## III. LEA SCHOOL IMPROVEMENT GRANTS 1003(g) APPLICATION COVER SHEET for 2015-2016 School Year Implementation

District Name: Northwest Arctic Borough School District

Address: PO Box 51

City: Kotzebue State: _AK_ Zip: 99752

## District Contact data for the School Improvement 1003 (g) Grant

Contact Name: Joy Williams
Position Director of State \& Federal Programs

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## District Signature

Dr. Annmarie O'Brien
District Superintendent (Printed Name):


Signature of the Superintendent:

The district, through its authorized representative, agrees to comply with all requirements applicable to the School Improvement $1003(\mathrm{~g})$ Grants program, including the assurances contained herein and the conditions that apply to any waivers that the district receives through this application.

## LEA SCHOOL IMPROVEMENT GRANTS 1003(g) APPLICATION ELEMENTS

A. SCHOOLS TO BE SERVED: An LEA must include the following information with respect to the schools it will serve with a School Improvement Grant.

List each Priority or Focus school the district commits to serve and identify the school intervention model that the district will use in each school. Use the chart below or attach a separate chart.

|  |  |  | INTERVENTION MODEL |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCHOOL NAME | AK School <br> ID Number <br> (\#\#\#\#\#) | Priority <br> or Focus <br> (P/F) | Trans- <br> formation | Turn- <br> around | Restart | Closure | Early <br> Learning | Evidence- <br> Based <br> Whole <br> School |
| Davis-Ramoth Memorial School | 370210 | P | $\underline{\mathrm{X}}$ |  |  |  |  |  |

B. Descriptive Information: Please address the capacity of the LEA to provide adequate resources and support to all Priority and Focus schools listed above. Address each area.
(1) For each priority and focus school, that the LEA commits to serve, the LEA must demonstrate that the LEA has analyzed the needs of each school, such as instructional programs, school leadership and school infrastructure, based on a needs analysis that, among other things, analyzes the needs identified by families and the community, and selected interventions for each school aligned to the needs each school has identified.
NWABSD had carefully considered the administrative and academic needs of Davis-Ramoth Memorial School. As a result, a new principal and assistant principal was assigned effective 20152016 school year. The School district analyzed data and comments from the Advisory School Council for Selawik, community input, teacher and student surveys when determining the school needs. We also looked at data from onsite visits by site advocate and others district leadership during the 2014-2105 school year, along with student academic and behavioral reports. The district has purchased and implemented a new language arts curriculum with extensive professional development. Academic data is reviewed at district and site level to assist in development of successful instructional supports. The District Office provides additional support in behavioral management (Susan Isaacs--Safe and Civil Schools), district curriculum and classroom strategies (Connie Christian), through site advocates, and other assistance provided by curriculum director. In collaboration with district incentives, Davis-Ramoth Memorial school is in the first year of actively developing successful strategies for school-wide positive reform.
(2) For each priority and focus school, that the LEA commits to serve, the LEA must demonstrate that it has taken into consideration family and community input in selecting the intervention.
Community meetings were held to discuss school plans by Lois Ballard during the summer and they have continued through August and September. Weekly Collaborative meeting incorporated the staff in identifying the transformational model. See section C below for specific meetings and dates.

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(3) The LEA must describe actions it has taken, or will take, to design and implement a plan consistent with the final requirements of the turnaround model, restart model, school closure, transformation model, evidence-based whole school reform model, early learning model, or state-determined model.

## Transformation Model Overview

## - Teachers and Leaders

- Replace principal—Principal was replaced effective for the new 2015-2016 school year
- Implement new evaluation system-1 ${ }^{\text {st }}$ year of implementation 2015-2016 school year in accordance with state guidelines.
- Developed with staff—Initial development September/October. If awarded Spring 2015 planning and will begin professional development plan outlined in timeline, 2016-2020 Implementation
- Uses student growth as a significant factor-Data assessment August 2015 to continue with NWEA MAP data three times a year and annual AMP data. District SLOs take into account student growth.
- Identify and reward staff who are increasing student outcomes-building internal school capacity with opportunities for professional development. Will support and then remove those who are not making adequate progress according to district teacher evaluation policy. Opportunities for travel and training to national and state conferences.
- Implement strategies to recruit, place and retain staff-FY 16 coordination with human resources director to development plan with staffing needs for Davis-Ramoth Memorial school. With a review annually to identify specific needs.


## - Instructional and Support Strategies

- Select and implement an instructional model based on student needs-FY 16 research and with support from district collaboration to research supplemental strategies that will meet the needs of Davis-Ramoth Memorial 's specific demographics with an annual review.
- Provide job-embedded professional development designed to build capacity and support staff-FY 16 Identify specific professional develop opportunities for staff and research and design opportunity for building internal capacity. Training for staff to become curriculum mentors. Training opportunities for language acquisition (Project GLAD) and math classroom strategies (Teachers Development Group).
- Ensure continuous use of data to inform and differentiate instruction-Weekly Collaborative meeting will provide additional time for student data review. Grade and inter-grade level meetings to review testing data to develop interventions has been intergraded into the master schedule.
- Provide Learning A-Z to PreK-8 ${ }^{\text {th }}$ grade classrooms. Learning A-Z is digitally delivered teaching and student support system for student growth in reading and writing
- Waterford Reading program as a supplement for student in grades K-2
- Time and Support
- Provide increased learning time (for staff and students)--research and develop plans consistent with district policy and negotiated agreement. See supplement for plan.
- Provide ongoing mechanism for community and family engagement-The district and NWALT to host a community informational night annually. Site advocate routinely visits sites and collaborate with Local ASC. School Administration is actively developing relationship with community stakeholders. See Section C for more details.
- Partner to provide social-emotional and community-oriented services and supports-The district has a going relationship with regional supports and services such as Maniilaq, Northwest Arctic Borough, and NANA Regional Corporation.
- Governance
- Provide sufficient operating flexibility to implement reform--FY16 the district will work directly with the site to development strategies that allow for site flexibility within school district policy. Annual review of the site plans will provide continued support
- Ensure ongoing technical assistance-District office and staff support the site whenever necessary.


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(4) The LEA must describe actions it has taken, or will take, to determine its capacity to provide adequate resources and related support to each priority and focus school identified in the LEA's application in order to implement, fully and effectively, the required activities of the school intervention model it has selected on the first day of the first school year of full implementation.
The District will work with school leadership to insure that all needed provisions that support the school's transformation model objectives will be in place by the 2016-2017 school year.
(5) The LEA must describe actions it has taken, or will take, to recruit, screen, and select external providers, if applicable, to ensure their quality, and regularly review and hold accountable such providers for their performance.
All outside providers will be selected and reviewed according to existing district policy and procedures and will be reviewed through national databases if applicable. Review will be conducted after each site visit and/or annually with input from staff, school leadership and district office as applicable. Will provided specific Requests for Proposals for external providers when necessary and will make required expectations clear on any MOAs and/or contracts.

The Outside Evaluator will be hired using the advertising and hiring practices for contractors as outlined in the NWABSD policies and procedures.

Duties of the Outside Evaluator will include:

- Organization, timeline, goal and objective reviews annually with the administration and site;
- Compilation of data for reporting to district and state;
- Reporting as required by State guidelines;
- Site and district visits (2-4 per academic year as outlined in the 5 year plan);
- Email and phone communication as necessary to perform all duties.

