

INSTRUCTIONAL TECHNOLOGY GRANT PROPOSAL

Name of Applicant: Brandy Beavers

District/School: Walker County/North LaFayette Elementary

Date: April 18, 2019

Total Cost of Project: \$1,063.94

Title of Project: Hearts on Fire for Physical Education

To what organization will you submit this grant application in the future?: Donors Choose

- I. Why is this project important (In 2-3 paragraphs, describe the need for the project and its relevance to the shared vision for instructional technology)?

This year, in my first year teaching Physical Education, I have been reminded of all of the standards and content that PE truly involves. I have been going through all of the standards, and teaching them to

the best of my ability. However, when it came time to complete the Fitness Gram Assessment, which includes students in grades K-5, I was shocked to see how out of shape some of my students truly were. Why couldn't I have seen this sooner? Why am I not doing my part to make sure that these students are in shape and can succeed on this assessment? These questions were hard for me to answer, because I had thought that I was doing a great job. When looking at next year, I see many things that I will be changing in my daily routine.

My students are not truly aware of what the activities that we are doing in PE can help them with. Some of my standards include that the students must be able to understand what activities will make their heart rate go up, go down, or stay the same. It has really been eye opening to see how many students do not understand that their heart rate is changing at all. These same students are also not aware of the calories that they are taking in, how many calories we are burning in class, etc. I have noticed from these observations that I need to be including more health aspects into my lessons. Therefore, next year I will be integrating a weekly health lesson into my plans.

I would like to be able to purchase a small group amount of heart rate monitors for my PE classes. Although I do have more students than 13, I feel like this would be a great starting point to be able to use these in class. I could use a small group of students to be able to complete an activity with them, chart some numbers with heart rate, and then the next day complete another activity to compare/contrast the levels that the students were able to get. Then, we could discuss what those numbers mean. Is it good that my heart rate went up during that activity? What made it go up? Does it always do that? Students could be more convinced into the teaching that I will be doing if they can see the numbers that they are creating on these monitors by completing the activities that they are completing.

As our school continues to grow in the area of instructional technology use, I believe that this would be a great way to integrate technology into an area of the school that may not see technology very much. It would be great to show students that they can use technology everywhere, even in PE.

II. What would you like to accomplish (In 2-3 paragraphs, describe the project and list instructional objectives/project outcomes.)?

In PE, I normally have two complete classes of students at one point. I know that thirteen heart rate monitors would not be enough to use for the entire class, however, I would use these heart rate monitors as a small group. I would complete an activity with the groups one day (in station format), and record our numbers. The next day, I would do a different activity with the groups (also in station format), and compare/contrast the numbers to the numbers that we had the day before. This will show students that different exercises will have different effects on our heart rates. I would also like to use these heart rate monitors when we run on “Mileage Monday.”

When looking at the long term, I would hope that students are able to understand their heart rate, what it means, and how to make it go up or down with certain exercises. Since this is part of the standards that they are learning, I believe that seeing this technology in use will help put a “real life perspective” on heart rate. They may understand the specifics better if they are seeing it put to use.

III. In what ways is this project an example of exemplary technology integration (In 2-3 paragraphs discuss your project regarding one or more of the following: LoTi, SAMR, TPACK, TIM, etc.)?

This project could greatly reach to higher levels in the LoTi. I can see this project reaching a level 5 on the LoTi indicators. Students will be able to collaborate with other peers and mentors about their findings when using the heart rate monitors. Not only can we share our findings by talking, we can also create bulletin boards in the school with healthy facts about food, heart rate, etc. This will help present this information to others. This information is very important, meaningful, and useful to others. This project can be both problem based and practice based, depending on how the activities are set up. Also, it can be both teacher directed and student directed, depending on how the teacher will present the information.

When looking at TPACK, students are using all three areas to complete this project. They will be using their content knowledge about the lessons we have been learning about heart rate to decide what is a high rate and what is a low rate. They can also use their technological knowledge to find out how to properly use the heart rate monitors, and how to display specific information on them. They can use their pedagogical knowledge by teaching others about their findings, and what those findings could mean.

