

APPLICATION COVER PAGE

Project Name: Yamhill Carlton Career Academy
Amount Requested: \$222,208

Project Director: Greg Neuman		
District, School or ESD: Yamhill Carlton High School		
Address: 275 N. Maple		
City: Yamhill	State: Oregon	Zip: 97148
Phone: (503) 852-7600	Email: neumang@yoschools.org	

Grant Fiscal Agent Contact: Loreli Wright		
District, Charter School or ESD: Yamhill Carlton School District		
Address: 120 N. Larch		
City: Yamhill	State: Oregon	Zip: 97418
Phone: (503) 852-6980	Email: wright@yoschools.org	

Superintendent: Charan Cline		
District or ESD: Yamhill Carlton School District		
Address: 120N. Larch		
City: Yamhill	State: Oregon	Zip: 97148
Phone: (503) 852-6980	Email: clinec@yoschools.org	

	Participating High School or Middle School Name (add additional rows as needed)	Lead Contact Name	Grade Levels	Student Enrollment
1.	Yamhill Carlton High School	Greg Nueman	9-12	378
2.	Yamhill Carlton Intermediate School	Michael Fisher	5 - 8	330
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

## **Section 2 - Application Narrative**

### **A. Project Abstract**

Yamhill Carlton High School will develop the Yamhill-Carlton Career Academy (YCCA). The YCCA will provide high school students with the knowledge and skills necessary for today's high-wage, high demand careers. Career Academies are researched-based models of Career & Technical Education that are proven to be highly effective. It begins with a robust education plan facilitated by the high school counselors and incorporates four core applied academic classes. The academy is focused on several distinct career paths that are connected to the needs of local business partners. Students will be assigned to work in project teams. Project teams will be led by advanced students who have demonstrated technical proficiencies. Industry partners will provide technical expertise and will meet as an advisory team to help set program goals and assess quality of student work. Industry and business partners will contribute to the sustainability of the YCCA by helping to locate and/or fund equipment, providing student internships, and employment opportunities. Higher Education partners will be engaged to facilitate further education in a technical field.

## B. CTE Revitalization Grant Vision

Yamhill-Carlton is a rural school district comprising 1,166 students. Yamhill-Carlton High School's student enrollment in 2015 – 16 is 364 students of whom 32% are economically disadvantaged, 13% are students of color, less than 5% are English Learners, and 18% are students with disabilities. Currently, in our CTE program there are **141 middle school** students and **184** high school students who are involved for a total of 325 current YCSD students being served in our current CTE incarnation.

Through the development of the Yamhill-Carlton Career Academy (YCCA), the CTE Revitalization Grant Vision's five goals are addressed.

1) Demonstrates **innovation** in the delivery of Career and Technical Education. Career Academies have been extensively studied and replicated throughout the United States. In a recent (September 2015) *What Works Clearinghouse Intervention Report*, Career Academies were shown to produce positive effects on completing high school. As of 2011 some 2,500 of this type of educational organization have been created. Career Academies are generally described as school-within-schools programs operating in high schools. They typically focus on a specific career area; and the academic curriculum and instruction are aligned with the career focus. Partnerships are established with local businesses to provide expertise, materials, and work experience. In some cases, Career Academies stand alone as separate high schools where students attend full or part time. The economic outcomes for graduates of Career Academies have been impressive: "increased earnings for young men by an average of \$212 per month over 48 months. This amounts to an 18 percent increase over the non-Academy group's average earnings of \$1,161 per month, and it totaled more than \$10,000 in additional earnings for the Academy group over the 48-month follow-up period. The Career Academies' impact on

earnings for young men is substantially larger than the roughly \$100 difference in monthly earnings that has been found in other research that compared the earnings of young workers who have one or two years of post-secondary education with the earnings of their counterparts who have only a high school diploma or a General Educational Development (GED) certificate” (Kemple 2004).

The Central Educational Center (CEC) in Coweta County, Georgia has been identified as an exemplary model nationally. As Georgia’s Lieutenant Governor, Casey Cagle, notes, “if 80% of the workforce of tomorrow is going to need some kind of technical training, we need more students on a technical path of learning, that’s what career academies, like CEC, accomplish.... This is about bringing relevance to education” (Cagle, 2015). The CEC’s mission is to help the people in its local geographic area take charge of their economic future. The school is based on nine key elements that the founders believe must be replicated for a successful model: 1) It is a system that must be developed step by step. 2) It is joint venture that has major community, business and industry stakeholders involved. 3) The CEC is needs driven and bases its curriculum on employer need. 4) It is seamless—integrating academics with CTE and post-secondary education. 5) It is experiential—emphasizing project and performance instruction. 6) It has high expectations. 7) It is flexible. 8) It requires and fosters leadership. 9) It is results driven. The Georgia Department of Education funded the CEC to develop a replication manual to assist other school districts interested in replicating their success.

