

NORTHFIELD PUBLIC SCHOOLS
Office of the Superintendent
Memorandum

TO: Board of Education
FROM: Matt Hillmann Ed.D., Superintendent
RE: Table File Items for February 13, 2017, Regular School Board Meeting

VI. Items for Discussion and/or Reports.

1. Flexible Learning Day at the High School on February 28.
In the table file is a document prepared by Principal Leer to support his presentation.

VII. Superintendent's Report

B. Items for Consent Grouping

2. Personnel Items

a. Appointments.*

6. *Nancy Johnson Event Worker District wide beginning 02/15/2017.
7. Megan Kremin 1.0 FTE ECSE Special Education Teacher at Longfellow beginning 02/06/2017-06/06/2017; BA, Step 0.

b. Increase/Decrease/Change in Assignment.

15. Brenda Kell Sped EA/PCA for 14.75hrs/wk. at the Head Start/Family School, change to Sped EA/PCA for 1.75hrs/wk. at the Family School NCRC beginning 02/03/2017-06/06/2017.
16. Brittney Laue Sped Ed Teacher at CVSEC-SUN, add Assistant Girls Softball Coach (9th Grade Part-Time Hourly) for 3hrs./day at the High School beginning 03/13/2017-06/09/2017; \$18.00/hr.
17. Kim McMillian Instructional EA at the High School, change to Reading Teacher/Specialist/Interventionist at the High School beginning 02/07/2017-03/03/2017; BA, Step 2.

c. Leave of Absence Requests.

3. Jessica Enge Special Ed Educational Assistant at Longfellow, Leave of Absence/ Childcare beginning 05/01/2017 through the end of the 2016-17 school year.

d. Resignations/Retirements.

5. Tina Holum ESL Teacher at Greenvale Park resignation effective end of 2016-17 school year.

* Conditional offers of employment are subject to successful completion of a criminal background check and pre-work screening (if applicable).

3. Grant Request.

The fourth grade teachers at Greenvale Park and Principal Craft are submitting a \$30,000 grant request to the McCarthy Dressman Education Foundation to assist them in transforming their instruction in science and critical thinking. The grant application form is enclosed.

February 28th, 2017
NHS Flexible Learning Day

With input and approval from Superintendent of Schools, Dr. Matt Hillmann, Northfield High School staff will be implementing a flexible learning day on Tuesday, February 28th, 2017.

Two events occurring on that day led to consideration of an alternative learning day:

- All juniors at NHS are scheduled to take the ACT. This will involve juniors and test proctors participating in testing periods 1-5 on that day.
- All seniors are slated to participate in Senior Capstone Idea Generator Day.

Both of these events require a significant number of staff and a significant number of building spaces to facilitate. As a result, HS administration and department chairs agreed on a flexible learning model for that day. In brief:

- 9th and 10th graders will not be required to report to school that day. Instead, teachers will develop flexible learning lessons that students will be able to access through hard-copy and online resources.
- 11th graders will complete the ACT. No additional learning will be assigned for juniors. Our collective belief is that the ACT is sufficient demand on student's cognitive capacity.
- 12th graders will attend the Idea Generator Day from 8-11, and then will be dismissed for the day. Additional flexible learning will be assigned similar to 9th/10th graders.

Additional Points to Consider:

- Staff will consider limitations to online access for students.
- Staff should consider the days leading up to the 28th as an opportunity to prepare students for flexible learning.
- Supervised HS facilities will be available for any students who need a place to study.
- Lunch will be available.

An unintended benefit:

Each year, departments look for days to gather for curriculum planning and review, and various necessary trainings. At issue with those types of meetings is that it pulls entire departments away from students during a typical school day. The 28th will allow us to have a full-day curricular meeting for mathematics, and a ½ day meeting for language arts, as well as a training for special education staff.

NORTHFIELD HIGH SCHOOL
1400 Division Street South
Northfield, MN 55057
PH 507.663.0630 • FAX 507.645.3455
www.nfld.k12.mn.us

To: Human Resources
From: Tom Graupmann
Date: February 13, 2017
RE: Event Workers (Job ID #1526)

I recommend for hire all individuals listed below:

Johnson	Nancy
---------	-------

Grant Application Approval Form

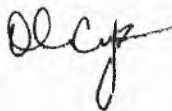
Date: February 9, 2017

Any proposal submitted to an external funding source that involves any entity within the Northfield Public Schools must be approved by the School Board before the proposal is submitted. This form will accompany all requests to the School Board and will be filed along with a copy of the completed grant proposal. All proposals must:

- Support the District's mission and goals.
- Be financially feasible and supported by all affected District departments or buildings.
- Demonstrate collaboration and commitment from the District, if required.

