HOBART REDEVELOPMENT COMMISSION

EDUCATIONAL & WORKER TRAINING GRANT PROGRAM

The Redevelopment Commission (RDC) of the City of Hobart (City) is seeking applications for 2018 grants allowed under Indiana Code 36-7-25-7 (see attached). The purpose of the grants is to support educational programs, work training programs, worker retraining programs, or any other program designed to prepare individuals to participate in a competitive and global economy. It is the intention of the RDC's grant program to 1) promote redevelopment and economic development in the City and 2) support programs or expenses which are in the best interest of the City's residents. A majority of the people served by the grant program or expense should be residents of Hobart.

In 2018, \$30,000 will be available for grant payment. Grant availability in future years is unknown at the present time. The RDC may make a single grant, multiple grants, or no grants based on the grant applications received. Grant selection is not determined on a point based system but may be in the future. Grant awards will be recommended by the Grant Committee of the RDC to the entire RDC for approval. Award notification will be made by the end of the year.

Grants are a reimbursement type of grant. Applicants must incur 100% of the expense and then provide the required documentation to seek reimbursement. (A reimbursement request form with submittal instructions will be provided to grant awardees.) An agreement between the Applicant and the Hobart Redevelopment Commission must be fully executed before any grant funded expense can be incurred. A resolution will be passed by the RDC authorizing the grant award and the execution of an agreement. Both documents will include the RDC's findings of fact as required by State statute.

Documentation of compliance with grant conditions must be submitted every 90 days during the term of the grant. Reimbursement of expenses from grant funds will take no longer than 45 days upon submission of a completed request for grant funds. Approval of claims for grant expenses will be done at special meetings of the RDC. A final written report with photographs must accompany the final request for reimbursement. (An outline of what to include in the final report will be provided to grant awardees.) All grant and compliance information submitted will become public record.

Any publicity related to the program or expense funded by a grant must also credit the Hobart Redevelopment Commission.

The RDC operates without discrimination as to age, race, sex, color, religion, sexual orientation, gender identity, disability, income status, or national origin in the consideration of grant requests. The RDC funds only grant seekers who do not unlawfully discriminate as to age, race, sex, color, religion, sexual orientation, gender identity, disability, income status, or national origin.

Grant recipients must comply with IC 22-5-1.7-1 (E-Verify Program) for grants over \$1,000.00.

Applications are due by 12:00 p.m. on Wednesday, November 1, 2017, to the Assistant Director of Development, Beth Jacobson, 414 Main Street, Hobart, IN 46342. bjacobson@cityofhobart.org 219-942-5517

The RDC encourages your questions which should be directed to Ms. Jacobson.

Five hard copies and one electronic copy are required. Incomplete applications will not be considered by the Grant Committee or the RDC.

Include in the grant application submission the following information.

1) Name of Organization or Individual Seeking Grant (*the Applicant*). School City of Hobart (SCOH)

2) Contact information for Applicant (*include Name/Title of Contact Person, E-mail, Phone #, Fax #, and Mailing Address*)

Dr. Peggy Buffington, Superintendent for School City of Hobart Email: peggyb@hobart.k12.in.us Phone: (219) 942-8885 Fax: (219) 942-0081 Mailing Address: 32 East 7th Street Hobart, IN 46342

Christopher King, Director of Technology Tammy May, Technology Professional Development Coordinator

3) Legal Status of Applicant.

Local Educational Agency (LEA)/Government Not-For-Profit Organization

4) Identify the Grant Administrator if different than the Contact Person.

There is not a separate grant administrator.

5) Please provide a concise summary of the Applicant's purpose and identify the governing body (*Board of Directors, School Board, etc.*) Provide a website address if such exists.

The school district's governing body is the School City of Hobart School Board.

According to the School City of Hobart (2015) School Improvement Plan:

Vision for Student Learning:

The School City of Hobart Community will foster intellectual curiosity, natural abilities, critical thinking, and literacy in students while developing respectful and responsible citizens who are excited about the challenges of tomorrow, confident in their ability to chart the future, and dedicated to the pursuit of lifelong learning.

Mission:

The primary mission of the School City of Hobart and the Board of School Trustees is to continually provide effective community schools.

