# **Table of Contents**

A. Significance
1) National significance of the proposed project
2) Development of promising new strategies that build on existing strategies
3) Project's exceptional approach to established priorities
B. Project Design and Management Plan
1) Measurable goals, objectives, and outcomes
2) Management plan, responsibilities, timelines, and milestones
3) Model for performance feedback and continuous improvement
4) Project dissemination to support replication
C. Quality of Project Evaluation
1) Evaluation methods to produce evidence of effectiveness
2) Deliverables and feedback
3) Formative evaluation
4) Efficacy study
Appendices: A: Nonprofit Status verification; B: Evidence Standards (Logic Model); C: Resumes
of Key personnel; D: letters of Support and Proof of Match; F: N/A; G: References Cited,
Technical Appendix for Evaluation, PREP Visual Aids

### A. SIGNIFICANCE

1) National significance of the proposed project. Portland Public Schools (PPS) proposes Personalized, Relevant, Engaged for Postsecondary (PREP), an Early Phase EIR project that will develop a replicable model that utilizes personalization and strategies addressing factors that lead to student disengagement and therefore support high-need students to graduate from high school and successfully transition to post-secondary education. The long-term consequences of student disengagement – a precursor to dropping out of school – have significant impact at both individual and societal levels. The U.S. Census Bureau reports the average annual income for high school dropouts is \$17,299, less than a third of the average income earned by graduates with a bachelor's degree (\$52,671) (U.S. Census Bureau). High school graduates contribute \$209,000/person in net economic benefit due to increased employment tax revenues (Belfield, et al., 2007). Graduates also positively impact decreased government spending on social programs such as Medicaid and food stamps (Baum, et al., 2007). Student disengagement often manifests as maladaptive behavior and academic underperformance. School systems traditionally have reacted to these manifestations without addressing the root causes, compounding academic failure and leading to students withdrawing from school as the last stage in a long process of disengagement (Rumberger, 2011).

In response, several researchers have offered a framework of structural and cultural factors that *push* or *pull* students out of school (Zammit et al., 2011). Some students are pushed out because of (a) a sense that they do not belong or fit in; (b) conflicts with teachers and students; (c) academic issues, such as lack of credits or failing grades; and (d) discipline issues, like suspensions and expulsions (Boylan et al., 2014). Research has also found that some students are pulled out of

school because of adverse life events or because they need to work, parent, or care for family members; these students are forced to make rational cost/benefit decisions regarding the opportunity costs of staying in school (Boylan et al., 2014). Rumberger (2011) has offered a similar theoretical framework for understanding the disengagement behavior of high needs students, highlighting both institutional and individual factors that contribute to the disengagement of students and to their decision to drop out. Institutional factors include the characteristics of schooling that lead young people to decide that school is not for them. Individual factors, such as student motivation, mental health, and family demands also pull students out of school.

As one of the largest urban school districts in the Pacific Northwest, Portland Public Schools (PPS) serves over 49,000 pre-K through 12<sup>th</sup> grade students across 78 schools. PPS has significant populations of high-need students, and the district's alternative education programs serve a disproportionately high percentage of them. Just under 45% of children in Portland live in households with a high housing cost burden; over 35% have parents who lack secure employment; and 30% speak a language other than English at home (2016 KidsCount Data). During the 2015-2016 academic year, 44% of PPS students were children of color, and over 46% qualified for the National School Lunch Program. Only 65% of historically underserved students graduated on time in 2015, compared to a 74% district-wide. These indicators are more deeply pronounced for students enrolled in the alternative education programs in comparison to traditional high schools.

Table 1: PP	S Student	Demograp	hics – T	raditional v	s. Altern	ative Hi	igh Schools	(2015-16)
			Mean					
			Age					Free/
	Total	Students	at	Pregnant/				Reduced
	Students	of Color	Entry	Parenting	SpEd	ELL	Homeless	Lunch
PPS								
Traditional	14,619	48.1%	15.8	1.1%	15.3%	5.0%	3.0%	26.1%
HS								

Absolute Priority 4 – Increasing Postsecondary Preparedness

PPS								
Alternative	2,228	58.5%	17.2	5.7%	18.5%	5.7%	7.5%	37.3%
Programs								

As a highly visible presence in Portland, Oregon, a community that boasts both industrial roots and a more recent burgeoning "creative class," PPS has forged a deep connections to governmental institutions, non-profits, and corporations who are key stakeholders in the success of the region's youth. These partnerships support and underpin the *PREP* project, as evidenced by the letters of support (see Appendix D). These *PREP* "boosters" include: The Curriculum of Cuisine, which will offer health and nutrition curriculum in the context of providing real-world culinary skills to *PREP* students; Literary Arts, which will include *PREP* students in Writers in the Schools sessions and provide tickets and transport to its author series; Impact NW, which will help develop and implement career pathways programs (construction and manufacturing); and Boeing, which will contribute its expertise in designing engineering curriculum. The Multnomah Education Service District is will offer college prep classes, one-on-one academic advising, among other supports.

The Gateway to College National Network is a long-time collaborator who shares the mission of persisting with students to high school graduation and college enrollment. The State of Oregon's Department of Human Services' Vocational Rehab Services has committed to bringing approximately \$115,000 in annual match to the *PREP* project in the form of money for students with disabilities to participate as additional student cohorts at Portland Community College's Career Pathways Certificate programs as well as a part-time Staff Pre-Employment Transition Service Coordinator. Multnomah County's Defending Childhood Initiative is committed to provide consultation and training on trauma informed practices focused upon Social Emotional Development of students and trauma informed education of *PREP* project staff, families and community. The Portland State University Graduate School of Social Work is committed to

continued placement of Mater of Social Work Interns in MPG. This synergy illustrates the significance and degree to which PPS is prepared for the successful implementation of *PREP*. Collectively, we embody the opportunity Mr. Mandela spoke to when he said, "Education is the greatest weapon one can use to change the world."

