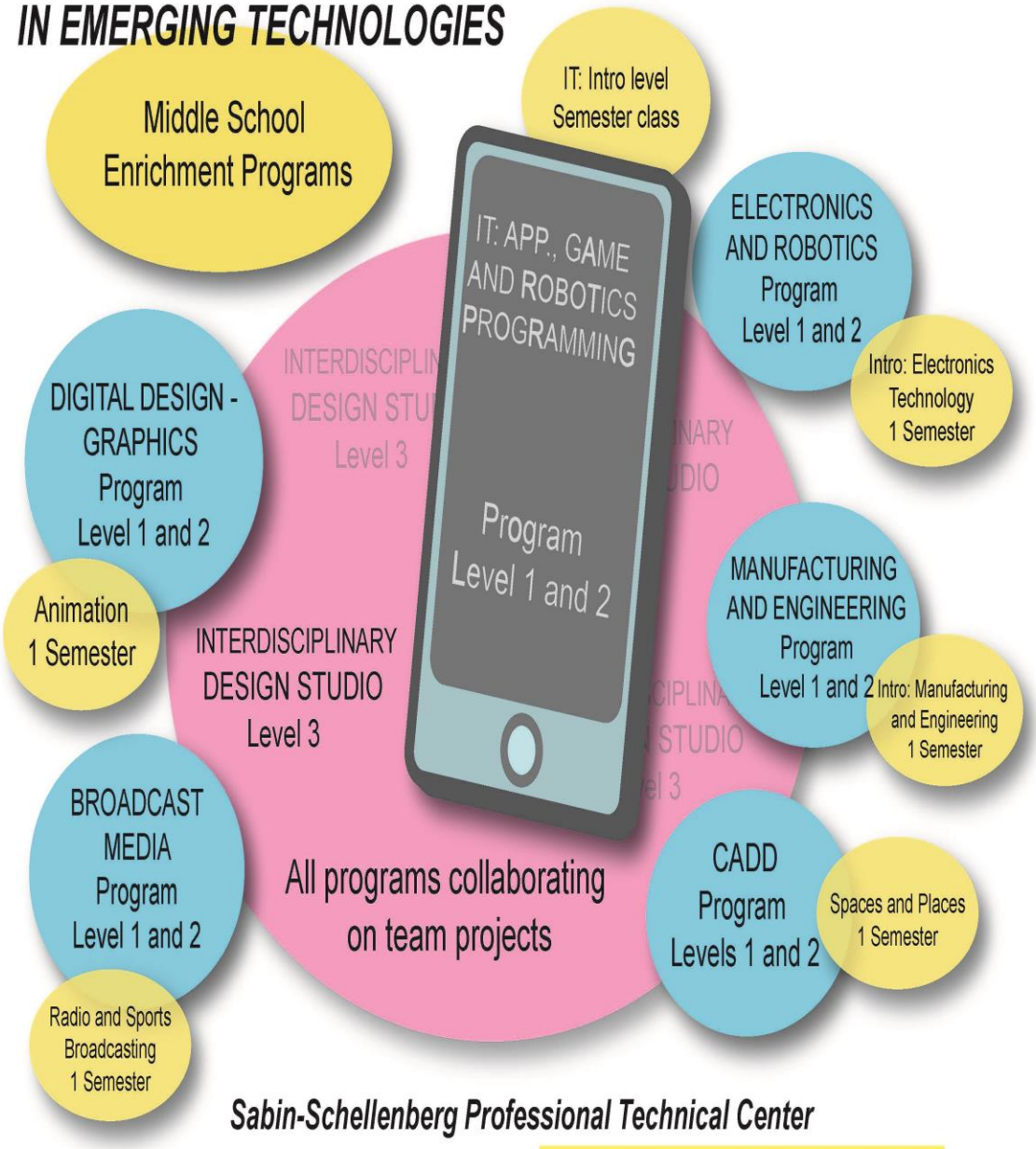
Sabin-Schellenberg Professional Technical Center

Oregon CTE Revitalization Grant Proposal 2015-2017

North Clackamas School District
14450 SE Johnson Road Milwaukie, Oregon 97267

EQUITABLE OPPORTUNITIES IN EMERGING TECHNOLOGIES



Sabin-Schellenberg Professional Technical Center

Where the Future is ... **UNDER CONSTRUCTION**

APPLICATION COVER PAGE

(Please Print or Type – All Fields Must Be Completed)

