct engagement with race and identity apart of youth empowerment approaches may create resistance to youth empowerment work. Stereotype threat and internalized racism are reported experiences of students of color in less diverse schools and communities.

Community input received related to this strategy area:

- United Way of King County and Puget Sound Educational Service District
- Youth Development Executives of King County
- King County: Council staff

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts:**
  - A rigorous 2013 comprehensive program evaluation of the One Voice program (not a race/ethnicity specific program), used a quasi-experimental research design. The evaluators selected two 6th grade classes in Dover Middle School as a comparison group. Scores across 21 variables included study-time hours outside of school and improved self-efficacy. No direct student achievement outcomes were found, but the program empowered students to make positive changes in their community. A total 217 middle school students participated in the evaluation with pre- and post-test surveys conducted.
  - A review of qualitative studies of racial and ethnic identity development instructional methods found some indirect outcomes for K-12 students when teachers employed cultural responsive teaching methodologies. Social-emotional development, resilience, healthier identity, self-efficacy, engaging civic service, and leadership skills are a few of the outcomes named in reports and studies analyzed. Such indirect impacts are reported to improve school attendance, school conduct, improve test scores, and lower dropout rates.
  - A 2010 meta-analysis of after-school programs noted an overall positive and statistically significant impact on feelings and attitudes, indicators of behavioral adjustment, and overall school performance. Specifically, the meta-analysis reported bonding to school, school grades, and achievement test scores were 12 percentile points better between the after-school group and control group.
  - A California-based 2013 study of 410 youth organizing alumni examined their educational and civic trajectories and compared them with a group of 2200 young adults who did not participate in youth organizing. Students in youth organizing were significant more likely to attend a four-year college and more likely to attend a selective four-year college or university. Researchers noted students in youth organizing most likely improved academically due to their over-all well being in the face of poverty, improved critical thinking skills, and exposure to data and research methods.
  - Size of impacts were often reported as short term, intermediate, and long-term effects. Several comparison group studies noted similar long-term educational outcomes – college acceptance and employability.
- **Rigor of Assessments**: A 2016 report by Education Northwest noted a lack of experimental and quasi-experimental research that ties culturally responsive practices and youth empowerment to student achievement outcomes. Noted previously, a 2013 rigorous quasi-experimental study using comparison groups was conducted on a youth empowerment model. Direct student achievement outcomes were found to be promising and required further research. This is consistent with 2008, 2010 (meta-analysis), and 2011 systematic reviews of rigorously studied youth empowerment programs; findings for non-education and general achievement outcomes were found to be promising, requiring further research. Recent (2017) international research specific to youth organizing for students of color and low-income students, using comparison groups, reports positive and direct impact on graduation rates, grades, and college acceptance.
- **Non-Education Impacts**: As a national youth empowerment model, the 2013 One Voice study noted the following outcomes were found to have increased: feelings of acceptance, supported by peers, increased engagement in pro-social activities such as volunteer service, increased self-efficacy and empowerment, improved presentation skills, and improved decision-making. Similar findings were noted by the Funder's Collaborative on Youth Organizing (2018), in a 2010 meta-analysis of after-school programs, and a 2011 systemic review of youth empowerment programs.

Findings Detail

A growing body of research and an overall increase nationally in similarly modeled programs, attempt to address the growing understanding of the role of ethnic identity development, and the impact poverty has on healthy adjustments for middle and high school youth.[99] The study referenced here is representative of similar studies linking race-ethnicity awareness, connectedness, and education outcomes. Such research pushes against arguments for colorblind approaches to education and youth development. It should be noted, studies like this assert that high school developmentally can be a "conscious-raising" experience for youth of color who form a more robust understanding of their race-ethnic identity.[100]

Recent rigorous comparison-based school research associates self-affirmation benefits for African American and Hispanic students when students experience stereotype threat, which often occurs as these student excel academically.[101] Results suggest that academic inequalities in particular school settings can be mediated through social-psychological interventions specific to race-ethnicity affirmations. In particular when students of color were experiencing higher thresholds of social identity threat, they were more likely to benefit from self-affirmation tools. As gentrification continues to create movement of youth of color, some will experience social identity threat at higher thresholds. Providing self-affirmation tools may support youth of color in ways that mediates stereotype threat and other academically challenging experiences.

One Voice, a national youth empowerment peer-led program, provided data in its 2013 evaluation study of 217 middle school students. As noted, a rigorous quasi-experimental comparison group study provided findings on the ability of youth empowerment programs to improve self-efficacy, build leadership skills, and improve critical thinking. Indirect education outcomes included knowledge of consequences of substance abuse, presentation skills, and prosocial peer engagement.[102] Beyond short term, intermediate, and long-term effects, size of impacts were not reported in this study.

A 2010 meta-analysis of after-school programs which measured the impact of programs, found statistically significant impact on feelings and attitudes, indicators of behavioral adjustment, and overall school performance. Specifically, the meta-analysis reported bonding to school, school grades, and achievement test scores were 12 percentile points better between the after-school group and control group.[103] Authors presented the need for further research due to the limitations of meta-studies of varying after-school program models. Studies were examined for rigor and validity. The personal and social benefits were found to be statistically significant, while educational outcomes were found to be largely indirect such as child self-perceptions and sense of belonging or bonding to the school; and included achievement test scores, grades, and school attendance. Yet, school achievement indicators were noted to have small effect sizes. Furthermore, the authors noted confounding variables may influence findings when analyzing different after-school interventions. For example, culture of the youth, age of students, length of engagement can influence outcomes. More rigorous research was recommended to assess the a broader set of outcome measures.

Rand Education, a nonprofit research organization, produced a 2008 paper analyzing the overall effectiveness of youth empowerment programs.[104] A peer-reviewed paper, the analysis concluded policymakers should recognize there is enough evidence that some youth programs can improve the academic and behavioral outcomes for youth. Specifically, vulnerable youth were noted to benefit more than others. They also noted difficulty in measuring short and long-term effects of programs with any consistency. More rigorous research assessing a broader set of outcome measures was recommended.

The most recent study and the most similar program model to youth empowerment-organizing, was conducted by The Funder's Collaborative for Youth Organizing (2018). Their analysis covered rigorous studies specific to youth-organizing as a distinct from traditional after-school programs. They cite a 2013 study of 410 youth organizing alumni, examining their educational and civic trajectories and compared them with a group of 2200 young adults who did not participate in youth organizing. This longitudinal study found students in youth organizing were significantly more likely to attend a four-year college and more likely to attend a selective four-year college or university.[105] The overall recommendations support findings that youth-organizing as an intervention for low-income youth has a greater effect size on short and long-term educational outcomes.

Related Community Plans

As part of our Information Request Process, we received one community plan that most directly addressed strategy area 8 – from the United Way of King County and the Puget Sound Educational District (PSESD). Their plan supports youth empowerment programs and proposed forming new curriculum to assist in teacher training.

As a targeted approach to impact the life of youth of color and low-income youth, the approach is consistent with other youth empowerment models reviewed for this assessment. Organizing students for social engagement and providing self-affirming race-ethnic identity development tools is also consistent with similar programs and events at several middle and high schools in the county.

Affordability Assessment

Summary:

- **Cost per student:** Two organizations prepared a cost benefit analysis of youth empowerment programs debating whether cost per service hour is a better measurement for program models of this kind. Rand Education, in a peer-reviewed paper, estimated after-school models vary in cost per service hours from $1.17 to $2.57. Academic enrichment models were reported to vary from $3.32 to $8.36. A 2011 economic impact study of the Valley of the Sun Boys & Girls Clubs reported for every $1 spend, $19.33 in positive economic impacts were realized.
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- **Fit to PSTAA funding flow:** The flow of funding currently available can support the strategy fairly easily given the flexibility of program options.
- **Sustainability:** There are no large facility or structural costs, and costs for curriculum development are typically not exorbitant as many strategic partnerships are formed within communities during the development of youth empowerment strategies.

Findings Detail

The most recent end comprehensive scan of total cost of youth empowerment was conducted by the Funder's Collaborative on Youth Organizing. A national review of 300 youth organizing programs in 38 states, noted 57% of organizing budgets were under $500,000, and 43% over $500,000. This is the most recent and relevant data on total cost available on youth empowerment-organizing

Cost benefit analysis of youth empowerment have provided a cost per service hour versus a cost per student statistic. Rand Education, in a peer-reviewed and rigorous cost benefit analysis of after-school programs estimated a range of cost per hour, largely influenced by the such variables as gift-in kind and volunteer service. For those programs where the interventions are non-educational and out-of school, they estimate a cost per hour of $1.17 to $2.57. For programs where the interventions include educators, curriculum, with educational outcomes such as standardized test improvement, graduation, etc., they estimate a cost per hour of $3.32 to $8.36. It should also be noted as a limitation of these estimates, they do not model or monetize the long-term impacts arising from short term outcomes. More importantly, cost per hour and cost per student do not and cannot monetize reductions in crime and increases in graduation. It is well-known today that the cost associated with criminality and incarceration does not compare to the cost of improving education outcomes.