2) <u>Development of promising new strategies that build on existing strategies.</u> Implementing a diverse array of individualized learning opportunities is a proven strategy in engaging and retaining students who might otherwise drop out. Results from a recent study indicated that Programs of Study (POS) enrollment improved probability of graduation by 11.3% and that each additional Career and Technical Education (CTE) credit earned in POS increased probability of graduation by 4% (Castellano et al., 2016). Informed by this research, PPS's CTE Office, a grade 6-12 initiative that offers career-related skills to prepare students for postsecondary, will help design activities for *PREP*, including "job shadows" and internships with regional business/industry partners, hands-on 3-day "Maker Space" experience, and skills such as resume and essay writing.

In 2005, PPS created the department that would become "Multiple Pathways to Graduation." MPF offers a continuum of educational options to engage students who have dropped out and/or are significantly off-track from graduation; are credit deficient and in need of credit recovery; have previously been unsuccessful in school; are enrolled in a charter school; need an alternative placement; are enrolled in day or residential treatment programs; and/or are pregnant or parenting. MPG serves students who typically exhibit low levels of academic achievement in and significant credit deficiencies. Also, MPG students experience disciplinary incidents more frequently than students enrolled in traditional programs. Because of the population served, MPG, to a significant degree, is the district's "early warning system" for student at risk of not graduating.

PPS data reflects that students who are excluded from school due to suspension or expulsion have a reduced rate of on-time graduation (69%). Students who are excluded more than 5 times during high school graduate on time just 18% of the time. (See Graphic in Appendix G). PPS students in Alternative High Schools (contracted and in-district) enter with 3.75 times more exclusions than the district average; therefore, concentrated best practices are required for academic achievement and success of alternative students.

MPG's Reconnection Services Program (RSP) identifies students who have dropped out, or are in danger of dropping out, and provides support to help them remain in their current school or connects them to "best fit" programs. A Reconnection Center provides temporary skill remediation and credit recovery for students waiting to be placed. During the 2015-2016 academic year, RSP identified more than 2,000 students who had disengaged/unenrolled and completed 1,074 student intakes requesting support. Due to the effectiveness of its strategies, PPS was recognized by the U.S. Department of Education as one of 16 exemplar districts (U.S. Department of Education, 2014). PPS was honored to host the 2014 Fourth Annual Reengagement Plus National Convening in partnership with PCC, the National Gateway to College Network, and the City of Portland. The success of our reengagement approach has increased demand for MPG programs, leading PPS to seek ways to further strengthen the district's placement options.

3) <u>Project's exceptional approach to established priorities.</u> *PREP* will support high-need youth to graduate at higher rates and more successfully transition to post-secondary education, and will target youth experiencing poverty, homelessness, involvement in foster care or the juvenile justice system, students with disabilities, and students from racially underserved backgrounds under EIR's **Absolute Priority 1** (Supporting High Need Students). In alignment with **Absolute Priority 4** (Increasing Postsecondary Preparedness), PPS will develop and implement a personalized project-

based learning model complemented by intensive social-emotional support and aligned with relevant career pathways. The *PREP* project is based on the **strong theory** that these strategies will increase the engagement, persistence, and academic achievement of students while reducing the impact of institutional/pull factors (Boylan et al., 2014).

Following a planning year (Year 1), PPS will focus on three schools during the Pilot Phase (Years 2–3) of implementation: 1) Metropolitan Learning Center (MLC); 2) Alliance Alternative High School at Meek Campus; and 3) Alliance Alternative High School at Benson Campus. While each targeted school serves high-need students as defined by EIR, each offers distinct expertise to the overall project. MLC is a K-12 and, in the middle and high school grades develops critical thinking skills through exploration in interactive Socratic Seminar and Costa's level of inquiry visible in whole community activities such as Mock Trial. Alliance Alternative High School provides educational options for students moderately or significantly off-track with credit acceleration located on two campuses. Benson operates on a day-to-night schedule to best serve students with varying schedules, has a rolling intake with a weekly orientation, and excels at serving older students. Meek emphasizes social-emotional learning in concert with a dual credit program and offers four CTE Strands: Manufacturing, Automotive, Natural Resources, and Digital Media. Meek excels at serving younger students, and offers a unique intake model, admitting new students six times annually (every six weeks). Intake cohorts remain together and use the Discovery Program, a social-emotional skills curriculum (www.discoveryprogram.net). Between 2013 and 2016, Alliance High School's combined Free/Reduced meal eligible enrollment was 39% compared to the district's overall rate of 28%.

While PPS currently offers elements of evidence-based programming designed to address the factors that contribute to disengagement and dropping out, the *PREP* project will

institutionalize collaboration between MLC, Alliance at Benson, and Alliance at Meek, and empower each participating site to lend its expertise to the others to develop a cohesive approach that will meet the needs of participating students, and be able to be scaled in the Replication Phase (Years 4–5) across PPS high schools, middle schools, and state/nationwide, and evaluated.

Table 2: PPS EIR Project Phases				
Phase	Activities	Students		
Planning Phase (Year 1)	Develop culturally responsive, competency-based project-based learning framework that incorporates relevant career development opportunities and provide training and professional development for teachers. Develop SEL curricula and assessments and hire and train school social workers and alcohol and drug specialists.	N/A		
Pilot Phase (Years 2-3)	Implement project strategies at three target school sites: Alliance Alternative HS at Meek, Alliance Alternative HS at Benson, and Metropolitan Learning Center.	600		
Replication Phase - Part 1 (Years 4-5)	Replicate standards- and project-based model at Community Based Organization Schools within MPG, reinforcing participation of these schools to pilot the model by including model elements in the 2020 CBO re-compete application.	1,400		
Replication Phase - Part 2 (Years 4-5)	Adapt project model for replication to Day and Residential Treatment (DART) Schools (alternative placement students on 7 small campuses) at the middle and high school grades.	250		
Replication Phase  - Part 3 Statewide/National Program Model (Year 5)	Based on lessons learned we intend to replicate this model to other district middle and high schools. As a state leader in Alternative Education, PPS will present <i>PREP's</i> progress each of the 5 years at Oregon's Statewide Alternative Ed. Conference as well as at the Alternative Accountability and Policy Forum and National Re Engagement Convening on implementation of best practices specific to students requiring alternative education. Other districts (state and nationally) will be invited to learn from <i>PREP</i> by (a) observing teaching and learning, (b) identifying lessons learned from the evaluation, and (c) adopting the culturally responsive standards and project-based units. PPS will work with teacher prep programs (e.g., PSU, Lewis and Clark, Concordia) to ensure that pre-service teachers are prepared to develop and teach project-based curricula. Training efforts will ensure that the new generation of teachers are willing and prepared to sustain these efforts.	2,250 plus up to 20,000 additional (TBD)		
Total	2,250 (up to 22,250 if replicated district wide)	2,250 +		