The district will:
Pay the Outside Evaluation for services provided, travel and per diem as outlined in the proposal. Daily rate of $\$ 750.00$, plus lodging and per diem

Payment terms: NWABSD will pay for services and reimbursements in accordance with the agreement. Contractor must provide an invoice for services and receipts for all transportation, room costs, and per diem.
(6) The LEA must describe actions it has taken, or will take, to align other resources (for example, Title I funding) with the selected intervention.
Title-1 funds are currently being used to pay for additional teachers in Davis-Ramoth Memorial School for class-size reduction in the primary grades. Any other funds such as any1003(a) funds that the district may receive will be utilized in accordance to school improvement priorities.

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(7) The LEA must describe actions it has taken, or will take, to modify its practices or policies, if necessary, to enable it to implement the selected intervention fully and effectively.
Any policy modifications that may need to be put into place to fully implement selected transformation model will be reviewed and approved by the Regional School Board as necessary.
(8) The LEA must describe how it will provide effective oversight and support for implementation of the selected intervention for each school it proposes to serve (for example, by creating an LEA turnaround office).
The District Office Leadership Team will provide oversight through site visits and additional support and flexibility given to site administration. External evaluator will supply in-depth reporting and evaluation of the school's progress and make recommendations to District Office Leadership Team as needed.
(9) The LEA must describe how it will meaningfully engage families and the community in the implementation of the selected intervention on an ongoing basis.
Visits of NWALT to hold community meeting in coordination with ASC and local and regional entities to receive community support as needed. The district's website offers parent resources and information. Parents also have access to the superintendent as needed. Information on school improvement process and updates on implementation will be made available on the the school's own webpage and on the District's website. Various community meetings will be held to communicate ongoing plans and to inform community of progress.
(10) The LEA must describe how it will sustain the reforms after the funding period ends.

With five year planning and support we expect initiatives will have made substantial improvement in student academics growth, teacher professional development and retention, and community support. Additional needed supports will be accessed in year 4 and 5 of implementation. District and site strategic plans will allocate resources as appropriate.
(11) The LEA must describe how it will implement, to the extent practicable, in accordance with its selected SIG intervention model(s), one or more evidence-based strategies.
N/A will implement the Transformation Model of School Improvement
(12) The LEA must describe how it will monitor each Priority and Focus school, that receives school improvement funds including by:
a) Establishing annual goals for student achievement on the state's assessments in both reaching/language arts and mathematics; and,
b) Measuring progress on the leading indicators as defined in the final requirements.

Outside evaluator will establish timeline. Guidelines and measurable outcomes in accordance with the district and school annually. Data will be collected annually from district report system and site information. Reports will be development twice annually based on specific Davis-Ramoth Memorial School's goals and well as annual SIG reporting guidelines
(13) An LEA must hold the charter school operator, CMO, EMO, or other external provider accountable for meeting these requirements, if applicable.

## N/A

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(14) For an LEA that intends to use the first year of its School Improvement Grants award for planning and other pre-implementation activities for an eligible school, the LEA must include a description of the activities, the timeline for implementing those activities, and a description of how those activities will lead to successful implementation of the selected intervention.
See attached timeline
(15) For an LEA eligible for services under subpart 1 or 2 of part B of Title VI of the ESEA (Rural Education Assistance Program) that chooses to modify one element of the turnaround or transformation model, the LEA must describe how it will meet the intent and purpose of that element.
Principal was replaced for the 2015-2016 school year. The district will want to continue with current principal to allow for a continuation on the positive reforms that are currently being implemented this school year.
(16) For an LEA that applies to implement an evidence-based, whole-school reform model in one or more eligible schools, the LEA must describe how it will
a) Implement a model with evidence of effectiveness that includes a sample population or setting similar to the population or setting of the school to be served; and,
b) Partner with a whole school reform model developer, as defined in the SIG requirements.

## N/A

(17) For an LEA that applies to implement the restart model in one or more eligible schools, the LEA must describe the rigorous review process (as described in the final requirements) it has conducted or will conduct of the charter school operator, CMO, or EMO that it has selected or will select to operate or manage the school or schools.
N/A
(18) The LEA must include a timeline delineating the steps it will take to implement the selected intervention in each school identified in the LEA's application.
See attached timeline.

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C. CONSULTATION WITH STAKEHOLDERS: The LEA must consult with relevant stakeholders regarding the LEA's application and implementation of school improvement models in its Priority and Focus schools.

List each meeting or other activity held to consult with stakeholders regarding the LEA's application and the implementation of the models in the Priority and Focus schools. Indicate the number of members present from each stakeholder group that had members present, and the general discussion or feedback received at the meeting.

| Meeting Topic |  <br> Time |  |  |  |  |  | General discussion or <br> feedback received |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Meet The New Administrator |  |  |  |  |  |  |  | 5/1/15

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## LEA School Improvement Grants 1003(g) Request for Applications

|  |  |  |  |  |  |  |  | towards five year goals and <br> successes. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

D. BUDGET: An LEA must include a budget that indicates the amount of school improvement funds the LEA will use each year in each Priority and Focus school it commits to serve.

The LEA must provide a budget that indicates the amount of school improvement funds the LEA will use each year to:

- Implement the selected model in each Priority and Focus school it commits to serve; and,
- Conduct LEA-level activities designed to support implementation of the selected school intervention models in the LEA's Priority and/or Focus schools.

> NOTE: An LEA's budget must cover at least three and up to five years of the grant, and be of sufficient size and scope to implement the selected school intervention model in each Priority and Focus school the LEA commits to serve.
> An LEA's budget for each year may not exceed the number of Priority and Focus schools it commits to serve multiplied by $\$ 2,000,000$. The minimum LEA budget is $\$ 50,000$ per year multiplied by the number of schools served. The SEA offers a general guideline of $\$ 250,000$ - $\$ 300,000$ for each year of full implementation, with lesser amounts for pre-implementation, planning, and/or sustainability years.

1. Complete the following budget overview chart

| School Name | $\begin{aligned} & \text { Year 1 } \\ & \text { Planning } \end{aligned}$ | $\begin{gathered} \text { Year } 2 \\ \text { Implementation } \end{gathered}$ | $\underset{\text { Implementation }}{\substack{\text { Yea } \\ \text { I }}}$ | $\begin{gathered} \text { Year } 4 \\ \text { Implementation } \end{gathered}$ | Year 5 $\substack{\text { Implementation or } \\ \text { Sustainability }}$ | Five-Year Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Davis-Ramoth Memorial School | 67,693 | 293,519 | 326,368 | 308,058 | 90,505 | 1,086,143 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Total Budget | 67,693 | 293,519 | 326,368 | 308,058 | 90,505 | $\underline{1,086,143}$ |

2. Attach a complete budget and narrative for each school for any pre-implementation or planning activities planned through June 30, 2016, plus at least three years (2016-2017, 2017-2018, 2018-2019, or 2019-2020) for which SIG funding is requested, and sustainability activities if planned for 2019-2020. The budget for each school served may include district level expenses that are used to support or provide services to the school. Use the Budget and Narrative Form \#05-07-071 found on the department website under Forms \& Grants:
http://www.eed.state.ak.us/forms/home.cfm

## LEA SCHOOL IMPROVEMENT GRANTS 1003(g) Assurances Signature Page

E. ASSURANCES: An LEA must include the following assurances in its application for a School Improvement Grant and must indicate which of those waivers it intends to implement.

The LEA assures that it will-
(1) Use its School Improvement Grant to implement fully and effectively an intervention in each Priority and Focus school that the LEA commits to serve consistent with the final requirements;
(2) Establish annual goals for student achievement on the state's assessments in both reading/language arts and mathematics and measure progress on the leading indicators in section III of the final requirements in order to monitor each Priority and Focus school that it serves with school improvement funds;
(3) Report to the SEA the school-level data required under section III of the final requirements, including baseline data for the year prior to SIG implementation (when available); and
(4) Ensure that each Priority and Focus school that it commits to serve receives all of the state and local funds it would receive in the absence of the school improvement funds and that those resources are aligned with the interventions.

## Dr. Annmarie O'Brien Superintendent, Northwest Arctic Borough School District

Name \& Title of Authorized Representative


| Planning Year Spring 2016 |  |  |  |
| :---: | :---: | :---: | :---: |
| Activities | Description of activities | Timeline | Resources needed |
| Replacement of Principal | Principal was recruited within the district. Principal selection was based on a proven record of instructional leadership and community engagement, two essential skills necessary for successful transformational efforts. <br> A contract extension was added allowing the new principal and additional time at site to familiarize herself with the community, and an experienced AP, with a record for instruction and behavioral leadership, was hired to assist. It was essential to install a principal that would work towards whole-school reform and was committed to stay in Selawik for years to come. | Spring 2015 |  |
| Community Meetings | Meetings were held to consult with stakeholders regarding the hire of a new principal and planning for the upcoming school year. <br> See Section C of LEA application for more details | $\begin{gathered} \text { Summer/Fall } \\ 2015 \end{gathered}$ |  |
| Connections | Connections is an efficient web-based tool for implementing a Tier 2 and 3 behavioral interventions that uses daily carry cards. Connections benefits students, their families, and an entire school staff-administrators, teaching staff, and support staff. <br> Connections will enable staff to connect with, monitor, and provide effective feedback to students who demonstrate chronic or intensive challenging behaviors and provided communication with families about daily behaviors. | October 2015 | $\$ 400$ a year for full implementation |
| Review of AMP Data | By teacher and in small groups - analyze the current AMP data for students <br> Teachers will analyze student overall data for strengths and challenge areas and will determine activities for improvement, resources the teacher will use, and a timeline for implementation including formative assessment will be developed | Oct 2015 | Data and collaboration time |
| RTI Conference January | Annual RTI Conference-4 Staff members Providing ongoing professional development in RTI and related strategies. <br> Teachers who attend conference will return and in turn share ideas and strategies with others through teacher collaboration | January 2016 | \$7000 |


| Learning A-Z | Implementation of digital reading and writing classroom resources for intervention and/or enrichment <br> Successful implementation will allow teacher to have additional differentiation within the classroom for all students | January 2016 | Will purchase 2 year license for PreK-8 grades \$12,000 |
| :---: | :---: | :---: | :---: |
| GLAD Strategy <br> Training | Four Staff members to National Project Glad Training <br> Project GLAD® is a model of professional development in the area of language acquisition and literacy. The strategies and model promote English language acquisition, academic achievement, and cross-cultural skills. Project GLAD® was developed and field tested for nine years by the United States Department of Education and is based on years of experience with integrated approaches for teaching language. Tied to the Common Core Standards and State Standards, the model trains teachers to provide access to core curriculum using local district guidelines and curriculum. See Attached documentation for professional development cycle. <br> Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | Spring 2016 | Approximately \$17,000 for initial Training for 4 staff |
| Purchase <br> Morning <br> Meeting Books | Morning Meeting Books -Strategy to work on culture and learning environment. <br> When implemented teachers will promote a climate of trust, academic growth, and positive behavior by launching each school day with a whole class gathering. | Spring 2016 | $\begin{aligned} & \$ 250 \text { for } 10 \\ & \text { books } \end{aligned}$ |
| CPI Training | Training will take place annually with staff member being trained as a trainer. They will in turn provide professional development to all staff members as needed throughout the school year <br> With successful implementation teachers and paraprofessionals will learn how to defuse challenging and disruptive behavior before an incident escalates to a crisis situation. Successful implementation leads to a change in organizational culture, a change in adult professional behavior, and a change in staff relationships with both service users and stakeholders | Spring 2016 <br> Anchorage | \$5000 |
| CPI Training materials | Consumable materials for CPI training | Spring 2016 | \$750 |


| Peer |  |  |  |
| :--- | :--- | :--- | :---: |
| Observation | Teachers will make observations of other teachers once per quarter to <br> establish a cycle of peer observations. - <br> Successful implementation will establish an empowered culture that nurtures <br> a collegial exchange of ideas and will promote a level of trust. | Spring <br> Semester | Costs to cover <br> Substitute costs- <br> $-\$ 3,105$ |
| SESA Training <br> Lyon Johnson | Training on the behavior of intensive behavioral students <br> Adverse Childhood Event Training <br> Successful implementation will increase teachers knowledge of strategies that <br> can be used with Tier 2 and 3 behavioral students | TBD | Provided at no <br> cost to the <br> district |
| Review of MAP <br> Growth Data | After Spring the MAP testing window teachers will analyze student overall <br> data for strengths and challenge areas and will determine areas for <br> improvement and will plan for the upcoming school year. | April 2016 | Data and <br> collaboration <br> time |
| Safe and Civil <br> Conference | Four staff members will attend the National Safe and Civil Conference in <br> Portland. <br> Successful Implementation will promote classroom and school-wide positive <br> behaviors and will support increased time on task and attendance. | Summer 2016 | \$8000 for travel <br> + registration <br> fees |


| $\begin{gathered} \text { Year One } \\ \text { 2016-2017 } \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Activities | Description of activities | Timeline | Resources needed |
| Connections | Connections is an efficient web-based tool for implementing a Tier 2 and 3 behavioral interventions that uses daily carry cards. Connections benefits students, their families, and an entire school staff-administrators, teaching staff, and support staff. <br> Connections will enable staff to connect with, monitor, and provide effective feedback to students who demonstrate chronic or intensive challenging behaviors and provided communication with families about daily behaviors. | August 2016 | $\$ 400$ a year for full implementation |
| Purchase of Cultural Activities Supplies | Successful implementation of cultural trips will increase our community involvement and engaging elders in our school day. These materials will allow our teacher to more effectively and actively intertwine the cultural standards into the classroom. | August/ <br> September 2016 | \$60,000 |
| CPI Training materials | Consumable materials for CPI training | Fall 2016 | \$750 |
| Review of AMP and MAP Data | By teacher and in small groups - analyze the current AMP and MAP data for your students <br> Teachers will analyze student overall data for strengths and challenge areas and will determine activities for improvement, resources the teacher will use, and a timeline for implementation including formative assessments and interventions strategies as needed. | $\begin{gathered} \text { ASAP Fall } \\ 2016 \end{gathered}$ | Data and collaboration time |
| GLAD Strategy Training | Four Staff members to National Project Glad Training <br> Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | Dates TBD 2016-2017 <br> School Year | Approximately \$17,000 for initial Training for 4 staff |


| Teachers Development Group Studio Teacher | Four Staff members to National Mathematics Studio Program Training. See attached brochure for additional information When implemented Mathematics Studio Program will increase mathematical knowledge of teachers that will lead to decreased achievement gaps for students | Dates TBD 2016-2017 School Year | \$12,500 |
| :---: | :---: | :---: | :---: |
| Community Nights Parent Nights | School-wide community and family involvement activities. <br> Approx. 4 times yearly for school-wide activities with classroom parent nights once per grade level quarterly. <br> Successful implementation will lead to increased positive family involvements in all school activities. | Ongoing throughout the school-year | \$3200 for Parent Involvement related activities |
| CPI Training | Training will take place annually with staff member being trained as a trainer. They will in turn provide professional development to all staff members as needed throughout the school year <br> With successful implementation teachers and paraprofessionals will learn how to defuse challenging and disruptive behavior before an incident escalates to a crisis situation. Successful implementation leads to a change in organizational culture, a change in adult professional behavior, and a change in staff relationships with both service users and stakeholders | Spring 2016 <br> Anchorage | \$5000 |
| RTI Conference January | Annual RTI Conference-4 Staff members Providing ongoing professional development in RTI and related strategies. <br> Teachers who attend conference will return and in turn share ideas and strategies with others through teacher collaboration | January 2017 | \$7000 |
| SESA Training Lyon Johnson | Training on the behavior of intensive behavioral students Adverse Childhood Event Training Successful implementation will increase teachers knowledge of strategies that can be used with Tier 2 and 3 behavioral students | TBD | Provided at no cost to the district |


