

## APPLICATION COVER PAGE

Project Name: Dream, Plan, Build Gaston
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Amount Requested: \$360,478.00
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Project Director: Christine Collins, Principal
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District, School or ESD: Gaston Junior/Senior High School
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Address: 300 Park Street #D
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City: Gaston	State: OR	Zip: 97119
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Grant Fiscal Agent Contact: Chrissy Jarvis, Business Manager
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District, Charter School or ESD: Gaston School District
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Address: 300 Park Street
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City: Gaston	State: OR	Zip: 97119
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Superintendent: Susy McKenzie
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District or ESD: Gaston School District
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Phone: 503-985-3366	Email: <a href="mailto:mckenzies@gaston.k12.or.us">mckenzies@gaston.k12.or.us</a>
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	Participating High School or Middle School Name	Lead Contact Name	Grade Levels	Student Enrollment
1.	Gaston Junior/Senior High School	Wade Sims	7 – 12	315

## **Application Narrative**

### **A. Project Abstract**

Gaston is a rural community near the Portland Metro and the smallest district in Washington County with one Junior/Senior High School grades 7-12. Over the last decade, the student population has grown exponentially. Gaston Junior/Senior High School (GJSHS) has taken advantage of the growth to strengthen the Career and Technical Education (CTE) offerings by adding staff equipped to deliver multiple robust CTE programs of study. Based on the reputation of existing programs, there is significant student demand for additional courses. Gaston aims to develop entrepreneurial manufacturers and businesspeople that dream, plan, and build Gaston's future. This proposal will enable students to pursue multiple pathways to high wage, high demand careers – business, manufacturing, or a hybrid of both– earning dual credit and connections with industry partners. However, GJSHS is bursting at its seams and has inadequate facilities for the programs. “Dream, Plan, Build Gaston” will revitalize CTE through the development of a new facility that houses and blends the business and manufacturing pathways to prepare Gaston students to be successful and contributing citizens in our community and state.

### **B. CTE Revitalization Grant Vision**

Gaston School District is the smallest district in Washington County serving approximately 585 students in grades K-12. Gaston Junior/Senior High School (GJSHS) serves 315 of those in grades 7-12. Over the last decade the student population has grown exponentially, more than doubling the numbers of students attending GJSHS, and that growth rate is projected to continue with two new housing developments under construction that stand to bring in up to 330 new families over the next five years. Yet, Gaston's relative geographic isolation, current economic

base, and lack of public transportation mean that Gaston continues to face limited access to resources, particularly for CTE programming.

Gaston has not allowed limited resources to stop efforts to increase CTE programming. Over the last several years GJSHS has strategically focused on strengthening Career and Technical Education (CTE) offerings by purposefully hiring staff with appropriate certifications and the passion for building multiple robust CTE programs of study to include Woods, Manufacturing, Health Occupations, and Business. One of those programs, the Woods/Cabinetry CTE program, now has a long history and reputation for quality product and work that has attracted deeply invested local partners and educators. As one example, Gaston students have supplied professional level cabinets to fire stations, private homes, and contractors – putting their Gaston Made products to use in the real world. As Gaston invests in increasing CTE programs, it expects to expand that reputation for quality into the Business and Manufacturing fields.

However, Gaston facilities are bursting at the seams and GJSHS lacks adequate room to expand business and manufacturing programs despite student demand and community support. GJSHS is severely limited by available space. Through partnerships and investment in recent years, Gaston has acquired much of the equipment needed for industry-standard programming but does not have a place that allows for the requisite clean, ventilated housing of industry equipment necessary to expand the manufacturing program. Likewise, developing a student-run business requires space to secure stock and materials, which is not feasible in the current facility. Nor is there room to fully create a robust business and manufacturing experience. With the business and manufacturing programs currently housed in the library and a 10 x 5 foot utility room, Gaston only has the space capacity to serve 13-15 students per semester in manufacturing and 25 students in the business program. Without any marketing, more than 30 students who

forecasted for those courses last spring were unable to participate and more are asking to be added to the wait list.