As detailed below, the proposed **PREP** project, whose over-arching vision is increased high school graduation of students prepared for success at the college level, has three primary goals: 1) Develop and implement a competency-based and project-based learning framework; 2) Embed framework in relevant career pathways; and 3) Address student trauma while increasing social-emotional support. Goal 1: Develop and implement a competency-based and project-based learning framework. Project-based learning has demonstrated significant benefits, including deeper comprehension, greater retention, and increased motivation to learn (Penuel et al., 2000). Comparative analyses have also shown the positive impact of project-based learning for students in specific content areas, including math, language, science, and economics (Mergendoller et al., 2006). Through **PREP**, PPS will develop and implement a project-based learning framework that is culturally responsive, competency-based, and incorporates relevant career development opportunities. During Year 1, a curriculum developer will collaborate with teachers to develop this framework, which will be modeled after research-based project-based learning curriculum and include accompanying assessments. The curriculum developer will work with teachers and PPS Office of Teaching and Learning staff to (a) research evidence-based models, (b) identify existing project-based practices within PPS, (c) identify and select exemplars, (d) develop a framework for developing project-based curricula, (e) facilitate the creation of pilot units, and (f) facilitate review and identification of lessons learned from pilot units. The curriculum developer, instructional specialist, and project director will provide training, support, and professional development (PD) time for teachers to support implementation. Teachers will receive four hours of release time per month to meet with the curriculum developer and instructional specialist to co-develop curriculum and receive training. Subsequent PD will be designed to build teachers' capacity to design and implement project-based units that are culturally responsive and standards-based. As such, the PD may include curriculum design facilitated by the curriculum developer, and co-teaching and coaching with the Instructional Specialist. The Measures of Academic Progress (MAP) will be used to assess effectiveness of strategies under this goal. MAP is a computer adaptive interim assessment that can be used 3-4 times per year to monitor literacy and numeracy growth. It is currently used at Alliance High School and several Community-Based Organization schools.

**PREP** will also utilize the district's Alternative Accountability Annual Report Card that includes the following metrics for alternative programs: academic growth metrics of reading and math, one year graduation rate, attendance, and retention, and the Successful Schools Survey measuring social emotional engagement. Several community-based organizations partnering with MPG have had success with components of the proposed model, and rigorously evaluated programs supported by the Social Innovation Fund- have implemented elements of it.

Goal 2: Embed learning framework in relevant career pathways. Through PREP PPS will target inequities in rigor and quality of postsecondary preparation. Also referred to as functional-context education, career pathway strategies have been recognized by the U.S. Department of Education's What Works Clearinghouse as an effective approach to teaching literacy and other skills (Fletcher, 2006). A partnership with Portland Community College (PCC) will enable students to pursue postsecondary education or full-time employment through the College's Career Pathways Program based on post-secondary education and career specific employment. Students enrolled in Pathways will receive dual high school and college credit and have the potential to obtain a certificate in one of the following: HVAC, Pre-apprenticeship, Healthcare, Accounting, or Client Relations. PREP builds upon the existing Career Pathways program at Meek (i.e., Manufacturing, Robotics,

Automotive, Natural Resources, Digital Media) through (a) the development of student cohorts engaged in specific strands; and (b) creation of senior project portfolios.

Goal 3: Increase capacity to provide social-emotional support to students. PPS is committed to providing trauma-informed and culturally relevant social-emotional support to optimize the success of high need students in alignment with SAMHSA's Trauma-Informed Approach. Inherent to effectively implementing this model are six key principles: safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice and choice; and cultural, historical, and gender issues (www.samhsa.gov/nctic/trauma-interventions). PREP will increase capacity to provide social-emotional support at the pilot schools, with effective strategies replicated across other district middle and high schools in Years 4 and 5. Strategies include: (a) hiring school social workers, alcohol and drug specialists; (b) developing and implementing social-emotional learning curricula and assessments; and (c) providing case management and career-track opportunities for students with disabilities in partnership with Oregon's Vocational Rehabilitation Program, and specifically its goals to implement "inclusive and dynamic statewide student and youth programs" and to "expand and improve services to Oregonians who have been underserved".

**PREP's** project design maximizes use of longitudinal data systems to provide timely information about high-need students to better match them with targeted educational interventions and support. **PREP** seeks to expand the use of data related to student referral, enrollment, academic progress, and both academic and social emotional factors of wellbeing. Tracking will be through district approved systems such as Google docs and Synergy. PPS has a robust and evolving set of early warning indicators in its digital database, or "dashboard," that help schools to identify student risk factors. Utilizing timely data, teams will discuss root cause of indicators and determine appropriate interventions. The data-driven interventions implemented will be tracked in the tools

available to the district, including surveys that measure student competencies in key SEL domains identified by the Collaborative for Academic, Social, and Emotional Learning (CASEL) self- and social awareness, self-management, relationship skills, and responsible decision-making.