Project Name: Equitable Opportunities in Emerging Technology
Amount Requested: $323,884.00

Project Director: Karen Phillips, Administrator		
District, School or ESD: Sabin-Schellenberg Professional Technical Center		
Address: 14450 SE Johnson Road		
City: Milwaukie	State: OR	Zip: 97267
Phone: 503 353-5940	Email: phillipska@nclack.k12.or.us	

Grant Fiscal Agent Contact: Sarah Mehrabzadeh, Accountant		
District, Charter School or ESD: North Clackamas School District		
Address: 4444 SE Lake Road		
City: Milwaukie	State: OR	Zip: 97222
Phone: 503 353-6029	Email: mehrabzadeh@nclack.k12.or.us	

Superintendent: Matt Utterback		
District or ESD: North Clackamas School District		
Address: 4444 SE Lake Road		
City: Milwaukie	State: OR	Zip: 97222
Phone: 503 353-6000	Email: Utterback@nclack.k12.or.us	

	Participating High School or Middle School Name	Lead Contact Name	Grade Levels	Student Enrollment
1	Sabin-Schellenberg Center	Karen Phillips	9-12	3,200
2.	Alder Creek Middle School	Alyson Brant	6-8	1,024 (13-14)
3.				
4.				

PROJECT ABSTRACT

For many of our disenfranchised students, the thought or hope of graduating from high school and pursuing a college degree and successful career is nothing but a dream. The staff of Oregon's most established and successful career and technical center has the ability to connect those students to the skills needed to jumpstart their passion and future in the world of game programming, robotics, design, communications, and developing new apps for mobile devices including cellphones and tablets within the new *Emerging Technologies* Program of Study series of classes as well as summer camps involving students from middle school to college.

Sabin-Schellenberg Center, and our numerous business and community partners, have developed a plan focusing on engaging students in hands-on curriculum and resources that are rigorous, relevant and provide new relationships aimed at success for those students who deserve new opportunities leading to high-wage and high-demand careers. We are especially committed to engaging females and students of color with the opportunity to learn technology-centric skills as they learn from professionals from business and industry, highly trained and qualified staff, and from each other in emerging technologies.

B. CTE Revitalization Grant Vision

Her name is Marie Garcia (not her real name), a student from Milwaukie High School who attends Computer Aided Design classes at the Sabin-Schellenberg Center on a daily basis. Her family faces economic limitations after immigrating from Mexico 7 years ago. She is one of six children in her family who lives below the poverty line and deals with the day-to-day concerns of keeping a roof over their head, never mind the possibility of college. Her parents struggle to make sure the children are fed and clothed so they can go to school each day and obtain the high school diploma that neither was able to obtain. Marie has dreams now because she excels in this technology class that enables her to work on a computer at school designing state-of-the art buildings using industry standard software. She wants to be an architect and see those structures built for companies someday. But Marie is one of the few Latino girls in the class and she knows her future is going to be a challenge. The middle class dream of being successful is escaping more than 70 percent of poor children of color in the metro area, according to a recent study commissioned by **Children First For Oregon**.

Oregon's economy has begun to improve adding a record number of high-wage jobs that include positions in technology, according to reports by the state economists. But, if you grow up in poverty, economic mobility continues to be a

major factor in the possibility of you moving up the economic ladder. One of the key factors for success following graduation from high school is having the tools and knowledge necessary to be prepared for college or career. The high-tech industry continues to be a career pathway for students who have been given the opportunity to learn the necessary foundational skills during their time in high school and earlier. For Marie, that path to success has already begun with her involvement in one of the 16 career and technical education programs already established at the Sabin-Schellenberg Center, a center that has been a leader in Oregon in CTE instruction for nearly 50 years. However, with funding from a CTE Revitalization Grant, SSC would further expand opportunities for students with a new pathway that includes middle school students in the North Clackamas School District; specifically, the middle school we will be focusing on in the grant is located less than a mile away from SSC and its programs.