Related Community Plans

Different youth empowerment models calculate total cost in different ways, based on the target total number of youth and community-based organizations participating. Based on the plan submitted there is

flexibility within the cost model to scale the program based on private funding support, public funds, and partnering community-based organization costs. As presented in the Information Request, United Way of King County and the Puget Sound Educational Service District (PSESD), provided a detailed estimate on program costs per year with total program costs over ten years at $61M. As an out-of-school based program, with plans to educate teachers and community leaders, the costs estimates include costs to not only work with students but teachers and community leaders.

Need Assessment

Summary:

- **Matches identified need by community:** The need for youth empowerment education was frequently referenced in the community input section of the Needs Assessment Report.
- **Does it address education needs and disparities in the county:** This strategy area directly addresses an identified need to increase the cultural relevance of curriculum and instruction, to improve the sense of well being and community for youth of color. Low-income youth are also known to benefit from youth empowerment models that access social issues as the source of learning. The most recent research reports that youth empowerment will indirectly improve student achievement such as school attendance, belonging, and grades; and directly impact outcomes such as resilience, self-efficacy, and leadership. There is limited research to suggest that graduation rates and overall academic achievement of vulnerable and marginalized youth will directly improve due to youth empowerment.

Findings Detail

In a recent national report on youth empowerment and organizing, programs of this nature were identified as contributing to the holistic development of youth[106]. This included socio-emotional and academic development, and informed prosocial skills in civic and community engagement.

Of the four leading focus areas (education, health, immigration rights, and criminal justice), found within youth empowerment organizations programming, education was more present than all other sectors[107]. Furthermore, 96% work with youth between the ages of 13 -18, 76% work with low-income youth, and 76% work with youth of color. Services provided to the population include academic services (95%), employment services (97%), and mental health (75%); based on data from more than 300 groups in 38 states[108].

These data points closely align with the needs found in the Needs Assessment Report for working with youth of color, low-income students, and other marginalized students to improve academic and social-emotional outcomes, and mental health needs. Interventions capable of addressing low-income students can greatly impact the education outcomes for King County schools. Low-income students make up a growing segment of King County's southern region. Youth empowerment through youth organizing has been found to improve the ability of youth to address the systemic problems of their communities. Culturally responsive teaching is known to have some impact on all students by creating an environment where all students see themselves represented in the curriculum.

Related Community Plans

The United Way/PSESD proposal takes a very specific approach to youth empowerment. The proposal estimates an initial 1400 to 1500 students will be engaged with hopes to scale the program to reach all 110,000 youth of color and other vulnerable populations. Given the increase in youth of color, low-income youth, and other marginalized students in King County, the need provided for by this strategy is a growing need if the county is going to address the school to prison pipeline, and reduce inequities in

education. As evidenced by local programs King Maker's and My Brother's Keeper, specific race-ethnic identity youth empowerment models are responsive to a need not currently filled by public schools.

Implementation Feasibility Assessment

Summary:

- **Models/replication supports exist**: Multiple models exist with strong trends nationally for growing numbers of youth empowerment models and programs. Locally, national program models like My Brother's Keeper and Kingmakers are two to four years old in the Seattle Public Schools and preparing to expand.
- **Existing capacity and partners**: There are many community-based organizations who have signed on to implement a collective or collaborative youth empowerment model. On the school district side, schools implementing youth empowerment curriculum and instruction often require and seek out outside support from local organizations as experts in ethnic social and cultural history.
- **Known barriers and challenges:** Challenges are not the same across the County, as noted in the Needs Assessment Report. Barriers to participation are influenced by the demographics of the school district; predominantly white districts report resistance at several levels -- parents, staff, and administration. In more diverse districts, barriers are lower and challenges vary dependent upon the cultural competence of the administration. Barriers and challenges for out-of-school programs are much lower and require fewer administrative hurdles to implement effectively. Collective impact approaches to youth empowerment are readily available and shared by community non-profits.
- **Other notes**:
  - In-school programs and events are optional for students and teachers, and use of culturally responsive instruction is often optional for teachers. Uptake of this approach may have scaling challenges for this reason.
  - Not all institutions are equipped to deliver racial and ethnic identity development programming. Capacity-building supports may be needed.

Findings Detail

Researchers cite the organizational culture of youth empowerment programs as a key factor in producing positive outcomes for youth of color. Youth empowerment works, according to researchers, by attending to different levels of development and utilizes culture, race, and class, community, and political context. Youth are engaged on a continuum. Youth empowerment is often done by building critical consciousness and collective agency to empower youth.[109]

Nationally, there is a growing number of youth organizing programs empowering youth. According to the Funder's Collaborative on Youth Organizing's 2018 report on the status of youth organizing, current models of youth organizing are working as collaborative or collective impact models and being scaled up to meet the increasing numbers of youth seeking to do civic engagement. Best practices are known and modeled as programs replicate across the country.

Implementing youth empowerment models beyond the school have a long history in after-school, either out-of school and in-school, programs. Reports indicate students are more likely to engage non-educational programs once the school day ends. The capacity of future programs seems largely related to the ability of out-of school programs to work directly with schools, to provide more academically integrated programming.

Yet, the barriers and challenges are not the same across the county. Using an equity framework, the lack of access and opportunities for students managing socio-economic concerns, while also lacking support in the community, may demonstrate the gap in serving this population. The county's economic reality is one of disproportionality. Challenges to implementing a youth empowerment model are about how an equity framework may assist the county in determining how to address implementation challenges.

Related Community Plans

The related community plan specifically employs a collective-based model wherein multiple ethnically-led community-based organizations will act cooperatively to deliver youth empowerment programming. While most youth empowerment approaches are based out of a single organizational model working directly with youth, this deviation is not significant according to the research, as the proposal seeks to scale the program for King County and not a single neighborhood.

Methodology Notes for this Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We had existing expertise on our consulting team related to this topic and so relied on prior research we had done on this topic. We examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research.

Equity Education

Strategy Assessment Brief

Full Text of Strategy Area #9: *Training educators in the effects that economic status and institutional racism have on educational outcomes and economic mobility*

Strategy Area Description

Equity in education has a long history in America. Growing cultural pluralism and diversity continues to expose public education's struggle to reduce racial disparities in completion rates, discipline, and test scores. Many question if public education was and is designed to meet the needs of all students. Many of the early intercultural educators believed intercultural relations and democracy were fundamental to each other. From the early days of public education there were some who pursued a more traditional curriculum with the intent to assimilate new immigrants into the mainstream, while others pursued a multicultural education.

Equity advocates argue the main outcome of public education is to graduate students able to engage issues of racism, poverty and homelessness. In order to accomplish this, all school personnel must be trained in equity frameworks. Without changing the curriculum and training educators to lead the transformation of schools, students will not graduate as citizens able to lead this democracy.

Equity in education programs or approaches differ in implementation and purpose. The emphasis of equity in education is to transform education for underrepresented minorities and other marginalized students and families. Some are curriculum centered and seek to improve the overall equity of the learning experience for underrepresented minorities. School districts often work to integrate different voices and experiences into the curriculum and diversify the learning objectives.

Some equity education models are teacher-centered. Teachers are trained on implicit bias or cultural responsive instruction, for example. Usually done through professional development opportunities, teachers initiate and pursue the type of training they feel best suits their discipline and instructional needs.

A growing approach to equity in education is described as learner-centered. Students can construct their own interpretations, pursue topics, subject matters, and develop a more transformative education experience. Teachers are trained in critical consciousness methodologies, assisting students in learning from their family and community story and history. Student-centered approaches are dependent upon the passion of the student and willingness of the teacher to facilitate their learning.

One local example of this work is the Federal Way Public Schools; they have formed an Office of Equity from which to train and support school personnel. Several county school districts have equity administrators supporting a variety of programs and training platforms. CBO-run programs like Rainier Scholars are supporting the academic development of Seattle students through a rigorous secondary school intervention paired with mentoring relationships with mentors from similar backgrounds.

We assess this strategy as to whether approaches responding to the need for increased knowledge and understanding of the lives of students of color, low-income students, and other vulnerable students by K-

12 personnel result in increased high school completion or other educational attainment. We look at interventions besides training. The goal is to understand what is known about approaches meant to help schools adapt to the lives of vulnerable students and improve teaching and systems so that more students – particularly the most vulnerable -- succeed.

Strategy Assessment Area Summary:

Overall Rating

This is a highly condensed assessment of the potential for the strategy area to meet the goals set forth in King County Council Motion 15029; it is intended to be directionally indicative rather than ultimately declarative about the opportunity, as it is based on preliminary and non-exhaustive research. Please refer to the introduction of this report for guidance for readers about the limitations of the assessment approach, and for explanation of our methods for rating strategy areas, and greater definition of terms.

