activities and facilities are accessible to and usable by persons with disabilities.

#### **Application Cover Sheet**

Organ and Tissue Donation Awareness Project Implementation Site Application: 2019-2020

| School District Centennial School of Lehigh University   |
|--|
| Has your School District received an OTDA mini-grant in the past? (YES) NO                                   |
| If yes, which school years? 1St year 2018-19   |
| Contact Person (s) Sheila Gottschall Email Slg 304@ lehigh edu<br>Sara Heintzelman Email Sch 309@ lehigh edu |
| Telephone (best phone to use to call contact person) 484.357.2725  |
| School Mailing Address: 2196 Avenue C  |
| Bethlehem, PA 18017  |
|  |
|  |
| This is to certify that all information contained herein is accurate, complete, and current.                 |
| Signature of School Superintendent Date  |
| Date Date  |
| JULIE B FOLF   |
| Print or type name of Superintendent   |

# Centennial School of Lehigh University

# OTDA Mini-grant Application 2019-2020

Sheila Gottschall, B.S.

Sara Heintzelman, Ph.D. June 12th, 2019

#### **Project Narrative**

#### Key Staff

The key coordinator identified in the implementation of this grant would be Sheila Gottschall, Physical/Health Educator at Centennial School of Lehigh University. Centennial School of Lehigh University is a Pennsylvania State approved private school for students ages 6-21 who are identified with severe emotional and behavioral disorders. Sheila has been teaching health and physical education at Centennial school for fourteen years to students across grade levels. In an effort to lead school-wide events, Sheila has coordinated Hoops/Jump Rope for Heart activities, facilitated events for the Athletic Committee (e.g., field days, 5k race) and Carnival/Talent Show Committee. For the purposes of this grant, Sheila's role is to facilitate the program at a curricular level and to create student, family awareness surrounding organ and tissue donation and provide awareness regarding the The Governor Robert P. Casey Memorial Organ and Tissue Donation Awareness Trust Fund. Her primary goals align directly to the OTDA curricular program with respect to educating her students on the functions of various organs and tissues, to dispel myths that hinder individuals from considering organ and tissue donorship and to provide students with the knowledge and skills they need to make informed decisions in the future. In an effort to sustain a school-wide effort, Sheila is co-planning with an OTDA committee at Centennial School to broaden their knowledge surrounding OTDA through co-curricular teaching and by teaming up to engage in cross-disciplinary planning (e.g., ELA teachers, Biology teachers). At the start of the new school year, the committee will transform into the Wellness Committee.

Along with Sheila, several other team members will assist with the program including Dr. Julie Fogt, Director of Centennial School, Dr. Sara Heintzelman, Technology Integration Specialist, Mrs. Alicia Reiss, High School Program Coordinator, Miss Erica Cappellini, Speech and Language Therapist, Mrs. Nichole Corsi, School Counselor, Maggie Ciliberti, Centennial's School Nurse, Miss Alexandra Serson, middle school representative, Miss Ariel Mickey, Miss Jessica Barberry, and Miss Jordyn Gutai who all represent the high school program.

#### OTDA Curriculum Framework and Toolkit Implementation

The purpose of this unit of study is to have students learn about organs and the importance of organ donation. During the second year of grant implementation, we will look to have our ninth grade students understand organ donation through a series of carefully designed lessons and

activities. To begin the unit, all students will participate in an electronic pre-survey designed in Google Forms to assess their prior knowledge of organ donation and determine if they are an organ donor. Several questions on the pre-survey will be taken from the *Quiz: Organ Donation* and *What Do You Know About Organ And Tissue Donation? Pre-Test* on pages 64 and 48 of the Toolkit. Students will also be invited to share this survey with their family members. The results of the survey will be graphed and analyzed by students and teachers in a high school math class. Lessons from the OTDA Toolkit will be implemented with students and adapted based on the needs and specially designed instruction outlined in their Individualized Education Program (IEP). Throughout the unit, Sheila will use the *General Subject Glossary* in order for students to have a better understand on many of the new vocabulary words that they may hear throughout the unit (pages 106-110 of the Toolkit).

Students will participate in a lesson about living donors and non-living donors. Throughout this lessons students will learn the difference between a living donor and a non-living donor. Through a variation of guest speakers and readings, students will have some understanding why people may choose to become a donor and how to register to become either a live donor or a non-living donor. They will gain an understanding of empathy and how a stranger can give someone hope and new life. Students will learn the statistics related to how many lives one non-living donor can save.