Students at Alder Creek Middle School come from a challenging demographic. As of the 2013-2014 school year, 17% were English learners, 46% were considered economically disadvantaged, and 22% were students with disabilities. Proficiency on state science assessments continues to be a priority for students at Alder Creek, especially female students and black students (-15% and -28% respectfully) whose scores remain historically low compared to other students. The demographics at Sabin-Schellenberg Center mirror our total high school population in North Clackamas. We are able to market to students to take part in this opportunity using our traditional approach of working with counselors, teachers, 8th grade

Expo held at Alder Creek and showcasing our programs, as well as our annual Open House that typically attracts a majority of middle school students and their parents. In addition, North Clackamas School District has established the CAFÉ program (an afterschool equity-focused enrichment and support program in education) that will help us reach out to underserved students in the Milwaukie High attendance area. BEAM (Black Educational Achievement Movement), a new District and SSC partnership, will lead focus groups with students of color at all three high schools to determine their needs or barriers to SSC and technology. BEAM will help us recruit technology professionals of color for our new program advisory panel and to help teach our summer camps for students.

The proposal comes in two parts. The first focuses on connecting earlier with middle school students, creating a personal plan for those students, in this case aimed at girls who are disenfranchised, encouraging them to take part in new STEM-focused programs at Sabin-Schellenberg. We will also invite and encourage freshmen students at all of our comprehensive high schools. We will provide opportunities in our first year of the grant to create hands-on technology-centric events and projects that will empower, support, and increase the confidence of our young women through a series of summer camps. Our mission is to increase opportunities and enlighten students who have not found their passion for classes leading to successful careers in gaming, programming, design, communications, animation, and robotics. Staff will develop rigorous and relevant curriculum working with leaders from SuperGenius, ATI, Clackamas and Portland Community

Colleges. The Instructor will be traveling to each site and additional skills centers to learn more and create a foundation of knowledge to predict and promote industry trends and focus.

Our second goal begins in year two and will focus on increasing the number of all high school students pursuing technology-based careers by connecting them with our business partners, our qualified staff, and mentors through curriculum rich with relevant and rigorous lessons beginning with the freshman and sophomore years. As students engage in the foundations of technology they will learn about each of the individual strands encouraging them to find their passion and options as they head into their sophomore and junior years. We are creating a MakerSpace where students can work together in a collegial fashion as they learn the various components related to five of our established CTE programs: Broadcasting and Social Media, Digital Design-Graphics, Computer Aided Design, Manufacturing, and Electronics. Staff will develop rigorous and relevant curriculum working with leaders from SuperGenius, ATI, Clackamas and Portland Community Colleges.

Culminating activities, such as designing an office building for a local corporation, producing a 3D animated movie, building a robot that can feed a dog, or authoring a new app on a smartphone that reminds you when to complete the college application will occur during the third year. All students will have an opportunity to showcase their learning through team projects from each of the different areas.

They will present their projects as an extended application to business and industry partners, the community, and parents, allowing for feedback, review, and possible next steps in internships, mentorships, and new career opportunities.

As a staff, trained to teach Common Core in CTE – including literacy and math – all classroom learning will have core academic content through contextual application.

Our district is primed for bringing back an opportunity for emerging technology education in the fields now looking for an educated workforce. Our center has always been considered a leader in Oregon for its innovation and our strong programs that continue to show a successful graduation rate for students who are completers in our current programs: 10% higher than non-completers at our three district comprehensive high schools. That success rate already shows our dedication to students who have been historically underserved. This new avenue, where students will be able to program new apps for their phone, learn programming for robotics, build animation shorts in 3D, and strengthen their learning in professionalism and the soft skills of problem solving, resiliency, communications, teamwork, and making deadlines will be embedded into the curriculum to aid in student success.

Our business partnerships continue to expand and we have commitments from new partners, including SuperGenius, a local company working with Disney and Activision where digital and 3D artists, animators and others develop games and

movie projects. We already are well connected with post-secondary programs, including Digital Media Communications at Clackamas Community College, where students are able to secure additional college credits through the 3D animation classes, as well as the video game development classes.

This is a rare opportunity to provide new opportunities to those students who have no experience how science, computers, and technology can be their stepping stone to a number of different career options. Sabin-Schellenberg Professional Technical Center is the educational leader to expand those opportunities for our most disenfranchised students.

Sabin-Schellenberg wants to give Marie Garcia an opportunity and the means to find her passion in an area not always inviting to young female students. We believe we have the ability to help her succeed and move onto college and beyond with strong instructors, relevant curriculum, mentors from business and industry, the latest technology and software, and her own sense of empowerment. Marie is waiting for that opportunity that we can give her with the new program funded by this grant.