Strategy #9: Equity Education	Rating	Commentary
Impact *Criteria: size and kind of impacts; certainty of research.*	**Medium**	Studies confirm students of color are more likely to graduate on-time, with better grades when equity strategies are employed. Studies are not considered rigorous. There is an emphasis on the moral imperative to correct historic injustices through social justice approaches.
Affordability *Criteria: cost per student; fit to PSTAA funding amount and flow; sustainability.*	**Unclear**	No data is available on typical cost per student. Equity education approaches vary in scale (enrollment, participants, method) and thus costs.
Need *Criteria: matches identified needs; serves underserved students.*	**High**	Matches identified needs within the Needs Assessment Report; serving underserved students through social justice approaches was brought up by community.
Implementation Feasibility *Criteria: replicable models exist; partners exist; known barriers.*	**Unclear**	There are replicable models to inform implementation. Multiple challenges and barriers exist in presenting a countywide approach to differing student and school demographics across all districts.
A full description of the approach to assessment and rating can be found in Appendix C.		

Assessment Highlights

For our full analysis, discussion and references, see the detailed brief that follows this highlights section. Please refer to the introduction of this report for guidance for readers about the limitations of the assessment approach and greater definition of terms.

Impact Assessment:

- **Education Impacts:**
    - Research studies assert historically underrepresented students have improved likelihood of graduating on-time and pursuing next level certification when students experience feeling valued and a sense of belonging.
    - As students see themselves in the curriculum and are represented in school leadership, such experiences increase the likelihood students indirectly develop self-efficacy and other social-emotional traits.
    - Learning environment is an important factor in achievement for students of color who often experience stereotype threat.
    - Non-student level education impacts for equity education are often related to systemic transformation of public education, of which some are: more students of color becoming educators, a decrease in racially correlated educational outcomes, addressing implicit bias in disciplinary actions, and an increase in student of color experiencing a sense of belonging.
- **Rigor of Assessments**: As the thrust of equity education is to undo racism in education and do social justice education for all students, there are no major comparison group studies that measure diversity, equity, and inclusion as statistical outcomes. Typically, studies in equity education are qualitative.

Affordability Assessment:

- **Cost per student:** Cost per student can't be calculated without greater specificity of implementation approach.
- **Total Cost:** Total cost varies according to the size of the districts or schools selected and scale of the program. Staff trainings are often conducted by outside consultants and cost between $5,000 for one training, to $100,000 to hire a strategic equity consultant for a longer term (adding a new senior district level person focused on equity would have a similar cost). One similar project to train all staff in a school cost $50,000. Costs to start an entirely new school would vary greatly depending on capital needs, but some new charter schools, as an example (such a school would not need to be a charter), have cost $3M - $5M to start up.
- **Fit to PSTAA funding flow:** Given the wide variation in potential approaches and their associated costs, it is unknown how the strategy will fit the funding.
- **Sustainability:** Typical teacher-based equity education approaches require ongoing funding to maintain professional development efforts. A school-wide approach would need other kinds of funding support as well. Forming a new school based in social justice education like the Ida B. Well School for Social Justice, requires support through additional private fundraising.

Need Assessment:

- **Matches identified need by community:** Community input identified several specific needs related to students of color's experience with their learning environment, a lack of representation of teachers/faculty of color, and challenges with racially correlated discipline.
- **Does it address education needs and disparities in the county:** Training teachers in equity may address less racially correlated disciplinary actions, and possibly improve the number of staff of color that is representative of the diversity of the school district. The Needs Assessment Report evidenced racial/ethnic and income disparities within the County's K-12 schools.

Particularly, that Report evidenced the south County region's increased need to support students navigating the intersection of race and class.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: There are multiple curriculum and instruction approaches to addressing inequities in education for K-12. Currently county districts are approaching equity as situated within the context of their enrollment and community.
- **Existing capacity and partners**: Currently multiple county school districts have some form of addressing equity in the classroom through the use of outside consultants, trainers, or have hired diversity administrators to guide the equity work.
- **Known barriers and challenges:** Often teacher professional development is not specifically required, and can depend on the subject matter being taught. Therefore, teachers may opt out of equity education professional development. District and school-wide strategies require substantive upfront planning and procurement of personnel time, and must be given priority by and for senior leaders.
- **Other notes**: A concern may be that any mandated equity education approach could be met with resistance or at least lack full participation of educators who need training the most.

Community input received related to this strategy area:

- King County: Council staff

Strategy Area Assessment Detail:

Impact Assessment

Summary:

- **Education Impacts:**
  - Research studies assert historically underrepresented students have improved likelihood of graduating on-time and pursuing next level certification when students experience feeling valued and a sense of belonging.
  - As students see themselves in the curriculum and are represented in school leadership, such experiences increase the likelihood students indirectly develop self-efficacy and other social-emotional traits.
  - Learning environment is an important factor in achievement for students of color who often experience stereotype threat.
  - Non-student level education impacts for equity education are often related to systemic transformation of public education, of which some are: more students of color becoming educators, a decrease in racially correlated educational outcomes, addressing implicit bias in disciplinary actions, and an increase in student of color experiencing a sense of belonging.
- **Rigor of Assessments**: As the thrust of equity education is to undo racism in education and do social justice education for all students, there are no major comparison group studies that measure diversity, equity, and inclusion as statistical outcomes. Typically, studies in equity education are qualitative.

Findings Detail

Teachers equipped with culturally relevant practices have a higher regard for themselves and others.[110] Teachers then form the ability to see all students as capable learners. Furthermore, the racial disproportionality of student discipline in the South King County districts may be mitigated by teachers trained in an equity framework. Such outcomes are largely systemic but also perform at the individual student-to-teacher level. Equity should be understood as directing resources to those who need it most.

Educational research suggest as students see themselves in the curriculum by accessing their real-life experiences, school and learning comes alive.[111] By seeing themselves in the curriculum students develop greater self-esteem and increased self-initiative in completing course work, reducing the likelihood of dropping out. Additionally, seeing oneself in the curriculum and represented within staff leadership, opens the door for students to legitimately critically evaluate the social issues that most impact their futures and learn how to contribute to a more just society, and not criminality due to unemployment. It is common knowledge today that two-thirds of the incarcerated do not have high school diplomas. By increasing the probability that ethnic minority students graduate, the outcome is municipalities save more money on incarceration.

What is the impact of a more positive learning environment for all students, and especially for low-income students? The development of critical thinking skills occurs in an environment when the relationship between culture and cognition is realized through culturally responsive teaching practices.[112] Critical thinking skills formed contextually within the issues of real-life experiences improves the capacity of students to be learners.[113] Too often students of color have not had the opportunity to learn contextually, the impact of which is a regular othering that demotivates and disconnects students from learning. Culturally relevant practices motivate student learning, self-esteem, and thereby improves general academic achievement.

Related Community Plans

The community plan presented provides a detailed articulation of a systemic approach. Research evidences systemic approaches impact long-term outcomes. For example, graduation rates can improve over time for any particular student population as the number of teachers practicing culturally relevant practices increases. A list of long-term outcomes associated with systems change will need to be identified and measured.

Research suggests the impact on schools developing a more culturally responsive teaching staff and curriculum is large for diversifying districts within South King County. The economic variance within King County means some districts have little diversity and others are increasing in diversity. Some districts are experiencing increases in homelessness, student mobility, and increasing low-income enrollment in early learning and K-12. Equity education as presented within the Information Request for this strategy was to train school personnel in the impact of race on economic mobility. The plan included building a school within Seattle that was modeled after the Ida B. Wells School for Social Justice. Planners could consider intersectional approaches that center race and the experiences of African Americans in America as the basis for equity and justice education.

Affordability Assessment:

- **Cost per student:** Cost per student can't be calculated without greater specificity of implementation approach.
- **Total Cost:** Total cost varies according to the size of the districts or schools selected and scale of the program. Staff trainings are often conducted by outside consultants and cost between $5,000 for one training, to $100,000 to hire a strategic equity consultant for a longer term (adding a new senior district level person focused on equity would have a similar cost). One similar project to train all staff in a school cost $50,000. Costs to start an entirely new school would vary greatly depending on capital needs, but some new charter schools, as an example (such a school would not need to be a charter), have cost $3M - $5M to start up.
- **Fit to PSTAA funding flow:** Given the wide variation in potential approaches and their associated costs, it is unknown how the strategy will fit the funding.
- **Sustainability:** Typical teacher-based equity education approaches require ongoing funding to maintain professional development efforts. A school-wide approach would need other kinds of funding support as well. Forming a new school based in social justice education like the Ida B. Well School for Social Justice, requires support through additional private fundraising.

Findings Detail

Some larger scale efforts have been reported to require significant capacity building resources, and a sustainability plan. In terms of training individual educators, estimates suggest a teaching career on average is 3 to 5 years. Therefore any long term strategy would require resources for the ongoing training of new teachers and possibly to hire an equity director to lead the planning and delivery of training across a district. For districts with dedicated equity administrators running district-wide school-based programming for staff and students, capacity-building funds would be needed to expand programming designed to address 1) students experiencing homelessness or foster youth, 2) staff training for new initiatives, or 3) to develop equity strategy teams.

Some recent examples may be a good barometer for costs. In June 2018, Garfield High School Race and Equity Team received a Best Start for Kids grant for $48,000 to provide the entire staff training in Ethnic Studies. The Bellevue School District received a 3-year $855,000 Best Start for Kids grant to expand support youth experiencing homeless. Gates Foundation grants for launching new charter schools have ranged between 3 and 5 million dollars. Recent awards suggest district-wide grants to seven of the county's 19 districts each year could range between $6 and $8 million for a 3-year grant cycle.