**OUTCOME 1: Develop and establish a Yamhill-Carlton Career Academy (YCCA).**

Yamhill Carlton High School seeks to replicate the CEC on our campus. Mark Whitlock, CEO of the CEC, has agreed to act as a development consultant for our project. Upon receipt of the

grant resources, a group of teachers and administrators will travel to Georgia in order to visit with teachers and study curricular practice.

2) Shows the integration of the separate elements of the proposal into a coherent project including the **integration** of core academic content and community resources. Career Academies are predicated upon the integration of academic content and community resources.

**OUTCOME 2.1: Establish career pathways for incoming 9<sup>th</sup> grade students.** The Career Academy begins with a robust education plan facilitated by the high school counselors. In the 7<sup>th</sup> grade all students are required to take a STEM class that uses a series of projects to introduce students to applied math, science, and engineers. In the 8<sup>th</sup> grade students can choose to take an introductory course in Manufacturing and Agriculture. As freshmen, students will meet with their counselors for a career conference at the beginning of the year and be shown options for their pathway toward a general career. If their goals reside in a technical or agricultural area, they would be introduced to the Career Academy.

During the first semester of the 2016 – 17 school year each member of the YCCA will have a credit inventory update with the primary counselor for YCCA students to review progress and chart a course for successful completion.

**OUTCOME 2.2: Revise four core academic content courses to reflect integration of technical and community resources that are aligned with diploma requirements, industry-recognized technical standards (Oregon Skill Sets), and employability skills.** Four academic classes will be created to support the YCCA. Each would replace a current course requirement and will only be open for students committed to the YCCA. The academic classes would explore the same information as the regular classes, but examined from an applied angle. For example, Technical Reading and Writing would replace Junior Language Arts; the Physics of

Machines would replace a general physics class; Math for Agriculture and Engineering would replace Algebra 2; and, the History of Technology in the US would replace US History. A cross-walk demonstrating the alignment of these revised courses with diploma requirements, industry-recognized technical standards, and employability skills will be developed and monitored.

In conjunction with experts in the field, a predetermined group of core content teachers will work additional summer hours to learn “tricks of the trade” from experts in the field, in order to align their curricular aspects of YCCA courses to reflect expectations from the workplace.

Additionally, all courses will be specifically aligned to meet the Common Core Expectations through which students are measured. This curricular alignment to workplace expectations and academic alignment with regards to the skill mastery will serve as the backbone of the YCCA.

The YCCA classes themselves will be focused on several distinct career paths. Our local business partners need skilled employees in manufacturing and agriculture. Both career areas are made up of a number of high wage, high demand occupations. Consequently, Yamhill Carlton has built programs that cater to those career areas. As we move from our current format to the YCCA, students from each grade level will attend the same classes and will be assigned to project teams. Students in each project team will have ranks that have been earned by gaining pre-defined skills and demonstrating their proficiency in each. The YCCA team will collaborate with organizations such as Skills USA to assist with student organization and ranks that are based on industry certifications and expectations. These certifications and expectations will be arranged into short-term targets that YCCA students will work to attain.

This rank and promotion system will allow students to be judged upon their skill level and effort within the YCCA program and not solely based upon age or grade level. The ranking promotion system will allow students to stand out among their peers based upon their skill level

attainments and certification progression motivating students to achieve rapidly and be recognized for their hard work with leadership positions within the YCCA.

3) Supports the **expansion** and **growth** of CTE programs and students served. Strong CTE programs enable students potentially at-risk of leaving school prior to graduation to remain and be successful.

**OUTCOME 3.1: Through the establishment of YCCA, student enrollment in CTE will increase by 20%.** Students consistently respond favorably to education that is real world based. The YCCA will attract more CTE students because of its emphasis on problem-based learning within real work experiences. Concrete educational outcomes appeal to many students who struggle to find meaning in an academic setting.

**OUTCOME 3.2: Through the establishment of YCCA, graduation rate of economically disadvantaged students will increase by 20%.** Historically, Yamhill Carlton High School has achieved a graduation rate that has hovered between 70% and 80% with regards to cohort. The YCCA will work to invite students into engaging curriculum and increase opportunities to inspire their creativity and abilities to achieve academically and meet the required standards with regard to high school graduation through an alternative yet equally rigorous course of study. This increased graduation rate for economically disadvantaged students will lead to opportunities for the students and their families to attain high wage employment opportunities beyond high school.