C. Partnerships

Lawrence Dennis, CTO of Aerial Technology International and Peter Lund, COO of SuperGenius, will guide us in designing curriculum aligned with industry needs and standards. Andy Mingo, Director of Digital Media Communications Division at Clackamas Community College will provide guidance and advise in developing

curriculum and courses that align with college courses and provide dual credit; other college advisors include Charmagne Ehrenhaus, Dean of the Computer Technology Division and Dieterich Steinmetz, Dean of Science and Engineering at PCC Sylvania, who have informally committed to advising us in our design of summer camps and our Makerspace. Noni Causey M.Ed, Consultant with Black Educational Achievement Movement (BEAM), and Derron Coles PhD, Principal Consultant with DRC Learning Solutions will facilitate our work to recruit, engage, and serve our students of color.

Our partners, and members of our numerous Advisory Committees, have made the commitment to share their expertise and experience as we create new contextual lesson plans, work with us to act as mentors and guest speakers, host internships, and assist us in creating new opportunities. They have committed to bring their employees who work in the field into our classrooms to work in conjunction with our staff on the new technology trends. And, with the help of BEAM, advisors and employees who visit the school and classrooms will represent the actual demographic that reflects our students whom we are working to help learn the future of emerging technology. These leaders will become members of an official advisory committee dedicated to spending time and energy in making sure this program continues to grow and update itself as we move forward after the grant. Our college partners will help us create a seamless connection with post-secondary credit and opportunities to continue to succeed on the road to achieving a high-wage, high-demand careers both locally and wherever the industry moves.

D. Project Outcomes and Measures

E. Evaluation Progress Markers and Results

Area 1 - Improved and sustainable partnerships with business, industry, labor, and educational providers.		
Project Outcome	**Progress Markers**	**Expected Results**
1.1 A new advisory committee will be formed assisting the program made up of business and industry representatives, community college faculty and advisors, as well as representatives from at least one union (SAG/AFTRA)	Business professionals will meet with SSC staff to review new curriculum, attend advisory committee meetings, and take part in the review of student work during an annual showcase event.	Students will gain knowledge of industry standards while the program teacher will have assistance in providing curriculum that is relevant, rigorous, and at industry level standards.
1.2 Business partners and community experts will work to establish a series of summer camps aimed	40 students, including those considered disenfranchised, will take part in the annual	Middle school students will experience hands-on programming projects showcasing lessons

at underserved students.	summer camp program at SSC.	leading to high school classes at SSC.
Area 2 – Improved student access to CTE programs of study with particular attention to historically underserved students.		
Project Outcome	**Progress Markers**	**Expected Results**
2.1 SSC will work with BEAM and those in the CAFÉ program to help recruit underserved youth to our summer camps. SSC students in established CTE programs will act as personal mentors.	40 students, one-third of whom will be underserved (mirroring district high school demographics) will be engaged enough to enroll in the summer camp program and will have a personal connection established with a high school student already enrolled in a technology class.	The middle school students will build personal relationships leading to a welcoming environment at the after school program. Students will work with high school counselors to enroll in the new program as freshmen.
2.2 Students in the	Students will learn and be	Students who may not

summer camp program will be given a free Arduino Starter Kit and a 64GB IPad Air to encourage additional opportunities.	able to use the starter kits and tablets to build a project leading to a better understanding of new technology.	have technology easily available will be able to explore and learn more about future career opportunities, how technology is used, and industry trends.
Area 3 – Increased rigor in technical and academic content aligned to diploma requirements, industry-recognized technical standards such as the Oregon Skill Sets, and employability skills.		
Project Outcome	**Progress Markers**	**Expected Results**
3.1 Students learn how to code by working in a real software development environment to design, program and publish mobile apps and games.	Curriculum will be matched with expectations for Information and Communications Technology Skill Sets and employability skills.	Learning to code by creating real products, students discover how their learning leads to exploring and effectively planning for careers after high school.

