

Race to the Top- Project 1 RFP Round 3 Letter of Intent (LOI)

Response ID:51 Data

2. RTT Project 1 RFP Letter of Intent to Apply

1. Please select the district that is submitting this Letter of Intent.

Kent School District

2. Please list any involved partners.

3. Please use the table below to fill out contact information for your district(s) including full names of contact person/people, title(s), email(s), telephone number(s), and name of lead applicant(s).

	Full Name	District	Title	Email	Telephone Number
Lead Applicant	Shannon Heckelsmiller	Kent School District	K12 Science Coordinator	shannon.heckelsmiller@kent.k12.wa.us	253-373-7196
Contact Person 1	Dr. Ann Minckler	Kent School District	Assistant Director, Grants and Special Products	ann.minckler@kent.k12.wa.us	253-373-7876
Contact Person 2					
Contact Person 3					
Contact Person 4					
Contact Person 5					
Contact Person 6					
Contact Person 7					

3. Summary of Proposal

4. The application will be for a:

Continuing Project of a Round 2 Project ending in 2016

4. Summary of Proposal

5. Please provide the name of your project.

Problem Based Learning to Improve Science Outcomes for ALL Students

5. Summary of Proposal

Please provide a description of the project.

6. Please describe any changes or course corrections made from your Round 2 Project.

The Problem Based Learning to Improve Science Outcomes for ALL Students grant was first funded during the 2013-2014 funding cycle. The goals for this were to increase the proportion of Kent graduates who are scientifically literate, who value scientific ways of thinking and who can demonstrate their knowledge and understanding of sciences concepts through a variety of performance assessments, including standardized summative tests. The vision of this work is to have teams of multidisciplinary teachers design and implement at least one PBL experience that integrates multiple content areas annually. The PBLs are to be implemented in a manner that is culturally relevant and accessible to all students and, when appropriate, include community partners that reflect the ethnic and cultural backgrounds of our students.

During the first round of funding we provided professional development opportunities for science teachers around problem based learning teaching strategies. Thirty-seven teachers participated in the first year trainings and reported:

- Renewed excitement about teaching
- Enthusiasm combined with some anxiety about piloting PBL units in the classroom
- An understanding regarding how time intensive planning a PBL unit can be and concerns that building and central office administration cannot or will not provide needed planning and collaboration time
- Feeling that the 3- or 4-day investment in the PBL Institute is time well spent for teachers
- Desire for further PD on how assessment works in the PBL approach

Encouraged by the response from teachers, we solicited additional funding to continue our work.

Between Round 1 and Round 2 we had to make course corrections around professional development because of our substitute teaching shortage. We also took advantage of the grant to hire a Science Program Specialist who has spent the year working side-by-side with teachers in the field supporting them as they learn and implement PBL practices into their learning activities. Again, data collected from teachers around this work indicates that change is occurring. After the December 2014 PBL workshop, teachers responded that the following topics from the workshop would be most beneficial to their instruction:

- Problem solving, critical thinking, collaborative learning
- Real-world applications
- Application of concepts
- Putting students at the center of their own learning, student engagement
- Cross-curricular projects
- Connections to engineering practices
- Critical thinking
- Students determine what the problem is, and how to solve it
- Ready-Set-Discover
- Letting students list what they need to find out

As we move forward from Round 2 to Round 3, we are not changing our work, but rather refining our work to be more effective and efficient and to identifying the specific work and methods we will use to make sure that our efforts are sustainable after funding ends.

7. Please describe how this project will be expanded from the Round 2 Project.

The focus for this Round 3 work will move from expanding our program to strengthening our program by developing plans and identifying resources that will let us leverage what we have learned during the grant and build fidelity in PBL implementation in our district and the region.

During this work we have developed several partnerships that are helping us meet the goals identified in our grant proposals. The first is with the Illinois Mathematics and Science Academy's Problem Based Learning Network (IMSA). This organization has helped us provide professional development over the past two years to our teachers. This year our K-12 Science Coordinator, and the Science Program Specialist, who has been hired to assist with this grant work, along with a building level STEM coordinator, were all certified as IMSA trainers and are now qualified to provide this training to our teachers in the future. During Round 3, we will have in-house trainers who will use and disseminate licensed materials created by IMSA during the PBL professional development opportunities. This speaks to our plan for sustainability because we now have in-house personnel who are able to provide training for which we formerly had to contract, and we only pay for the site license for materials.

During this second round of funding we established another valuable partnership with the Woodland Park Zoo. During the 2014-15 school year, we worked with the Woodland Park Zoo's Ready, Set, Discover Program to implement revisions with a PBL focus on a problem of local amphibian conservation. The 5th grade teachers and the instructional staff from the zoo were provided with an introduction to PBL pedagogy and were supported in teaching this unit. We will follow-up with the zoo staff this summer to evaluate and revise, and will continue to use this PBL unit for 15-16.