Related Community Plans

The plan associated with this strategy articulated the need to provide a cost model as the plan moves into implementation phase. Cost models for districts to be serviced and the district desiring to pursue an alternative school where race and ethnicity is centered will need to be included in the implementation plan. In addition, the development of an implementation plan, stakeholder engagement and analysis, curriculum development, and an market analysis could be budgeted for in developing the plan presented in the Information Request.

Need Assessment:

- **Matches identified need by community:** Community input identified several specific needs related to students of color's experience with their learning environment, a lack of representation of teachers/faculty of color, and challenges with racially correlated discipline.
- **Does it address education needs and disparities in the county:** Training teachers in equity may address a gap in less racially correlated disciplinary actions, and possibly improve the number of staff of color that is representative of the diversity of the school district. Needs Assessment Report evidenced racial/ethnic and income disparities within the County K-12 schools. Particularly, that Report evidenced the south County region's increased need to support students navigating the intersection of race and class.

Findings Detail

Diversity will continue to be an issue for King County as the need for a diverse workforce continues. Students of color and their families noted in the Needs Assessment Report the need for education to address their concerns more innovatively and effectively. Students of color reported feeling disconnected from school, lacking representation in the curriculum and school personnel, and that schools lacked an understanding of Black/African American students. Students reported wanting culturally relevant lessons and culturally responsive educators. Students also desired alternative pathways to graduation, as many of them experience challenges that may be serviced by innovative methods to attending and ultimately graduating. By improving teacher-student relations through improved cultural competence, students reported believing issues of racially-correlated disciplinary actions might be mitigated. There was significant community input on transforming the learning experience for all students, especially for those historically not represented.

African American students schooling experience has been described by educators, in both empirical and theoretical studies published, as historically poor quality in both instruction, instruction materials, teaching strategies, and curricular methodology.[114] Tatum, Kozol, Ladson-Bilings, Kunjufu, and many other educators have located the need for educators to view educators and the teaching profession, as an act of justice. Can a better understanding of the lives of Black students and other marginalized students impact high school graduation? While rigorous comparison studies do not establish a significant effect, students reported needing to experience undoing institutional racism through improved relationships with school personnel.

Related Community Plans

Equity education, with its multiple frameworks, continues to increase along with community advocacy and activism. Communities of color continue to say that teachers should be able to engage the complexity of culturally responsive instruction. In response, increasingly, County school districts are hiring administrators assigned to direct equity, justice, and diversity development. Information provided in the equity education plan details the need to correct historic injustices in education, prepare teachers to lead that work, and build a social justice school as a means to addressing the prison pipeline and achievement gap.

Implementation Feasibility Assessment:

- **Models/replication supports exist**: There are multiple curriculum and instruction approaches to addressing inequities in education for K-12. Currently county districts are approaching equity as situated within the context of their enrollment and community.
- **Existing capacity and partners**: Currently multiple county school districts have some form of addressing equity in the classroom through the use of outside consultants, trainers, or have hired diversity administrators to guide the equity work.
- **Known barriers and challenges:** Often teacher professional development is not specifically required, and can depend on the subject matter being taught. Therefore, teachers may opt out of equity education professional development. District and school-wide strategies require substantive upfront planning and procurement of personnel time, and must be given priority by and for senior leaders.
- **Other notes**: A concern may be that any mandated equity education approach could be met with resistance or at least lack full participation of educators who need training the most.

Findings Detail

Implementation of this strategy area has three possible approaches. We'll first assess implementation of teacher professional development generically for K-12. Educators committed to equipping teachers for a diverse world argue that culturally responsive teaching for ethnically diverse students is fundamental for teacher development.[115] Therefore, any implementation should include pre-service teachers. A plan to provide teacher professional development across the county may require coordination across district schedules. PSTAA funds could go to participating school districts interested in funding teacher professional development. Measurements for proper implementation of the PSTAA funds would need to be developed.

Secondly, the implementation of district level directors of equity and inclusion to build and sustain the equity work, staff, and training is needed for this strategy. Currently, district level directors are being hired and have been for several years in multiple districts. Concern for those districts who cannot afford to hire a full-time DEI leader should be noted.

Thirdly, a whole school model similar to the Ida B. Wells School for Social Justice could serve a district but it is not clear how to implement this county-wide. Furthermore, sustainability of similar efforts have required a separate funding source to sustain the school. With the increase of public charter schools in the region, a feasibility study may need to be done early in the planning phase. It is unknown whether this ideas falls within the flow of PSTAA funds.

Related Community Plans

An alternative whole-school development plan would need more rigorous planning than is posited within the Information Request. It is unclear if there is a particular school district willing or ready to move students of color out of currently assigned schools. The Ida B. Wells School for Social Justice emphasizes first generation and low-income youth, and is supported by its own private foundation. Implementing this idea would require a long range planning to ensure sustainability.

Methodology Notes for this Brief

We believe our research was reasonably thorough, but not exhaustive on the central topic of the strategy. We had existing expertise on our consulting team related to this topic and so relied on prior research we had done on this topic. We examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed. We utilized community-provided input to discover additional research.

Summary of Strategy Area Assessments

Please note that our approach to assessment and rating (detailed in the Introduction and in Appendix C) compares all strategy areas' dimensions to a set of standards – this is not a comparative rating. We believe these ratings to be directionally useful, but should not be interpreted as any kind of authoritative judgment on the programs or activities described in the strategy areas. Please refer to the strategy area briefs for more details and the justifications for these ratings.

		IMPACT	AFFORD-ABILITY	NEED	IMPLEMENTATION FEASIBILITY
		Size and kind of impacts; certainty of research.	*Cost per student; fit to PSTAA funding; sustainability.*	*Matches identified needs; serves underserved students.*	*Replicable models exist; partners exist; known barriers.*
1	College Promise	Promising	Unclear	Medium	High
2	Career Academies	Medium	High	Medium	Medium
3	Project-Based Learning	Promising	Unclear	Low	Medium
4 / 5	Early Learning Facilities	High	Medium	High	Medium
6	Underserved Youth	NOT RATED			
7	Children's Savings Accounts	Promising	Medium	Medium	Medium
8	Youth Empowerment	Promising	Medium	High	High
9	Equity Education	Medium	Unclear	High	Unclear
	See Appendix C of this report for a full explanation of ratings method and approach.				

Ratings Explanation:

We use the following rating schema for the four dimensions assessed, and use the color shading technique shown here, where darker colors indicate a higher rating. See Appendix C for the exact rating criteria used.

Rating	General Description	Dimensions Using This Rating
High	Meets all rating criteria	Impact, Affordability, Need, Implementation Feasibility
Promising	Specific to Impact rating – strategy area showing promise but research still emerging or early results are small	Impact only
Medium	Meets some rating criteria	Impact, Affordability, Need, Implementation Feasibility
Low	Meets few rating criteria	Impact, Affordability, Need, Implementation Feasibility
Unclear	At least 2 rating criteria can not be answered; rating is not possible	Impact, Affordability, Need, Implementation Feasibility

Reflections:

Based on our work preparing this report, looking at various kinds of inputs and evidence, and considering the language of the County's Motion related to PSTAA and our discussions with County staff, we offer these reflections, in hopes they may be helpful to the County and PSTAA stakeholders as next steps are considered.

- **Quality Matters:** For many of the strategy areas, if not all, large positive impacts are only definitively achieved by very intentionally funding interventions that fit known definitions of high quality implementation. In our research, we generally found that large positive impacts are dependent on implementation "quality;" many implementations may have no to little impact. (The County may want to fund promising new practices that so far have limited or unknown results, of course – or may also seek to fund efforts that help to improve quality of existing programs.) We simply caution the County that not all implementations will achieve the best known results, unless funding is very intentionally targeted to models of interventions that are known to produce the results desired.

- **Timing of Funding Availability:** If the County can not get legislative relief in order to bond PSTAA funds and disburse them more evenly over time (or to whatever timing meets the County's needs) a major factor for the County will be in regards to the timing of the release of funding; some strategies may be impossible (particularly in conjunction with the funding timing needs of multiple strategies on the table) to implement given the current timing of receipts of PSTAA funding.

- **Unaddressed Needs:** Our separate Needs Assessment Report for King County (published simultaneously with this report) notes some specific education needs that community members have identified, and which are not directly covered by the nine strategy areas the County has identified. The County may want to consider those needs and ideas in addition to the nine strategies profiled in this report.

- **Race and Social Justice Equity Assessment:** Our assessment of the County's nine strategy areas have been conducted prior to any systematic review through a race and/or social justice framework, and we were not charged with doing such a full assessment, or role was limited to ascertaining whether the nine strategies could close opportunity gaps. We believe that such an assessment would add additional valuable information for the County when considering how to proceed with its PSTAA process.

- **Funding Partnerships:** As the County considers what it will fund, very different options, and complexities, open up if it decides whether to be the sole funder of the strategy, as opposed to approaches where it will jointly fund, or is reliant on other funding which is not already secured.