Students will explore the organs and learn about the functions of each organ through the human torso model. Each student will be assigned an organ to research. Using Merge Cubes, iPads, the iPad app Anatomy AR +, and Curiscope Virtuali-Tee, the students will investigate virtual 3D models of the organs. As students view the organs, they will take screenshots of the 3D models. The students will combine their research into a final eBook that they will create using Book Creator. Additional research for the eBook creation will take place in Language Arts classes. The technology integration specialist will provide instruction on creating an eBook. The Organ eBooks will be exported in ePub format and posted to Centennial School's website. The link to the eBooks will be shared using Centennial School and Mrs. Gottschall's Health/PE Twitter account. Students will also be involved in sharing out their eBook during the Centennial Learning Expo and Family Night events. The eBooks will be assessed using a teacher-created rubric. Expectations for this activity will be guided by the *Senior BioMed Project* that is outlined in the Toolkit on pages 68 and 69.

Students will participate in a lesson on decision-making skills. Throughout this lesson, the students will learn about the five steps in the decision making process and other factors that may influence a person's decision. Students will work through scenarios of everyday decisions that they may need to make and then move onto some higher level of life decisions. During these

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lessons, the *Decision Making - Definitions, examples and Format* pages from the Toolkit will be used (pages 61 and 62).

To complete the unit, students will participate in a post-assessment survey, similar to the pre-unit survey, to determine if student attitudes, beliefs, and decision to be an organ donor have changed after instruction. In math class, students will graph the changes from the pre-survey. The students will engage in a discussion around their learning from throughout the year. Several questions on the post-assessment survey will be taken from *What do you Know About Organ and Tissue Donation - Post Test*, Toolkit pages 53 and 54 and others questions will be teacher created. At the conclusion of the unit, the teacher and students will utilize *Letter Home to Parent and Letter From Students to Parent* from pages 111 & 112 of the Toolkit.

High school students in grades tenth through twelfth will learn about the OTDA history and create a OTDA timeline. Using the lesson objectives and activities list on page 75 of the Toolkit. Cost and health complications of a Transplant Procedure will be viewed and assessed using the outline activities within the Toolkit on pages 70-71 and pages 57-59. These students will also be actively engaged in participating in a field trip to the following, but limited to: The Gift of Life House and Sight Life. While on the field trip touring each facility, students will be taking video footage, conducting interviews, and collecting information to produce a final project of a virtual tour of each facility. The virtual tour will be designed and able to be viewed by using the *Google Expedition Kit*. Students will participate in a Gift of Life speaker presentation/interview activity. The speaker will share the importance of organ donation, engage students in a conversation around the organ donation process, and share facts about organ donation. Speakers during this time can speak on being the donor, someone from the donor's family, and/or a donor recipient. Students will have the opportunity to ask the speaker questions, which were created in Language Arts class, and take video footage. The final project would be for students to create a short 2-5 minute video.

Throughout the third quarter of the school year, students will read <u>The Gifts that Heal</u> in English class. The students will read the stories presented throughout the book to learn about individuals who have been impacted by the organ donation process. These stories will serve as models for the interviews that students will conduct with organ donation recipients. In Language Arts class, the students will learn how to write interview questions, conduct an interview, and edit the video footage from the video. Three organ donor recipients and/or donor families will visit Centennial School for an one hour interview where students will conduct a video interview. The students will compile the interview footage into a video clip that tells the recipient's story. With permission from the interview participant's, the finished video clips will be posted to Centennial School's website and Tweeted out through their Twitter account. The dissemination of the video clips

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through Twitter will help students to share their work with a global audience while simultaneously providing information about organ donation.

Within the high school biology program, the students will dissect fetal pigs to help students gain a better understanding of all organs in the body. The purpose of this live dissection is for students to see the intricacies of each organ. This will help students further understand the purpose of each organ and how each function connects to the overall functioning of the body. Students will have the opportunity to ask questions during the live dissection. A continuation of organ and tissues research will take place utilizing the *Directions for Student Activity and Scoring Rubric* on pages 50 and 51 of the Toolkit. Activities will continue to grow through and across the curriculum each year.

Throughout the process of OTDA at Centennial, the intent is to use a cross-discipline approach. Student projects and materials funded by this grant will enhance our library with books, video, and eBooks. The goal is to support the OTDA with supplemental materials while providing students with meaningful experiences and opportunities to share their work with a global audience.