A. Our Schools Equip Children for Adulthood

Effective Community Schools adequately equip young people for adulthood in the 21st century. Our students must be prepared both for employment and for day-to-day living in a complicated and rapidly changing world. This necessitates that our schools provide students with the intellectual tools necessary for life-long learning. Among these tools must be: skills to facilitate participation in a democracy, communication skills, critical thinking, and other flexible learning skills as well as the ability to work both individually and in a team situation. It is expected that these skills be developed through all curricular areas.

B. Our Schools Address the Needs of Individual Students

Effective Community Schools address the needs of individual students and focus on individual development. Students bring to the schools a great diversity of interest, aptitudes, motivations and learning styles. Our schools must be able to address this diversity by identifying individual needs, responding with appropriate teaching strategies, flexibly meeting these needs and recognizing each individual student's ability to contribute to the school community.

C. Our Schools Are Community Schools

Effective Community Schools are necessary to a healthy community. Our schools must always recognize their affirmative duty to the entire community, including families, government, business and industry, other institutions, civic groups and individual citizens. Our schools must draw from the strengths of this community to identify and accomplish their goals.

D. Our Schools Are Committed to Success

Effective Community Schools fully utilize the resources of the entire school community (administration, teachers, support personnel, families and students) in all aspects of school life. Our schools cannot succeed without the committed involvement of all.

6) Explain the program, expense, or equipment that the grant will be funding and include the dollar amount of the grant request.

The grant will be used to fund the purchase of tablets and VEX robotics kits to expand SCOH's PLTW program. The PLTW Launch program is the name of the K-5 curriculum. This program brings a standards-aligned, project-based curriculum to students in elementary school in which students will explore a variety of topics from science, math, and computer science. Students actively complete projects in which they explore solutions to real-world problems and practice the skills that lead to careers in the engineering, bio-medical, and technology fields. PLTW Launch modules align to Indiana's Academic Standards for Computer Science and Science as well as English Language Arts and Mathematics.

Expanding the PLTW curriculum at the elementary level will allow students to meet Indiana's Academic Standards while gaining essential skills in the STEM areas of Science, Technology, Engineering, and Mathematics. The program will encourage students' curiosity, problem solving skills, and interest in these areas, including Computer Science.

The grant will allow SCOH to expand the Project Lead The Way (PLTW) programs at the elementary school level. PLTW began at the elementary level in the 2017-2018 school year. However, in order for more classes to use the program simultaneously, more tablet devices and VEX robots are required. Currently, at our largest school, only two classrooms per grade level are able to use the program concurrently. Considering there are 5-6 classes per grade, it would be ideal for more classrooms to be able to use PLTW at the same time. PLTW is designed to be integrated as part of the curriculum rather than a separate event. PLTW includes Science and Technology, but every unit also includes English Language Arts and Math standards. However, teachers are not able to integrate modules throughout the day when they are limited by many classes sharing the same devices.

SCOH would also like to add 3D printers to complement the PLTW Launch programs in the district. Adding 3D printers to the PLTW Launch program would allow for students to see the real-world capabilities of skills they learn. For example, in the fifth-grade robotics module, students investigate different types of robots. One robot they explore is 3D printers. Giving students the opportunity to interact with and use a 3D printer would bring this material to life and enable students to see more of the amazing things made possible through STEM fields.

7) Explain in detail how the grant funds will be spent.Grant funds will be spent to purchase tablet devices and VEX robotics kits in order to

make PLTW modules more accessible to students in the elementary schools in SCOH. A budget breakdown is included.

- Explain when the grant funds will be spent, include start and stop dates.
 Purchasing equipment will begin as soon as possible if we receive the grant.
- 9) Provide a short title for the grant request. Brickies STEM higher!
- 10) Calculate and/or explain the Return on Investment for the grant funds.

This program will bring a large return-on-investment to the City of Hobart. Research has shown that offering computer science to elementary-aged students increases interest in the subject (Lambert & Guiffre, 2009). SCOH graduates college and career ready students, and this grant will promote more students entering the fields of computing and technology. This will directly benefit the city of Hobart as more residents have an interest in computing and are therefore able to support the ever-increasing technological demands of modern business. Computer programmers are needed in a wide range of businesses in all areas of the country (Code.org, 2016), and SCOH sees the need to train computer programmers, which will benefit the City of Hobart as the modern workforce is developed.

The STEM problem is in computer science:

71% of <u>all</u> new jobs in STEM are in computing 8%

of STEM graduates are in computer science

Source: Bureau of Labor Statistics, National Center for Education Statistics as cited in Code.org (2016).