IV. How will you complete the work? (Describe how the project will be completed.)

A. Describe how the instructional objectives/project outcomes will be met (2-3 paragraphs).

In small group setting, we will complete activities that both raise and lower the heart rate when they are being completed. We will use games that we play on a regular basis so that the students can see what these games are doing to our heart rate each time that we play them. Are these games good or bad for our heart rate? Students will learn to understand that it is good for our heart rate to fluctuate at times.

We will continue to work on our standards that we work on daily, but we will do this with instructional technology use as well. We will wear the heart rate monitors to decide which activities we need to be doing each day in order to maintain our overall wellness.

Students who are not using the heart rate monitors at that time will be able to complete another activity, so that they are able to stay busy while the groups are finishing up. It is important for the students to stay active in the gym, since this is the overall goal of wellness. Wellness is my main goal for the upcoming school year, and I believe that this technology advantage would help me move in a positive direction toward that goal.

B. Describe the time involved (project length including amount of time each day/week; include a timeline for planning and implementation).

I would need to familiarize myself with the technology before I would feel comfortable putting it to use in the classroom. I don't want to be the teacher that does not understand what

she is teaching. I want to feel confident when students ask me questions, that I will have the correct answers. I would at least give myself two weeks of familiarizing myself with the heart rate monitors before I would implement them into my lesson plans.

When implementing, I would plan to have a “training course” on how to use these monitors. They are expensive, and students need to be made aware of that fact, and the fact that they need to take care of them. We take care of the equipment in the gym daily, but they need to understand that just like our balls and other supplies, these monitors are important as well. Since I only see each class every other week, and fifth grade only once every 3 weeks, I would want a solid week of familiarizing the students with how to use the technology before I actually started charting the numbers that they are getting.

As to full implementation, I would be using these heart rate monitors all year. I would be using them throughout each week with different exercises, as well as charting calories burned throughout different activities. All of the data provided from these monitors will sync to an ipad that I will have access to in the gym. I will make sure that I number the monitors so that I can easily track who has been using each one.

C. Describe the people involved (grade level/subject & # of students, teachers and/or staff, other stakeholders).

I would love to include as many people as possible for this project! Due to age and maturity levels, I would prefer to only use these monitors with third-fifth grades. I would expect that they

would be able to control themselves enough to be able to properly use this equipment. I will be discussing the calories and heart rate with the younger students, but I will not go into as much detail with them as I do the older ones. With including all of third-fifth grade, that would be about 225 students working with and benefitting from these devices.

As for teachers, I would encourage them to begin talking about health and wellness more in their classrooms. If teachers are able to talk about it more, then it just adds more information that students may be aware of about health/wellness before I teach them about heart rate, calorie intake and burn, etc.

Stakeholders can help with the buy-in of these devices as well. They can come in and share lesson ideas, come be the “demonstrators” of games, and let the students see the difference in an adult heart rate and a student heart rate. They can also send in “healthy, easy-to-make food suggestions” for students to see and learn about.

D. Describe any professional development that you or others will complete prior to implementing the grant.

As previously mentioned, before the grant could be implemented then my paraprofessional and myself would have to really have some familiarizing with the devices. We would have to be able to answer questions that the students may have, and we can't do that if we are just learning about them too. We need to be able to activity, work with, and plan how to use these in our classroom effectively.

I would also like to show the teachers in a faculty meeting how to use these as well. I would like to be proud of these devices, and let the teachers know that we are not only playing games in the gym, but working on student overall wellness. If they would like to mention these devices, heart rate, or calorie intake or burn in their classroom, then they need to be able to explain what we are trying to teach them in the gym.

E. Describe the materials needed for the project (provide links to relevant websites; include a written description of how the technology/ies will benefit students).

