

Integrating iPads for a Healthy Future

Collaborative Classroom Grant Application

Castle Rock Middle School

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Billings, 59105

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Application Form

Report Fields

Project Name*

Name of Project

Integrating iPads for a Healthy Future

Amount Requested

Amount Requested

\$2,718.88

Grade Level

Program Area of Request

Middle School (7-8)

Primary Subject Area

Please choose the primary subject area.

Health/PE

School

Please select your school.

Castle Rock Middle School

Applicants*

Please list the educators collaborating on this grant.

Dan Bosch
Michelle Rieter
Randy Chase

Number of Students Served

Please enter the number of students that will be served by this grant.

777

Project Cost

What is the total cost of your project?

2718.88

Statement of Need

Please describe the need for this project. For example, how will this project impact student learning?

The Common Core State Standards (2012) outline rigorous content expectations with the intent to make all students ready for life in a technological society. Our students are 21st Century learners and are a part of the digital age where technology is a part of their everyday lives. We need to continue to change and improve our teaching strategies if we want to engage these students to learn the skills needed to maintain healthy behaviors for life.

Using iPad technology in the classroom can be a powerful tool for learning and comprehension. The interactivity it provides can make for a very engaging experience. Early initiation of healthy behaviors is essential for students to get into positive habits as they become adults. As students move into real world situations, their overall health and well-being becomes a top priority. The potential of what can be done with these iPad is virtually limitless. By incorporating this type of technology into our current curriculum, students might even start changing their health habits outside of school. They may even share these ideas with their families. Every teacher in our department has two separate teaching spaces, so the portability of the iPads makes for a perfect fit.

We would be using this technology on various occasions, from QR codes for workout stations to the nutrition unit in the classroom. Our nutrition information and other topics found in our textbook are completely outdated. That leaves us to find supplemental materials to accomplish our curriculum goals and finding good resources can be challenging. The iPads can give us the ability to find and present the information to our students in a multitude of formats other than just lecture.

Primary Goal

Please describe the primary goal of the project and how it blends with School District 2 goals and curriculum.

The primary goal of "Integrating iPads for a Healthy Future" is to give kids the opportunity to see that the technology they use everyday can actually be used to enhance their overall health. By using many of the iPad apps related to health, students can make better nutritional choices, monitor their weight goals, receive personalized motivation, and stream a variety of workouts, just to name a few. This idea perfectly blends with School District #2 technology standards of having students use digital tools and resources for problem solving and decision-making. As stated in the Montana Health Enhancement K-12 Content and Performance Standards: Health is essential to a quality of life and leads directly to improved learning. Health Enhancement develops skills and behaviors necessary for students to become healthy, productive citizens who take personal responsibility for their own well-being. This could lead to higher graduation rates and more well rounded young adults.

Project Description

Briefly identify the major activities and materials involved in your project.

Computers allowed students to word process rather than type, to do media presentations instead of show and tell, to find information on the Internet instead of encyclopedias, and to graph data electronically instead of with magic markers. Teachers depend on computers to do the same, as well as using interactive whiteboards to increase the effectiveness of presentations. The iPad can do all these things, along with many other capabilities, and it is super portable, and that might make all the difference (Ben Johnson HS Principal, consultant, author and instructional learning coach, July 9, 2012).

"The bottom line is that these iPads and similar tools actually do make a difference," said physicist Matthew Schneps, a founding member of the Science Education Department at the Harvard-Smithsonian Center for Astrophysics in Massachusetts, December 10, 2013.

A study at Oklahoma State University concluded that 75% of students agreed that the iPad enhanced their learning experience (May 3, 2011).