| Cultural Activities | These activities include items such as overnight hunting trips with <br> Fish and Wildlife, travel to collect subsistence items that are then <br> shared with village elders, survival classes, expansion of our Arctic <br> Resource Management Class and will allow the school to participate <br> in subsistence activities that help promote culture and sustainability <br> of the village. | TBD | $\$ 5000$ for gas and <br> other supplies |
| :--- | :--- | :--- | :---: |
| Save and Civil On- <br> Site Consulting | Consultant will be onsite to address sites specific concerns and to <br> provide additional training. <br> Successful Implementation will promote classroom and school-wide <br> positive behaviors. | Dates TBD | $\$ 25,000$ |
| Safe and Civil <br> Conference | Four staff members will attend the National Safe and Civil <br> Conference in Portland. <br> Successful Implementation will promote classroom and school-wide <br> positive behaviors and will support increased time on task and <br> attendance. | Summer 2016 | $\$ 8000$ for travel + <br> registration fees |


| $\begin{array}{\|l\|} \hline \text { Year Two } \\ \text { 2017-2018 } \\ \hline \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Activities | Description of activities | Timeline | Resources needed |
| Community Nights Parent Nights | School-wide community and family involvement activities. <br> Approx. 4 times yearly for school-wide activities with classroom parent nights once per grade level quarterly. <br> Successful implementation will lead to increased positive family involvements in all school activities. | Ongoing throughout the school-year | \$3200 for Parent Involvement related activities |
| Review of AMP and MAP Data | By teacher and in small groups - analyze the current AMP and MAP data for your students <br> Teachers will analyze student overall data for strengths and challenge areas and will determine activities for improvement, resources the teacher will use, and a timeline for implementation including formative assessments and interventions strategies as needed. | $\begin{gathered} \text { ASAP Fall } \\ 2016 \end{gathered}$ | Data and collaboration time |
| GLAD Strategy Training | Four Staff members to National Project Glad Training <br> Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | $\begin{aligned} & \text { Dates TBD } \\ & \text { 2017-2018 } \\ & \text { School Year } \end{aligned}$ | Approximately \$17,000 for initial Training fro 4 staff |
| Connections | Connections is an efficient web-based tool for implementing a Tier 2 and 3 behavioral interventions that uses daily carry cards. Connections benefits students, their families, and an entire school staff-administrators, teaching staff, and support staff. <br> Connections will enables staff to connect with, monitor, and provide effective feedback to students who demonstrate chronic or intensive challenging behaviors and provided communication with families about daily behaviors. | Year-long implementation | $\$ 400$ a year for full implementation |


| Teachers <br> Development Group <br> Studio Teacher | Four Staff members to National Mathematics Studio Program Training. See attached brochure for additional information Begin onsite consulting and training cycle When implemented Mathematics Studio Program will increase mathematical knowledge of teachers that will lead to decreased achievement gaps for students | Dates TBD <br> 2017-2018 <br> School year | \$12,500 for <br> National Conference <br> On-site consulting $\$ 60,000$ |
| :---: | :---: | :---: | :---: |
| CPI Training | Training will take place annually with staff member being trained as a trainer. They will in turn provide professional development to all staff members | Spring 2017 | \$5000 |
| CPI Training materials | Consumable materials for CPI training | Once a year | \$750 |
| Peer Observation | A cycle of peer observations will be established an empowered culture that nurtures a collegial exchange of ideas and will promote a level of trust. | Once per quarter | Costs to cover Substitute costs \$12,420 |
| Learning A-Z | Implementation of digital reading and writing classroom resources for intervention and/or enrichment Successful implementation will allow teacher to have additional differentiation within the classroom for all students | January 2017 | Will purchase 3year license for PreK-8 grades $\$ 17000$ |
| RTI Conference January | Annual RTI Conference-4 Staff members <br> Providing ongoing professional development in RTI and related strategies. <br> Teachers who attend conference will return and in turn share ideas and strategies with others through teacher collaboration | January 2017 | \$7000 |
| SESA Training <br> Lyon Johnson | Training on the behavior of intensive behavioral students Adverse Childhood Event Training <br> Successful implementation will increase teachers knowledge of strategies that can be used with Tier 2 and 3 behavioral students | TBD | Provided at no cost to the district |
| Save and Civil OnSite Consulting | Consultant will be onsite to address sites specific concerns and to provide additional training. <br> Successful Implementation will promote classroom and school-wide positive behaviors. | Dates TBD | \$25,000 |

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\begin{array}{|l|l|l|c|}\hline \begin{array}{l}\text { Safe and Civil } \\
\text { Conference }\end{array} & \begin{array}{l}\text { Four staff members will attend the National Safe and Civil } \\
\text { Conference in Portland. } \\
\text { Successful Implementation will promote classroom and school-wide } \\
\text { positive behaviors and will support increased time on task and } \\
\text { attendance. }\end{array} & \text { July 2017 } & \begin{array}{c}\$ 8000 \text { for travel + } \\
\text { registration fees }\end{array} \\
\hline \begin{array}{l}\text { GLAD Strategy } \\
\text { Training }\end{array} & \begin{array}{l}\text { Four Staff members to National Project Glad Training and school } \\
\text { will begin cycle of training to become certified as a trainer } \\
\text { Onsite consultation for teacher program certification } \\
\text { Successful implementation will lead to improved classroom } \\
\text { strategies that promote English language acquisition and will } \\
\text { provided onsite teacher trainers that will continue with on-site } \\
\text { professional development. }\end{array} & \begin{array}{c}\text { Dates TBD } \\
\text { School Year }\end{array} & \begin{array}{c}\text { S17,000 for } \\
\text { Notional } \\
\text { Conference }\end{array}
$$ <br>
On-site <br>
consulting <br>

\$ 20,000\end{array}\right]\)| These activities include items such as overnight hunting trips with <br> Fish and Wildlife, travel to collect subsistence items that are then <br> shared with village elders, survival classes, expansion of our Arctic <br> Resource Management Class and will allow the school to participate <br> in subsistence activities that help promote culture and sustainability <br> of the village. | TBD |
| :--- | :--- |


| $\begin{array}{\|l} \hline \text { Year Three } \\ \text { 2018-2019 } \\ \hline \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Activities | Description of activities | Timeline | Resources needed |
| Community Nights Parent Nights | School-wide community and family involvement activities. <br> Approx. 4 times yearly for school-wide activities with classroom parent nights once per grade level quarterly. <br> Successful implementation will lead to increased positive family involvements in all school activities. | Ongoing throughout the school-year | $\$ 3200$ for Parent Involvement related activities |
| Review of AMP and MAP Data | By teacher and in small groups - analyze the current AMP and MAP data for your students <br> Teachers will analyze student overall data for strengths and challenge areas and will determine activities for improvement, resources the teacher will use, and a timeline for implementation including formative assessments and interventions strategies as needed. | $\begin{gathered} \text { ASAP Fall } \\ 2016 \end{gathered}$ | Data and collaboration time |
| GLAD Strategy <br> Training | Four Staff members to National Project Glad Training <br> Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | Dates TBD <br> 2018-2019 <br> School year | Approximately $\$ 17,000$ for initial Training fro 4 staff |
| Connections | Connections is an efficient web-based tool for implementing a Tier 2 and 3 behavioral interventions that uses daily carry cards. Connections benefits students, their families, and an entire school staff-administrators, teaching staff, and support staff. <br> Connections will enables staff to connect with, monitor, and provide effective feedback to students who demonstrate chronic or intensive challenging behaviors and provided communication with families about daily behaviors. | Year-long implementation | $\$ 400$ a year for full implementation |