We originally learned about these heart rate monitors when we were ordering battle balls from [Gopher](#), which is a website for ordering all types of PE equipment. This website did a great job of explaining what the technology is, and what all it can be used for. According to the website, this heart rate monitor can be used for average and max heart rate, time in target zones, total exercise time, and calories burned.

For this project we would need:

- Ipad for data collection
- 13 heart rate monitors
- Any supplies for the games that we play (depending on activity)

V. What is the timeline for assessing accomplishments and objectives/project outcomes (In 2-3 paragraphs, describe the program evaluation procedure. Explain how each objective will be measured and how success will be determined.)?

Students will be taught about heart rate prior to “training” of the technology. They will need to understand why we are using the technology, and what we are trying to learn about the technology throughout the project. Training should take about 1 week, but then implementation will be a few weeks before I even begin to give the pre-assessment. Then, in December, at the half way mark, we will give the mid-year assessment. At the end of the year, in May, they will be able to take the post assessment.

In the beginning, my students will be able to describe what they know about heart rates. This will serve as a pre-assessment baseline. Then, throughout the implementation they will also be able to tell about which games make their heart rate go up, and what they can do to slow it down. At the end of implementation, they will be able to tell what makes the heart rate go up, what may slow it down, and why this can be good or bad.

The success of the students will be measured by how they can describe these facts about heart rate, calories, etc. The understanding that they have will be enough to tell me if they are reaping all of the benefits that this technology can give to our PE classes.

VI. How will the students be impacted by the project (In 2-3 paragraphs, include details regarding how the impact on students will be assessed and reported to students, parents, teachers, and others.)?

Students will understand the importance of taking care of our heart health. They will know what effects certain games have on our heart rate, and how that affects our body and how we feel. Students will take a pre, mid, and post assessment that will show them the progress that they are making when using these devices during exercise, and how they are understanding how to use these devices.

Parent communication is normally addressed through quarterly newsletters. Throughout training, implementation, and assessment, we will update parents on the things that we are working on for overall health. We will also give suggestions as to how they can address these topics at home, and what to encourage children to focus on when it comes to eating, exercising, and having a healthy heart.

We will communicate our findings to other teachers and stakeholders by creating informational bulletin boards in the hallways. Students will communicate ways that students can keep their bodies “Heart Healthy.”

VI. What is the proposed budget? Include information on the following:

- A. Materials/supplies – A set of 13 Heart Rate Monitors- \$1,063.94
- B. Equipment – 1 iPad for data collection

C. Total Cost of Proposed Project (include a line item for any required professional development)- \$1,063.94 (iPads are already available at the school)

VII. List your supporting references.

Action for Healthy Kids. (n.d.). Retrieved April 19, 2019, from <http://www.actionforhealthykids.org/>

Georgia Physical Education Standards. (n.d.). Retrieved April 19, 2019, from

<https://www.georgiastandards.org/Georgia-Standards/Documents/Physical-Education-K-5-Georgia-Standards.pdf>

LoTi Framework. (n.d.). Retrieved April 18, 2019, from <https://www.loticonnection.com/loti-framework>

Polar H10 Heart Rate Monitor Chest Strap. (n.d.). Retrieved April 18, 2019, from

<https://www.gophersport.com/assessment/hrm/polar-h7-heart-rate-monitor-chest-straps#longDescription>

**INSTRUCTIONAL TECHNOLOGY GRANT PROPOSAL
EVALUATION FORM/SCORING RUBRIC**

Total Points (out of 300): _____

1. Impacts a variety of skill levels and/or learning styles or impacts an important target population.

Possible number of points: 60 _____

2. Clearly identifies standards and learning objectives/project outcomes being addressed.

Possible number of points: 60 _____

3. Pedagogically sound, based on research and/or best practices.

Possible number of points: 60 _____

4. Clear plan for assessment of project and goals with examples of implementation methods.

Possible number of points: 60 _____

5. Impacts large number of students and/or can be recycled/reused.

Possible number of points: 60 _____

General Comments: