We would like to attend the National Council of Teachers of Mathematics 2013 Annual Meeting and Exposition in Denver. The event is scheduled April 17-20, 2013. Attending this seminar would give us an opportunity for making an investment in our students' academic growth and success and is directly related to our school improvement plan.

VCS teachers have been trained in Balanced Mathematics over the last three years. This current school year is our full implementation year. Sara Cutler, from Madison, WI, has been our trainer during this process. A great deal of time has been spent analyzing the Common Core State Standards, creating classroom assessments, and working with teachers as they fully implement the Four Block Model of Balanced Mathematics.

We feel very comfortable with the components of Balanced Mathematics, but we are still seeking information and guidance in the area of proof and reasoning. NCTM's central theme this year is proof and reasoning. The Common Core State Standards are putting a heavy emphasis on the Mathematical Practice Standards. Vicksburg teachers have spent some time studying those standards and the expectations of our students. The practice standards were not an explicit topic in our training with Sara Cutler. Attending the NCTM conference will support this new learning and will impact both students and teachers as learners. There is a real need to train teachers on questioning techniques and strategies for supporting student reasoning skills. We will offer professional development to train teachers in this crucial area.

## II. Project goal and summary. (20%) Must state relevancy of project to local district goals or current teaching assignment. Project must be relevant to be considered, as confirmed by local school district screening committees.

After seriously investigating math programs and piloting two different programs, Vicksburg teachers and administration decided that teaching from a program did not help us understand our students' thinking about mathematics. The programs did not provide us with information about strengths and weaknesses of students. Learning about how children develop and come to understand mathematics became a district goal and vision. Teachers wanted to know the what, why and how their students were processing the math that was presented to them. Our four year training and implementation guide was devised at this point.

With three years of training, teachers now have a strong knowledge base about mathematics and how children move through a progression as they learn new skills and problem solve. Teachers know where learning is breaking down and how to prescribe instruction. After our most recent training focused on the practice standards, we see a need to support teachers on how to improve their conversations with students around these standards. Asking students higher level questions, guiding their work through questions and supporting them as they prove their thinking are all areas in which additional training is needed.

We expect to learn strategies that will help to align our practice with the Common Core State Standards while giving our students the tools they need to succeed. In addition, we will be able to learn about new classroom resources and technology, interact and network with colleagues, and bring back activities and lesson plans that can immediately be implemented in the classroom. This has been our first year fully implementing the Four block model in mathematics. Attending this conference with this new perspective will complement our school's objectives as well as strengthen our professional learning. Crucial issues will be addressed in over 700 sessions at the conference:

- Formative assessment in the Common Core State Standards
- Reasoning and proof
- Research in algebraic thinking
- Research in proof
- Response to intervention
- Supporting new teachers

These topics are directly linked to the mathematical practices that Vicksburg Community Schools has emphasized this school year.

We plan to offer a professional development session in the fall of 2013 focused on reasoning and proof. This session will support teachers in this crucial next step to improved math instruction and alignment and full implementation of the CCSS. Following our session, Jessica will utilize coaching time to work with teachers on an individual basis. Laura will support teachers through providing additional research and resources regarding reasoning and proof and the other practice standards. If teachers need additional time to study and learn about the practice standards, Jessica and Laura will take that concern to the math leadership committee and offer further support.

### III. Recent professional activities related to the project goal. (20%)

We are currently working in Year 4 of a four year plan for the implementation of a 4-block structure for teaching mathematics. Attending the conference at this time of the implementation process will reinforce what we have learned thus far in our journey, as well as provide us with additional information in the mathematical practice standards. Our four year plan can be described briefly as follows:

YEAR 1	YEAR 2	YEAR 3	YEAR 4
Teacher leaders attend 2 day training for overview of Balanced Mathematics	Two day training on Number Work and Inspecting Equations blocks	CGI training for all teachers	Integration and full implementation training
Full day training for all teachers on Fact Fluency	Teacher leader three day training on Number Development	Guiding principles for school mathematics work	Math leadership team writes pacing guides for geometry, measurement and data
Analysis of current assessments	Full day training for all teachers	Math leadership team continues to improve assessments and alignment work with CCSS	In support of SIP. 5
Math leadership team troubleshoots current struggles	Resource analysis; 4 point grading scale	×	teachers, including Special Ed, attend extensive training on Interventions
l teacher visits Madison, WI	5 teachers visit Madison, WI	5 teachers visit Madison, WI (Jessica and Laura)	using the Developmental Guidelines

The district has put a lot of time and energy into improved math instruction. Jessica and Laura have served on the math leadership committee for several years, supporting the work that has

been done. Jessica is an academic coach for Sunset Lake, a role that has taken a strong math focus since the beginning of implementation. She has worked one on one with teachers to support and guide implementation. Her work with the professional resource, <u>Teach Like a</u> <u>Champion</u>, encourages teachers to hold high expectations for every student in the classroom. The proof and reasoning focus of NCTM conference will compliment her work with teachers. Laura has offered professional development sessions linked to mathematics and the analysis of the CCSS in relation to Balanced Mathematics. She was also hired by Muskegon ISD as a consultant and trainer for 6 sessions and has co-facilitated session with over 70 participants. This year-long project has given her the opportunity to guide teachers through their journey of understanding the CCSS and teaching mathematics. Reasoning and proof are two areas in which she has studied throughout the school year. Laura also co-presented at the Michigan Council of Teachers of Mathematics in Traverse City, MI in the summer of 2012. With over 30 participants present, she was able to inform teachers and administrators of the many exciting, cutting-edge teaching happening in Vicksburg.