| Teachers <br> Development Group <br> Studio Teacher | Four Staff members to National Mathematics Studio Program Training. See attached brochure for additional information Begin onsite consulting and training cycle When implemented Mathematics Studio Program will increase mathematical knowledge of teachers that will lead to decreased achievement gaps for students | Dates TBD <br> 2018-2019 <br> School year | \$12,500 for <br> National Conference On-site consulting $\$ 60,000$ |
| :---: | :---: | :---: | :---: |
| CPI Training | Training will take place annually with staff member being trained as a trainer. They will in turn provide professional development to all staff members | Spring 2018 | \$5000 |
| CPI Training materials | Consumable materials for CPI training | Once a year | \$750 |
| Peer Observation | A cycle of peer observations will be established an empowered culture that nurtures a collegial exchange of ideas and will promote a level of trust. | Once per quarter | Costs to cover Substitute costs \$12,420 |
| RTI Conference January | Annual RTI Conference-4 Staff members <br> Providing ongoing professional development in RTI and related strategies. <br> Teachers who attend conference will return and in turn share ideas and strategies with others through teacher collaboration | January 2018 | \$7000 |
| SESA Training Lyon Johnson | Training on the behavior of intensive behavioral students Adverse Childhood Event Training <br> Successful implementation will increase teachers knowledge of strategies that can be used with Tier 2 and 3 behavioral students | TBD | Provided at no cost to the district |
| Save and Civil OnSite Consulting | Consultant will be onsite to address sites specific concerns and to provide additional training. <br> Successful Implementation will promote classroom and school-wide positive behaviors. | Dates TBD | \$25,000 |
| Safe and Civil Conference | Four staff members will attend the National Safe and Civil Conference in Portland. <br> Successful Implementation will promote classroom and school-wide positive behaviors and will support increased time on task and attendance. | July 2017 | $\$ 8000$ for travel + registration fees |


| GLAD Strategy <br> Training | Four Staff members to National Project Glad Training and school will begin cycle of training to become certified as a trainer Onsite consultation for teacher program certification Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | $\begin{gathered} \text { Dates TBD } \\ \text { 2016-2017 } \\ \text { School Year } \end{gathered}$ | \$17,000 for National Conference On-site consulting $\$ 20,000$ |
| :---: | :---: | :---: | :---: |
| Cultural Activities | These activities include items such as overnight hunting trips with Fish and Wildlife, travel to collect subsistence items that are then shared with village elders, survival classes, expansion of our Arctic Resource Management Class and will allow the school to participate in subsistence activities that help promote culture and sustainability of the village. | TBD | $\$ 5000$ for gas and other supplies |


| Sustainability year2019-2020 |  |  |  |
| :---: | :---: | :---: | :---: |
| Activities | Description of activities | Timeline | Resources needed |
| Community Nights Parent Nights | School-wide community and family involvement activities. <br> Approx. 4 times yearly for school-wide activities with classroom parent nights once per grade level quarterly. <br> Successful implementation will lead to increased positive family involvements in all school activities. | Ongoing throughout the school-year | \$1600 for Parent Involvement related activities |
| Review of AMP and MAP Data | By teacher and in small groups - analyze the current AMP and MAP data for your students <br> Teachers will analyze student overall data for strengths and challenge areas and will determine activities for improvement, resources the teacher will use, and a timeline for implementation including formative assessments and interventions strategies as needed. | $\begin{gathered} \text { ASAP Fall } \\ 2016 \end{gathered}$ | Data and collaboration time |
| GLAD Strategy Training | 2 Staff members to National Project Glad Training <br> Successful implementation will lead to improved classroom strategies that promote English language acquisition and will provided onsite teacher trainers that will continue with on-site professional development. | Dates TBD <br> 2019-2020 <br> School year | \$8500 |
| Connections | Connections is an efficient web-based tool for implementing a Tier 2 and 3 behavioral interventions that uses daily carry cards. Connections benefits students, their families, and an entire school staff-administrators, teaching staff, and support staff. <br> Connections will enables staff to connect with, monitor, and provide effective feedback to students who demonstrate chronic or intensive challenging behaviors and provided communication with families about daily behaviors. | Year-long implementation | \$400 a year |


|  | Complete onsite consulting and training cycle |  |  |
| :--- | :--- | :--- | :---: |
| Teachers <br> Development Group <br> Studio Teacher | When implemented Mathematics Studio Program will increase <br> mathematical knowledge of teachers that will lead to decreased <br> achievement gaps for students | Dates TBD <br> $2019-2020$ <br> School year | On-site <br> consulting <br> 15,000 |
| CPI Training | Training will take place annually with staff member being trained as <br> a trainer. They will in turn provide professional development to all <br> staff members | Spring 2020 | $\$ 5000$ |
| CPI Training <br> materials | Consumable materials for CPI training | Once a year | $\$ 750$ |
| Peer Observation | A cycle of peer observations will be established an empowered <br> culture that nurtures a collegial exchange of ideas and will promote <br> a level of trust. | Once per <br> Semester | Costs to cover <br> Substitute costs <br> $\$ 6000$ |
| RTI Conference <br> January | Annual RTI Conference-4 Staff members <br> Providing ongoing professional development in RTI and related <br> strategies. <br> Teachers who attend conference will return and in turn share ideas <br> and strategies with others through teacher collaboration | January 2020 | \$7000 |
| SESA Training <br> Lyon Johnson | Traning on the behavior of intensive behavioral students <br> Adverse Childhood Event Training <br> Successful implementation will increase teachers knowledge of <br> strategies that can be used with Tier 2 and 3 behavioral students | Date TBD | Provided at no <br> cost to the district |
| Save and Civil On- <br> Site Consulting | Consultant will be onsite to address sites specific concerns and to <br> provide additional training. <br> Successful Implementation will promote classroom and school-wide <br> positive behaviors. | Date TBD | \$15,000 |
| Cultural Activities | These activities include items such as overnight hunting trips with <br> Fish and Wildlife, travel to collect subsistence items that are then <br> shared with village elders, survival classes, expansion of our Arctic <br> Resource Management Class and will allow the school to participate <br> in subsistence activities that help promote culture and sustainability <br> of the village. | TBD | $\$ 5000$ for gas and <br> other supplies |

## About the

## Mathematics Studio Program

Transforming a School's Culture of Mathematics Professional Learning


What are the Key Features of Mathematically Productive Teaching Routines?

During studio work, teachers learn and rehearse "mathematically productive teaching routines." By design, these practices engage students in evidence-based learning experiences that -

- Align directly with how students learn mathematics
- Recur regularly in the everyday work of teaching mathematics
- Typically involve one or more challenging aspects of mathematics teaching
- Enable mathematical access and challenge for all students


## What Happens During Each Studio Cycle?

The following activities typically occur during a studio cycle:

1. One half-day of leadership coaching for the studio principal
2. One half-day of pre-studio inquiry with the studio teacher
3. One full "studio day" per cohort of 10-12 resident teachers and administrators (number of cohort depends on district/school size and resources)
4. Option. One or two full days of one-to-one job-embedded coaching for the math coach(es), teacher leaders, and/or one or more resident teachers.
5. Option. One half-day Instructional Leadership Seminar for all Studio and Resident Principals from across the district.

See page 6 for other Math Studio Program expectations and opportunities.

## What Happens in a Mathematics Classroom Studio?

Over the course of a year, a cohort of "resident" teachers, coaches, and administrators meets four or five times for a "studio day" in the studio teacher's classroom to:
$>$ Design a plan that involves the "live" rehearsal of one or more "mathematically productive teaching routines"
> Observe the enacted plan
> Gather student data
> Analyze the data as evidence about the impact of instructional decisions and the lesson design
> Set action steps
In the beginning, all studio sessions are facilitated by a Teachers Development Group consultant. Over 2-3 year's time, the consultant's focus shifts to providing coaching and support to local teachers, coaches, and/or principals who learn to facilitate studios,"mini-studios," and/or other studio-related professional development.


## What are the Purposes of a Math Studio?

While the Studio classroom provides the context for professional inquiry and individual teacher growth, the studio school is the first-order unit of transformation. That is, the primary purposes of the Studio work are to:

- Transform the mathematics understanding and achievement of all students in a school
- Transform mathematics instruction and the culture of mathematics professional learning across the school

To achieve these purposes, Studio activities:
> Bring Best Practices in Teaching Mathematics seminar learning to life in a real-time "live" classroom
> Increase the level, fidelity, and quality of implementation of research-based teaching
> Build participants' shared images and understandings about meaningful practice
$>$ Engage teachers as mathematical thinkers
> Focus on building professional norms and habits-of-practice

- productive planning
- in-the-moment teacher reflection/ metacognition
- relentless curiosity and inquiry about students' mathematical thinking
> Deprivatize practice to build powerful professional community
> Deepen the principal's knowledge and skill re: (1) using her/his leadership voice to engender effective math instruction; (2) analyzing teaching; and (3) organizing the school for math learning


## How Does a School Benefit Over Time from Studio Work?

## Long-Term Outcomes for Schools

- Increased Professional Development Capacity in Mathematics
- Increased Mathematical Knowledge for Teaching
- Established Studio Classrooms
- High-functioning Mathematics-based Professional Learning Communities
- Improved Teaching for Understanding
- Increased Mathematical Discourse


## Long-Term Impacts for Schools

- Increased Student Achievement
- Increased Math Pursuits
- Sustainable Infrastructure
- Specific school-based roles and responsibilities
- Well-defined ongoing professional learning for each role
- Research-based tools and structures that support effective implementation and sustenance of roles, responsibilities, and professional learning
- Institutionalized mechanism - transcends people who come/go
- Decreased Achievement Gaps
- Equity in the math achievement levels attained by students of differing ethnicity, gender, language, and sociocconomic status


## Who Participates in a Math Classroom Studio?

The studio model is applicable at all grade levels K-12. In addition to studios whose residents are teachers and leaders focused on classroom teaching, a studio may include residents who are all administrators focused on rehearsal of math leadership strategies, or coaches focused on math coaching. A studio may also focus on a special need (e.g., Special Education, English Language Learning, etc.). In the case of a classroom studio focused on instruction, the following individuals are the studio participants:

## Studio Teacher

The teacher in whose classroom the studios take place across the school year. The studio teacher's classroom serves as a "greenhouse" environment where colleagues' learning about mathematics content, pedagogy, and leadership thrives. $\mathrm{He} /$ She is a highly reflective, accomplished teacher who is eager for coaching and hungry to work on new/refined practices during and between the studio cycles. The studio teacher meets for a half-day of pre-planning (typically outside of school hours) with the consultant and with all studio participants for one full studio day (sub required) during each of the five studio cycles. He/She receives close side-by-side coaching from the consultant, and, in addition to participating in the school's Online Math Collaborative (OMC), interacts periodically by e-mail or teleconference with the consultant between cycles.

## Studio Primcipal

The principal of the school in which the studio teacher works. During day one of each two-day studio cycle, the principal receives a half-day of coaching that emphasizes developing a leadership voice for math, organizing the school for math learning, and analyzing math teaching. This includes a Data Snap walk-through in the studio and resident teachers' math classrooms. The purposes of the Data Snap are: (1) to assess and support the impact of the Studio work on mathematics learning across the studio school, (2) to provide context for coaching the principal as the school's "lead learner" for mathematics, and (3) to inform the consultant's emphases during the remainder of the cycle. The principal also participates actively in day two of each studio cycle, attending the full studio session and providing a powerful opening and closing to the day.

## Resident Teachers and Administrators

Up to twelve teachers of mathematics per studio cohort. If any residents are teachers from schools other than the studio school, their principals are also residents. Each resident attends one full studio day during each of the five studio cycles (five total sub days per resident). A cohort of residents for a studio remains intact and participates together in each studio day throughout the year. All studio participants explore mathematics, plan, observe, gather and analyze data, and determine related action steps for their practice. They build professional community and use the studio work as rich context for reflection and to identify their individual and collective between-cycle commitments (e.g., teaching practices to work on work on, student work/data to collect for discussion at the next studio cycle).

## Lead Math Teacher (e.g., Math Coach)

A teacher leader who supports mathematics instruction in the studio school. Depending on the teacher leader's background and leadership/coaching focus, he/she may receive direct coaching and support from the consultant during the studio day. Between the consultant's visits, this individual also provides the studio and resident teachers support re: classroom applications of their studio learning. Not all studios include a lead teacher/math coach, and in some settings, the studio serves as context for identifying/developing individuals for that role.

## District Office Administrator

A district office administrator responsible for principal and math curriculum leadership. To underscore district sponsorship of the studio work, a district office administrator may share in providing a powerful opening or closing for a studio in which he/she participates.

## Teachers Development Group Consultant

An external resource who is an accomplished mathematics educator and classroom coach. The TDG consultant provides coaching/professional learning for the studio and resident teachers, principal, and district administrators, and is always purposeful and transparent about teaching and coaching decisions/actions.

## How Students Learn Mathematics

Drawing on a robust and seminal body of research on how students learn mathematics, all studio related work on instruction emphasizes engaging students consistently in evidence-based learning experiences that involve -

- Cognitively demanding mathematical tasks
- Adherence to mathematically productive classroom norms and relationships
- Productive disequilibrium about mathematical ideas and relationships
- Mathematical discourse that focuses on students' mathematical reasoning, sense making, representations, justifications, and generalizations
- Reflection and metacognition about their own and each other's mathematical thinking

The studio design is guided by a well-defined, research-based vision of effective mathematics learning experiences for students. This vision is articulated in the following theory of action:
Student mathematics achievement will improve if teachers consistently use research-based instructional practices to develop both computational fluency and a deep understanding of mathematics concepts by engaging all students consistently and effectively in the following mathematical practices:

- Providing Explanations - Students explain how they think about the meanings of ideas and the mathematical reasoning they use to make sense of calculations, problems, and/or ideas.
- Making Justifications - Students use mathematical reasoning (both inductive and deductive) to justify why their own or others' ideas are or are not valid/accurate. They identify relevant and age-appropriate mathematical definitions, properties, processes, counter examples, and/or established generalizations to present a robust logical argument and demonstrate precision.
- Formulating Conjectures \& Generalizations - Students make and test conjectures and generalizations about the application of their own and others' mathematical ideas and processes to the general case, special cases, and/or different contexts.
- Using Multiple Representations - Students make, use, and connect multiple mathematical representations - equations, verbal descriptions, graphs, concrete models, charts, tables, everyday life situations, and diagrams - to "mathematize," make sense of, solve, and/or communicate about the questions, quantities and relationships in problems and ideas.
- Engaging in Metacognition - Students practice mathematical metacognition by reflecting about: (1) what/how they think about a math idea or problem; (2) disequilibrium, breakthroughs, and "stuck-points" in their thinking; (3) ways their mathematical understanding is developing; and (4) specific ideas or learning episodes that influenced their thinking.
- Making Connections - Students make and discuss connections between their prior understandings and the new mathematical concepts and skills they are learning, between their thinking and others' ideas, and between the mathematics they are learning and other contexts/content.

Bransford et al, 1999; Cohen, 1994; Donovan \& Bransford, 2005; Franke et al, 2007; Kilpatrick, 2001; Lotan, 2003, 2006; Stein et al, 2000; Common Core State Standards Initiative, 2010

## Mathematically Productive Teaching Routines

Work in the studio school emphasizes the planning and rehearsal of several specific research-based teaching practices that meet criteria for "mathematically productive" because they:

- engage students in activity that aligns directly with how students learn mathematics
- recur regularly in the everyday work of teaching mathematics
- typically involve one or more challenging aspects of mathematics teaching
- enable mathematical access and challenge for all students

Because of these features, a teacher's repeated use of such practices will leverage mathematical sensemaking, understanding, and proficiency by all students, and will carry over into other aspects of the teacher's practice.
Franke, 2008; Franke \& Kazemi, 2009; Ball, 2008; Marzano, 2006, 2009; Ghousseini, Lampert, et al, 2008; Weiss et al, 2003

## Mathematical Discourse

An evidence-based premise of the studio work is the notion that orchestrating productive mathematical discourse increases students' opportunities to learn and, in turn, raises achievement and participation levels in mathematics. Embracing this premise requires developing teachers' knowledge, skills, tools, and disposition for building classroom communities of mathematical discourse. Leahy, Lyon, Thompson, and Wiliam, 2005; Yackel \& Cobb, 1996; Hufferd-Ackles \& Sherin, 2004; Stein, Engle, Hughes \& Smith, 2008; Weaver \& Dick, 2006

## Specialized Mathematics Content Knowledge

In order to orchestrate purposeful and mathematically productive discourse, teachers need a deep understanding of the math content they teach and its trajectory over time. Whether in a related Knowing Mathematics for Teaching course or during a studio day, all studio work emphasizes deepening teachers' knowledge of the content needed to effectively teach mathematics. Ball, Thames and Phelps, 2008; Ball, Hill and Bass, 2005

## Cognitive Demand

Not all math tasks are "discourse worthy." The Math Task Framework and the role of cognitive demand in student learning provide a theoretical underpinning for identifying and designing high-cognitive tasks, and a basis for planning and analyzing "live" studio enactments of those tasks. Stein, Smith, Henningsen and Silver, 2009; Bloom, 1956

## Professional Learning Community \& Student Achievement

Built into the design of the studio program are research-based features of professional community that correlate positively to student achievement. A primary focus of all mathematics studio work is transforming the culture of mathematics professional learning across each studio school. Boaler, 2006; DuFour, 2009; Little, 1990, 2000; Louis et al, 1996; McLaughlin \& Talbert, 2001, 2006; Weaver \& Dick, 2009

## Generative Learning

Teachers learn to attend relentlessly to their students' mathematical thinking. Administrators learn that understanding students' mathematical thinking is central to effective teaching, and they learn to support teachers in developing the norm of being curious about students' mathematical thinking - the single most important factor in developing into a teacher who continues to learn. Students develop metacognitively - learning to attend carefully to their own mathematical thinking and relationships to others' thinking. Through this process, learning becomes selfgenerating for students, teachers, and administrators, who continually add to their understandings. Franke, Carpenter, Levi, \& Fennema, 2001

## Formative Assessment

A teacher's relentless focus on understanding students' mathematical thinking is also fundamental to formative assessment - a practice that shows an effect size larger than most known educational interventions. In particular, formative assessment is especially effective for students who have not done well in school, thus narrowing the gap between low and high achievers while raising overall achievement. Black et al, 2004; Wiliam, 2007
Lesson Study
The studio model applies elements of Japanese lesson study in that teachers collaboratively plan, observe/enact, and analyze a lesson. While contextualized in deep planning, unlike lesson study, studio work focuses teachers' attention on public work with students as a way to rehearse and refine evidence-based mathematically productive teaching routines - i.e., emphasis is on polishing practice vs. polishing a whole lesson. Stigler \& Hiebert, 1999; Lewis, 2006; Watanabe, 2003; Lampert et al, 2008; Kazemi \& Franke, 2009.

## Effective Professional Development

By design, all studio-related work aligns tightly with the research-based characterization of effective professional development as:

- intensive, ongoing, and connected to practice
- focused on students' learning
- supportive of teachers while they rehearse teaching in "real time"
- designed to align with local school goals and priorities and other initiatives
- focused on the development of strong working relationships among teachers

The studio program embodies all five of these principles in a structured way that is sustainable for the long-term within a school. Darling-Hammond et al, 2009; Stiles et al, 2009; Franke et al, 2001; NSDC, 2001

## Powerful School Leadership

Focusing on the school as the "unit of change" and a distributed view of leadership requires specialized learning for principals and district administrators, who receive coaching to develop their leadership voice for mathematics, organize their school for mathematics learning, and analyze mathematics teaching. Elmore, 2002; City et al, 2009; Nelson et al, 2005; Lambert, 2003; Grant et al, 2009


What Are a School's Commitments

## During a Year of Studio Work?

There are typically five studio cycles spread across the academic year in each studio school with the following participants:

## One Studio Teacher

- 1 half-day per cycle, after school inquiry with the consultant
- 1 "studio day" per cycle (requires a substitute)
- Mid-cycle communications with consultant
- Mid-cycle applications of instructional practices
- Mid-cycle reflection on the school's OMC (see right)


## One Studio Principal

- 1 half-day per cycle, Data Snap and coaching
- 1 studio day per cycle
- Mid-cycle communications with consultant and with teachers via the school's OMC (see right)
- Mid-cycle applications of studio learning
- 1 half-day per cycle, Instructional Leadership Seminar for all studio principals from across the district.


## Resident Teachers (up to twelve per cohort)

- 1 studio day per cycle per resident (requires a substitute for each resident)
- Mid-cycle classroom applications of studio learning
- Mid-cycle communications with studio colleagues and TDG consultant via the school's OMC
- May receive side-by-side coaching from consultant during days three/four of a studio cycle
- May receive side-by-side coaching from Lead Teacher/Coach during mid-cycle
One Lead Math Teacher
- 1 half-day per cycle, after school pre-planning with studio teacher and consultant
- 1 studio classroom day per cycle
- Mid-cycle communications with consultant
- Mid-cycle applications of studio learning and communication with colleagues via the school's OMC
- May receive side-by-side coaching from consultant during days three/four of a studio cycle


## What Are Other Math Studio Program Expectations and Opportunities?

## Best Practices in Teaching Mathematics Seminars

Prior to the first studio cycle, all participating teachers and teacher leaders are expected to complete at least three days of the Best Practices seminar, How Math Teaching Matters (the remaining two days may be completed during the academic year). Emphasis during all classroom studios is bringing the experiences and research studied during this seminar to life in the everyday math classroom. During subsequent years, additional Best Practices seminars attend to more specific aspects of learning/teaching math.