3.2 Students will demonstrate the ability to manage projects and use knowledge of design and operation of specific technology.	Students will be able to work together to produce projects from different courses of study for the showcase on the specified date.	Student productions will be professional and will showcase time management, teamwork, communications, and problem-solving techniques using the technology provided and mastered.
Area 4 – Increased student awareness of career opportunities through exposure to employers.		
Project Outcome	**Progress Markers**	**Expected Results**
4.1 Students will meet with various industry professionals and college representatives to better understand next steps following high school graduation.	Industry professionals will review curriculum and guide SSC staff on a semester basis in essential skills now and in the future. They will also act as guest speakers in the	All students will have the knowledge necessary to understand industry expectations and pathways to post-high school opportunities.

	program.	
4.2 Students in the third year of the program will participate in internships at business sites, including ATI.	Curriculum developed and implemented that provides students with foundational skills in coding, design, and robotics.	Successful interns are offered employment opportunities.
Area 5 – Improved ability to meet workforce needs in the region with a focus on high wage and high demand occupations.		
Project Outcome	**Progress Markers**	**Expected Results**
5.1 Students will learn the software necessary to be proficient at a number of areas aimed at employment in 3D animation, coding, robotics, communications, and design.	Advisory Committee members will review student work during the year to examine learning and knowledge.	Student use of software with Creative Cloud Adobe Suite and coding languages will be able to showcase essential skills necessary to compete for actual positions in local and state technology professions or for

		obtainment of college credit.
5.2 Disenfranchised students will have an opportunity to hear from and work with professionals, including professionals of color, in the high-demand high-wage technology industries.	Guest speakers will have an opportunity to interact and mentor students who will have access to the latest technology and expectations of the emerging technology industry.	A new population of highly trained students will have the ability to not only showcase their learning to obtain a career but will be successful due to the inclusion of learning the soft skills necessary to retain employment.

F. Activities and Timeline

Activity	Outcome(s) addressed	Timeline	Person(s) responsible
Advisory Committee members sought and group formed to review expectations and assist with student	Area 1	Dec. 2015	SSC Administrator

recruitment.			
CTE Instructor is hired after going through appraisal process along with Technical Assistant	Area 1	Dec. 2015	SSC Administrator/NCSD Human Relations Department
Curriculum is developed along with industry partners and advisory committee	Area 1	Jan-June 2016	Instructor
Summer Camp preparations begin	Area 2	March 2016	Instructor
Summer Camp recruitment	Area 2 and 3	March – June 2016	Instructor/SSC/NCSD staff
MakerSpace set up at SSC	Area 3	Jan-June 2016	Technical Asst.
Summer Camp	Area 2 and 3	June and July 2016 and 2017	Instructor and Technical Asst. along with 3 additional SSC staff and business partner/guest teachers
Advisory Committee meeting – review summer camp and curriculum	Area 3, 4 and 5	August 2016	Advisory, Administrator, Instructor
Emerging Technologies program begins classes at SSC – semester long to be held both first and second semesters	Area 3, 4 and 5	Sept. 2016 and February 2017	Instructor, Technical Assistant

Student of Color Summit	Area 2	Nov 2016	BEAM Consultant
Guest speakers, field trips	Area 4 and 5	2016-2017 school year	Business partners. Instructor, Technical Assistant
Capstone project showcase	Area 4 and 5	Jan and June 2017	Students, Instructor, Technical Assistant

G. CTE Program of Study Design

Sabin-Schellenberg will establish a new program of study completed in the spring of 2016. This new program of study focuses on Emerging Technologies within a broad range of opportunities. Using literacy skills, students will have the opportunity to learn how to research trends and how coding can be used in various applications. Students will learn to code by working in a real software development environment aimed at teaching them how to design, program, and publish mobile apps and games. The Program of Study will have semester classes,

yearlong classes, and the opportunity to earn 3 high school credits, as well as dual credit. Additionally, we will have a dedicated computer lab, MakerSpace, and an advisory consisting of industry and college partners who will ensure alignment with industry standards. Students will experience hands-on activities by creating real products, discovering they can make things that have real world relevance, while taking part in learning industry-recognized standards from our business and industry partners and employability skills focusing on professionalism standards.

The CTE Revitalization Grant Vision is the heart of our proposal. We will be focused on the demographic that will benefit the most from new opportunities leading to success in all of their classes: students of color, females, and students of poverty. We will be working with students and their parents through the program. We provide the needed resources, including IPads, software, and other technology to allow students to continue to learn at their own pace in their own homes. We will invite parents into the summer camps to be a part of the learning process with their students. We will continue that strong communication by working with parents through the school year.