Appendix A: Full Text of King County Council Motion 15029

A MOTION stating the King County council's intent to develop an implementation plan to invest proceeds from the Puget Sound taxpayers' accountability account to improve educational outcomes in King County through investments in early learning programs; college and career training programs; and in programs that serve children and youth from low-income families or communities of color, or who are homeless, in the foster care system, in the child welfare system, involved in the juvenile justice system or otherwise vulnerable.

"WHEREAS, the Washington state Legislature amended chapter 81.112 RCW via Second Engrossed Substitute Senate Bill 5987 in 2015 to create the Puget Sound taxpayer accountability account, and

WHEREAS, the Puget Sound taxpayer accountability account is to be funded by a sales and use tax offset fee of three and twenty-five one-hundredths percent of the total payments made by a regional transit authority to construction contractors on construction projects that are:

    1. For new projects identified in the system plan funded by any proposition approved by voters after January 1, 2015; and

    2. Excluded from the definition of retail sales under RCW 82.04.050(10), and

WHEREAS, on July 26, 2017, the King County council's committee of the whole held a special meeting in the city of Kent to discuss the account to hear from the public on this topic, and

WHEREAS, the King County council adopted Motion 14923 directed legislative department staff to prepare a report, in consultation with all councilmembers and the executive branch that provides strategies for how King County can engage stakeholders in a public process to determine how to use proceeds from Sound Transit 3 in the Puget Sound taxpayer accountability account, and

WHEREAS, between 2018 and 2035, King County is projected to receive approximately three hundred fifteen million dollars, and

WHEREAS, the proceeds are required by RCW 43.79.520 "for educational services to improve educational outcomes in early learning, K-12, and higher education including, but not limited to, for youths that are low-income, homeless, or in foster care, or other vulnerable populations," and

WHEREAS, to the greatest extent practicable, the expenditures of the county must follow the requirements of the Sound Transit subarea equity policy, and

WHEREAS, the proceeds may only be spent after the Washington state Legislature appropriates them, and

WHEREAS, meaningful funding from the account will be available starting in 2019, and

WHEREAS, the Youth Action Plan defines youth as people from ages sixteen to twenty-five, and

WHEREAS, economic status and race are predictors educational outcomes and economic mobility, and

WHEREAS, King County has traditionally not been involved in providing direct educational services to children or youth, and

WHEREAS, King County is fortunate to be home to dozens of organizations that work to improve educational outcomes for students and youth in all parts of the county;

NOW, THEREFORE, BE IT MOVED by the Council of King County:

A. King County will utilize moneys from the Puget Sound taxpayers' accountability account to meet the following goals:

    1. Ensure every child in King County is ready for kindergarten;

    2. Improve educational outcomes for children and youth who are homeless, in the foster care system, in the child welfare system, involved in the juvenile justice system or otherwise vulnerable;

3. Close the opportunity gap for children and youth of color and low-income children and youth;

4. End the school to prison pipeline and reduce youth involvement in the criminal justice system;

5. Embody the King County equity and social justice goal;

6. Ensure all youth in King County are prepared to fill the jobs of the future; and

7. Build a legacy for King County that lasts beyond the duration of the funding.

B. In order to meet the goals stated in section A. of this motion, King County will use the following principles:

1. Maximize the impact of the funding by focusing on no more than three areas for investment;

2. Invest in programs and projects consistent with the limited duration of the funding as much as possible, such as facility or pilot projects;

3. Prioritize programs that are evidence based or promising practices and have measurable outcomes, while also investing in innovative approaches;

4. Include funding for direct services provided in and by the community being served; and

5. Leverage existing initiatives, organizations, programs and funding sources,

such as the Youth Action Plan, , the Children and Youth Advisory Board, the Best Starts for Kids Levy, and the Veterans, Seniors and Human Services Levy, as well as related investments by cities, the state of Washington, schools employers and private foundations.

C. Puget Sound taxpayers' accountability account funding will be directed to the following priority areas:

1. Early learning;

2. K-12 education for vulnerable and underserved children and youth; and

3. College, career, and technical education.

D. The council initiative's director will lead the development of the implementation plan and will coordinate with the appropriate legislative branch and executive branch staff. The council initiatives director should provide an oral update on the progress of developing the implementation plan to the council's committee of the whole each quarter.

E. The King County council will engage a consultant to help facilitate community outreach and prepare an implementation plan, for the life of the account, guided by the goals and principles stated in section A and B of this motion, targeting the priority areas in section C of this motion, and in accordance with section F of this motion. The consultant shall meet with stakeholders and subject-matter experts when drafting the implementation plan.

F. When conducting the community outreach to develop the implementation plan, the consultant will explore a variety of strategies including, but not limited to:

1. Increasing access and success in postsecondary or career connected education, including advisory support or other necessary services at community or technical colleges via a "promise scholarship" program, or programs targeting low-income youth, youth of color or homeless youth.;

2. Constructing, maintaining and renovating facilities to support early learning programs;

3. Collocating early learning centers with affordable housing, including flexible, mixed-use space to meet the multiple needs of children and youth with limited access to services;

4. Programing or facilities to support children and youth who are homeless, in the foster care system, in the child welfare system, involved in the juvenile justice system or otherwise vulnerable or underserved;

5. Supporting asset building strategies for youth including children's educational savings accounts;

6. Identifying innovative strategies to empower students to be change agents in their schools and communities who can identify and address social and racial injustice through advocacy and organizing; and

7. Training educators in the effects that economic status and institutional racism have on educational outcomes and economic mobility.

G. The King County council intends to engage the public directly through at least two town hall meetings of the committee of the whole. The King County council also intends to establish an advisory committee to review and provide comments on the consultant's draft report and will establish this advisory committee in a future motion.

H. The implementation plan is due to the council by September 1, 2018, and will be used to inform the development of the 2019-2020 biennial budget.

Motion 15029 was introduced on 11/27/2017 and passed as amended by the Metropolitan King County Council on 12/11/2017, by the following vote:

Yes: 7 - Mr. von Reichbauer, Mr. Dunn, Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles and Ms. Balducci

No: 0

Excused: 2 - Mr. Gossett and Ms. Lambert

Appendix B: Expected Annual King County PSTAA Funds

2017 projected payout of PSTAA funding:

2020	$5,519,000
2021	$8,556,000
2022	$7,638,000
2023	$9,351,000
2024	$15,561,000
2025	$17,105,000
2026	$13,302,000
2027	$26,202,000
2028	$37,429,000
2029	$36,398,000
2030	$25,711,000
2031	$29,325,000
2032	$29,799,000
2033	$31,662,000
2034	$17,625,000
Total	**$315,719,000**

Appendix C: Assessment Rubrics and Ratings Approach Methodology Detail

The following information presented is supplemental to the general information provided in this Report's Introduction under Assessment and Rating Approach Methodology, and details the rubrics used to assess strategy area dimensions (Table C1) and create ratings for strategy area dimensions (Table C2). Please read the general description of our overall approach to assessment and rating, which begins on page 6 of the Introduction, before turning to the supplemental detail offered in this Appendix.

Approach to individual strategy area dimension assessments:

In our individual assessments for each strategy area, the consulting team believes our research was reasonably thorough, but we can not claim it was exhaustive on the central topic of the strategy area, given time constraints and the large number of strategy areas to be assessed. Frequently we had existing subject matter expertise on our consulting team related to the topic, and so relied on existing knowledge and prior work of team members on the strategy. In addition, we examined existing reports and resources we had, and followed referenced items in those reports to discover additional research and information. We primarily relied on meta-studies and research summaries, but read individual program research as needed, and in some cases reached out to interview national researchers on the topic under review. We utilized community-provided input to discover additional research and supply local context.

We developed the rubrics below for each assessment dimension, and collected and assessed information on each strategy against all the questions stated in the rubrics. Some items in these rubrics were then used as part of our approach to rating the dimensions (see Table C2).