**OUTCOME 3.3: Through the establishment of YCCA, historically underrepresented student participation in CTE will increase by 20%.** Targeted recruitment efforts, such as informational publications and specific career informational opportunities, will reach out to female students to increase enrollment in CTE classes. This will involve informational



publications and specific career opportunities geared toward increasing females' interest in the YCCA. During the 2016-2017 school year the after school program, Yamhill Carlton's Innovation Academy, will collaborate with the YCCA team to design a student led project that will specifically focus on female student recruitment.

4) Provides students with **experiential learning** opportunities. Demonstration of learning and the skills required to perform well in high-wage, high-demand jobs requires students to practice those skills. These skills develop through project based learning activities, where a student may have to interact with customers, research design possibilities, and build a project to specification.

**OUTCOME 4.1: Develop project team structure in which YCCA students solve job-embedded problems.** YCCA students will be organized by skill level as opposed to grade level. Project teams will be led by students who have a higher rank as they are working to fulfill their proficiency requirements for leadership and teamwork. Project teams will have specific problems to solve as a group. Part of the team leader's job will be to help the group define what must be learned to solve the problem and make sure that lower ranking students are working to earn skill proficiencies. Students who are interested in related fields, but are not interesting in the full CA can join the project teams at lower levels to learn basic skills. The teacher's role is to facilitate student leadership, manage student process, and monitor quality control. Industry volunteers will become advisors to student project teams and help them to develop skills and procure resources.

**OUTCOME 4.2: Establish industry internship within the Yamhill-Carlton community for seniors.** Seniors (Level 4) will add an industry internship to this process to replace the current Senior Project. Many of the proficiencies for the Level 4 students will be about

leadership, teamwork, and the business of industry and agriculture. Commitments for industry internships have already been secured and are evidenced through our letters of commitment. They will help to fund or find equipment for the programs. They will provide internships that YCCA students must compete to get.

5) Builds career pathways for students that lead to **high wage** and **high demand** occupations. The YCCA is a road for all students to find success. A student who emerges from the YCCA will have the skills to step out into a well-paying job or a college technical program, and will have the know-how of how to market their skills effectively.

**OUTCOME 5.1: Ensure alignment of YCCA curriculum with the knowledge and skills required by high-wage, high-demand employers.** Industry partners will provide technical assistance to both the whole program and project teams. The partners will meet as an advisory team to help set program goals and assess quality of student work.

**OUTCOME 5.2: Increase access of YCCA students to employers throughout the broader Willamette Valley.** As the YCCA Advisory Board becomes established, additional business will be invited to participate to ensure broad community engagement thus providing students with maximum exposure to a variety of industry and business leaders. Each advisory board currently has 3 to 5 members. Both boards will increase their business members by three.

**OUTCOME 5.3: Increase ability of YCCA students to access post-secondary education.** Higher Education partners have programs that the YCCA will align student learning to. There will be a direct connection for students who desire to take their educational program to another level. At least once a year a college counselor will come and meet individually with students and connect the student's current learning path to higher education.

This project changes the way that students experience Career Technical Education. Oftentimes CTE programs are thought of as the programs that students do who cannot quite cut it in academic work. The YCCA creates a legitimate path for students who are interested in a technical education. By formalizing the system, the YCCA will help students that are historically underserved walk a defined path to success. Research on Career Academies indicates that at risk students graduate at a higher rate compared to their peers in a traditional school system. In Yamhill Carlton, our major underperforming group is economically disadvantaged students. We often find that those students experience success in CTE.

### **C. Partnerships**

The YCCA is built on a foundation of business and educational partnerships that began with a need for a robust and talented workforce and continues in the development of this grant proposal. Two examples illustrate the need for these partnerships. Three years ago two major local employers came to the YCSD looking for help. Independent of each other, and in different industries, Jeremy Lodge of the Meggitt Cooperation and Ken Wright of Ken Wright Cellars approached us with similar stories.

Mr. Lodge, manager of a local branch of an international corporation, had contracts with the aerospace industry, but could not find skilled workers to expand his operations and meet contracts. He approached the YCSD with a proposal: If his company invested into the machinery and curriculum of our fledging manufacturing program, would YCSD produce students who would be qualified to work? An agreement and partnership was born. The Meggitt Corporation has now invested over \$150,000 in refurbishing facilities and training instructors to work to industry standards. Meggitt employed a YCSD manufacturing teacher for a summer internship to gain the necessary knowledge and skills.