### B. PROJECT DESIGN AND MANAGEMENT PLAN

1) Measurable goals, objectives, and outcomes. The *PREP* project will create a model that can be duplicated across PPS and by other districts nationwide. With 26 Reengagement Centers currently involved with the National League of Cities National Reengagement Network and dozens more sprouting up, *PREP* will serve as a model of effective linkage and individualized student support and of academic pathways that meet the specific needs of and challenge the academic interests of high-risk students. To support full implementation of the project model, PPS has established the following measurable goals, objectives, and outcomes:

### **Table 3: Project Goals, Objectives and Outcomes**

### Goal 1: Develop and implement a competency- and project-based learning framework.

### Objectives:

- a. Improve student engagement and persistence through project-based learning,
- b. Increase number of students who make gains on the MAP Language Arts assessment by 2%, and on the MAP Math assessment by 3%, annually.

#### Outcome:

- a. Increase student retention by 4% annually.
- b. High school graduation for project participants will increase by 10% as compared to those not in project.

### **Activities by Project Year:**

- **Y1:** Develop competency and project-based learning framework and pilot units. Provide training to teachers to support implementation of project-based model.
- *Y2-3:* Implement project-based units in three pilot schools. Conduct formative evaluation to inform iterative development and refinement of framework and units. Continue to develop project-based units and provide coaching and professional learning to teachers.

**Y4-5:** Replicate project-based model in CBOs, Middle Schools, and DART program; conduct efficacy evaluation; continue to provide coaching and professional learning to teachers and build capacity of project staff to develop project-based units.

# Goal 2: Embed learning framework in relevant career pathways.

### Objectives:

- a. Increase completion of PCC Career Pathway certificates by 10% over initial baseline.
- b. Increase percentage of students earning dual high school-college credit by 2% annually.
- c. Improve engagement and persistence by connecting students to relevant career development opportunities and support the transition to post-secondary education and training.

#### Outcomes:

- a. 5% of students who received a PCC Career Pathway certificate will continue their education in a career technical strand following receipt of PCC Career Pathway certificate.
- b. 5% increase in students reporting positive personal development and increased positive association related with Career Related Learning formal education as indicated on annual Successful Student Survey.
- c. 100% of project high school graduates will complete one: apply for FAFSA, apply for scholarship, visit a college campus.

## **Activities by Project Year:**

Y1: Expand partnerships between PPS MPG and PCC Career Pathways Certification and post-secondary programs (e.g., Client Services, Accounting, HVAC, Pre-Apprenticeship Construction, Healthcare, Music Production). Integrate career development opportunities into project-based pilot units. Establish three separate cohorts of students: Fall, Winter, and Spring terms. Tentative criteria for students enrolling in the strand. Programs are: Fall (ages 17-21) 4 remaining credits, Winter (ages 17-21) 2.5 remaining credits, Spring (ages 17-21) 1.0 remaining credits. Students will: enroll in a class of interest within Pathways options or enroll in one Pathway strand; and register for the Alliance Career readiness elective class (one month prior to beginning PCC program) where they will work on time management, career-related learning experience activities necessary for high school completion, PCC registration/enrollment/homework support, and how to effectively communicate/advocate as a college student. Outcomes will be diploma and either a career pathway certificate, leading to a job in the field, or a continuation in a PCC program within field.

**Y2-3:** Develop cohorts of CTE and Career Pathways students at pilot sites Career Pathways pilot projects outlined by cohort term:

<u>Fall cohort:</u> complete FAFSA, connect with career/college coordinator to make post-secondary career plan (if student needs to drop out due to life circumstances- connect with social worker, or necessary resources- but keep connected to plan to possibly re-visit in future). Begin work in Naviance on Career Related learning experiences- resume My Plan Essay. Enroll in, and complete courses with PCC. Meet with counselor to confirm all needed classes are connected to graduate. <u>Winter cohort:</u> Students enrolled in strand- if strand continues- they will join the Winter cohort. New cohort students- enroll in PCC classes, take Career success class. Continue work with career

plan- or alter as needed. Complete any needed work/volunteer experience documentation. Meet with counselor to assure on track for graduation.

**Spring cohort:** Enroll in PCC classes- complete work in Naviance- work with career coordinator to confirm completion. Explore internships/experiences related to strand engaged in- with career coordinator and PCC. Meet with counselor to assure credits are in place for graduation. Meet with PCC to confirm on track to gain certificate or enroll in Summer/Fall term.

Y4-5: Replicate model in CBOs, Middle Schools, and DART program; conduct evaluation.

## Goal 3: Increase capacity to provide social-emotional support for students.

### Objectives:

- a. Increase capacity to provide case management and SEL support
- b. Improve student engagement and persistence through increased SEL support.
- c. Improve social and self-awareness, decision-making, relationship skills and self-management through SEL support

#### Outcomes:

- a. Increase student retention by 4% annually.
- b. High school graduation for project participants will increase by 10% as compared to those not in project.
- c. Increased competence in SEL domains (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making).

### **Activities by Project Year:**

**Y1:** Hire three school social workers. Establish Social Emotional Learning (SEL) framework and assessments aligned with trauma-informed practices with stakeholder feedback including administrators, and teacher feedback, specifically social work and counseling staff. Select an appropriate SEL curriculum. Among the programs we will explore include Facing History and Ourselves (Domitrovich et al, 2014). Provide training to build capacity for developing SEL.

**Y2-3:** Implement SEL curricula, place social workers at pilot sites, including specific SEL skills instruction, integration of SEL into teaching practices and curriculum, and begin vocational rehabilitation case management; begin efficacy study in Y3 in pilot sites

Time for teacher training will be provided monthly and partially embedded into the Professional learning community (PLC) work within the work week as well as identified days when substitutes will be provided so teachers may attend professional development. Integration of SEL will be visible in the Discovery curriculum currently utilized at the Alliance at Meek campus. PPS will continue to engage in Courageous Conversations about Race and the SEL work will intentionally support growth of multiple worldview perspectives acknowledging both historical and current contributions of various racial, ethnic and cultural communities.