## Online Math Collaboratives (OMC)

Studio participants design and post individual and school Action Plans in their OMC and regularly review, refine, and expand those plans between cycles. They reflect regularly in their OMC Teaching Journals, and they interact in an OMC Discussion Forum, moderated by their TDG consultant. Participants upload artifacts (e.g., student work, video clips, photos) to their OMC as context for online discussions of successes and "problems of practice" they encounter between cycles.

## Instructional Leadership Seminars and Studio

Administrators from across the district attend this 3 - to 5 day seminar, which includes a mix of workshop sessions and live "leadership studio" activities in schools.

## Mathematics Leadership Seminar and Studio

Coaches/teacher leaders from across the district attend this seminar, typically offered as one day attached to each studio cycle. Includes a mix of workshop sessions and live "coaching studio" activities in schools.

## Knowing Mathematics for Teaching Content Courses

These 30 -hour courses deepen teachers' mathematical knowledge for teaching. While adaptable to specific grade levels, these are designed to include teachers from across $\mathrm{K}-12$ and to support teachers' understanding of the trajectory of important math ideas. Courses include: Algebra, Geometry, Measurement \& Change, Data \& Chance, Number \& Operations, Discrete Math.

## Online Courses on Math Content/Pedagogy

Online courses can be used to enhance learning by focusing on content that relates directly to the focus of the studio work.

Teachers Development Group is a nonprofit organization whose mission is to improve all students' mathematical understanding and achievement through meaningful, effective professional development for teacher and school leaders.

E-mail: linda.foreman@teachersdg.org
Phone: (toll-free) 877-650-1914; (local) 503-650-1914 www.teachersdg.org

## What is Project GLAD®?

## The Guided Language Acquisition Design

Project GLAD® ${ }^{\circledR}$ is a model of professional development in the area of language acquisition and literacy. The strategies and model promote English language acquisition, academic achievement, and cross-cultural skills. Project GLAD® was developed and field tested for nine years by the United States Department of Education and is based on years of experience with integrated approaches for teaching language. Tied to the Common Core Standards and State Standards, the model trains teachers to provide access to core curriculum using local district guidelines and curriculum.

The federally funded research project field-tested the model and was completed in the early 1990's. The U.S. Department of Education placed a mission of national dissemination upon us at the conclusion of the federal project. At that point, the project ended and our goal to make the nation 'BE GLAD' began. BE GLAD ${ }^{\text {TM }}$ LLC has been providing Project GLAD® training for almost 20 years and has an elite set of trainers. It is the only organization currently endorsed by Marcia Brechtel the co-creator of Project GLAD® to provide this professional development to educators in the area of language acquisition and literacy.

GLAD is an instructional model with clear, practical strategies promoting effective interactions between students and students and teachers and students that develop metacognitive use of highlevel language and literacy. During the staff development, teachers are provided with the instructional strategies, together with the theory and research that support the model, and the curriculum model that brings these all together in the context of district and state frameworks and guidelines. This includes 21st Century Skills, Common Core State Standards, integrated with NGSS \& state Social Studies Standards. The second part is a demonstration session in the classroom where the model is demonstrated with students using an integrated CCSS based unit.

BE GLAD training results in teachers' renewed commitment to high expectations and high standards for all students. The results for students have been continued gains in standardized test scores, as well as renewed involvement in a classroom that is, not only student-centered, but fosters a sense of identity and voice.

Project GLAD is a United States Department of Education, OBEMLA, Project of Academic Excellence; a California Department of Education Exemplary Program, a model reform program for the Comprehensive School Reform Design, and training model for five Achieving Schools Award Winners. It was the recommended K-8 project by the California State Superintendent of Schools for teachers of English learners. It is also highlighted as a California Department of Education "Best Practices" program for Title III professional development funding.

## TRAINING PROCESS (OVERVIEW)

BE GLAD® is a model of staff training for language acquisition. Teachers are trained to modify the delivery of instruction of students to promote academic language and literacy. BE GLAD has two aspects to its success.

1. The first aspect is the "what" of the language acquisition model

The "what" is that the Guided Language Acquisition Design (GLAD) provides an organizational structure for an integrated, balanced literacy approach. The integration, of listening, speaking, reading, and writing into all content areas and the interrelating of science, social studies, and literature with each other, underscores research that language is acquired most effectively when the emphasis is on meaning and the message. Language, any language, should be acquired while studying something of interest or real life use.

Writings in the field of brain research and standards-based instruction reinforce that by integrating the content areas and direct teaching of metacognitive strategies, learning is made more relevant and meaningful, thus insuring more efficient and effective learning. The strategies and classroom implications foster a risk-free, cross-culturally sensitive environment within which students are able to acquire academic language and concepts. Although, as written, the Project GLAD model is intended for English language acquisition for English language learners, it is valuable for acquisition of language for all students. The structure, strategies, and classroom implications, are invaluable in a multilingual setting. BE GLAD has been used successfully in gifted and talented settings.
2. The second is the "how" of the staff training

## STEPS IN TRAINING:

*EDUCATOR TRAINING begins with a total of 6 or 7 days. This includes Element 1 and 2 for the initial training. *

Element 1: 2-Day Workshop (Theory and Research)
The BE GLAD Training is available to anyone in the profession of education. It involves the Two-Day Research and Theory Workshop where participants will have the opportunity to dialogue and learn with other professionals in the field about the research that supports the model and its development, planning support connecting with the Common Core State Standards, an introduction to integrated units, and exposure to about forty effective teaching strategies. It covers the works of educators across the disciplines: reading, writing, brain compatible teaching, language acquisition, cross-cultural respect, primary language, and coaching. Research is directly tied to specific classroom implications, strategies and organization.

Element 2: Classroom Demonstration Session (Days 3-6 of the training)
After attending the 2-Day Workhshop, the Four or Five Day Demonstration Lesson occurs. The demonstration is a unique opportunity for teachers to observe students utilizing the strategies with a BE GLAD elite trainer. The participants will be supported by a BE GLAD elite coach who will facilitate a deeper understanding of the strategies, their variations, and engage participants in meaningful conversations around the model. During the afternoons of the demonstration, participants will be able to start planning and preparing materials to use in their classroom right away to effectively support application and implementation. Seeing successful strategies with students is the most effective method of promoting change.

Element 3: Follow-up and Coaching
The trainers and leadership team develop a customized plan for Follow Up support. Trainers will provide customized follow up coaching to BE GLAD trained teachers. Teachers will receive individualized and grade-level team support around Project GLAD strategies to increase implementation of the use Project GLAD strategies. This differentiated model will provide and encourage collaboration, support, modeling of strategies, reflection and goal setting. Follow-up coaching might include classroom modeling, co-teaching, planning sessions, time to create standards-based lessons and prepare strategies.

Element 4: Gladiator
Teachers and district staff deepen their knowledge of the BE GLAD model and strategies to develop support for sites and districts. Districts can create model classrooms at each site to be a resource for BE GLAD trained staff.

Element 5: Trainer-in-Training (TnT)
Teachers and district staff increase their comprehension of the BE GLAD model to become certified trainers to conduct trainings within their own district. This supports districts to sustain implementation of BE GLAD in their district. TnT's build internal capacity for future BE GLAD trainings in their district. *Must be trained in Elements $1 \& 2$ to be eligible. If you are interested, please apply.

Element 6: Agency Trainers
Certified trainers continually receive updates and enhance their practice. Structures for data collection and adhering to the purity of the process and strategies are shared consistently. The continued improvement of our practice is celebrated every 2 years with recertification as an Agency Trainer. Only Certified Trainers that maintain this level of rigor will be recognized by BE GLAD as elite trainers.