A similar story has emerged with Ken Wright. While the wine industry has the necessary workers, it has become apparent that few of our local students are getting involved. Mr. Wright and other local wine makers pooled their resources to put in an acre and a half of vineyard on school district property resulting in the establishment of program similar in design to Chemeketa's Viticulture Program. From 4 to 8 students are hired as paid interns by Ken Wright each summer to learn all aspects of growing grapes while earning college credit in Summer Vineyard Practices VMW 116.

In addition to these two businesses, YCSD partnerships include a diverse range of business, industry, and labor partners from within and around the YCSD. Most of the businesses are in manufacturing and agriculture, defined as high wage/high demand: Solid Form Fabrication, a custom metal fabrication shop that designs and crafts metal products; Kerr Contractors, a leading heavy civil general contractors in Oregon; Slater Machine & Tool, a precision shop for specialty parts; and G.K. Machine, a company that builds heavy equipment and machines for agriculture. Recently, the business development group - Strategic Economic Development Corporation (SEDCORE) has come on board as a partner to help us expand our network of employers. Throughout the development of this proposal our partners have collaborated in providing input and guidance

The Yamhill Carlton CTE Advisory Council is comprised of representatives from each of our partners who contribute their time and resources to educate students in their fields. In addition, YCSD is currently working to align our class standards with courses from Chemeketa Community College so that students may leave our institution and advance their knowledge in a technical school.

YCS D business partners are clearly interested in employing people with the skills that they need regardless of the individual’s background, race, or gender. They are interested in helping YCS D expand our CTE programs to include more students who are historically underserved so they will have a larger pool of people from which to hire.

**D. Project Outcomes and Progress Markers**

As noted in the Request for Proposals, the project’s outcomes and process markers have been inserted into the Appendix F table. The outcomes have been outlined in Section B.

**E. Evaluation Progress Markers and Results**

The following table includes how each project outcome will be assessed through the use of Progress Markers and Expected Results. The results are what is expected to be achieved by the end of the grant cycle. Data collected will be analyzed and incorporated into quarterly and end-of-project reports submitted to ODE.

<b>Area 1 - Improved and sustainable partnerships with business, industry, labor, and educational providers.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
OUTCOME 1: Develop and establish a Yamhill-Carlton Career Academy (YCCA).	<p>Document analysis of commitments made by CEC, Advisory Board members, and YCS D</p> <p>A needs assessment will be developed and administered in September 2016 to Advisory Board to identify expectations for YCCA</p> <p>A survey will be developed and administered in June 2017 to assess Advisory satisfaction with YCCA</p>	<p>1.a Memorandum of Understanding with Career Educational Center in Georgia exists</p> <p>1.b YCCA Advisory Board is established</p> <p>1.c Increase number of business partners from 5 to 10</p>
<b>Area 2 – Improved student access to CTE programs of study with particular attention to historically underserved students.</b>		
<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>

OUTCOME 2.1: Establish career pathways for incoming 9th grade students.	Surveys will be developed to determine <ul style="list-style-type: none"> <li>• student satisfaction with career pathways and YCCA design</li> <li>• parent satisfaction with career pathways</li> </ul>	2.1.a. Career pathways are established for incoming 9 <sup>th</sup> grade students
OUTCOME 3.1: Through the establishment of YCCA, student enrollment in CTE will increase.	YCSD enrollment data will be examined to compare number and percentage of students enrolled in CTE classes overall <ul style="list-style-type: none"> <li>• 2015-2016 to 2016-2017</li> <li>• 3 year average to 2016-2017</li> </ul>	3.1.a. 20% increase in student enrollment in CTE
OUTCOME 3.2: Through the establishment of YCCA, graduation rate of economically disadvantaged students will increase.	YCSD graduation data will be examined to compare the graduation rate of economically disadvantaged students <ul style="list-style-type: none"> <li>• 2015-2016 to 2016-2017</li> <li>• 3 year average to 2016-2017</li> </ul>	3.2.a. 20% Increase in high school graduation rates for economically disadvantaged students
OUTCOME 3.3: Through the establishment of YCCA, historically underrepresented student participation (female students) in CTE will increase by 20%.	YCSD student enrollment records will be examined to compare number and percentage of female students enrolled in CTE classes overall and CTE manufacturing classes <ul style="list-style-type: none"> <li>• 2015-2016 to 2016-2017</li> <li>• 3 year average to 2016-2017</li> </ul>	3.3.a. 20% increase in female student participation in CTE manufacturing classes