*Y4-5: Y4-5:* Replicate model CBO's, Middle Schools, and DART program. Continue training and professional learning to social workers. Establish systems to continuously improve SEL programming through inquiry and data collection; expand efficacy evaluation.

**Fidelity of Implementation:** Following the initial planning year, PPS will implement proposed strategies with 70% fidelity during Year 2 (Pilot), 85% in Year 3 (Pilot Phase with efficacy study), increasing to 95% fidelity in Years 4 - 5 (Replication Phase).

Education Northwest (EdNW), the project's evaluator, will establish baseline for all measurements in the initial year (Pilot Phase) of implementation, with progress toward goals assessed annually using the PPS Alternative Accountability Framework. PPS designed this framework specifically for use within alternative schools (both in-district and contracted) to measure success in working with significantly off-track and/or out-of-school youth. The framework provides data appropriate for these populations in: academic growth in reading and math; course completion/progress toward graduation; progress toward GED completion; attendance; growth in attendance; and school climate. We believe that this framework is highly replicable, and the Oregon Department of Education's ESSA Accountability Task Force has requested information on this process with the possibility of utilizing an Alternative Accountability Report Card for districts throughout the state.

Students participating in *PREP* will also receive skill-based learning that reflects post-assessment growth in social-emotional development and college preparedness as reflected in Ansell-Casey Life Skills Assessment. Additionally, students will complete a series of activities related to trauma regulation and social-emotional learning which illustrates individual skill growth through post assessment measure, with activities including: participation in and completion of student success support group, "onboarding" group for Alliance at Benson, six-week Discovery Social Emotional Learning Orientation Group at Alliance at Meek, and a newly implemented weekly social emotional support group at the Metropolitan Learning Center.

2) <u>Management plan, responsibilities, timelines, and milestones.</u> PPS has significant experience in implementing district-wide federally funded initiatives, including the USDOE's 21<sup>st</sup>-

Century learning Centers, the Foreign Language Assistance Program, and the High School Graduation Initiative five year project from 2009 – 2014 which successfully allowed PPS to work with students exhibiting chronic attendance and supported their academic achievement via individual and school supports. *PREP* has been developed by a broad-based committee: administrators, principals, teachers, evaluation and assessment experts, budget specialists, and community partners. The responsibility for the project resides within the district's Multiple Pathways to Graduation Department under the leadership of Matt Eide, PPS Reconnection Services Administrator. The project's Leadership Team will provide oversight for all components of the project to inform implementation of the *PREP* model to fidelity and replication at sites across the district and state/nationwide. This team will meet monthly to align project strategies with identified goals and inform continuous improvement. The following table delineates key staff and partnering organizations and members' role within *PREP*.

Table 4: Key Staff and Partners				
Name/Organization	Project Role			
Matt Eide, PPS Reconnection Services Administrator	Project Director: Oversight; management; facilitation of Project Leadership Team; reporting; supervision of data collection, intake completion and pre/post assessment of students identified in project as well as treatment group.			
Korinna Wolfe, Senior Director, PPS Multiple Pathways to Graduation	Project's Executive Sponsor at school district level. Responsible for supervision of Project Director.			
Ewan Brawley, PPS Senior Director of Instruction, Curriculum and Assessment	Project's Liaison with District to ensure adequate support for curriculum development and position <i>PREP</i> as model to increase postsecondary preparedness of high-need students' district-wide.			
Allison Adams, PPS Vice Principal, Alliance Alternative HS, Benson	Project Leadership for Alliance at Benson; supervisor of the PCC Career Pathways Partnership. Direct supervisor of School Social Worker, Drug and Alcohol Counselor at Benson.			

Lorna Fast Buffalo Horse, PPS Principal, Alliance Alternative High School, Meek Campus	Project Leadership for Alliance at Meek campus; supervisor of the State of Oregon Vocational Rehabilitation contract and partnership growth over 5 years; direct supervisor of School Social Worker, Drug and Alcohol Counselor at Alliance at Meek.
Liz Wilson, PPS Vice Principal, Metropolitan Learning Center	Project Leadership for Metropolitan Learning Center campus; direct supervisor of School Social Worker, Drug and Alcohol Counselor time and oversight of SEL supports provided at MLC.
Carla Gay, PPS Director of Early Warning Systems (EWS)	Project Leadership Team member from EWS perspective, with development of SEL and academic intervention and data collection. Provides expertise in and training district-wide during project implementation, replication and expansion.
Dr. Julie Prindle, PPS Senior Manager, Social Work Services, MPG	Project Leadership Team member for SEL. Identification of SEL assessment, development of social-emotional intervention and data collection.
Kirsten Plumeau, PPS Program Director, Contracted Alt. Schools	Project Leadership Team member. Supervisor of the contracted alternative schools. Collaborates on identification of students for project and control group.
Michelle Markle, PPS SPED Administrator	District-level project support specific to the needs of students with disabilities.
Jeanne Yerkovich, PPS Director, CTE	Project Leadership Team member for CTE at high schools and support for partnerships with Portland Comm. College.
Chris Mazzeo, Principal Investigator, Education Northwest	Project Evaluator: Academic research partner. EdNW will serve as evaluation partner for both the formative feedback/feasibility study and efficacy study.
Keith Ozols, State of OR Vocational Rehab. Division	Project Leadership Team member; responsible party from State of Oregon Vocational Rehabilitation Department.
Kate Kinder, Career Pathways Director, PCC	Directs and provides contract and project management for PPS – Portland Community College Career Pathways Partnership.
Dr. Laura Nissan, Dean, PSU School of Social Work	Supports PPS-PSU Graduate School of Social Work partnership. Assigns MSW student interns to.

Under the direction and expertise of the Project Leadership Team, the schedules below delineate a clear plan to ensure successful implementation of the *PREP* project.