Finally, we have every intention of preparing the needed documentation to add this program to the 16 others already approved programs of study at Sabin-Schellenberg. We have strong district support, a qualified staff, and the business and industry partnerships that will assist us in the process.

H. High Wage and High Demand Occupations

According to a recent report by the Oregon Employment Department, "One out of every nine jobs in Oregon falls in the STEM category (science, technology, engineering, and mathematics), and one out of every eight new jobs from 2012 to 2022 is expected to be a STEM job. (https://www.qualityinfo.org/-/10-year-occupational-projections-for-stem-jobs) The focus for qualified applicants in the area of software developers and applications is one of the highest demand occupations with a need for qualified applicants. The experts agree, that these high paying jobs are multiplying with a need to train a new generation on the skills necessary to understand what is needed to be successful.

According to information at the Oregon Business Plan website, IT and software design are one of the strongest areas for economic growth and high-wage high demand jobs in Oregon. High Technology is considered a key growth industry and our connections with local business leaders in the software and technology industries will give students new opportunities in Clackamas County for advancement. In addition, Clackamas County continues to grow in the video production industry. Oregon has already invested state dollars in encouraging producers from all over the country to come to Oregon to film and produce award-winning movies, documentaries, and television shows. Our Broadcasting and Social Media program works with industry leaders and has already been able to assist students in becoming professionals at CBS and NBC. Our Electronics program, which includes robotics, had a student graduate from the University of Colorado and now works at NASA. Our Computer Drafting department had a girl

of color graduate from the program and is now working at a well-known architecture firm. We have many other success stories that have built a foundation of a strong commitment to professionalism and career and technical education for student success. The Emerging Technologies program will provide the conduit for students to delve deeply into design and coding, as well as move across the programs, from Emerging Technologies to Electronics, from Electronics to Manufacturing, depending on student interest. All six programs intersect in Emerging Technology program.

I. Equity

We offer an annual Open House to primarily middle school students and their parents as those students begin the forecasting process into high school. We connect with middle school classes and have students visit our classrooms to get a better feeling of what is offered while teaming those students with our upper-level students in the program. We will be working closely with the CAFÉ program and its administrators to directly connect with our students who have not normally thought of technology as something they would consider as an option. Our webpage and Facebook page will focus on the new opportunities and we will work with the local newspaper to make sure the community is aware of our additional courses and summer camp.

The summer camps may focus on those we believe show the greatest need. However, the program and subsequent classes to be held in the fall of 2016 will be

open to all. We will work with high school guidance counselors to increase awareness among others who have been historically underserved. Sabin-Schellenberg data indicates we do serve and work with students of color, English language learners, students who live in poverty, as well as students with disability. And, as with most CTE programs, we have learned our methods and curriculum offer those students a better chance of success in the classroom.

J. Diploma Connections

Sabin-Schellenberg Professional Technical Center has consistently showcased a higher than state average success rate for high school graduates. Almost ninety percent of completers of our programs graduate with their four-year cohort. One of the ways we help students succeed is by connecting business and industry requirements to our focus on professionalism. Students are taught every day that they are not at just a career center but at a school that helps them reflect on problem solving, communications, teamwork, safety, appearance, productivity, attendance, and character.

We provide two career-related learning experiences in each of our programs each semester. We have been trained in proficiency assessment, literacy, and math in the common core. We have special education professionals who work with our staff in our classrooms to help every student succeed. We have had the expectation that all seniors will take part in an extended application in order to graduate. We provide relevant curriculum, state-of-the-art equipment, after school clubs where students can continue to work on what they have learned as leaders in FFA, DECA, SkillsUSA and other programs. Each program has essential skills emphasized with all curriculums.

Our new Emerging Technology program will include the same expectations and same resources. We believe our teachers, who came from 16 different professional industries, know what is expected when students go on to college, internships, and industry.

K. Sustainability

Sabin-Schellenberg is using a team approach in connecting new students, especially those who need the resources to improve their foundations in science, opportunities in five programs of study. We work off of data to continually improve our practice. We have strong business and industry ties along with partnerships with institutions of higher education leading to college credit for our students already being served. We are the most established and longest running professional technical career center in the state of Oregon. Oregon lawmakers, from the state and federal level, have supported our programs for many years.