The CRMS Health Enhancement department would like to apply for a grant to purchase a small classroom set of 15 iPad minis, cases and related apps. Apps can be distributed to five different iPads, so we would need to purchase each app three times so that they will be available on all the iPads. These tools would be used to further enhance our current classroom activities and fitness programs. Every student in our building is involved in our Health Enhancement program, which makes for an impactful project. The use of iPads in the Health room and the gymnasium has a plethora of potential benefits. Our classroom textbooks contain many incorrect facts simply due to the age of our textbooks (they are older than our students, copyright 1999). It is pertinent that we continually update information as it changes often in our curriculum area. Many of us already use interactive teaching strategies (such as the mimio teach), however this method only allows for one student to interact at a time. Having a department set of iPads, would allow students more one on one time with the actual device. We want to be able to provide students with experiences that they can use outside of the classroom and Health Enhancement truly lends itself perfectly to that idea.

Health Enhancement often gets overlooked when it comes to technology. I think there is a perception that we just roll out the basketballs or handout worksheets. It is quite the opposite at Castle Rock. We pride ourselves in offering our students many opportunities to be active in different ways and really show students how each topic that we cover is related to real world situations. Our department's goal is to help students see how important lifetime health and fitness is and those habits are created now. Using iPads in class, just helps emphasize our vision. These iPad's would be used weekly by each of us in different capacities. This is a collaborative grant, the following people will be part of this grant: Randy Chase, Dan Bosch, and Pam Walz I have attached a copy of sample lesson plans for both the classroom and the gymnasium.

Professional Development

If your project includes professional development how will it improve student performance?

We will use the time already set aside for our PLC's to work on set-up and implementation of this project. We will also work on lessons individually and share them with one another. Four people in our department are TILT (Teachers Integrating and Learning Technology) members, one was also involved in the IT=EC program, and several of us are part of our school's technology planning team. We are all eager to continue our technology journey. We each love learning and trying new things. Therefore, we won't utilize any of the grant money for professional development but rather put it all directly toward tools that will impact student learning.

Project Timeline

When will you implement your project?

We would implement this program immediately upon funding approval. This project will only continue to grow as more apps related to health and fitness become available.

Plan for Evaluation

How will you evaluate student outcomes for your project?

In the gymnasium: We would evaluate our program through student feedback and bi-annual standardized fitness assessments that align with the national standards. We will use the scores to determine if students fitness levels are improving from the beginning of the school compared to their fitness levels at the end of the school year.

In the classroom: We would compare our common assessment scores with students from previous years that did not have access to the iPads to our students that used the iPads to enhance their learning.

Project Budget

Please explain how the funds from this grant will be spent to support your project goal. You can either type or upload a project budget to show how funds will be used. Please identify other funding sources if applicable.

Workbook1.xlsx
7-iPad minis (16GB) \$2100.00
(priced between 297.75 and \$301.98)
7-OtterBox Defender Series for Apple iPad Mini \$419.93
Apple Lightning to VGA Adapter \$48.95
Related apps \$150.00

Total \$2718.88

Supervisor Approval*

I have received approval from my supervisor to apply for this grant.

yes

Attachment 1

Please attach any photos, pages from catalogs, or other documents below. This is completely optional.

pictures.docx

Attachment 2

Dembones.docx

Attachment 3

Fooducate_Worksheet_2012-08-14_Verbal.pdf

File Attachment Summary

Applicant File Uploads

- Workbook1.xlsx
- pictures.docx
- Dembones.docx
- Fooducate_Worksheet_2012-08-14_Verbal.pdf

Name of App	Cost
ECGinMotion HD	\$18.99
Gorilla Workout	\$0.99
HIIT Timer	\$1.99
Vital Signs Camera	\$0.99
ITGO Interval Trainer	\$3.99
Power Music Hour	\$0.99
muscle and bone anatomy 3D	\$4.99
Foodle	\$2.99
Circulatory, Digestive, Reproductive System	\$1.99
Dr. Frankenstein's Body Lab	\$2.99
Skeletal Anatomy #D	\$2.99
The Human Body	\$2.99
Spin it	\$1.99
AFIT Pro	\$4.99
Pregnancy sprout	\$3.99
whack a bone	\$2.99
Buzz monster	\$5.99
Fooducate	free
Total	\$66.83