The “Dream, Plan, Build Gaston” proposal will support the development of a new facility on GJSHS’s campus to house the business and manufacturing programs. This will enable Gaston to expand CTE offerings from 13 to 80 students in the manufacturing program, and 25 to 110 in the business program per year. The space will grant more students access to rigorous courses and ensure students are participating and gaining skills that are immediately marketable and transferable to high wage, high demand career pathways or post-secondary pursuits. The program will also expand offerings for the Gaston diploma requirement – a more rigorous set of expectations than the Oregon Diploma – of at least one CTE class and one business class. Gaston also plans to add a new course in SY16-17 so that all middle school students take a Careers/Industries Exploratory class, which could further build a pipeline for both pathways. **In total, the proposed program will expand the CTE manufacturing and business programming to 200 students per year in GJSHS and reach all 7-12<sup>th</sup> grade students via one exploratory CTE credit.**

“Dream, Plan, Build Gaston” is a vision to develop tomorrow’s entrepreneurial manufacturers and businesspeople for the region and state. Creating the facility to expand the CTE program will enable students to pursue three pathways to high wage, high demand careers: business, manufacturing, or a hybrid of both. **Through all three avenues, students can earn 24 business and 6 manufacturing dual credits working in conjunction with Portland Community College.** The facility will create an innovative space designed to link business and manufacturing coursework, industry partners, and a functioning student-run business center, directly connecting school to high wage, high demand career pathways.

Innovation in the Delivery of CTE and Integration of Elements: The proposal will overhaul the way in which manufacturing and business programs of study are delivered in Gaston. First, the facility will move students from spaces that are not suitable to the coursework – the library and a 10x5 foot utility room – to an intentionally designed facility where students will engage in hands-on manufacturing and business work and study. Without the current square footage constraints student learning will go from learning theory to interacting with content and materials through real-world application projects that yield profitable and marketable business products. With local industry partners committed to offer advice and knowledge, not only will students gain the academic expertise, they will earn up to 24 business and 6 manufacturing dual credits toward future education goals. They will also gain hands-on experience taking a business from vision to reality: from developing a viable business plan, to financing the concept, to designing and manufacturing the product, to marketing and selling. For students interested in further growing their business acumen and building leadership skills, Gaston is launching a DECA program, designed to prepare “emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management.”<sup>1</sup> This intentional expansion and blending of the manufacturing and business programs is designed so that students will gain core academic skills, CTE skills, and 21<sup>st</sup> century readiness with dual credit offerings as outlined in Section J: Diploma Connections.

Expansion and growth of the CTE programs and students served: The much needed facility will enable the school to add at least two additional manufacturing sections per semester and three yearlong business courses as well as increase the number of students who can fit in one class. Ultimately the program will grow the number of students served between the two programs from less than 50 high school students to 200 high school students. Additionally, all 7<sup>th</sup>

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<sup>1</sup> [www.deca.org/about](http://www.deca.org/about)

and 8<sup>th</sup> grade students will take a required Careers/Industries exploratory course that will reach all 115 middle school students.

Experiential learning opportunities: Currently, the library serves as the business classroom and a 5x10 foot utility room houses the manufacturing program. The GJSHS facility is significantly past maximum capacity and as a rural community, there are not alternative sites for students to engage in a robust program of study. The new facility will create the space for industry-standard manufacturing experiences and a business storefront to mirror the real-world business operations of planning, marketing, and selling Gaston Made products. The paired programs will give students new opportunities to engage in complex entrepreneurial challenges: designing and launching businesses with products manufactured in the facility with and by peers. The increased partnerships with local industry will further expose students to on-the-job training and skills including business planning, stock analysis, and accounting for local businesses. In the past, Gaston's carpentry, woods, and sewing programs have led students to construct marketable products used in homes and for programs like Toys for Tots. The proposed facility will ensure that Gaston students expand the types of products manufactured and develop viable businesses through their academic coursework.

Builds career pathways leading to high wage and high demand occupations: Outlined further in Section H, the "Dream, Plan, Build Gaston" proposal will provide new avenues to high wage and high demand career pathways for students through a unique and strategic hybrid of manufacturing and business experiences, credits and skills. Business is a growing and robust high wage and high demand occupation, with positions ranging from accounting, advertising and finance. As students attain up to 24 dual credits in the business program of study, they will be on track to earn postsecondary and career attainment in the field. Manufacturing is also a growing

industry, particularly in Washington County with projected positions growing over the next decade. Students will attain up to 6 dual credits in the manufacturing program of study that can be applied toward Portland Community College and other postsecondary opportunities, and will be transferable for the growing high wage, high demand industry.

Changing the way historically underserved students will experience CTE: 50% of Gaston students are lower socio-economic status (SES) and 19% students qualify for special education services. The proposed program will intentionally target female participation and expand opportunities for the low SES populations. For all Gaston students, the increased rigor of a hands-on, real-world manufacturing and business experience will open possibilities currently not afforded to our rural population. See Section I: Equity for further information about the proposed plan.