We have our own grant writer and have successfully obtained grants sustaining our various professional programs for over 20 years. Our Broadcasting and Social Media department has strong connections with the media with various advisory members being in the media and our instructor is a former broadcast reporter with numerous connections. Our programs are often mentioned in print and broadcast news stories.

Members of the North Clackamas School Board frequently described Sabin-Schellenberg as the "Crown Jewel" of the district and have continuously supported the largest number of CTE programs in one district in the state. The superintendent is committed to providing staffing for the Emerging Technologies program after the grant. Additionally, the district will be moving forward with a construction bond in November of 2016 and one of the top priorities is the remodeling and focus on Sabin-Schellenberg.

Whether it is State Labor Commissioner Brad Avakian, Congressman Kurt Schrader, or Representatives from all over Oregon, those who come and visit Sabin-Schellenberg see students engaged in higher-level thinking, working on state-of-the-art equipment, connections with business and industry, and rigorous and relevant curriculum leading to college credit.

There is no doubt, the long standing history and accomplishments of Sabin-Schellenberg will give students a strong foundation in emerging technologies with this new program. Building new partnerships with those in the industry will be strengthened during the first two years of the program enabling staff to continue to identify technology trends and connecting real world standards with our curriculum. We will expand our connections to offer college credit with local post-secondary institutions. Summer camps will give our disenfranchised students an opportunity to participate in hands-on projects with their peers, leaders in the field, and educators who want to see these students succeed. And, we will engage our communities of color to assist us in recruiting a strong educator who will be the right person to connect to our students.

L. Communications

Sabin-Schellenberg has already begun the process of working with several groups already engaged with our disenfranchised community of students. They are on board with our proposal to offer summer camps to our middle school students who have the lowest scores in assessments in science. Coincidentally, these are the female and students of color who we are targeting for engagement in the program. The CAFÉ program, now housed at one of our comprehensive high schools connected to that middle school and Sabin-Schellenberg, already has relationships built with our target families. The CAFÉ staff has built a community that we will engage with invitations to visit our facility. We ask the parents to accompany the students we are targeting. Interpreters will be on site. Leaders of

color and our business partners will showcase the employment opportunities available. Our community college partners will have information available regarding post-secondary education opportunities.

We will invite the Clackamas Review to visit during the preparations for summer camps and during the sessions. We will have information on career pathways in multiple languages available for the reporters as well as our students and parents.

Our school board and administration will also be on hand to meet with students and parents during the summer camp and as we showcase the program during our awards ceremony at the end of the school year.

V. Bonus Narrative

A. Career and Technical Student Organization

Sabin-Schellenberg is already fully involved in the SkillsUSA organization. Many of our current programs have had after-school clubs established for over 5 years. Our students have competed and placed in the state contest every year. We already have procedures in place to help our award-winning competitors get to national competitions along with our coaches.

Our students in the new program would get to know about the opportunities in competing and showcasing their skills during the summer camp programs while they are still in transition from middle school to high school. We will offer applications and after school activities for those interested in belonging to the organization.

Our current advisors will work in tandem with our new advisor offering information and assistance in getting the students more familiar with the opportunities with SkillsUSA.

B. Middle School Component

We are focused on middle school students in this grant proposal. A year ago, students in a middle school class that focused on news around the school, visited Sabin-Schellenberg's Broadcasting and Social Media class. The students from both classes were teamed and worked in the SSC television studio. The middle school students were able to connect with what they were doing at the middle school in a CTE setting. The opportunity was more than just looking at equipment or being given a handout. The visit offered the students an opportunity to look at options for them in high school. They worked with students who had already learned in the program and found new connections with those who had come before them into the classes. When students registered for classes, even without specific invitations from that class, the Broadcasting and Social Media program was the new home for several freshmen who had visited the year before.

C. Out of School Time Programming

It seems the perfect opportunity to recruit and attract middle school students is in the transition into high school. In North Clackamas, our middle school students include sixth, seventh, and eighth graders. Our proposal is to engage those students while they are in middle school to take part in the summer camp opportunities for the two years of the grant as our jumpstart into forecasting for high school classes. We will run these camps beginning in the summer of 2016. They will run over a five-day period, two times during the summer to enable our focused disenfranchised middle school students a learning environment to explore the possibilities of emerging technology.