Tables C1a-d: Strategy Area Dimension Assessment Rubrics

(items marked with a * indicate items directly from King County Motion 15029)

C1a: Impact
OVERALL
There are known specific educational outcomes associated with the strategy
Impact is directly on an educational outcome
Impact is indirectly on an educational outcome
Impacts on non-education outcomes are associated with this strategy.
EVIDENCE BASE
Evidence base is quantitatively rigorous and shows positive results?
Evidence base is qualitatively sound and shows positive results?
If lacking a substantial evidence base, the strategy provides data on why it is promising or innovative (i.e. pilot with promising results)
Model of fidelity is known and associated with evidence-based outcomes
Evidence base for strategy and outcomes is widely accepted
SIZE OF IMPACT
Strategy's size of impact based on its evidence base
OUTCOMES FOR FOCUS POPULATIONS
The educational outcomes have been demonstrated for children and youth who are homeless*

The educational outcomes have been demonstrated for children and youth who are in the foster care system*
The educational outcomes have been demonstrated for children and youth who are in the child welfare system*
The educational outcomes have been demonstrated for children and youth who are in the juvenile justice system*
The educational outcomes have been demonstrated for children and youth who are otherwise vulnerable or underserved*
The strategy will close education gaps for children and youth of color*
The strategy will close education gaps for children and youth who are low-income*
SPECIFIC PSTAA OUTCOMES SOUGHT
End the school to prison pipeline*
Reduce youth involvement in the criminal justice system*
Ensures every child in King County is ready for Kindergarten*

C1b: Affordability
OVERALL
Cost estimates are sophisticated, detailed and dependable
Cost per individual served is known
Cost per individual served
Cost per outcome achieved is known
Cost per outcome achieved is comparatively low
APPROPRIATENESS TO PSTAA STRUCTURE:
Invests in programs and projects consistent with the limited duration of the funding as much as possible, such as facility or pilot projects*
Funding need matches reasonably well with timing of release of PSTAA funding
BACKING EVIDENCE
ROI studies indicate positive ROI

C1c: Need
OVERALL
Strategy addresses a need that appears in PSTAA Needs Assessment Report
SIZE OF NEED
Number of children for whom the strategy/plan could produce educational outcomes annually
FOCUS POPULATIONS
Serves children and youth who are homeless*
Serves children and youth who are in the foster care system*
Serves children and youth who are in the child welfare system*
Serves children and youth who are involved in the juvenile justice system*
Serves children and youth who are otherwise vulnerable or underserved*
Serves children and youth of color*
Serves children and youth who are low-income*

C1d: Implementation Feasibility
PRIOR EXPERIENCE:
Strategy has been successfully implemented elsewhere before in a similar environment
Implementation studies/reports exist pointing towards best practices for implementation
LONG TERM SUSTAINABILITY
Builds a legacy that lasts beyond the duration of the funding*
Other likely funding sources exist to sustain strategy after end of PSTAA funds
APPROPRIATENESS TO PSTAA STRUCTURE:
Invests in programs and projects consistent with the limited duration of the funding as much as possible, such as facility or pilot projects*
Timing of release of PSTAA funding not problematic for implementation
BUILDS ON EXISTING LOCAL WORK:
Leverage existing initiatives, organizations, programs, such as the Youth Action Plan, the Children and Youth Advisory Board, the Best Starts for Kids Levy, and the Veterans, Seniors and Human Services Levy*
OTHER IMPLEMENTATION FUNDS NEEDED:
Leverages related investments by cities, the state of Washington, schools, employers and private foundations.*
Requires other funding sources to attain impact during implementation
Likelihood of accessing other funding sources in order to implement
RESPONSIVE TO COMMUNITY:
Includes funding for direct services provided in and by the community being served*
CAPACITY TO IMPLEMENT:
All entities needed to implement currently exist
Entities needed to implement currently have sufficient capacity to begin implementation w/in one year
POTENTIAL BARRIERS:
Policy and/or legal barriers exist and must be removed prior to start

Rating:

For each assessment dimension, we established key criteria for which to base our ratings on, and then set a uniform method to create a standard rating. The consultants developed and used the tool below to set the ratings. It is based on information collected in the rubrics found in Tables C1a-d.

We believe these ratings are best used directionally and as suggestive, as they are based on research and assessment techniques limited by the time and resources available, and by the inherent difficulty of assessing broad and diverse approaches in a standardized manner.

Table C2: Approach to Rating Assessment for Each Dimension

Dimension	Criteria	Rating Method
Impact	1. A majority of studies agree there are substantial positive impacts on education outcomes (either directly on, or on factors known to be correlated with these major education-related outcomes: K readiness; HS grad; postsecondary completion)	**High**: meets all 4 criteria **Promising:** does not meet either criteria 1 **or** 3, but meets all other three criteria (i.e. only does not meet only one of #1 or #3)
	2. Studies note multiple positive direct or	**Medium:** ('mixed' or 'moderate')

	indirect impacts (education- and/or non-education-related) 3. Studies are rigorous (there is at least one positive comparison group-based analysis) 4. Studies demonstrate positive results for underserved students	- meets 2 or 3 criteria (and does not qualify for 'Promising') **Low**: meets 1 criteria **Unclear**: not enough research has been done to assess against most criteria (at least 2)
Affordability	• Within average cost per student parameters for programs with known impacts (under $5K/student/year) • Funding need consumes less than 50% of PSTAA funds • Need for PSTAA funds can fit within current PSTAA funding availability timeline • Funding is one time or has strong potential for sustainability	**High:** meets all 4 criteria **Medium:** meets 2 or 3 criteria **Low**: meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at least 2)
Need	• Strategy was specifically called for in Community Input section of Needs Assessment Report • Strategy impact is related to education gaps noted in Data section of Needs Assessment Report • Strategy is likely to impact meaningful numbers of underserved students	**High** meets all 3 criteria **Medium:** meets 2 criteria **Low:** meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at least 2)
Implementation Feasibility	• Models and other information exist about the strategy from which implementation approach can be designed to create high impact programs • Local capacity exists or can be easily built to execute strategy • No major potential local barriers or challenges to implementation identified	**High:** meets all 3 criteria **Medium:** meets 2 criteria **Low:** meets no or 1 criteria **Unclear:** not enough research has been done to assess against most criteria (at least 2)

Appendix D: Community Information Request Respondents

The following organizations responded to a July 2018 request from Ken Thompson Consulting, sent to organizations chosen by King County, to supply information related to the County's 9 potential strategy areas for use of the Puget Sound Taxpayer Accountability Account funds.

The 9 strategies are described on page 5 of this document.

Organization Completing Information Request	Related to Strategy/ies
Puget Sound Educational Service District	1
Career Connect Washington	2
King County - Executive Office staff	2
Washington Alliance for Better Schools	2 and 3
Washington STEM	2 and 3
Rachel Klein Consulting	3
Early Learning Facilities Stakeholder Group	4 and 5
Friends of Youth and YouthCare	6
King County - EER Department staff	6
Treehouse and College Success Foundation	6
Washington State Budget and Policy Center	7
United Way of King County	6, 8 and 9
Sound Alliance	3 and 6
Youth Development Executives of King County	5, 6 and 8
King County - County Council staff	1, 2, 6, 7, 8 & 9

END NOTES

[1] State of Washington. RCW 43.79.520 http://app.leg.wa.gov/RCW/default.aspx?cite=43.79.520

[2] King County. RFP for PSTAA consultant.

[3] Univ Arkansas; Promises Fulfilled? A Systematic Review of The Impacts of Promise Programs http://www.uaedreform.org/downloads/2016/10/promises-fulfilled-a-systematic-review-of-the-impacts-of-promise-programs.pdf

[4] Univ Arkansas; Promises Fulfilled? A Systematic Review of The Impacts of Promise Programs http://www.uaedreform.org/downloads/2016/10/promises-fulfilled-a-systematic-review-of-the-impacts-of-promise-programs.pdf

[5] It's worth noting that one of the community impact outcomes found was an increase in housing prices in the school district that had the CP program.

[6] The Effects of the Kalamazoo Promise Scholarship on College Enrollment, Persistence, and Completion (2017)

[7] Clotfelter, Hemelt and Ladd (2016). Multifaceted Aid for Low-Income Students and College Outcomes: Evidence from North Carolina. http://ftp.iza.org/dp9888.pdf

[8] Clotfelter, Hemelt and Ladd (2016). Multifaceted Aid for Low-Income Students and College Outcomes: Evidence from North Carolina. http://ftp.iza.org/dp9888.pdf

[9] MDRC. Detroit Promise Path https://www.mdrc.org/project/detroit-promise-path#overview; https://www.mdrc.org/sites/default/files/DetroitPromisePath-IssueFocus.pdf

[10] cited in: Clotfelter, Hemelt and Ladd (2016). Multifaceted Aid for Low-Income Students and College Outcomes: Evidence from North Carolina. http://ftp.iza.org/dp9888.pdf

[11] College Board. (2014) Research Brief: A Review of the Role of College Counseling, Coaching, and Mentoring on Students' Postsecondary Outcomes. https://files.eric.ed.gov/fulltext/ED556468.pdf

[12] Castleman, Ben et al. Stemming the Tide of Summer Melt. Journal of Research on Educational Effectiveness 5(1):1-17 · January 2012 https://eric.ed.gov/?id=EJ952097

[13] Future of statewide college promise programs. Century Foundation. https://tcf.org/content/report/future-statewide-college-promise-programs/

[14] State of Tennessee. Tennessee Promise Annual Report (2018). https://www.tn.gov/content/dam/tn/thec/bureau/research/promise/TN%20Promise%20Report%20-%202018%20-%20Final.pdf

[15] Education Trust. A promise fulfilled: a framework for equitably free college programs. 2018. https://edtrust.org/resource/a-promise-fulfilled/

[16] Sara Goldrick-Rab. The Case for Free Public Higher Education. 2016. HOPE Center. https://www.freecollegenow.org/case_for_free_highered

[17] The Effects of the Kalamazoo Promise Scholarship on College Enrollment, Persistence, and Completion (2017) . p. 18. https://research.upjohn.org/cgi/viewcontent.cgi?article=1246&context=up_workingpapers

[18] Thompson, Ken. Presentation to Washington State College Bound Scholarship Advisory Board. 2015.