Grant Proposal Information	
Project Title	Teacher Development Grant
Project Period	From: August 1, 2017 To: July 31, 2020
Funding Source	
Application Deadline	ASAP - Applications will no longer be accepted once McCarthy Dressman Foundation has received 350 submissions
List all Grant Applicants	David D. Craft, Alisha Clarey, Kimbra Dimick, Robert Garcia and Sheila Hetzel
School/Department	Greenvale Park Elementary School
Contact Person	David D. Craft, principal Phone No. (507) 645-3500
Project Information	
Brief Proposal Description	Collectively, we feel our instruction in science and critical thinking has been very traditional. We are motivated to transform our teaching in these areas. This grant will empower us to develop our teaching skills using inquiry and project-based learning. Students will experience: *exploration skills that may become lifelong hobbies *increased motivation, experience, and desire for girls in science and math *utilize 21 st Century skills, giving them an advantage in the work force *experience real-world science connections.
Project Goal (in one Sentence)	To transform our teaching in science and critical thinking and to empower us to develop our teaching skills using inquiry and project-based learning.
List All Personnel Involved in Application	David D. Craft, Alisha Clarey, Kimbra Dimick, Robert Garcia and Sheila Hetzel
Budget Information	
Amount Requested	\$10,000/year in 2017, 2018 and 2019 (\$30,000 total)
Matching Funds	<input type="checkbox"/> Are Required <input checked="" type="checkbox"/> <u>Not Required</u>
Source of Matching Funds	Not Applicable

Required Documents Attached: Completed Application Rough Draft Summary of Application



Project Initiator Signature



Building Principal or District Administrator Signature

Approved by the School Board

Not Approved by the School Board Date _____

**McCarthy Dressman Education Foundation Grant Application
Greenvale Park Elementary School**

Describe your project and how it will contribute to the development of participating teachers.

Collectively, we feel our instruction in science and critical thinking has been very traditional. We are motivated to transform our teaching in these areas. This grant will empower us to develop our teaching skills using inquiry and project-based learning.

We will begin by implementing critical thinking using our existing Professional Learning Communities (PLC) structure in our curriculum. We will use creative and critical thinking to enhance our students' reading comprehension, creativity, and problem solving in science, technology, engineering and math (STEM). As a part of our science instruction, we will use LittleBits Electronics Kits and K'Nex Motion & Design Kits to enhance student learning through inquiry. This will make the instruction of science more student-driven and project-based and less dependent on the teacher lecture and textbook instruction. It will foster more independent and creative problem solving, critical thinking, and cooperative group work.

In year one, students will document their learning and growth through a video documentary. This will include mistakes they made, lessons they learned, and a reflection on the engineering and design process. To incorporate creative and critical thinking throughout the school day, we will use the Jacob's Ladder Curriculum to enhance our reading and writing curriculum. This curriculum targets reading and writing from many different genres while students' progress through questions of increasing complexity and intellectual demand. Students respond with high-level written responses. To integrate science, reading, and writing, students will use their writing skills and new knowledge of engineering and design by presenting an engineering idea to an engineering company. As an additional activity, students will visit the Minnesota Science Museum and attend a design workshop.

In year two, we will expand this process by hosting an engineering fair where students will share their video documentaries project, using LittleBits and K'Nex kits, and their design process with the upper grades. Students will again refine their writing skills by presenting engineering and design ideas to engineering companies.

In year three, students will share will share their video documentaries project, using LittleBits and K'Nex kits, and their design process at a school-wide engineering fair. Again, students will refine their writing skills by presenting engineering and design ideas to engineering companies. As an additional activity, students will visit the Minnesota Science Museum and attend a design workshop.

Please provide at least two references (models, books, or research citations) related to your project.

1. William & Mary, (School of Education, Williamsburg, VA):
<https://education.wm.edu/centers/cfge/curriculum/languagearts/materials/jacobsladders/index.php>
2. LittleBits Electronics Kits Defy Conventions, (The Wall Street Journal):
<http://www.wsj.com/articles/littlebits-electronics-kits-defy-conventions-1456110329>

3. Critical Thinking Skills Among Elementary School Students, (Todd Kettler, College of Education, Department of Educational Psychology, University of North Texas, Denton): <http://gcq.sagepub.com/content/58/2/127.short>

4. The Effects of the Problem Based Learning Approach on High Order Thinking Skills in Elementary Science Education, (Derya Cinar and Sule Bayraktar, Selcuk University, Turkey): https://www.researchgate.net/profile/Alexandro_Escudero/publication/235609805_The_trouble_of_cultural_values_in_science_education_towards_the_construction_of_the_european_model_of_science_in_society/links/5453bb520cf2cf51647c220b.pdf#page=279

5. Robotics to Promote Elementary Education Pre-Service Teachers' STEM Engagement, Learning, and Teaching, (ChanMin Kima, Dongho Kima, Jiangmei Yuana, Roger B. Hilla, Prashant Doshib, Chi N. Thaic): <http://www.sciencedirect.com/science/article/pii/S0360131515300257>

6. Our Brains Extended, (Marc Prensky): <http://eric.ed.gov/?id=EJ1015404>

Describe your school organization and team of teachers who the teachers who will participate include pertinent school demographics. Be specific.