**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.**

<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
OUTCOME 2.2: Revise four core academic content courses to reflect integration of	Conduct needs assessment to identify most desired employability skills by YC	2.2.a. YCCA Math Framework established and implemented

technical and community resources that are aligned with diploma requirements, industry-recognized technical standards (Oregon Skill Sets), and employability skills.	employers  A crosswalk document will be developed to analyze the alignment between the course frameworks developed and Oregon Diploma Standards, Oregon Skill Sets, and industry-recognized employability skills	2.2.b. YCCA Science Framework established and implemented  2.2.b. YCCA Social Studies Framework established and implemented  2.2.b. YCCA Language Arts Framework established and implemented
OUTCOME 4.1: Develop project team structure in which YCCA students solve job-embedded problems.		4.1.a. Rank and promotion proficiency structure developed based upon Oregon Skill Sets, local industry developed skills, and CRLS

**Area 4 – Increased student awareness of career opportunities through exposure to employers.**

<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
OUTCOME 4.2: Establish industry internship within the Yamhill-Carlton community for seniors.	Each industry partner offering an internship will be interviewed at the beginning and again at the end of the school year to assess expectations, realities, satisfaction, and outcome of the internship experience for the employer  YCCA internship agreements will undergo a document analysis to determine alignment of expected outcomes with identified industry employability standards	4.2.a. YCCA internship established with 10 local employers  4.2.b. YCCA internships have clear outcomes identified and agreed upon by YCSD, employer and student intern
OUTCOME 5.2: Increase access of YCCA students to employers throughout the broader Willamette Valley.	Each YCCA student will be interviewed at the beginning and again at the end of the school year to assess expectations, realities, satisfaction, and outcome of	5.2.a. Industry professionals interact with students in lab setting and work experience  5.2.b. Technical Schools promote programs in CTE

	the YCCA experience for the student	class and career fair  5.2.c. Local Employer Job Fair and employment notice board utilized by YCCA students
--	-------------------------------------	---

**Area 5 – Improved ability to meet workforce needs in the region with a focus on high wage and high demand occupations.**

<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
OUTCOME 5.1: Ensure alignment of YCCA curriculum with the knowledge and skills required by high-wage, high-demand employers.	Conduct needs assessment to identify most desired employability skills by YC employers A crosswalk document will be developed to analyze the alignment between the course frameworks developed and Oregon Diploma Standards, Oregon Skill Sets, and industry-recognized employability skills	5.1.a. Direct Employer Input on knowledge and skills students learn solicited through YCCA Advisory Board  5.1.b. YCCA curriculum reflects industry standards for high-wage, high-demand jobs
OUTCOME 5.3: Increase ability of YCCA students to access post-secondary education.	Document analysis of commitments made by post-secondary partners and YCSD  Post-graduation survey with YCCA students to determine post-graduation outcomes (employment status, post-secondary status, ease of movement into employment and/or post-secondary education, etc.)	5.3.a. Memorandum of Understanding established with post-secondary institutions to participate in Career and Job Fairs  5.3.b. Post-secondary partners collaborate with YCSD to identify clear pathways for students to progress from \ to post-secondary training as needed.  5.3.c. YCCA graduates matriculate seamlessly into post-secondary partners' classes

**F. Activities for Planning and Implementation**

<b>Activity</b>	<b>Outcome(s) addressed</b>	<b>Timeline</b>	<b>Person(s) responsible</b>
After School Innovation Program will be established. A “girls only”	2.1, 2.2, 3.3	Feb 2016 – June -2017	Greg Nueman



project team will be established as part of program.			
Reps from YCCA Development Team will travel to Georgia to research CEC and smaller replication site.	1	April 2016	Charan Cline
Current and new business partners are formed into Advisory Council that will meet monthly.	5.1, 5.2	March 2016	Trevor DeSilva
TRI from WOU develops a data gathering and evaluation plan.	All outcomes	May 2016	Charan Cline
New Equipment is purchased and installed in CTE programs.	1	April 2016	Nichole Spearman
CTE Classes are designed for proficiency and project team based approach. Supplies are purchased.	2.2	Jun-July 2016	Trevor DeSilva
Four Academic Classes are redesigned to support YCCA	2.2	Jun-July 2016	Jordan Slavish
Counseling brochures and program documents are created. Plan developed for attracting female students.	3.1, 3.2, 3.3	August 2016	Mimi Robb
Administration develops varied Implementation timeline for students 9-12. Also develops student and parent communication plan.	1, 2.1	June-July 2016	Charan Cline
Students begin attending YCCA classes and aligned academic classes.	2.1, 3.2, 3.3	September 2016	Mimi Robb
Consultant from Georgia CEC travels to Yamhill to review program.	1	October 2016	Charan Cline
Advisory Council and YCCA team meet quarterly to review implementation process.	5.1	Oct 2016 – June 2017	Nichole Spearman
TRI Team gathers data	All outcomes	Sept 2016 – June 2017	Charan Cline
Industry representatives teach specific skill sets in class	5.1	Sept 2016 – June 2017	Trevor DeSilva
High School Seniors and Juniors promote YCCA with 8 <sup>th</sup> grade.	2.1, 3.1, 3.3	April 2017	Mimi Robb
Technical Schools have post-secondary fair.	5.3	April 2017	Mimi Robb
Industry representatives have job fair.	5.2	May 2017	Nichole Spearman