Brief Description

a look inside a beat heart, heart attach animation
no equipment grouping of 40+ exercises
customized timer for interval training
Measures your heart rate and breathing rate from a distance
customized timer for interval training
customized music for interval training
actions, models, quizzes
nutrition at your finger tips
ready made lesson and assessments
5 body system game
quiz, video, diagrams
a look inside the body
random exercise and activity generator
teaches the importance of nutrition and physical activity
color images and 3D models
bone anatomy
multiplayer game
Dietian at your finger tips

Grade/Chapter App will be used

7th/Chapter 5 and 8th/Chapter 8

7th and 8th/ Throughout the year

7th and 8th/ Throughout the year

7th and 8th/ Throughout the year

7th and 8th/ Throughout the year

7th and 8th/ Throughout the year

7th/Chapter 5

7th/Chapter 4

7th/Chapter 4-5 and 8th/Chapter 10

8th/Chapter 10

7th/Chapter 5

7th/ Chapter 4, 5, 10 and 8th/Chapter 10

7th and 8th/ Throughout the year

7th and 8th/ Throughout the year

8th/Chapter 7

7th/Chapter 5

7th and 8th/ Throughout the year

7th/Chapter 4



OtterBox Defender Series Case for iPad mini - Black by OtterBox

~~\$69.95~~ **\$59.99**

In Stock

More Buying Choices

\$59.99 new (5 offers)

\$44.42 used (4 offers)

★★★★☆ (2,214)

Product Features

... over the front or back of the *iPad mini* and doubles as a stand to view ...

Electronics: See all 31,124 items



Apple iPad Mini MD528LL/A (16GB, Wi-Fi, Black & Slate) by Apple

~~\$329.00~~ **\$300.00** Prime

Order in the next **4 hours** and get it by
Wednesday, Feb 26.

Only 6 left in stock - order soon.

More Buying Choices

\$280.00 new (155 offers)

\$229.98 used (102 offers)

★★★★☆ (1,497)

Trade in this item for an Amazon.com Gift Card

Product Details

- 2.4 GHz Apple A5
- 1 GB DDR2 SDRAM
- 16 GB Serial ATA
- Apple iOS 6

Electronics: See all 568,903 items



Apple Lightning to VGA Adapter by Apple

~~\$49.00~~ **\$48.95**

In Stock

More Buying Choices

\$34.95 used (8 offers)

★★★★☆ (103)

Product Features















Apple Lightning to *VGA Adapter*

Electronics: See all 552 items

Lesson Plan for Teaching the Human Skeleton Using QR Codes and Ipad

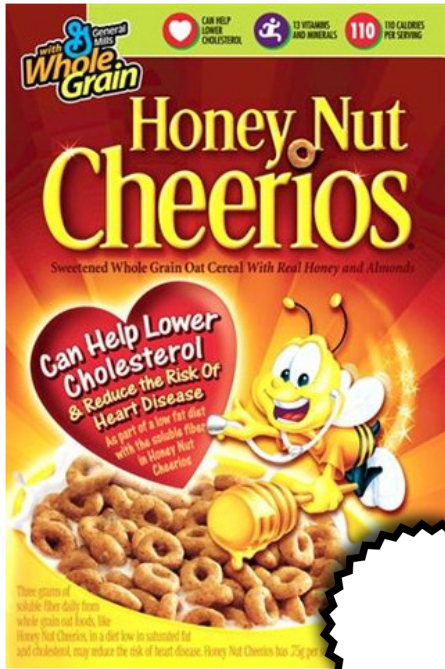
A human skeleton model in the classroom has to undertake a little update and the bones have to be affixed with QR codes that when scanned, reveal the name of the underlying bone. Once the activity has been explained, the students set about scanning and revealing, scanning and revealing, scanning and revealing until they can identify the 20 key bones in the human skeleton via scientific name. The next step is to play 'Skeletal Bingo' which the kids run for each other. Basically, the kids write down in a 4X4 grid 16 different bone names. The caller then points to bones and if students has that bone in their list, they cross it off. Eventually, there is a bingo and to prove they know their bones, they have to identify them in front of the class by revealing the bones using the QR code reader.