- 11) Explain if other funds are secured for the program or expense proposed for grantfunding. Funds are secured for funding the PLTW program itself. This grant would allow more classes to participate in PLTW the way the program is intended to be implemented.
- 12) Explain if there is public outreach and if so, provide details on this effort. This program offers an excellent opportunity for community outreach to

technology or computer-science related employers. One of the major goals of the program is to build a workforce to respond to the future high demand for technologyrelated careers. As such, School City of Hobart would be pleased to host guest speakers, helpers, or sponsors from the community. SCOH currently works with Ready NWI and the Center of Workforce Innovations. This provides an opportunity for spreading the news about this new computer science curriculum across the community to potential employers.

SCOH plans to get families involved in learning computer science alongside their students. Students will be encouraged to participate in the annual SCOH Maker's Faire, which takes place each spring. This will provide an opportunity for students to share their new skills and creations with family and community members. In addition, families will be encouraged to volunteer with any after-school clubs associated with the program.

13) Explain how the Applicant will measure success related to the grant funded program, expense, or equipment.

Success will be measured through the number of students enrolled in the programs at the middle and high-school levels as well as after-school clubs at all levels. The classes that will be offered at middle school and high school will be offered as electives that students can sign up for by choice. Therefore, increased numbers of students enrolled in them would reflect the success of the program at all previous levels. The number of students pursuing postsecondary education in technology and computer-science fields will also be measured as an indicator of the success of the program as children who have participated in the additional PLTW courses continue on past high school. After-school clubs would also be an opportunity to measure success as students would join because they have developed an interest through the academic courses that are offered; therefore, increased participation in these clubs would be an indication of the success of the program.

In addition, SCOH hosts a maker's faire each spring. This is an opportunity for SCOH makers of all ages and products to come together and share what they make. SCOH has had computer science and technology projects entered in the past. A measure of the success of the PLTW programs would be indicated by an increase in the number or percentage of technology and computer science projects entered in the faire. Because community outreach should be a result of this grant, community participation in events such as the Maker's Faire, after school events, and other programs will be measured in order to gauge the success of outreach efforts.

Finally, at Hobart High School we will monitor enrollment into the Computer Science Applications and Computer Science Principles classes. The PLTW Launch and middle-school Gateway programs will serve as feeder programs into the higher level PLTW courses at the high school level. Beyond School City of Hobart, we will utilize the National Student Clearinghouse, which provides post-secondary data on graduate students, to monitor and view enrollment and completion of Computer Science programs in college.

14) Identify any partner organizations involved in the grant and explain their role and responsibilities.

The School City of Hobart has partnered with Project Lead the Way since 1999 to bring innovative engineering and design programs to students in Hobart. We will continue to expand this partnership through the grant by providing younger students with the same opportunities in computer science that high school students have been receiving for years.

We also have a strong partnership with the Center of Workforce Innovation in order to provide students with the college and career readiness skills needed to become successful citizens in a dynamic and increasingly technological world. SCOH will invite alumni and Hobart Chamber of Commerce members to speak with students about realworld experiences with computer science.

Purdue University Northwest is our partner for a Walk Into My Future program, which provides STEM-related opportunities which will build on those opportunities available to them at the School City of Hobart.

15) Explain why the Applicant is seeking funding for this grant program, expense, or equipment.

Funding will allow School City of Hobart to offer Computer Science to students at the elementary levels in a manner that is integrated into the curriculum. Offering Computer Science to younger students will increase foundational knowledge and interest at an earlier age, thereby increasing future and overall skills and success. Offering Computer Science can also increase participation in school, and schools incorporating PLTW Launch have reported fewer tardies and absences (PLTW, 2015).

Building interest in and passion for computer science can help students discover pathways to postsecondary education to which they would not otherwise be exposed. By 2025, the Indiana Chamber of Commerce has set a goal that 60% of residents of Indiana have a postsecondary education (Indiana Chamber, 2016). Providing computer science education at all levels will build interest for these needed areas of labor-market shortage.

16) Identify any Hobart and/or Lake County businesses who will benefit directly or indirectly from the program or expense proposed. Explain the benefit in detail.