Table 5: Key Activities, Responsibility, and Timeline	
<b>Year 1: Planning Year (10/17 – 9/18)</b>	

Key Activities/Milestones	Responsibility	<b>Target Dates</b>
Project Leadership Team meeting to map project	Project Director	10/17 and
year	.,	monthly
Finalize contract with evaluation partner	Project Director	By 11/17
Hire project staff	Project Director	By 12/17
Develop project forms and protocols	Project Director	By 3/18
Identify baseline data for evaluation	Independent Evaluator	By 3/18
Finalize partnership details with Portland	Project Director	By 6/18
Community College		
Develop educator professional development	Project Director	By 6/18
calendar to include job-embedded model of		
instructional coaching		
Develop media campaign	Project Director	By 9/18
Develop Professionals of Color speaker series	Project Director	By 9/18
Develop project curriculum and activities	Curriculum Developer	By 9/18
	Project Director	
Present progress at Oregon's Statewide	Project Director	By 9/18
Alternative Education Conference, Alternative	-	
Accountability and Policy Forum, and National		
Re Engagement Convening		
Years 2-3: Pilot Phas	e (10/18 – 9/20)	
Key Activities/Milestones	Responsibility	Target Dates
Project Leadership Team meeting to discuss	Project Director	10/18 and
previous quarter data and project progress		monthly
Implement annual educator professional	Project Director	By 10/18
development calendar		
Conduct project intake with students at three	Project Director	By 10/18
participating school sites	School Social Workers	
IEP and Student Behavioral file review	School Social Workers	By 10/18 and
		quarterly
PCC Career Pathways Fall Cohort begins	Project Director	By 10/18
Administer group interventions for project	Project Director	By 10/18
students		
Conduct data analysis of project activities	Independent Evaluator	By 12/18
Data of project students analyzed for course	Independent Evaluator	By 1/19 and
completion		quarterly
PCC Career Pathways Winter Cohort begins	Project Director	By 1/19
PCC Career Pathways Spring Cohort begins	Project Director	By 4/19
Conduct post-assessment testing	Project Director	By 6/19
Present progress at Oregon's Statewide	Project Director	By 9/19
Alternative Education Conference, Alternative		
Accountability and Policy Forum, and National		
Re Engagement Convening		
Begin efficacy study with pilot schools in year 3	Independent Evaluator	By 10/19

Year-end data analysis and media distribution	Independent Evaluator	By 9/19				
Twice annual review and dissemination of	Independent Evaluator	Twice per year				
evaluation results to key stakeholders						
<b>Years 4-5: Replication Phase I</b> (10/20 – 9/22)						
Key Activities/Milestones	Responsibility	<b>Target Dates</b>				
Project Leadership Team meeting to discuss	Project Director	10/19 and				
previous quarter data and project progress		monthly				
Develop incentive for district's CBO high schools	Project's Executive	By 9/20				
to pilot model within district's RFP process	Sponsor and CBO					
	Director					
Replicate standards and project-based model at	Project Director	By 9/20				
four CBO high schools (Rosemary Anderson,						
NAYA, and Mt. Scott)						
Data of project students analyzed for course	Independent Evaluator	By 1/21 and				
completion		quarterly				
Present progress at Oregon's Statewide	Project Director	By 9/22				
Alternative Education Conference, Alternative						
Accountability and Policy Forum, and National						
Re Engagement Convening						
Year-end data analysis and media distribution	Independent Evaluator	By 9/22				
Twice annual review and dissemination of	Independent Evaluator	Twice per year				
evaluation results to key stakeholders						
Years 4-5: Replication Ph						
Years 4-5: Replication Ph Key Activities/Milestones	Responsibility	Target Dates				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss		10/20 and				
Years 4-5: Replication Ph Key Activities/Milestones	Responsibility	10/20 and quarterly				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress	Responsibility Project Director	10/20 and quarterly thereafter				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and	Responsibility Project Director  Project Director,	10/20 and quarterly				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress	Responsibility Project Director  Project Director, Curriculum Developer	10/20 and quarterly thereafter				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and	Responsibility Project Director  Project Director, Curriculum Developer & Instructional	10/20 and quarterly thereafter				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist	10/20 and quarterly thereafter By 9/20				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director	10/20 and quarterly thereafter By 9/20				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly By 9/20, 9/21,				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide Alternative Education Conference, Alternative	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative  Accountability and Policy Forum, and National	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly By 9/20, 9/21,				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative  Accountability and Policy Forum, and National Re Engagement Convening	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator  Project Director	By 9/20 By 9/20 By 1/22 and quarterly By 9/20 By 1/22 and quarterly By 9/20, 9/21, & 9/22				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative Accountability and Policy Forum, and National Re Engagement Convening  Year-end data analysis and media distribution	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator  Project Director  Independent Evaluator	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly By 9/20, 9/21,				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative Accountability and Policy Forum, and National Re Engagement Convening  Year-end data analysis and media distribution  Year 5: Replication Phas	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator  Project Director  Independent Evaluator	By 9/20 By 9/20 By 1/22 and quarterly By 9/20 By 1/22 and quarterly By 9/20, 9/21, & 9/22 By 9/22				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative Accountability and Policy Forum, and National Re Engagement Convening  Year-end data analysis and media distribution  Year 5: Replication Phas  Key Activities/Milestones	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator  Project Director  Independent Evaluator  Independent Evaluator  Independent Evaluator  Independent Evaluator  Independent Evaluator  Responsibility	10/20 and quarterly thereafter By 9/20 By 9/20 By 1/22 and quarterly By 9/20, 9/21, & 9/22 By 9/22  Target Dates				
Years 4-5: Replication Ph  Key Activities/Milestones  Project Leadership Team meeting to discuss previous quarter data and project progress  Adapt project model for replication to Day and Resident Treatment (DART) schools  Implement model across 7 DART middle schools  Data of project students analyzed for course completion  Present progress at Oregon's Statewide  Alternative Education Conference, Alternative Accountability and Policy Forum, and National Re Engagement Convening  Year-end data analysis and media distribution  Year 5: Replication Phas	Responsibility Project Director  Project Director, Curriculum Developer & Instructional Specialist Project Director Independent Evaluator  Project Director  Independent Evaluator	By 9/20 By 9/20 By 1/22 and quarterly By 9/20 By 1/22 and quarterly By 9/20, 9/21, & 9/22 By 9/22				

