Educational
FOUNDATION
of Lake County

Request for Funding

- All funds must be used by May 1, 2020. A final program evaluation must be submitted by May 15, 2020. If the applicant misses the deadline but submits a final grant report by September 30th, they will be eligible to apply after one academic year. Applicants that do not submit a final grant report by the deadline of September 30th will not be considered for future funding.

  - (Requests will not be accepted without the requesting parties signature)*

Please complete all sections.

Requester:	Dustin Strate
Project Title:	Digital Design and CAD
School Name:	Umatilla Elementary
Academic Subject:	STEAM and Literature/ Nonfiction reading and writing
Grade(s):	3rd – 5th
Number of Students:	350 (This includes 3-5th grade)
Number of Participating Teachers:	One lead teacher and all teachers will have access to it.
Amount Requested:	$1,500.

Please provide a detailed budget of how funding will be expended for this project.

Expense Category:	Amount:	Reason:
Program Materials (Consumable)	$300	Printer filament 4 Rolls of Filament, all filament is nontoxic and plant based. For reference, 1 roll of filament would make 200 keychains or 100 phone cases.

Program Materials (Non-Consumable):	$1,800	3D Printer, Professional Development for teachers, and Lesson Plans.

3D Printer – This is a Dremel 3D45 EDU printer designed for the classroom. The reason behind choosing this printer is because of the printers high quality and the software's ability to be friendlier for younger users. The goal is also to have families work together at home, the program is free and is cloud to cloud. The cloud to cloud software means students can work at home on designs that can be accessed at school for printing. The printer is UL certified for 3D printers so the printer has safety features to ensure a safer environment for the classroom. The manufacture also has support for teachers. The 30 printer can also use a variety of printing filaments for specific needs of a project, like printing a bio degradable fork for an environmental study. The printer prints to 50 micron resolution for more detail projects.

Professional Development and Lesson Plans – The package includes 4 hours of credited professional development on how to implement lesson plans and integrate cross circular activities. The professional development is digital based so teachers can use it at their own pace. The professional development focuses on creating digital design and fabrication in order to solve real word open ended problems. There are also 30 included lesson plans for grades 3-5th that focus on starting with the basics of fabrication to build more advanced techniques. All of the lesson plans and professional development come right from Dremel. |
Transportation:		
Program Implementation (not to exceed 10%):		
Other (Please Specify Expense):		
TOTALS	$1,800	
In Kind Contributions that benefitted project:		Printer filament after the original has been used will be provided with money from the STEAM program.
Project Detail		

Other Funding Sources:

Outside funding will be completed with planned fundraisers to ensure there will be filament available to have sustainable printing.

Program Rationale: (Why is this program important?)

The rationale for this program is to give students the opportunity to experience digital design, incorporating skills that are critical for 21st century careers. The focus of our STEAM program is to give students exposure to various STEAM related careers with the flexibility to let them explore and dive deeper into their interests. This project will have students learning the basics of digital design to solve problems that will require them to use the 4Cs they are critical thinking, collaboration, creativity, and communication.

Program Impact: (How will the teachers and students benefit from this project?)

The impact of the program will be to have tools available to students give them experience in skills that are critical for todays careers. This program aligned with other programs we are doing this year will ensure students have the skills necessary to move forward to Middle School with the knowledge of how to complete complex tasks that require the use of technology, critical thinking and collaboration. The next goal of this project is to connect art and literacy by having students create projects themed with books being used in the classroom. Teachers will be a critical part of this program, PD comes with this program that will be available for teachers, I will also try to reach out to teachers to help them plan and discuss ways they can implement projects to align with standards.

Program Evaluation Method: (How will you measure teacher and student success?)

Teacher success will be measured by the amount of teachers willing to use the 3D printer, this program will have a PD section for willing teachers. Student success will be measured by performance on what they are willing to create based on project rubrics, these rubrics will also evaluate the students skills at using the 4Cs of collaboration, creativity, critical thinking and communication.

Program Timeline: (provide a project start date and completion date)

The project will not have a set timeline, rather it will be used all year and for following years. The goal will be that the first students to work with 3D printing will continue to show growth in their skills as they reach 5th grade.

Program Approved By: _Dianne Dwyer_ _____
Principal   Assistant Superintendent/Superintendent

(A principal, assistant superintendent or superintendent signature is required for all requests over $2,000.00. The superintendent's signature is required for all requests over $5,000.00. The superintendent's signature is also required for all requests for curriculum or capital expenditures (other than building improvements)

*Requesting party has read and agrees with the funding policies of the Educational Foundation.

Signed: _____   Date: _9-12-19_

Printed Name: _Dustin Strate_   Email: _strated @ lake.k12.fl.us_

To be completed by foundation staff/board

Program meets Foundation Mission/Funding Policy: Yes   or   No

_____ Approved   _____ Denied _____

                                        President Signature   Date