Date	Session	Presenter
April 16, 2013	Arrive in Denver	
April 17 - 19, 2013	Opening Session	Mayim Bialik
	Keeping Our Eyes on the Prize	Philip Treisman
ċ	Framing Questions to Engage All Students in Geometric Reasoning	Carol Malloy
	Enhancing Teaching and Learning with the Standards for Mathematical Practice	Ruth Parker
	Meeting the Challenges of the Common Core State Standards	Alan Schoenfeld
April 17 – 19, 2013	Various conference topics	Various presenters
April 20, 2013	Depart from Denver	
Spring 2013	Coaching Follow up	Jessica Moughton
May, 2013	Staff Meeting – Present Major Highlights from conference	2
September, 2013	Offer 3 hour Professional Development session	Jessica Moughton & Laura Wilson
Winter 2014	Offer 3 hour Professional Development session	Jessica Moughton & Laura Wilson

# IV. Full explanation of project activities including resources, specific activities and time lines. Projected completion date should be no later than October 2013. (20%)

We hope to take full advantage of this opportunity to gain new information, confirm practices that we are currently using, and learn best new practices for our school.

#### V. Full explanation of anticipated project outcomes. Explain how project will impact students, staff, the instructional program, and your personal professional growth. (30%)

This conference will directly impact our students and our math instruction. With a focus on reasoning and proof, we hope to increase opportunities for communication to help students develop mathematical understanding. Our new learning will influence our instructional decisions in our classrooms. Students will work at higher levels of generalization, model and solve complex problems, and be more logical in their decision making.

We will return with resources and share what we've learned with our peers. Our professional development session in the fall will help teachers expand their view on how reasoning and proof should be an active part of all students' learning of mathematics. This focus helps to support effective mathematics teaching, enhance mathematics learning, and influence what mathematics is taught. As an academic coach, Jessica will support teachers with the implementation of this professional development session. She will also provide additional resources, materials, and offer co-teaching opportunities centered on mathematics. We will offer a follow up 3 hour PD session in the winter of 2014 for sustained growth and learning. This session will offer further learning about reasoning and proof and plan for implementation of higher level questioning during instructional planning.

Laura's personal growth goal is to challenge students using higher level questioning during math instruction. The sessions at this conference will provide insight on highly achieving this goal. We both are passionate about mathematics and best practices in math instruction.

#### VI. Overall project creativity or innovation. (10%)

After serving on the Vicksburg Math Leadership committee for several years and helping the district implement Balanced Mathematics, we have embraced teaching that is problem based. Our involvement on this committee included creating scoring rubrics, grade level assessments and pacing guides for our elementary teachers. We're looking forward to this conference and bringing back more innovative techniques to our district.

As teacher leaders in the district, we are committed to continued education and evaluating best practice in instruction. Professional development and teacher training are both taken seriously throughout VCS. Follow up and true analysis of weaknesses and then indentifying next steps, are lacking in most PD and trainings. Teachers are often left with 'now what?' mentality after attending well planned, highly informative sessions. After the professional development session in the fall, Jessica and Laura have included the follow up and will be encouraging sustained growth for the teacher participants. Our plan stands out among others in that we will continue to support teachers and students long after our return from Denver and our fall PD session.

### <u>VII. Description of anticipated project costs. Itemize all direct costs in detail, i.e. travel,</u> <u>lodging, meals, tuition, materials, fees, etc. Budget must indicate that total costs will equal</u> <u>total sources of income (i.e. grant money + 25% district match + other sources of income).</u> <u>The Educator Incentive Grant Financial Reconciliation form (to be mailed to you at a later</u> <u>date) is due no later than October1, 2013.</u>

See attached Proposed Budget and Reconciliation Form



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Date

#### EDUCATOR INCENTIVE GRANT PROPOSED BUDGET & RECONCILIATION FORM 2012-2013

To all 2012-2013 Educator Incentive Grant Applicants:

Please fill out this budget work sheet and return with your grant application. Should you receive a grant, this form will be returned to you to reconcile your expenses.

Item	Projected Cost	Actual Cost Upon Completion
Workshop/Training/Seminar	\$ 650.00	
Transportation:		
Airfare	\$847.20	
Train		
Bus		
Personal Vehicle Mileage		
Lodging		
Meals		
Tours, etc.		
Parking		
Airport Shuttle		
Materials (please list)		
Other		
TOTAL	\$1,497.20	

PROJECT TOTAL Less Grant Award Less District Match Less Other Funding Sources - 4 24720 TitleIA funds

Personal Contribution = 10

\* See Table Below

	Grant Award	District Match
Individual Teacher / Administrator	\$550.00	\$137.50
Multi-Educator / Building-Wide	\$1000.00	\$250.00
District-Wide / Multi-District / School Cluster	\$1500.00	\$375.00

Please complete this expenditure reconciliation form within two weeks of the completion of your project or no later than October 14, 2013. If you have any questions or concerns, please contact Carol Carter at 381-4416.

- Individual and Administrator Grant Recipients please attach copies of your receipts to this completed form.
- Multi-Educator/Building-Wide/District-Wide/Multi-District/School Cluster Grant Recipients, please attach copies of purchase orders, requisitions or a detailed fiscal agent budget printout to this completed form.
  Please mail this form and attachments to:

Carol Carter Kalamazoo Community Foundation 151 S. Rose Street #332 Kalamazoo, MI 49007

Thank you for your attention to this detail.