Invite districts across state and country to observe	Project Director	By 12/22
project model, discuss lessons learned from		
evaluation, and replicate culturally responsive		
standards and project-based units		
Present progress at Oregon's Statewide	Project Director	By 9/22
Alternative Education Conference, Alternative		
Accountability and Policy Forum, and National		
Re Engagement Convening		
Evaluator final report and media distribution	Independent Evaluator	By 9/22
Grant close-out	Project Director	9/22

3) Model for performance feedback and continuous improvement. The *PREP* program model will be piloted at three school sites during Year 2. During the first phase of the formative evaluation, the project evaluators will identify lessons learned regarding implementation and impact to be used to refine full scale implementation in Year 3. Similarly, during the first year of full-scale implementation, evaluators will conduct a second round of formative evaluation to address (a) fidelity of implementation, (b) barriers to fidelity, and (c) lessons learned/recommendations. Combined, this formative feedback will inform adjustments to the model and address system conditions necessary for full implementation with fidelity.

4) <u>Project dissemination to support replication</u>. PPS will broadly disseminate information on *PREP* to support further development or replication through the following venues: Continuing Technical Education Conference Presentations; Alternative Education Policy Forum Conference Presentation; Worksystems, Inc. WOI partnership replication; National Re-Engagement Plus Conference Presentation; and NICWA Annual Conference Presentation (held each spring).

### C. EVALUATION PLAN

1) Evaluation methods to produce evidence of effectiveness. Education Northwest will serve as the evaluation agency, with Principal Investigator Chris Mazzeo providing oversight for all research and evaluation components. Based in Portland, OR, EdNW has more than 50 years of experience in research and evaluation, as well as direct experience evaluating an i3 grant in Alaska.

The team includes researchers with deep knowledge of strategies and PD that improves secondary and postsecondary outcomes for high-needs students and expertise in advanced methods for longitudinal, multi-stakeholder formative and impact evaluations, and collaborative experience in (PPS). A recent project, led by Mazzeo, involved working with PPS to develop an accountability framework for alternative schools. For *PREP*, EdNW's work will include formative evaluation to describe program development and implementation fidelity, and an efficacy study to determine the project's impact on student achievement, and attainment outcomes. The evaluation questions, data sources, and analysis methods are summarized below in Table 6.

Table 6: EIR Project Evaluation Summary				
Questions	Data sources	Analysis methods		

Formative evaluation (years 1 – 4)		
What are the key elements and activities of the project and to what extent are they being implemented as intended?  To what extent did project activities produce expected <b>outputs</b> (increased use of project-based learning, students engaged in career development activities, use of trauma-informed practices, enrollment in dual-credit courses)?  How did project activities achieve <b>short-term outcomes</b> , (student engagement, career awareness and goal setting, staff and student satisfaction)  What <b>barriers to implementation</b> arose and how were they overcome?	Documents (project plans & records, meeting & training materials, feedback forms) Surveys (staff, students) Interviews (staff) Progress tracking data (project records, classroom observations, skills survey, demographic, discipline, attendance records, transcripts)	Descriptive summaries (frequencies, percentages, averages) of quantitative data, such as close-ended survey items and administrative data; reliable content analysis of qualitative data using multiple raters to develop a coding scheme derived from data and guided by the logic model)  Descriptive statistics
student and per successful student outcome?	Project records (cost, student enrollment)	(total program cost/# of students)
Efficacy study (years 3 – 5)		,
What effect does the project have on mid and long term student social-emotional well-being (self & social awareness, self-management, decision-making)? What effect does the project have on mid and long term student achievement outcomes (standardized test scores, credits earned, diplomas or equivalent awarded, post-secondary enrollment, post-secondary degree/certificate completion)?	Survey (students)  Administrative data (demographic files, transcripts, test scores, enrollment records)	Experimental: Randomized Control Trial (RCT) with Multi-level linear and logistic regression

2) <u>Deliverables and feedback.</u> EdNW evaluators will collaborate and attend regular meetings with PPS project staff to align evaluation activities with *PREP* implementation and provide actionable feedback for continuous improvement. EdNW will collect evidence of all required *performance measures* (see Bibliography) as well as all project activities in all years of the evaluation, focusing on implementation in years 2 through 4 and efficacy in years 3 and 4. After each data collection, EdNW will deliver *performance feedback reports* with high-level findings

and considerations for program improvement. During twice annual in-person meetings, EdNW will facilitate conversations to help PPS interpret evaluation findings and plan for upcoming evaluation activities. Finally, EdNW will submit annual reports that summarize program activities and progress on the project goals, using current and longitudinal data.

3) Formative evaluation. The evaluation team and core project team will work together to identify key implementation phases of the project based on the logic model, and set goals and benchmarks for each phase. The evaluation team then will pursue a mixed-methods evaluation to describe and quantify fidelity of implementation and perceptions of program activities, outputs, and short-term results (Creswell, 2003). Evaluators will use descriptive statistics to analyze quantitative implementation data, such as close-ended survey items and project records, and will apply content analysis to make inferences about qualitative data, including training materials, open-ended survey responses, interview and observation data (Mayring, 2000). The evaluation team will develop a rubric to monitor implementation relative to project standards and rate implementation fidelity. These activities will help project leaders make real-time adjustments to maximize project benefits.

Methods for collecting qualitative and quantitative data are summarized below in Table 7.