#### OTDA Curriculum Framework and Standards

The first year of instruction will focus on these academic standards:

#### **English Language Arts**

- 1.2 Reading Information Text
- 1.4 Writing
- 1.5 Speaking and Listening

#### Math

- 2.1 Numbers and Operations Apply quantitative reasoning to choose and interpret units and scales in formulas, graphs, and data displays.
- 2.4 Measurement, Data, and Probability Summarize, represent, and interpret data on two categorical and quantitative variables.

#### Science

- 3.1 Biological Sciences
- 3.4 Technology and Engineering Education

#### International Society for Technology in Education (ISTE)

- 2. Digital Citizen Students recognize the rights, responsibilities and opportunities
  of living, learning and working in an interconnected digital world, and they act and
  model in ways that are safe, legal and ethical.
- 6. Creative Communicator Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
- 7. Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

#### Health, Safety and Physical Education Standards

- 10.1 Concepts of Health
- 10.2 Healthful Living

#### Sustainability Plan

Sustainability will be maintained by Mrs. Sheila Gottschall and the Wellness team identified at Centennial School by providing ongoing education regarding OTDA not only to our students but to our families and community. The OTDA will be addressed throughout the entire 2019-20 school year and to various programs within Centennial School through a cross-discipline approach. Since Centennial School educates students grade one through age 21, Mrs. Gottschall plans to embed the OTDA framework into health classes across all grade levels. Mrs. Gottschall will encourage team members and other educators to attend the Spring OTDA Free Conference annually. Mrs. Gottschall will also assist the writing of the OTDA grant in the future. Throughout the year, Mrs. Sheila Gottschall is planning to have special OTDA related activities during the study hall periods that students may participate in: Facts/Myths, OTDA Trivia, supply/food drive for the Gift of Life, etc. During Centennial School's Fall/Spring Family Night there will be an OTDA table for families to visit to learn more about OTDA and how to become a registered donor. At these events, technology will be available for individuals to register onsite to become a donor. Several activities are also being looked upon for this year and to continue the following years include: Miller-Keystone blood driver and Governor Casey Fundraiser to support the Governor Casey Memorial Organ and Tissue Donation Awareness Trust Fund. Students will be involved in designing posters and pamphlets that would promote OTDA. A poster design contest will run in the late fall after students have built background knowledge about organ donation. The poster designing will be worked within art education. The winning poster/posters will be printed at Centennial school through the use of their poster maker and be asked to be put on display at various business and the College of Education at Lehigh University. Students will design information pamphlets regarding OTDA knowledge, statistics, truths, and myths, throughout the school year. Each quarter, a pamphlet will be selected to be printed and distributed at various school events: Fall Family Night, Spring Family Night, Talent Show, and Learning Expo.

The technology integration specialist will maintain the eBook library from the first year of the grant. This library will continue to build as our ninth grade students complete the project during the second year of the grant, 2019-20. Students will participate in the unit outlined in previous sections annually and the eBook library will continue to build over the years. These eBooks will be shared through social media in an effort to increase awareness about organ donation.

Planning for the second year of OTDA at Centennial School, students will learn about the OTDA history and create a OTDA timeline. Using the lesson objectives and activities list on page 75 of the Toolkit. Cost and health complications of a Transplant Procedure will be viewed and assessed using the outline activities within the Toolkit on pages 70-71 and pages 57-59. A

continuation of organ and tissues research will take place utilizing the *Directions for Student Activity and Scoring Rubric* on pages 50 and 51 of the Toolkit. Activities will continue to grow through and across the curriculum each year. Student timelines will be displayed throughout the school utilizing bulletin boards and hallways. Electronic designed timelines may be shared out through the school website and Social Media Accounts and Centennial OTDA Google Site.

To provide students with an immersive experience, the Google Expeditions Kit will be purchased. This kit will serve multiple functions throughout the coming years. One way students will use the virtual reality viewers is to learn more about the human body, organ functions, and the importance of donors. The Google Expeditions Kits will allow students to visit the inside of organs, travel through the bloodstream, Examples of applications students will experience include Anatomyou, Human Anatomy - Respiratory System, InMind VR, InCell VR, and Ride through the Human Body. Another way students will use the Google Expeditions kit is to create virtual field trips. Our limited funding for field trips means we need to find creative ways to bring field trips to our students. To accomplish this, we will use the Expeditions Kit to take small groups of students to the Gift of Life and Sight Life to use a 360 camera to take video footage. This video footage will be converted into virtual field trips for all students to access. We will make this available to other OTDA grant awardees so that their students can also access 360 tours that they might not otherwise be able to visit through the OTDA Team Share Group on Schoology.