[19] Scrivener, Susan et al. Doubling Graduation Rates. MDRC. 2015. https://www.mdrc.org/publication/doubling-graduation-rates p. 7.

[20] MDRC. College Promise Cost Calculator https://www.mdrc.org/publication/college-promise-success-initiative-cost-calculator

[21] The Effects of the Kalamazoo Promise Scholarship on College Enrollment, Persistence, and Completion (2015) . p.53. https://www.brookings.edu/wp-content/uploads/2016/06/Download-the-paper-3.pdf

[22] Upjohn Institute: Promise Research Consortium https://upjohn.org/promise-research-consortium

[23] Mary G. Visher. 2015. New Pathways to Careers and College: Examples, Evidence, and Prospects. MDRC.

[24] Ace Parsi, David Plank, and David Stern. No date. Costs of California Multiple Pathway Programs. Policy Analysis for California Education (PACE) University of California, Berkeley.

[25] KQED News. What It Takes to Become an All Project-Based School. https://www.kqed.org/mindshift/28475/what-it-takes-to-become-a-project-based-school

[26] Condliffe, B. et al (2017). Project-Based Learning: A Literature Review. Working Paper. MDRC. https://www.mdrc.org/sites/default/files/Project-Based_Learning-LitRev_Final.pdf

[27] Ibid, pg.15.

[28] Shafaei, A. and Rahim, H. A. (2015). Does project-based learning enhance Iranian EFL learners' vocabulary recall and retention? *Iranian Journal of Language Teaching Research 3*(2), 83-99.

[29] Duke, N., Halvorsen, A-L (2017). Putting PBL to the Test: The Impact of Project-based Learning on Second-grade Students' Social Studies and Literacy Learning and Motivation. https://docs.google.com/viewer?a=v&pid=sites&srcid=dW1pY2guZWR1fG5rZHVrZXxneDpkNGE5OGZiMGZiMGE0ZGI

[30] https://newtechnetwork.org/resources/new-tech-network-schools-continue-outperform-national-high-school-graduation-rates/

[31] Condliffe, B. et al (2017). Project-Based Learning: A Literature Review. Working Paper. MDRC. https://www.mdrc.org/sites/default/files/Project-Based_Learning-LitRev_Final.pdf, pg. 19.

[32] Bryk, A., Gomez, L., Grunow, A. (2011). Getting Ideas into Action: Building Networked Improvement Communities in Education. Carnegie Foundation for the Advancement of Teaching: https://www.carnegiefoundation.org/wp-content/uploads/2014/09/bryk-gomez_building-nics-education.pdf

[33] KQED News. What It Takes to Become an All Project-Based School. https://www.kqed.org/mindshift/28475/what-it-takes-to-become-a-project-based-school

[34] KQED News. What It Takes to Become an All Project-Based School. https://www.kqed.org/mindshift/28475/what-it-takes-to-become-a-project-based-school

[35] Condliffe, B. et al (2017). Project-Based Learning: A Literature Review. Working Paper. MDRC.

[36] MDRC Lit review

[37] WA state's QRIS is known as Early Achievers and provides quality ratings on a scale from 2 -5.

[38] Yoshikawa, H. et al (2013). Investing in Our Future: The Evidence Base on Preschool Education. Society for Research in Child Development. http://depts.washington.edu/cqel/PDFs/EvidenceBaseonPreschoolEducationFINAL.pdf; Also see: https://www.ed.gov/early-learning/research

[39] Yoshikawa, H. et al (2013). Investing in Our Future: The Evidence Base on Preschool Education. Society for Research in Child Development. http://depts.washington.edu/cqel/PDFs/EvidenceBaseonPreschoolEducationFINAL.pdf; Also see: https://www.ed.gov/early-learning/research

[40] Ibid.

[41] Kay and Pennuci (2014). Washington State Institute for Public Policy. Early Childhood Education for Low-Income Students: A Review of the Evidence and Benefit-Cost Analysis. http://www.wsipp.wa.gov/ReportFile/1547/Wsipp_Early-Childhood-Education-for-Low-Income-Students-A-Review-of-the-Evidence-and-Benefit-Cost-Analysis_Full-Report.pdf

[42] This cost/benefit analysis is based entirely on non-WA state studies. WSIPP

[43] Nores, Barnett, Friedman-Krauss, & Francis (July 2015). Technical Report for the City of Seattle: A Review of the Evidence of Preschool Programs and a Comparison of Selected State and City Programs. Updated Citations Technical Report for the City of Seatle. National Institute for Early Education Research, Pg. 1

[44] García, Jorge Luis, James J. Heckman, Duncan Ermini Leaf, and María José Prados (2016). "The Life-cycle Benefits of an Influential Early Childhood Program."

[45] Outcome Evaluation of WA State's Early Childhood Education and Assistance Program (2014). http://www.wsipp.wa.gov/ReportFile/1576/Wsipp_Outcome-Evaluation-of-Washington-States-Early-Childhood-Education-and-Assistance-Program_Report.pdf

[46] 2016-17 ECEAP Outcomes Report. Department of Early Learning. https://del.wa.gov/sites/default/files/public/ECEAP/ECEAP_Outcomes_2016-17.pdf

[47] Minervino, Jim (2014). Lessons from Research and the Classroom: Implementing High-Quality Pre-K That Makes a Difference for Young Children. Ready on Day One. Bill and Melinda Gates Foundation. https://docs.gatesfoundation.org/documents/lessons%20from%20research%20and%20the%20Classroom_September%202014.pdf

[48] Note that at-risk children spending multiple years in high-quality early learning is a rare occurrence today, not just in Washington State, but nationwide.

[49] As outlined by Early Achievers, which is Washington State's early learning Quality Rating Improvement System (QRIS).

[50] Barnett, W.S. (2008). Preschool education and its lasting effects: Research and policy implications. Boulder and Tempe: Education and Public Interest Center & Education Policy Research Unit.

[51] DEL April 2016 Early Start Act Rating Release. https://del.wa.gov/sites/default/files/imported/publications/eceap/docs/ECEAP_and_ESA_rating_release_FAQ.PDF

[52] WA State Department of Early Learning website: Early Achievers Data Dashboard (Data as of March 13, 2018): https://del.wa.gov/sites/default/files/public/QRIS/EarlyAchievers_DataDashboard.pdf.

[53] Early Achievers, Washington's Quality Rating and Improvement System Standards (2017). https://del.wa.gov/sites/default/files/public/QRIS/Early_Achievers_Standards_2017.pdf

[54] Butler, Stuartl, Cabello, Marcela (2018). Housing as a Hub for Health, Community Services, and Upward Mobility. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2018/03/es_20180315_housing-as-a-hub_final.pdf

[55] Ibid.

[56] Ibid.

[57] Cruse, L R., Eckerson, E., Gaults, B (2017). Child Care Assistance for College Students with Children: An Opportunity for Change in Washington State. Briefing Paper. Institute for Women's Policy Research. https://iwpr.org/publications/child-care-assistance-college-students-children-opportunity-change-washington-state/

[58] Expansion Opportunities for King County Early Childhood Programs: Head Start, Early Childhood Education Assistance Program, Child Care Subsidy, 3SI, pg.31. Submitted and presented to King County on July 6, 2018, unpublished.

[59] Expansion Opportunities for King County Early Childhood Programs: Head Start, Early Childhood Education Assistance Program, Child Care Subsidy, 3SI, pg.31. Submitted and presented to King County on July 6, 2018, unpublished.

[60] Expansion Opportunities for King County Early Childhood Programs: Head Start, Early Childhood Education Assistance Program, Child Care Subsidy, 3SI, pg.31. Submitted and presented to King County on July 6, 2018, unpublished.

[61] Berk Consulting, NAC Architecture, and Columbia City Consulting. Facilities Needs Assessment for ECEAP Expansion, 2016. Department of Early Learning.

[62] Ibid.

[63] Sussman, C. and Gillman, A. NIEER. Building Early Childhood Facilities, What States Can Do to Create Supply and Promote Quality, 2007. Preschool Policy Report. See: https://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/pre-k_education/buildingearlychildhoodfacilitiespdf.pdf

[64] See appendix A for the full text of the Council's motion.

[65] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[66] Afterschool Alliance: Afterschool Programs in Demand (2014). America After 3pm.

[67] From multiple sources: Goldschmidt, P., Huang, D., & Chinen, M. (2007). *The long-term effects of afterschool programming on educational adjustment and juvenile crime: A study of the LA's BEST afterschool program*. Retrieved from http://www.lasbest.org/what/publications/LASBEST_DOJ_Final%20Report.pdf ; Huang, D., Gribbons, B., Kim, K. S., Lee, C., & Baker, E. L. (2000). *A decade of results: The impact of the LA's BEST After School Enrichment Program on subsequent student achievement and performance*. Los Angeles, CA: University of California, National Center for Research on Evaluations, Standards, and Student Testing (CRESST). ; Huang, D., Leon, S., Harven, A., La Torre, D., & Mostafavi, S. (2009). *Exploring the relationship between LA's BEST program attendance and cognitive gains of LA's BEST students* (CRESST Report No. 757). Retrieved from CRESST website: http://www.cse.ucla.edu/products/reports/R757.pdf ; Huang, D., Leon, L., & La Torre, D. (2011). *Supporting student success in middle schools: Examining the relationship between elementary afterschool participation and subsequent middle school attainments*. Retrieved from CRESST website: http://www.cse.ucla.edu/downloads/files/Huang.etal.AERA.paper.pdf ; Huang, D., Leon, S., La Torre, D., & Mostafavi, S. (2008). *Examining the relationship between LA's BEST program attendance and academic achievement of LA's BEST students* (CRESST Report No. 749). Retrieved from CRESST website: http://www.cse.ucla.edu/products/reports/R749.pdf

[68] Huang, D., Leon, L., & La Torre, D. (2011). *Supporting student success in middle schools: Examining the relationship between elementary afterschool participation and subsequent middle school attainments*. Retrieved from CRESST website: http://www.cse.ucla.edu/downloads/files/Huang.etal.AERA.paper.pdf

[69] Huang, D., Leon, L., & La Torre, D. (2011). *Supporting student success in middle schools: Examining the relationship between elementary afterschool participation and subsequent middle school attainments*. Retrieved from CRESST website: http://www.cse.ucla.edu/downloads/files/Huang.etal.AERA.paper.pdf

[70] Huang, D., Coordt, A., La Torre, D., Leon, S., Miyoshi, J., Perez, P., & Peterson, C. (2007a). *The after school hours: Examining the relationship between afterschool based staff capital and student engagement in LA's BEST* (CSE Technical Report No. 712). Retrieved from CRESST website:

http://www.cse.ucla.edu/products/reports/R712.pdf ; Huang, D., Gribbons, B., Kim, K. S., Lee, C., & Baker, E. L. (2000). *A decade of results: The impact of the LA's BEST After School Enrichment Program on subsequent student achievement and performance*. Los Angeles, CA: University of California, National Center for Research on Evaluations, Standards, and Student Testing (CRESST).

[71] Huang, D., Kim, K. S., Marshall, A., & Perez, P. (2005). *Keeping kids in school: An LA's BEST example. A study examining the long-term impact of LA's BEST on students' dropout rates*. Retrieved from http://www.lasbest.org/what/publications/Keeping_Kids_in_School_Exec_Sum...

[72] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[73] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[74] *Newman, S.A., et al. America's After-School Choice: The Prime Time for Juvenile Crime, or Youth Enrichment and Achievement. Fight Crime: Invest in Kids, Washington D.C., 2002.*

[75] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[76] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[77] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[78] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[79] McCombs, Jennifer Sloan, Anamarie Whitaker, and Paul Youngmin Yoo, The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/perspectives/PE267.html

[80] *Out-of-School Time Landscape Scan*, September 2017, prepared by BERK Consulting: https://cdn.shopify.com/s/files/1/0515/3189/files/Landscape_Scan_September_2017.pdf?12945729401719137010

[81] Luma Consulting. Report to Youth Development Executives of King County: Puget Sound Taxpayer Accountability Account Funding Principles and Opportunities. August 2018.

[82] Road Map Project. Target Population Characteristics: 2016 Update (handout paper). Based on Berk Consulting analysis of Census data.

[83] Washington State. DSHS Opportunity Youth Data Project Findings. 2015. (presentation) http://www.roadmapproject.org/wp-content/uploads/2013/09/Final-slides-7-20-15.pdf

[84] 529 account—named for section 529 of the Internal Revenue Service code that authorizes it—is a tax-advantaged investment account designed for saving towards postsecondary education for a specific beneficiary. Earnings in 529 accounts are not subject to federal income taxes when they are used to cover eligible postsecondary education expenses, such as tuition, fees and books at eligible universities, colleges or vocational programs. While accounts are generally opened by a parent or grandparent, most states allow nonprofit organizations and government entities to open a 529 account for designated beneficiaries. In addition, nonprofits and government entities can make contributions into parent-opened accounts.

[85] Markoff, S., Loya, B., and Santos, J. Quick Guide to CSA Research: An Overview of Evidence on Children's Savings Accounts (Expected publication October 2018). Prosperity Now and the Institute on Assets and Social Policy at Brandeis University.

[86] Huang, J., Sherraden, M., & Purnell, J. Q. (2014). Impacts of Child Development Accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. Social Science & Medicine, 112, 30-38.

[87] Huang, J., Sherraden, M., & Purnell, J. Q. (2014). Impacts of Child Development Accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. *Social Science & Medicine, 112*, 30-38.

[88] Youngmi Kim, Michael Sherraden, Jin Huang and Margaret Clancy, "Child Development Accounts and Parental Educational Expectations for Young Children: Early Evidence from a Statewide Social Experiment," Social Service Review 89, no. 1 (2015): 99-137.

[89] Elliot, W., Lewis, M, O'Brien, M. Children's Savings Account Program: School Outcomes Report. AEID, University of Michigan, and AIR. Available from: https://www.researchgate.net/publication/322936293_Children's_Savings_Account_Program_School_Outcomes_Report [accessed Oct 10 2018].

[90] Markoff, S., Loya, B., and Santos, J. Quick Guide to CSA Research: An Overview of Evidence on Children's Savings Accounts (Expected publication October 2018). Prosperity Now and the Institute on Assets and Social Policy at Brandeis University.

[91] Elliott, W. 2018. Lessons Learned from Children's Savings Account Programs: Tools to Leverage Spending to Facilitate Saving among Low-Income Families. University of Michigan AEDI. https://aedi.ssw.umich.edu/sites/default/files/publications/Lessons_Learned.pdf

[92] Elliott, W., Beverly, S. (2011). The role of savings and wealth in reducing — wilt between expectations and college attendance. *Journal of Children and Poverty* 17, no. 2: 165–185.

[93] William Elliott and Sondra Beverly, "Staying on Course: The Effects of Savings and Assets on the College Progress of Young Adults," *American Journal of Education* 117, no. 3 (2011): 343-374, http://csd.wustl.edu/Publications/Documents/WP10-12.pdf

[94] Markoff and Derbigny. Investing in Dreams: A Blueprint for Designing Children's Savings Account Programs. CFED, Washington D.C., p. 90.

[95] CSA Budget Calculator available online at: https://prosperitynow.org/budget-calculator

[96] Markoff, S., Loya, B., and Santos, J. Quick Guide to CSA Research: An Overview of Evidence on Children's Savings Accounts (Expected publication September 2018). Prosperity Now and the Institute on Assets and Social Policy at Brandeis University.

[97] For more information, visit the website of the Cuyahoga County College Savings Account Program at: http://collegesavings.cuyahogacounty.us/

[98] Integrating College Promise Programs with Children's Savings Accounts, webinar June 2018. https://www.youtube.com/watch?reload=9&v=z6TjxSCuwY8

[99] Altschul, I., Oyserman, D., & Bybee, D. (2006) Racial-Ethnic identity in mid-Adolescence: content and change as predictors of academic achievement. Child Development (77)5: 1155-1169.

[100] French, S., Seidman, E., Allen, L., & Aber, J. (2000). Racial/ethnic identity, congruence with the social context, and the transition to high school. Journal of Adolescent Research, 15, 587-602.

[101] Hanselman, P., Bruch, S.K., Gamoran, A., & Borman, G.D. (2014) Threat in Context: School moderation of the impact of social identity threat on racial/ethnic achievement gaps. Sociology of Education, (87)2: pp 106 – 124.

[102] Kohn, R., Jorgensen, S., & Coakley, E. (2013) One Voice Youth Empowerment Model Comprehensive Evaluation Report. Community Health Institute.

[103] Durlak, J.A., Weissberg, R.P., & Pachan, M. (2010) A Meta-analysis of After-School Programs that Seek to Promote Personal and Social Skills in Children and Adolescents. American Journal of Community Psychology. (45) pp: 294 – 309.

[104] Becket, M.K. (2008) Current-Generation Youth Programs: What works, what doesn't, and at what cost? Rand Education.

[105] Rogers, J., & Terriquez, V. (2013) Learning to Lead: The impact of Youth Organizing and the Educational and Civic Trajectories of Low-Income Youth. Los Angeles, CA: Institute for Democracy, Education, and Access.

[106] Shah, S., Buford, W., & Braxton, E. (2018) Transforming Young People and Communities: New findings on youth organizing. New York, NY: Funder's Collaborative on Youth Organizing.

[107] Ibid.

[108] Ibid.

[109] Ibid.

[110] Ladson-Billings, G. (2009) The Dream Keepers: Successful teachers of African American children. San Francisco, CA: Jossey Bass.

[111] Ibid.

[112] Hammond, Z., & Jackson, Y. (2015) Culturally Responsive Teaching and the Brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students. Thousand Oaks, CA: Corwin Publishing

[113] Ibid.

[114] Ani, A. (2013) In Spite of Racism, Inequality, and School Failure: Defining hope with achieving black children. The Journal of Negro Education (82)4: 408-421

[115] Gay, G., & Kirkland, K. (2002) Developing Cultural Critical Consciousness and Self-Reflection in Pre-service Teacher Education. Theory into Practice. (42)3