TRI Delivers Evaluation of YCCA	All outcomes	July 2017	Charan Cline
YCCA Team revamp curriculum from lessons learned	2.1, 2.2	Aug 2017	Greg Nueman
YCCA Curriculum is locally published and is available for other Oregon Districts	1, 3.1, 2.1	Sept 2017	Charan Cline

**G. Career and Technical Education Program of Study Design**

Both of our primary CTE programs (agriculture and manufacturing) currently reside within our agriculture **Program Of Study (POS)**. This will be the currently approved ODE program that will be enhanced upon the awarding of the grant and full implementation of the YCCA. Additionally, this funding will act as the catalyst to expand our already successful manufacturing program (currently housed within our agriculture POS) to become its own fully functional and thriving POS. Conversations have already begun with the Oregon Department of Education, as well as the Mid-Willamette Education Consortium (MWEC) with regard to making this a reality very early in the process.

As explained in the grant vision portion of our application, the YCCA will act to bind industry level expectations to thriving and engaging content standard requirements. Teachers responsible for YCCA curriculum within the expanded programs of study, as well as core content areas, will work closely with the advisory board to truly align their academic practice to workplace expectations coupled with high level and engaging academic rigor. This combinations of support will act to ensure that YCCA students will graduate from Yamhill Carlton High School better prepared to address their individual personal success as well as meet the need of local business and industry partners.

The manufacturing wing of our agriculture POS also boasts thriving industry partnerships well documented throughout our grant application. These partners understand the unique opportunity that has been created at YCHS, as well as the limitless potential the YCCA has when

fully funded and operational. Our current industry partners are not the only ones who have stood up and taken notice of the work of our staff and students within this POS. We were honored to welcome Senator Ron Wyden to YCHS on 10/21/2014 to recognize and see for himself the strong and growing programs at YCHS. The manufacturing program within our agriculture POS was fortunate enough to receive a \$19,000 Grant from the Oregon Business Development Department based upon the recommendation from Sen. Wyden, in order to purchase 3-D printers which are already paying dividends. Students are interacting with cutting-edge real-world equipment and expectations modeled to industry standards, in order to enhance their ability to find success within our program and beyond. Both federal and state officials have recognized the opportunities that our current POS offers students. The funding and ultimate creation of the YCCA will allow our POS program/s to expand and thrive to serve more of our traditionally underserved students by making curriculum that is relevant and engaging to all members of our student body.

#### **H. High Wage and High Demand Occupations**

The communities of Yamhill and Carlton are primarily supported by industries related to growing, processing, and selling agricultural products. Other local industries tend to be related to light manufacturing and metal fabrication. Our current CTE programs directly relate to those industries that are locally in demand of employees. The Oregon Employment Department lists many of the occupations that are related to agriculture and manufacturing as high wage/high demand. The Oregon Business Plan names both manufacturing and agriculture as important industry clusters. According to Oregon State University, agriculture accounts for 15% of the state's economy and 12% of the state's employment. The average age of a farmer in Oregon is 57, and older farmers own 55% of farms in the state. Creating a system of education and

transition to a younger generation will be vital for the long term health of the state's economy. YCSD's proposal is aimed at helping students gain the skills and knowledge to do just that.

Manufacturing took a downturn in the economic health of our state due to the effects of the Great Recession. As manufacturing businesses begin to rebound they find the workforce has been trained to do other things. According to the Oregon Business Plan, education institutions should offer "project-based, problem solving curriculum along with experiential learning and extra-curricular activities." Our project is directly focused at preparing students for these two high demand/high wage industry clusters.

The YCCA system of helping our students into high wage and high demand occupations will be communicated to student, parents, and community members through a series of open houses and local news stories. We will document our students' accomplishments through social media and our local website. Students will take literature home to parents that communicate the YCCA path to high wage / high demand occupations.

## **I. Equity**

The YCSD exists as a rural district that pulls students from a large rural area. Many of these students live their entire lives in their current location. The National Center for Education Statistics (NCES) reports that rural high school students take more credits of CTE than urban, suburban, or town-based students – we've seen this to be true and the YCCA will further emphasize this prevalent association into something that is not a passive draw but an active recruitment.

The two historically underserved populations that exist in the YCSD are economically disadvantaged (ED) and female students. Because of varieties of social issues, students that are ED tend to have trouble visualizing a long term goal and the steps to achieve it. Research on

Career Academies has shown that ED students perform well beyond the rest of their peer group in that educational environment. The YCCA with its system of short-term concrete educational goals is designed specifically for an ED student to be successful. Recruiting these students will come through several avenues. The first is introduction to CTE in Middle School Programs that will cause some students to self-select. Other students will discuss career interests with counselors who will show them the YCCA path. Support will be given to those students through academic intervention programs.

At the YCSD, females outperform males in almost every academic indicator at all grade levels. However, they are underrepresented in our current CTE programs. When interviewed, our female students indicate that they are afraid that boys will criticize their work; therefore they do not get involved in CTE. This indicates that the participation problem is social and will need a social solution. First both the YCCA and the Innovation Academy afterschool program, will have “girls only” project team inside the normal coed environment. This will create a space where girls will be free to make mistakes and learn from them. We will also work with our business partners to find females in their companies who can come and speak to high school and middle school female students. These women will mentor our girls over the long term and encourage them to stick with the program.

The more students participate in career and technical student organizations, the higher their academic motivation, academic engagement, grades, career self-efficacy, college aspirations and employability skills. (Alfeld et al., Looking Inside the Black Box: The Value Added by Career and Technical Student Organizations to Students’ High School Experience, National Research Center for CTE, 2007).

The YCCA is designed to be a student organization in every sense of the word. Students mentor each other, students advance in ranks, and students own the products they produce and distinctions they earn. These students already have a strong sense of comradery with their community, and our system capitalizes on that loyalty to each other by creating not just a program, but an academy of students that support and rely upon one another.

### **J. Diploma Connections**

The YCCA will have a clear and measurable diploma connection for academic achievement, personal/social development and career development essential for student success. These areas are critical in order to help students reach their potential at YCHS and throughout post-secondary tracks, college and/or career. Engaging students with career guidance in the YCCA will be critical with regard to keeping them on track to graduation and engaged in their academic experience.

Students are looking for alternatives to a traditional four-year college track. Many students want to turn their hobby or what they love into their career, and the YCCA will help make this a reality. The Career Academy model is designed to reach all students, but is particularly beneficial to the specific population of YCSD students, who would be labeled as the 20% and/or traditionally underserved in the 40/40/20 model.

Many students feel they cannot afford or will not make it into a traditional college, or have a lucrative career - based upon past experiences of family or peers. Having the YCCA will greatly influence and inspire these students to achieve something greater than their predecessors. It is exceedingly important for staff members in the YCCA to look objectively at possible alternatives to the four-year college/university degree. The YCCA will bring new life to a population of

students who feel stagnant. Students in YCSD want to achieve great things and given the right opportunity and assistance, they will.

### **K. Sustainability**

The YCCA will be designed from the ground up to be a sustainable change to our high school program. The vast majority of the grant budget is focused on research, writing curriculum, professional development, and purchasing some much needed equipment for our programs. The extra funding needed to keep the program going after the grant ends will be derived from an expected increase in enrollment in students into the YCCA and ongoing contributions from our business partners. To give them continuing influence the YCCA will form a system that has a defined role for leaders in 7-12 education, business owners, and community college educators.

Another aspect of sustainability relates to the continuous improvement of the program. We have partnered with The Research Institute at Western Oregon University to help us develop a model of data collection and analysis of results. The data collected will help us to view our program objectively and adjust it to improve student results.

### **L. Communication:**

Students will begin to hear about the YCCA in their 7<sup>th</sup> grade STEM class and again in the 8<sup>th</sup> grade Intro to Manufacturing and Agriculture class. As 8<sup>th</sup> grade students are forecasting for high school classes, high school upperclassmen and women from industry will talk to interested students about how the YCCA works. At that time, literature will go home to parents. When a student is a freshman, they will take a career interest minatory. Each student will meet with an academic counselor to discuss his or her career interests. If the student is interested in a

technical field, their class choices will involve the YCCA. Parents will be contacted and will be given literature about the YCCA and invited to the YCCA Open House twice a year.

We will partner with local media to periodically highlight stories about the YCCA. These stories will go out to inform the community of the accomplishments of our students. The school's Journalism classes will create newsletters to distribute to business partners, school staff, parents and community leaders about the achievements of future employees.



### **Section 3 - Bonus Narrative**

#### **A. Career and Technical Student Organizations (CTSO's)**

YCSO's are designed to provide support and guidance to students seeking rewarding careers. Our design will allow for students to be engaged in leading innovation by blending traditional academics and CTE programs. The support of these CTSO's will play a significant role in the recruitment and retention of future members of the YCCA by exposing YCSO students to the opportunities far before they join the ranks of the high school.

We strongly agree with studies that show that the more students participate in CTSO's the higher their academic motivation, academic engagement, and college aspirations or employability will be. According to the Gates Foundation 81% of high school drop-outs surveyed said that if they would have had more learning opportunities that made the classroom relevant to the real world, the less likely they would have been to leave school prior to graduation. YCSO's model will help ensure these students experience real world opportunities and feel a part of the overall school environment. CTSO's are organizations that are well known within our community and will act as partners to connect the academic work of the YCCA with the high expectations of our community members and industry partners.

Currently CTSO's are seeing increased enrollment nationwide. YCSO's current CTSO is FFA. Students have the opportunity to compete as individuals and teams in FFA while developing leadership skills and a selfless character with community service. YCSO is one of very few programs that include middle school FFA. The YCCA will allow us to add 6<sup>th</sup> grade to our local program. With the YCCA, we will be able to regain our Skills USA program and have our students be part of the current 300,000 members nationally. By adding a diversity of CTSO's we will be able to serve the variety of interest of our students and our community.

## **B. Middle School Component**

Introduction to the YCCA begins at the middle school level in the Yamhill Carlton School District. Starting in the 7<sup>th</sup> grade, students are required to take a STEM class that exposes them to various aspects of applied science and technology. Projects from robotics to rocketry are covered, and students have the opportunity to find their own interests in the application of knowledge. In the 8<sup>th</sup> grade, students have the option to take a yearlong elective in Introduction to Agriculture and Introduction to Manufacturing. These courses expose our students to the basics of horticulture and manufacturing. In manufacturing, middle school students start with wood shop projects. They learn how to measure and cut, how to follow a plan, and how to safely use machinery. These activities help students economically develop a set of skills that are directly applicable to the next stage of work with metals. In Agriculture, the students learn to drive a tractor, graft plants, and learn about the soils needed for growing successful crops. These classes and activities are a good introduction to YCCA. This exposure, together with the talks by high school juniors and seniors about the YCCA will help interested students determine whether the YCCA is the correct choice for them.

## **C. Out of School Time Programming**

YCSD also plans to implement an after-school program that will focus on an Innovation Academy, the YC I3 (Imagine, Inspire, Innovate). This is currently under development with Innovate Oregon. The Innovation Academy meets after school in three eight week sessions. Each session will take on a single problem and work to develop and implement solutions. We envision three project teams of four to five students, one of which will be a “girls only” team. This project model asks students to solve real problems that are encountered in life. Our

program will work with local farmers to use aerial drone technology to solve problems in agriculture.

The program will be based upon the work of the YCCA to connect the school work within the school day to real-life issues and concerns that face our local community and that are of interest to our students as well as to our community partners. While the YCCA is connected to the YC I3, a student does not need to be on that academic track to participate. IA I3 will extend the work of the YCCA and help to recruit more students into the program. This afterschool programming will be closely partnered and developed with the intended purpose to allow for collaboration between multiple school districts such as Dayton, Central, and Umatilla who are also exploring partnerships with Innovative Oregon. We envision our YC I3 center to be a direct reflection and offshoot of our successful YCCA to allow students to think beyond their work in the classroom and push their learning to a new level with regards to serving the needs of our community.

#### **D. Focus on Regional, Statewide, or System Changes**

The Yamhill Carlton Career Academy will replicate a model that has been proven to work across the nation. We are using the replication manual published by the Career Education Center in Georgia as the basis for our program development. The CEC has 32 replication sites in various sized districts in Georgia. We are working with their CEO, Mark Whitlock, to adjust the model for Oregon. By adjusting the model for small rural schools, using Oregon Standards, we intend to create a system that can be transported from district to district in Oregon with little modification. The YCCA will reach out to students of every race, gender, and economic circumstance and give them a concrete path to success.

The YCCA structure and curriculum will be scalable to other school districts in our region and statewide. We will have a proficiency structure and a project based instructional model that can be implemented in most districts. The curriculum for our four academic classes will be focused on technical applications, but will also meet Oregon Standards. After utilizing the first year to develop the academic classes and the structure of the YCCA, all of the materials will be available free to any interested school district.