Attached are the codes used:

 Carpals	 Clavicle	 Cranium	 Femur
 Fibula	 Humerus	 Mandible	 Meta-Carpals
 Meta-Tarsals	 Patella	 Phalanges	 Radius
 Scapula	 Sternum	 Tarsals	 Tibia
 Ulna	 Vertebrae	 Ribs	

Let's Get Fooducated!

Product:



Ingredient List:

Ingredients: Whole Grain Oats (includes the oat bran), Sugar, Modified Corn Starch, Honey, Brown Sugar Syrup, Salt, Tripotassium Phosphate, Canola and/or Rice Bran Oil, Natural Almond Flavor. Vitamin E (mixed tocopherols) Added to Preserve Freshness.

Vitamins and Minerals: Calcium Carbonate, Zinc and Iron (mineral nutrients), Vitamin C (sodium ascorbate), A B Vitamin (niacinamide), Vitamin B₆ (pyridoxine hydrochloride), Vitamin B₂ (riboflavin), Vitamin B₁ (thiamin mononitrate), Vitamin A (palmitate), A B Vitamin (folic acid), Vitamin B₁₂, Vitamin D₃.
CONTAINS ALMOND; MAY CONTAIN WHEAT INGREDIENTS.

Nutrition Facts:

Nutrition Facts	
Serving Size 0.75 cup (28g)	
Serving Per Container 12	
Amount Per Serving	
Calories 110	Calories from Fat 15
% Daily Values*	
Total Fat 1.5g	2%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Potassium 115mg	3%
Sodium 160mg	7%
Total Carbohydrate 22g	7%
Dietary Fiber 2g	8%
Sugars 9g	
Protein 2g	4%
Vitamin A 10%	• Vitamin C 10%
Calcium 10%	• Iron 25%
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2400mg 2400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Nutrition Grade

1. Look at the product above. Read the ingredient list and nutrition facts.

<p>2. What are good things about this product?</p> <hr/> <hr/> <hr/> <hr/>	<p>3. What are bad things about this product?</p> <hr/> <hr/> <hr/> <hr/>
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4. What nutrition grade should this product get? (examples: A, B+, C-) Write the grade in the Nutrition Grade circle above.

5. What do you think is a healthier alternative to this product? _____



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Product:



Ingredient List:

TOMATO CONCENTRATE FROM RED RIPE TOMATOES, DISTILLED VINEGAR, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP, SALT, SPICE, ONION POWDER, NATURAL FLAVORING.

Nutrition Facts:

Serving Size 1 Tbsp (17g)
Serving Per Container 60

Amount Per Serving	
Calories 20	
	% Daily Values*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 4g	1%
Dietary Fiber 0g	0%
Sugars 4g	
Protein 0g	0%

Vitamin A 1% • Vitamin C 2%

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Look at the product above. Read the ingredient list and nutrition facts.

<p>2. What are good things about this product?</p> <hr/> <hr/> <hr/> <hr/>	<p>3. What are bad things about this product?</p> <hr/> <hr/> <hr/> <hr/>
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Product:



Nutrition Grade

Ingredient List:

Carbonated Water, High Fructose Corn Syrup, Caramel Color, Phosphoric Acid, Natural Flavors, Caffeine

Nutrition Facts:

Serving Size 1 can (12g)
Serving Per Container 1

Amount Per Serving

Calories 140

% Daily Values*

Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 45mg	2%
Total Carbohydrate 39g	13%
Dietary Fiber 0g	0%
Sugars 39g	
Protein 0g	0%

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Look at the product above. Read the ingredient list and nutrition facts.

2. What are good things about this product?

3. What are bad things about this product?

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Let's Get Fooducated!

Product:



Nutrition Grade

Ingredient List:

Enriched Flour (Wheat Flour, Niacinamide, Reduced Iron, Thiamin Mononitrate [Vitamin B1], Riboflavin [Vitamin B2], Folic Acid), Corn Syrup, High Fructose Corn Syrup, Dextrose, Vegetable Oil (Soybean, Cottonseed and Hydrogenated Cottonseed Oil (Less than 0.5 g Trans Fat per Serving) with TBHQ and Citric Acid for Freshness), Sugar, Cracker Meal, Contains Two Percent or Less of Wheat Starch, Salt, Dried Strawberries, Dried Apples, Dried Pears, Cornstarch, Leavening (Baking Soda, Sodium Acid Pyrophosphate, Monocalcium Phosphate), Citric Acid, Milled Corn, Modified Wheat Starch, Gelatin, Caramel Color, Partially Hydrogenated Soybean and/or Cottonseed Oil (Less than 0.5 g Trans Fat per Serving), Modified Corn Starch, Xanthan Gum, Soy Lecithin, Color Added, Niacinamide, Reduced Iron, Red No. 40, Vitamin A Palmitate, Yellow No. 6, Pyridoxine Hydrochloride (Vitamin B6), Riboflavin (Vitamin B2), Thiamin Hydrochloride (Vitamin B1), Folic Acid, Turmeric Color, Blue No. 1.

Nutrition Facts:

Nutrition Facts																													
Serving Size 1 pastry (52g)																													
Serving Per Container 8																													
Amount Per Serving																													
Calories 200	Calories from Fat 45																												
% Daily Values*																													
Total Fat 5g	8%																												
Saturated Fat 2g	10%																												
Trans Fat 0g																													
Polyunsaturated Fat 2g																													
Monounsaturated Fat 1g																													
Cholesterol 0mg	0%																												
Sodium 170mg	7%																												
Total Carbohydrate 38g	13%																												
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Vitamin A 10%	●																												
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	<table border="1"> <thead> <tr> <th></th> <th>Calories</th> <th>2,000</th> <th>2,500</th> </tr> </thead> <tbody> <tr> <td>Total Fat</td> <td>Less than</td> <td>65g</td> <td>80g</td> </tr> <tr> <td>Sat Fat</td> <td>Less than</td> <td>20g</td> <td>25g</td> </tr> <tr> <td>Cholesterol</td> <td>Less than</td> <td>300mg</td> <td>300mg</td> </tr> <tr> <td>Sodium</td> <td>Less than</td> <td>2400mg</td> <td>2400mg</td> </tr> <tr> <td>Total Carbohydrate</td> <td></td> <td>300g</td> <td>375g</td> </tr> <tr> <td>Dietary Fiber</td> <td></td> <td>25g</td> <td>30g</td> </tr> </tbody> </table>		Calories	2,000	2,500	Total Fat	Less than	65g	80g	Sat Fat	Less than	20g	25g	Cholesterol	Less than	300mg	300mg	Sodium	Less than	2400mg	2400mg	Total Carbohydrate		300g	375g	Dietary Fiber		25g	30g
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Let's Get Fooducated!

Product:

Ingredient List:

Nutrition Facts:



SUGAR, UNBLEACHED ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE {VITAMIN B1}, RIBOFLAVIN {VITAMIN B2}, FOLIC ACID), HIGH OLEIC CANOLA AND/OR PALM OIL, COCOA (PROCESSED WITH ALKALI), HIGH FRUCTOSE CORN SYRUP, CORNSTARCH, LEAVENING (BAKING SODA AND/OR CALCIUM PHOSPHATE), SALT, SOY LECITHIN, VANILLIN-AN ARTIFICIAL FLAVOR, CHOCOLATE. CONTAINS: WHEAT, SOY.

Serving Size 3 cookies (34g)
Serving Per Container 15

Amount Per Serving		% Daily Values*	
Calories 160		Calories from Fat 60	
Total Fat 7g			11%
Saturated Fat 2g			10%
Trans Fat 0g			
Cholesterol 0mg			0%
Sodium 160mg			7%
Total Carbohydrate 25g			8%
Dietary Fiber 1g			4%
Sugars 14g			
Protein 1g			2%
Calcium 2%		Iron 10%	



* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
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