Any business that uses or depends on technology will benefit from this program. The PLTW focus is to develop critical thinking and engineering skills in students. The computer science programs on which SCOH will focus will expose students to the field of computer science who would not otherwise consider careers in the field. Currently in the United States, there are 500,000 computing job openings, and this number is only projected to increase moving forward (Code.org, 2016). Businesses that depend on computer science will all benefit from building the much needed computer-science workforce. In addition, college graduates from the field of computer science earn more over their lifetime on average than the average college graduate (Code.org, 2016). This could lead to improved outcomes for students entering Computer Science and for the City of Hobart. See Code.org's presentation for more details. <u>https://code.org/promote</u>

17) Are there planning documents to support the requested grant program, expense, or equipment and if so, attach documentation.

PLTW provides standards-alignment documentation, planning documents, and scope-and-sequence models to guide what needs to be taught and when in order for students to progress. These guides have been developed by experts in the field, and they have been used in classrooms across the country. This eliminates guess work which may be associated with developing a program. The program has already been tested. PLTW determines the materials required for the successful implementation of these programs. For example, in fourth grade, PLTW uses Tynker on tablets to teach coding to students.

PLTW Launch Link (Elementary) - https://www.pltw.org/our-programs/pltw-launch

18) Provide any other information that the Applicant thinks would be beneficial for the RDC to know that would aid in selecting your grant application for approval.

The Gallup poll measures hope for the future and engagement at school. The graphs below show School City of Hobart results. Jobs in computer science are available, with more appearing each year. The engagement aspect of technology is high, and expanding PLTW programs will meet these needs. In today's economic climate, people are afraid of not having a job. Teaching students in STEM related fields where jobs are available gives students hope for the future.



	Your District	U.S. Overall
ENGAGEMENT GRANDMEAN	3.70 n=1,596	3.90 n=867,454
At this school, I get to do what I do best every day.	3.30	3.57
My teachers make me feel my schoolwork is important.	3.94	4.04
I feel safe in this school.	3.95	3.93
I have fun at school.	2.99	3.50
I have a best friend at school.	4.47	4.38
In the last seven days, someone has told me I have done good work at school.	3.32	3.65
In the last seven days, I have learned something interesting at school.	3.65	3.92
The adults at my school care about me.	3.64	3.85
I have at least one teacher who makes me excited about the future.	3.92	4.13

THE IDEAS AND ENERGY STUDENTS HAVE FOR THE FUTURE.



HOPE

	Your District	U.S. Overall
HOPE GRANDMEAN	4.14 n=1,653	4.25 n=901,714
I know I will graduate from high school.	4.68	4.69
I have a great future ahead of me.	4.36	4.48
I can think of many ways to get good grades.	4.16	4.21
I have many goals.	4.10	4.26
I can find many ways around problems.	3.82	3.92
I have a mentor who encourages my development.	3.30	3.52
I know I will find a good job in the future.	4.24	4.43

And students enjoy computer science and the arts the most



Source: Change the Equation

Cited in Code.org (2016).

In a study by Change the Equation, Computer Science and Engineering ranked higher than other academic course areas in student interest and enjoyment. Students who are happy and more engaged in school find greater success across all disciplines. Currently students have fewer opportunities to learn in Computer Science and are therefore less engaged. This grant would provide opportunities in the Computer Science and Engineering disciplines where students report more interest and enjoyment.

19) Have you researched and identified other organizations or individuals who are currently providing a similar program or have made a similar expense? Explain why your program or expense is warranted, if a similar program exists, or a similar expense has been made by another organization or individual.

PLTW uses a national K-12 curriculum. SCOH has been using PLTW modules at the high-school and middle-school levels since 1998. The elementary program was added for the 2017-2018 school year. Increasing access to the Launch elementary program through greater availability of devices will promote computer science to many children who would not be exposed otherwise. The expense is warranted and needed as SCOH builds the technological workforce of the future.

References

Code.org. (2016). Promote Computer Science. Retrieved from https://code.org/promote

Indiana Chamber. (2016). *Indiana Vision 2025 – 2016 Task Force Update*. Retrieved from <u>http://www.indianachamber.com/images/media/2025/2016/IN-Vision2025-Aug9.pdf</u>

Lambert, L. & Guiffre, H. (2009). Computer science outreach in an elementary school. *Journal of Computing Sciences in Colleges*, *24*(3), 118-124.

School City of Hobart. (2015). School city of hobart's district strategic plan for continuous school improvement: Building college and career ready brickies! Retrieved from

http://hobart.schoolwires.com/cms/lib/IN01000440/Centricity/Domain/10/SCOH%20Di strict%20Strategic%20Plan%2015-16.pdf

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