Transnational communities are migrant populations living in a country other than their country of origin with strong ties to their home country. The surrounding community of Greenvale Park has a large rural transnational population. Approximately 70% or more are from Obscuridad and its vicinity in Veracruz, Mexico. This significantly impacts Greenvale Park Elementary (GVP) and student achievement.

David D. Craft: GVP principal since 2007; former principal, Sibley Elementary, Albert Lea from 2004–2007; former assistant principal, Willard Elementary School; Minneapolis Award for quality and effective instruction recipient; former gifted/talented teacher and classroom teacher; B.S. elementary education and M.S. curriculum and instruction, Saint Cloud State University; and K-12 Educational Administration Licensure, Saint Mary's University.

Alisha Clarey: Teacher for 13 years; M.S.: Differentiating Instruction in the Regular Classroom, St. Mary's University; gifted and talented coordinator at Shakopee Schools.

Kimbra Dimick: Teacher for five years; M.S.: Literacy Education, Hamline University; K-12 Reading License.

Robert Garcia: Teacher for 10 years in Minnesota and Texas; B.S.: North Dakota State; served as the Talented Coordinator in El Paso; currently teaches 4th grade Spanish Immersion section.

Sheila Hetzel: Teacher for 13 years in Minnesota and Wisconsin; M.S.: Curriculum and Instruction, Carroll University; teacher of grades 3, 4 and 5.

Describe how your project meets these criteria: *Will differ from your teaching in the past *Will improve instruction *Will contribute to the development of teachers *Will increase student learning.

Students will experience:

- *exploration skills that may become lifelong hobbies
- *increased motivation, experience, and desire for girls in science and math
- *utilize 21st Century skills, giving them an advantage in the work force
- *experience real-world science connections

We will transform our teaching and provide a common language when discussing student achievement on critical thinking tasks. It will provide materials that promote science/technology/engineering/math for students to use in a creative/hands-on approach. It will also enhance creative/critical thinking within our reading curriculum. We will have common data to share at our Professional Learning Communities (PLC) and will challenge students.

LittleBits has 10 lessons. Two help students develop foundation knowledge of the Bits/Invention Cycle and eight provide companion materials for using the Invention Cycle to execute the Invention Guide challenges in formal learning settings.

Our 4th grade teachers are using LittleBits within existing curriculum to investigate electrical properties. Students create flashlights, test different conductivity materials, create energy transfer circuit, learn about energy conservation and the conversion/loss of energy to heat. LittleBits supplements existing curriculum. Students investigate circuits and engineering practices to design projects. This curriculum supplement enriches science curriculum with hands-on projects. Activities are linked to Next Generation Science Standards.

Inquiry, Reflection, Documentation *What questions will guide your learning? *In light of your questions, how will you document teachers' learning? *In light of your questions, how will you document students' learning?

Guiding student learning, we will use our Professional Learning Communities(PLCs) questions:

1. What do we want students to learn?
2. How do we know they have learned?
3. What do we do about the students who have not learned it?
4. What do we do about the students who have learned it?

As a team, we will create/implement common formative/summative assessments during teacher development/collaborative time.

Levels of Questioning in Reading and strategies for solving/thinking Stages of the Invention Cycle/Problem-Solving/Cooperative Group Work: This link provides an overview of Next Generation Standards that can be met by/extended to meet, specific STEAM Student Set challenges. Information on fulfilling performance expectations and suggestions for integrating Common Core standards in English Language Arts/Literacy/Mathematics, are in the 19-page document including LittleBits lessons:

https://d3ij2l1dyojfer.cloudfront.net/pdf/STEAM+Student+Set/STEAM-Student-Set-NGSS-Connections-0_9.pdf

We will use the Jacob's Ladder assessment data from our Professional Learning Communities.

1. How does one invention lead to other inventions?
2. What is the engineering/design process?
3. Can the engineering/design process be used to solve everyday problems?
4. What's an electric current?

The National Science Education Standards(NSES) guidelines for K-12 science education in U.S. schools. This link provides National Science Education Standards: <http://www.csun.edu/science/ref/curriculum/reforms/nses/nses-complete.pdf> Those guiding us: NSE4.1.3.3.1--NSE4.1.2.2.3--NSE4.1.2.2.2--NSE4.1.2.2.1--PS4.2.3.2.2

Describe the product(s) you will use to disseminate this project to other groups of teachers. (Examples: teachers' reflective journals, set of lesson plans, DVD, power point, etc.)