We will continue to plan and implement school wide fundraisers to be about to support OTDA through, but not limited to the Gift of Life and the Governor Casey Fund. We will also continue to use free resources such as the Gift of Life and other community services. We will offer the green cords for graduating students who can demonstrate either via driver's licence or verified evidence of commitment to organ donation. While teaming up with Miller Keystone Blood Center, students will also have the opportunity to participate in the Miller Keystone Blood Center Student Scholarship Award and earn red cords for graduation students who complete the requirements.

During the 2019-20 school year and ongoing within the future we vision students sharing out their OTDA eBooks and virtual tours/videos with other students, families, and community members by having our students present their projects at student showcases such as the PAECT Student Technology Showcase and local learning expositions.

To reach other educators and share lessons and activities, we will put together a Zoom video call for local biology, health and PE teachers, and school nurses to share the successes of our grant. This will take place in late February. The Zoom synchronous video call will allow us to share the work that our students did, provide information about the grant, and encourage other educators to attend the OTDA conference in the Spring of 2020. We hope to serve as a mentor for at least

one other local school and/or school district to help them move forward with the grant writing process.

For our third year, we hope to focus on sustainability to prepare for the coming years. One way we will do this, is by setting up a table at the DMV down the street from Centennial School to provide information about OTDA as people are coming in to renew their licenses. We may also assist at community blood drives by having a table and taking visitors on a virtual tour of the donation centers with the Google Expeditions kit. Furthermore, we plan to sponsor a teenage organ recipient candidate throughout their donation journey by writing encouraging cards, sending small gifts, and sharing their story. Our ultimate goal is connection to other OTDA grant awardees who are in their initial stages of the grant. We hope to connect via Zoom for join activities to model, guide, and support their OTDA journey.

#### Student Involvement

Centennial School of Lehigh University is a state approved special education school which provides education for students age six through age twenty-one years. Centennial School enrolls an average of 80-85 students per school year; three elementary classrooms, 3 middle school classrooms and 5 high school classrooms. Students attending Centennial School come from 40 surrounding school districts surrounding and within the Lehigh Valley. Mrs. Gottschall teaches elementary physical education, middle school health and physical education and high school education. The high school programs makes up at least 50% of the student population at Centennial School.

- At least 90% of high school student will be involved throughout the school year within the
  delivery of instruction and future progress of the program if the grant is awarded for
  2019-20.
- At least 40 students and families will have the opportunity to participate in OTDA info during the fall and spring family night.
- High school students (30-50 students) will be instructed on the OTDA program through the school year during health education classes.
- At least 40 students will have the ability to read books, articles, and watch movies related to OTDA and participate in video calling, virtual trips, and/or field trips experiences.
- Use social media and the Centennial School website OTDA Google Site to share the work being done with OTDA at Centennial School.
- All students will have the opportunity to participate in a school health fair which will promote wellness, nutrition, relaxation, OTDA and therapy.

- At least 4 students will be given the opportunity to present their OTDA eBooks at a Learning Expo and/or PAECT Technology Student Showcase.
- At least 4 students will be given the opportunity to present the virtual field trip at a Learning Expo and/or PAECT Technology Student Showcase.
- All students will have the opportunity to participate in learning about the heart, functions of the heart and view several animals hearts during the heart month special activities.
- All students will have the opportunity to participate in a poster contest regarding OTDA and/or body organs/tissues.
- At least 25 students will have the opportunity to create an OTDA information pamphlet which can be reproduced to share out within the community and school activities.
- All students across grade levels will have the opportunity in participating in health
  activities which they will learn about the various body organs and tissues along with the
  function and importance of each.

#### Local District Contact Information

Bethlehem Area School District 1425 Livingston Street Bethlehem, PA 18017

https://www.beth.k12.pa.us

Jenna Husovsky - Health/Physical Educator jhusovsky@basdschools.org 610-865-0012

## **Budget Form Application**

Centennial School of Lehigh University

#### 2019-2020

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| Personnel Costs   | ersonnel Costs Substitute teacher   |   | \$0.00      |            |
| Travel  | ravel To and from the conference  |   |             | \$195.46   |
| Supplies  | Google Expedition Kit (10)  1 Dual Core Router  1 Intel Teacher Tablet  10 Magellan Android VR Devices  1 Carry Case  10 Mattel student viewers  2 StarTech 8-port Charging Station | \$3,099.00  |             | \$3,099.00 |
| Communications  | Gift of Life Speaker  | \$0   |             | \$0        |
| Equipment*  | Animal Organs<br>Kidney Model<br>Liver Model<br>Books<br>OTDA Carnival Wheel  | \$200.00<br>\$85.00<br>\$100.00<br>\$65.00<br>\$135.50  |             | \$585.50   |
| Other Costs  Bulletin Board Supplies Photos Posters Green Cords |   | \$50.00<br>\$20.00<br>\$10.00<br>\$40.00                |             | \$120.00   |
| TOTAL COSTS   |   | \$3999.96   |             | \$3999.96  |

### **Proposed Timeline**

| Activity/Event Description   | Month/Qtr                    | Personnel Responsible                                      |
|--|------------------------------|--|
| High School Health Education - Organ/Tissue identification, function and OTDA awareness  | 1Q-4Q                        | Mrs. Gottschall  |
| Book Reading and reflection - Book from the Toolkits recommended reading list  | 2-3Q                         | Mrs. Gottschall<br>Miss Mickey                             |
| Biology - Organ Dissection   | 3-4Q                         | Mrs. Gottschall<br>Miss Wolf & Science Teachers            |
| Health Fair  | 2Q/3Q                        | Mrs. Gottschall, Mrs.Ciliberti & Wellness Committee        |
| OTDA activities during Family Night (Fact & Myth, ebook viewing, Donor Registration Information).                                | Oct. 2019<br>& March<br>2020 | Mrs. Gottschall  |
| Ebook creation - ninth grade students will create an Ebook on the specific organ/tissue that they research.                      | 3Q                           | Mrs. Gottschall<br>Dr. Sara Heintzelman<br>Miss Cappellini |
| Guest Speaker and/or Video Calling (a representative from Gift of Lift, organ donor, organ recipient, and/or transplant doctor). | 1Q-4Q                        | Mrs. Gottschall<br>Dr. Sara Heintzelman                    |
| Critical Thinking and Decision Making Skill -<br>Health Education (Ninth Grade) & Middle School                                  | 2Q & 3Q                      | Mrs. Gottschall  |
| Virtual Tour creation  | 2Q-3Q                        | Dr. Sara Heintzelman                                       |
| Virtual Tour Exploration   | 1Q-4Q                        | Dr. Sara Heintzelman<br>Mrs. Gottschall                    |
| OTDA Poster Contest  | 1Q/2Q                        | Mrs. Gottschall<br>Art Education                           |
| OTDA Study Hall Student Activities   | Ongoing                      | Mrs. Gottschall<br>Ms. Held                                |

#### Scope and Sequence

|            | 2018-2019   | 2019-2020  | 2020-2021  |
|------------|---|--|--|
| 9th Grade  | Ebook Creation<br>Pre-Survey<br>Post-Survey<br>Animal Organ<br>Dissection (Heart) | Ebook Creation Pre-Survey Post-Survey Animal Organ Dissection (Fetal pig)  | Ebook Creation<br>Pre-Survey<br>Post-Survey  |
| 10th Grade | Ebook Creation Pre-Survey Post-Survey Animal Organ Dissection (Heart)             | OTDA Timeline<br>Virtual Tour Creation<br>Animal Organ Dissection<br>(Fetal pig)   | OTDA Timeline<br>Virtual Tour Creation<br>Animal Organ Dissection  |
| 11th Grade | Ebook Creation Pre-Survey Post-Survey Animal Organ Dissection (Heart)             | OTDA Timeline<br>Virtual Tour Creation<br>Animal Organ Dissection<br>(Fetal pig)   | Organ Recipient Donor<br>Family Interview and<br>Video Creation<br>Animal Organ Dissection                                       |
| 12th Grade | Ebook Creation Pre-Survey Post-Survey Animal Organ Dissection (Heart)             | Organ Recipient Donor Family Interview and Video Creation Animal Organ Dissection (Fetal pig) Graduation Green & Red cords | Animal Organ Dissection Graduation Green & Red cords Info table at DMV Organ Recipient Donor Family Interview and Video Creation |