Round 2 provided for our K-12 Science Coordinator and our Science Program Specialist to attend the National Science Teachers Association's (NSTA) conference where they gained additional knowledge around their work, but perhaps even more importantly, created partnerships with two organizations that will be critical to our Round 3 work. Hand2Mind provides hands-on materials that promotes student engagement and learning that parallels our PBL work, particularly in the engineering domain of STEM. This summer, teachers who participated in our PBL workshop learned how to utilize Hand2Mind engineering kits for use in their classroom this upcoming year.

As we continue our work in reaching the goals we have outlined in our grant proposals for the last two rounds, there is one goal that has been particularly difficult for us to achieve. We have proposed developing and maintaining a library of exemplary PBL units that have been field tested and revised by PBL-trained teachers. Because creating high-quality PBL units is so time consuming, and because our teachers are still learning the strategies around PBL, many of them have not been eager to share their units. In our efforts to meet this goal, we conducted research around what other district are doing to archive and share learning plans. Our research helped us identify an organization, Defined STEM, to help us. For this third round of funding we have established a partnership with Defined STEM that not only allows our teachers to save their PBL learning plans, but also provides support to them as they are creating those plans. The partnership with Defined STEM is timely. As our teachers are now becoming more facile with the development of PBL units, they will also be able to save and share them with others in the district and regionally.

During both Round 1 and Round 2 of our work, our district has suffered from substitute shortages which has kept us from offering trainings that were originally scheduled to occur during the school year. This has resulted in the extra funds that were carried over last year and will be carried over this year as well. We were, however, able to provide a four-day PBL training in December of 2014 for teachers. The December cohort, along with any other previous cohorts, were offered a follow-up workshop day in June of 2015. This provided the teachers with additional support and a refresher in PBL pedagogy. The attending teachers reported very positive feedback on all PBL workshops.

In June of 2015, we also offered a 4 day PBL workshop for our elementary teachers. Thirty-Six staff members participated along with 2 administrators. Teams of teachers created PBL units that will be implemented during the 2015-2016 school year. Engineering practices were also incorporated in this workshop using the Hand2Mind kits. Additionally, we demonstrated how a fictional text can be used as the introduction of science and engineering practices and as a basis for a PBL lesson focused on engineering. The Science Program Specialist will assist the teachers as they teach their lessons, providing job embedded support and training during these activities. This support has been well received and an effective practice this past school year.

As we move forward with our work this year, we will not only focus on our goals, but also on making the work sustainable. Our changes are less about adding new criteria, and more about putting more emphasis and clarity around existing goals.

Teachers who just attended the June 2015 PBL session are planning to work with other teachers in their grade level to introduce PBL as an integrative way to include Common Core State Standards in math, reading and writing, Next Generation

Science Standards, ELPS, and Century 21 skills in lessons.

Recently our district adopted a new K-6 reading curriculum and several grade levels have modular units that include non-fiction and fiction content based materials. The ELA specialists provided the opportunity for the Science Coordinator and Science Program Specialist to give input before they chose the modules for each grade level; the intent was to have at least one science themed unit at each grade level. The literature selections in the newly adopted reading curriculum have been aligned to grade-level science concepts, where applicable. Teachers are more likely to use PBL as a pedagogy if the science is linked to reading and writing already used in the classroom.

As of June of 2015, all middle school science teachers have had some PBL training and at least one middle school administrator attended a PBL session. Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

The work we are doing around problem-based learning aligns with the following Kent School District strategic objectives and organizational goals:

1. High Student Achievement

1.1 Implement systematic reform in the Kent School District grounded in the research base for high performing school systems

1.3 Each student will meet or exceed established standards

1.4 Each student will experience challenging and engaging learning that builds on their strengths, passions, and interests

1.5 Each student will be prepared for post-secondary education, career success and productive community life

6. Summary of Proposal

Please name the high-needs school(s) involved. (For reference, click the following link to see the list of high-needs schools [RTT High Need Schools List](#)) Note: Round 3 proposal funds are to be requested for RTTT eligible high-needs schools only.

8. Will the project continue with the same high-needs school(s) involved in Round 2? If not, please list the high-needs schools involved in the text boxes below. (For reference, click the following link to see the list of high-needs schools: [RTT High Need Schools List](#)) Note: Round 3 proposal funds are to be requested for RTTT eligible high-needs schools only.

1 : Yes

7. Summary of Proposal

9. Check all groups that are relevant.

English Language Learners (ELL)

Low-Income

Hispanic

Black

10. Check all grade levels that are relevant.

PreK-3rd

4th-8th

8. Summary of Proposal

Describe the proposed project leadership structure.

9. Summary of Proposal

11. Check no more than two from list of relevant RTTT-D Goal Area or Performance Measure.

Washington State Science Assessment

12. Identify the school years when the proposed P1 district project is expected to impact student targets in the identified goals areas or performance measures identified above :

Please check all that apply-

2015-2016

2016-2017

2017-2018

10. Summary of Proposal

Please describe the intended goal areas for students and a theory of action about how the project activities will impact outcomes.

(Please click here to access RTT Goal Areas and Performance Measures: [RTTGoalAreasPerformanceMeasures.pdf](#))

Note: As a reminder, this investment fund is focused on Math, Science and ELL Instruction for underserved populations in high-needs schools.

13. Please describe any changes to the Round 2 project concerning the goal areas for students and the theory of action that articulates how the project activities will impact outcomes.

(Please click here to access RTT Goal Areas and Performance Measures: [RTTGoalAreasPerformanceMeasures.pdf](#))

We have no changes to the Round 2 project concerning the goal areas for students.

The theory of action that articulates how our project activities will impact outcomes is:

If we:

- Provide teachers access to coaching and professional development focused on the three dimensions of NGSS
- Implement professional development in science content, science pedagogy (science and engineering practices and cross-cutting concepts) that will improve teaching and learning

Then we will move our organization from its current state to its desired future and we will see the results in the following ways:

- For those eighth grade classrooms that implement PBL units, we would expect to see improved scores on the eighth grade science MSP
- A greater number of elementary and middle school science teachers implementing at least one PBL lesson/unit in the year
- A greater number of elementary teachers implementing engineering-based PBL lessons and units during the year
- For those fifth grade classrooms that implement PBL units, we would expect to see improved scores on the fifth grade science MSP
- A more collaborative culture among the PBL cohort teachers across the district as demonstrated through sharing of lessons/units on sites such as Yammer

11. Summary of Proposal

Please describe how your strategies are culturally responsive and how they align with your district's equity plan or equity efforts. Note: the rubric also asks that district leads (e.g., ELL, Special Ed., family engagement) and families/other community groups that represent the needs of student subgroups be consulted on these practices.

14. Please describe how your strategies are culturally responsive if different from your Round 2 Application and how they align with your district equity plan or equity efforts. Note: the rubric also asks that district leads (e.g., ELL, Special Ed., family engagement) and families/other community groups that represent the needs of student subgroups be consulted on these practices.

We will continue to align our trainings with the ELPS and with support from the ELL specialists. We have intentionally included materials and instructional strategies from the PSESD ELPS training on the proficiency standards, focusing on the guiding principles.

Please describe your approach to ensuring sustainability of the project after the life of the grant.

15. Please describe your approach to ensuring sustainability of the project after the life of the grant. What key components would you keep/maintain and how would they continue to provide the impact you desire?

Our project will be sustained by focusing on the following:

- 2015-16 continued RTT funding for the 1.0 FTE Science Program Specialist
- 2016-17 .5 FTE RTT funding for Science Program Specialist which will ensure continued support for RTTT schools
- 2016-17 .5 FTE District funding for Science Program Specialist which will allow this position to expand the support to non RTT schools which are also high need schools
- All of our middle school teachers have received PBL training and will be able to support each other as we use these strategies in our continued implementation of NGSS
- Our district has a new online professional learning community called Yammer, which is like Facebook for educators! We have set up a PBL group where teachers can support each other as they work on developing their PBL units.
- We have identified an online product called Defined Stem which contains pre-made PBL units as well as the ability for teachers to create their own units with structured support. This will provide a bank of PBL units. Mill Creek will have this product this fall through RTT, but we have approved this for district wide use and hope to fund it for all middle schools in the future.
- Hand2Mind kits implemented district wide to provide an engineering focused problem based instructional unit. This supports teachers both in PBL and in NGSS science and engineering practices. Our Science Specialist has been trained in providing support for the staff and students using these kits.
- Alignment with ELPS ensures that our ELL students will be afforded with quality targeted instructional strategies
- Alignment with TPEP goals that are tied to PBL pedagogy
- Making connections between PBL, NGSS, and CCSS math and literacy to ensure a wider use of these instructional materials and strategies

- Connections have been made with other grant projects that also provide support: Gates Grant through King County Housing will support a STEAM specialist who will use the Hand2mind kits to support students in after school programs tied to two RTT elementary schools who live in the Birch Creek Housing development. This grant will continue to provide PBL and NGSS support at Pine Tree and Millennium Elementary schools (RTT schools) after the RTT grant ends.
- We have developed a relationship with Martin Sortun elementary school which is a Lighthouse grant STEM focus school. A team of teachers and 2 administrators from that school have received our PBL training in June 2015 and will be a model school moving forward.
- A team of staff members from the Washington Alliance for Better schools Century 21 program attended our June 2015 PBL training and are using the PBL model in their after school programs that are offered for students at Daniel, Cedar Valley, and Kent elementary schools. This program will continue past the RTT grant window.
- The revisions made to the Ready, Set, Discover Program with the Woodland Park Zoo will continue to be used by our 5th grade classes. In 2015-16, the same schools will be supported as in 2014-15. In 2016-17, all of the other 5th grade classes at the rest of our elementary schools will participate in this PBL based experience.

12. Summary of Proposal

16. How has the education association been involved in the planning of your proposed project?

The Standards-based Instruction Department and the education association will continue to collaborate on the work to make it amicable to both parties. We continue to articulate our plans and work together to ensure a focus on teacher development and growth that leads to high student achievement while working within the contractual agreements that are already in place.

The association is in agreement with the project lead and the administrators in the schools that are served by the grant that all involvement in any of the above mentioned work will be voluntary and that extra time for any work done outside the agreed to contractual day, including meetings, will be compensated at the individual's per diem rate.

As course corrections are considered, the Kent Education Association (KEA) will be included on the plans and asked for input to assure we are working within the contractual agreements.

13. Summary of Proposal

17. Please describe your estimated budget in the text box below.

For this final round of Project 1 funding the Kent School District is requesting \$148,508 to be used over the period 2015 and 2016.

Our Science Program Specialist will continue to be funded at 1.0 FTE for 2015 for 10 months and at .50 FTE for 2016, with the district picking up the other .50 FTE for 2016 (\$129,380). In addition to this, we are requesting substitutes to be funded for our winter training (\$8,700), additional pay for teachers for summer training (\$19,508), and classified costs that support the summer training (\$432). Fringe benefits on the personnel costs are \$46,211.

Travel in the amount of \$6,000 is being requested for the Science Coordinator and Science Program Specialist to attend the NSTA Convention in 2015. Supplies are needed to refill the Hand2Mind kits already on hand (\$1,000), plus we are looking to purchase PBL Unit supplies for Mill Creek Middle School (\$1,500). The cost to purchase a Defined STEM two-year license to be used At Mill Creek to access and store PBL learning plans is \$6,122.

Adding in indirect costs of \$17,508, the total of the expenses outlined above is \$236,361, but this amount has been offset by the projected carryforward amount of \$87,853. This leaves a net request of \$148,508.

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Survey Submitted:	Jul 1, 2015 3:54 PM
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Language:	English (en-US)
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Http Referrer:	http://www.surveygizmo.com/s3/2154991/Race-to-the-Top-Project-1-RFP-Round-3-Letter-of-Intent-LOI
URL Variable: snc	1435601831_55918ba78a0402.23660171
Page Path:	1 : Introduction (SKU: 8) 2 : RTT Project 1 RFP Letter of Intent to Apply (SKU: 1) 3 : Summary of Proposal (SKU: 14) 3 : Summary of Proposal (SKU: 14) 3 : Summary of Proposal (SKU: 14) 3 : Summary of Proposal (SKU: 14) 4 : Summary of Proposal (SKU: 3) 5 : Summary of Proposal (SKU: 15) 6 : Summary of Proposal (SKU: 10) 7 : Summary of Proposal (SKU: 13) 8 : Summary of Proposal (SKU: 11) 9 : Summary of Proposal (SKU: 7) 10 : Summary of Proposal (SKU: 6) 11 : Summary of Proposal (SKU: 4) 12 : Summary of Proposal (SKU: 5) 13 : Review Submission (SKU: 12) 12 : Summary of Proposal (SKU: 5) 11 : Summary of Proposal (SKU: 4) 10 : Summary of Proposal (SKU: 6) 9 : Summary of Proposal (SKU: 7) 8 : Summary of Proposal (SKU: 11) 7 : Summary of Proposal (SKU: 13) 6 : Summary of Proposal (SKU: 10) 5 : Summary of Proposal (SKU: 15) 4 : Summary of Proposal (SKU: 3) 5 : Summary of Proposal (SKU: 15) 6 : Summary of Proposal (SKU: 10) 7 : Summary of Proposal (SKU: 13) 8 : Summary of Proposal (SKU: 11) 9 : Summary of Proposal (SKU: 7) 10 : Summary of Proposal (SKU: 6) 11 : Summary of Proposal (SKU: 4) 12 : Summary of Proposal (SKU: 5) 13 : Review Submission (SKU: 12) 14 : Thank You! (SKU: 2)
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