1. We will share our lesson plans, Professional Learning Communities (PLC) data and additional insights and lessons learned with the Greenvale Park Elementary School staff.
2. We will develop a digital time lapse of students in action with the Greenvale Park Elementary School staff.
3. We will also share this information and additional information to the McCarthy Dressman Education Foundation during the grant period and in a final grant report to the foundation.

Describe your plan to implement the project, including timelines and specific projects.

During the summers, we will meet as a team to establish baseline data based on 5th grade Science MCA scores. We will also plan, create, and modify learning targets and objectives for both science and literacy. We will create assessments and lay out a scope and sequence for the year, based on the National Science Education Standards and English Language Arts Common Core Standards.

During the school year, we will implement Jacob's Ladder curriculum as part of our literacy block. As part of our weekly meeting, we will spend part of our time discussing and analyzing student assessment data.

McCarthy Dressman: Online Applications

Project Budget

Budget Year	Type	What will the money be used for?	How are these expenses related to your program?	When will the money be spent?	Amount needed	
1	Stipends	Teacher development and collaborative time to plan and implement this project. Summer 2017.	Directly related to both the Reading and Math Instruction components of our grant request.	August 1 2017	\$3,200.00	Edit Delete
1	Materials	Minnesota Science Museum educational field trip experience for Greenvale Park Elementary grade 4 students.	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM). The allow our grade 4 students to have hands-on applied learning experiences related to science/technology/engineering/math (STEM)education.	September 1 2017	\$2,000.00	Edit Delete
1	Materials	Miscellaneous Supplies	Additional supplies that may be needed and directly related to both the Reading and Math Instruction components of our grant request.	August 1 2017	\$246.68	Edit Delete
1	Materials	One K'Nex Replacement Kit	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM).	August 1 2017	\$278.95	Edit Delete
1	Materials	Three K'Nex Motion & Design Kits	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM).	August 1 2017	\$3,890.85	Edit Delete
1	Materials	Three Jacob's Ladder level 2 books and one level 2 book and PDF set	Directly related to Reading Instruction to enhance student reading comprehension.	August 1 2017	\$191.76	Edit Delete
1	Materials	Three Jacob's Ladder level 1 books and one level 1 book and PDF set	Directly related to Reading Instruction to enhance student reading comprehension.	August 1 2017	\$191.76	Edit Delete
Total Year 1 Budget:					\$10,000.00	
2	Materials	Digital Educational iPad Apps (Applications)	Directly related to both the Reading and Math Instruction components of our grant request.	August 1 2018	\$404.00	Edit Delete
2	Stipends	Teacher development and collaborative time to plan and implement this project. Summer 2018.	Directly related to both the Reading and Math Instruction components of our grant request.	August 1 2018	\$1,600.00	Edit Delete
2	Materials	LittleBits Workshop Set	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM).	August 1 2018	\$7,996.00	Edit Delete
Total Year 2 Budget:					\$10,000.00	

3Materials	Miscellaneous Supplies	Additional supplies that may be needed and directly related to reporting findings and outcomes to Greenvale Park Elementary staff and McCarthy Dressman Education Foundation.	August 1 2019	\$103.05	Edit Delete
3Stipends	Grade 4 teacher team developing and reporting to Greenvale Park Elementary staff and McCarthy Dressman Education Foundation. Sharing of lesson plans, Professional Learning Communities (PLC) data, digital time lapse of students in action and additional outcomes from this project.	Directly related to both the Reading and Math Instruction components of our grant request. Allows staff time to compile outcomes learned and share widely for others to use and learn from.	August 1 2019	\$1,000.00	Edit Delete
3Materials	STEAM/STEM Workshop & Seminars for grade 4 teacher team	Directly related to both the Reading and Math Instruction components of our grant request.	August 1 2019	\$4,000.00	Edit Delete
3Materials	One K'Nex Motion & Design Kits	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM).	August 1 2019	\$1,296.95	Edit Delete
3Materials	Minnesota Science Museum educational field trip experience for Greenvale Park Elementary grade 4 students.	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM). The allow our grade 4 students to have hands-on applied learning experiences related to science/technology/engineering/math (STEM)education.	August 1 2019	\$2,000.00	Edit Delete
3Stipends	Teacher development and collaborative time to plan and implement this project. Summer 2019.	Directly related to Science Instruction to enhance problem solving in science/technology/engineering/math (STEM).	August 1 2019	\$1,600.00	Edit Delete
Total Year 3 Budget:				\$10,000.00	