Table 7: Formative Evaluation Methods	
Surveys	Satisfaction surveys will be administered in Years 2-4 to staff, parents, and
	students to gauge perceptions of the approach and fidelity to the
	implementation plan. A pre-post survey measuring engagement and social-
	emotional learning will be administered to all treatment and control
	students. The number of subjects to be surveyed will be determined after
	consultation during Year 1 with project staff.
Semi-structured	Semi-structured interviews will be conducted with selected treatment staff
interviews	to understand how implementation is occurring and help identify challenges
	and successes of the implementation process. Semi-structured interviews
	will be conducted with at least two project leaders and developers two times
	a year throughout the project, and once a year with at least two staff
	members in each participating school in Years 2-4.

Document	Evaluators will review documents and materials produced in the process of
review	designing and implementing the intervention and associated training. These
	data will inform development of survey and interview protocols, and the
	implementation fidelity rubric (developed by the end of Year 2).
Progress	Starting in Year 1, the evaluation team will help program leaders collect and
tracking data	analyze observation and quantitative data to track progress on goals and
	benchmarks throughout as well as data on student demographics (e.g.,
	underrepresented groups). These data will relate to numbers of participants,
	which will be tracked through administrative data collection at the sites.

4) Efficacy study. The efficacy study will use a student-level block randomized design and will meet What Works Clearinghouse (WWC) Evidence Standards without reservations. The first cohort will enter the study in Year 3 of the project, consisting of 150 (treatment + control) students in grades 9-12 across the three PPS alternative schools piloting the project (Benson, Meek, and MLC). A second cohort will enter the study in Year 4, consisting of 150 new students from the PPS schools and an additional 150 students from three CBO schools. To ensure equity, Cohort 1 students assigned to the control group in Year 3 may exercise a "delayed" treatment option the following year. Should more students indicate interest than can be accommodated, we will randomly assign students for participation. After obtaining parental consent, students will be randomly assigned within blocks (schools) to either the treatment group or the control group. Students in the treatment group will take **PREP** math and/or English courses and receive other **PREP** supports. Students in the control group will participate in the business-as-usual curriculum. By randomly assigning students in each site, the treatment and control groups are expected to be equivalent in both observed and unobserved characteristics, and to differ only in terms of their exposure to the **PREP** approach. We will use administrative data obtained from the sites to assess baseline equivalence of students in the treatment and control groups on prior academic and demographic characteristics. For randomized control trials, WWC does not require establishing baseline equivalence across conditions. However, baseline information about the sites and students will be collected to safeguard against a situation where a study suffers a high degree of attrition. EdNW researchers will adjust analysis methods to address spill-over and attrition issues.

*Measures*. EdNW will evaluate effects of PREP on two main outcomes: academic achievement and social-emotional learning. To ensure validity and reliability, we will measure achievement using the standardized Measures of Academic Progress (MAP) test, and social-emotional learning by scores on a recently field-tested survey measuring three different SEL constructs (related to the CASEL domains described above): growth mindset (beliefs about the malleability of ability and the payoff for student effort, 4 items and  $\alpha = 0.75$ ), performance avoidance (hiding one's effort or refraining from making an effort due to concerns of failure or embarrassment, 5 items with  $\alpha = 0.77$ ), and academic behaviors (such as completing homework and class participation, 5 items with  $\alpha = 0.74$ ) (Farrington et al., 2014; Snipes & Loan, 2017). Data on achievement and SEL outcomes will be collected before randomization (pretest), and at the end of the spring semester (posttest) for both the treatment and control groups. EdNW will establish data sharing agreements with sites to capture these measures and covariates (demographic variables, attendance, behavior, and GPA).

PPS aspires, over a longer time horizon, to improve graduation and post-high school outcomes. Where possible, EdNW evaluators will incorporate data on these outcomes into the efficacy study. The feasibility of doing so will depend on data availability and on the characteristics of individuals actually served. Baseline data collection during Year 1 and participant data collected thereafter will help to determine the final list of outcomes included in the efficacy study.

Statistical Power and Analysis Plan. To estimate the impact of the intervention on student outcomes, we will use fixed-effects linear regression models, with block fixed effects, for each outcome. Based on the following assumptions, the study is powered to achieve a minimum

detectable effect size (MDES) of 0.22 at a significance level alpha of 0.05 (two tailed test) and statistical power of beta = 0.80, for 50 students per site recruited to participate in the study and 50 percent of students in the treatment group (balanced design), and 30 percent of the outcome variance explained by student-level covariates and pretests and block fixed effects ( $R^2$ ), which we have selected for the two outcome measures for the MAPs and SEL than what is typically used in power analyses for academic outcomes (Bloom, 2007). For analyses, we will estimate the following fixed-effects linear regression model for student I in random assignment block j:

(1) 
$$Y_i = \beta_0 + \beta_1 T_i + X_i \beta_x + B_i \gamma_j + e_i$$
,

Where  $Y_i$  is an outcome measure score for student i;  $T_i$  is a dichotomous indicator for treatment status for student i (coded 1 for students assigned to the treatment group and 0 for students assigned to the control group);  $X_i$  is a vector of pre-treatment covariates (grand-mean centered);  $B_i$  is a vector of J-I dichotomous indicators for the J-I randomization blocks in the study;  $\beta_0$  is the pooled within-block mean for control students, adjusted for pre-treatment covariates;  $\beta_1$  is the pooled within-block mean difference between treatment and control students, adjusted for pre-treatment covariates;  $\beta_x$  is a vector of coefficients for the pre-treatment covariates,  $X_i$ ;  $\gamma_i$  is a vector of J-I block fixed effects, which accounts for the differences between the sites and cohorts; and  $e_i$  is the residual term for student i. The parameter of primary interest in this model is  $\beta_1$ , which is the precision-weighted average treatment effect. Calculation of MDES, and procedures for baseline equivalence and attrition rates are provided in Appendix G.

*Human subjects protection*. Evaluators will obtain approval from EdNW's Institutional Review Board for the independent evaluation. EdNW will also establish data sharing agreements with PPS to use extant data for the evaluation.