### **C. Partnerships**

Local industry and postsecondary partners are critical to the design of the “Dream, Plan, Build Gaston” proposal. Gaston High School has a longstanding partnership with Portland Community College providing dual credits for students in the CTE programs of study. Local industry partners have been core to the vision and design of the new facility and the idea of launching a manufacturing business. Fordyce Designs approached Gaston with the idea of buying products that are Gaston Made in order to support student entrepreneurship and job-readiness to grow their future employee pipeline. Umpqua Bank is deeply invested in stronger ties between the school and working world in the hopes of preparing students who can contribute to their organization and others with a positive work ethic. The close ties that Gaston has formed with local and regional industry partners has yielded commitments to expand our career-learning opportunities significantly. As noted in the included letters of commitment, industry partners

have committed to open their doors and their time to support students through job shadows, internships, and additional work-study opportunities. For the construction of the needed facility, Gaston has received bids from local plumbing and construction companies to provide in-kind materials and labor costs because these partners recognize the importance of paving pathways to high wage and high demand careers for Gaston's students and community.

Gaston partnerships are primarily local businesses and community members who are a part of the community and deeply committed to the success of students academically and in their career trajectories. GJSHS has commitments with postsecondary, manufacturing and business industry partners and will continue to partner with teachers and schools in other school districts.

- Business Partners include Umpqua Bank, Gaston Supermarket, and a local accounting firm Fitzpatrick and McKenzie, PC. They will offer job shadows, trainings on how to develop business plans, mentoring on interview skills and career development, and practice with communication skills. Many partners are eager to help market and sell Gaston Made products and will contract with the student-run businesses on projects as possible.
- Manufacturing Partners include Ultimate 3D, Fordyce Design and Manufacturing, LLC, Ultimate 3D, and The Woodworkers Guild of Oregon. The manufacturing partners have committed to volunteer time to mentor students, job shadows, and internship opportunities.
- Gaston's postsecondary partner is Portland Community College (PCC). As articulated in Beth Molenkamp's letter, PCC will continue to support Gaston's 24 business and 6 dual credit offerings as well as teacher training and support.

- Construction and Infrastructure Supports: Cornils Plumbing and David Millar  
Construction have committed to labor and the construction of the facility.
- DECA, a CTSO is launching within the school to support the development of business, marketing and communications skills.  
Research shows that exposure to dual credits and real work environments leads to increased postsecondary attainment and pursuit of high wage, high demand career pathways.<sup>2</sup> In the past, GJSHS has engaged with partners in ad-hoc and informal ways. This proposal would support the expansion of thoughtful work-embedded learning experiences and dual credit availability for all students participating in the program. With 50% of Gaston students qualifying as low SES, and equal or greater numbers of those students from poverty taking business and/or manufacturing classes with dual credit offerings, the partnerships have a significant impact.

#### **D. Project Outcomes**

See the embedded table (Appendix F) below for project outcomes.

#### **E. Evaluation Progress Markers and Results**

See the embedded table (Appendix F) below for evaluation progress markers and results.

#### **Appendix F: Project Outcomes, Progress Markers, and Expected Results**

<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>
1.1 Students will be placed in internships and job shadows in high wage and high demand fields through our current partnerships and any future ones.	At the end of year one (SY16-17): <ul style="list-style-type: none"> <li>• Every student in advanced manufacturing will have a chance to job shadow at a manufacturing site.</li> </ul>	All students who take a second level of manufacturing or business will have at least one job shadow opportunity or internship before they graduate.  All students will be able to

<sup>2</sup> Supporting research found at <https://www2.ed.gov/programs/slcp/finaldual.pdf> and <https://www.act.org/research/policymakers/pdf/DualCreditTexasReport.pdf>

	<ul style="list-style-type: none"> <li>• Every accounting student will job shadow an accountant or similar job.</li> </ul> <p>At the end of year two (SY17-18):</p> <ul style="list-style-type: none"> <li>• At least 20% of our advanced manufacturing students will participate in an internship with a partner.</li> <li>• At least 20% of business students in advanced business classes will either job shadow multiple professionals or have an internship at a business.</li> </ul>	<p>list internship and job shadow experiences on their college applications and/or resumes.</p> <p><b>Measurement:</b> The counselor and head CTE teachers will help track internships/work studies for students.</p>
1.2 Students will earn between 6 and 24 dual college credits in the areas of manufacturing and/or business that are articulated through Portland Community College.	GJSHS will attend PCC Dual Articulation meetings on a quarterly to biannual basis to maintain articulation agreements.	<p>All GHS students will earn at a minimum of 6 dual credits in manufacturing or business.</p> <p>One business class is a diploma requirement. Students must also take at least one more CTE class as part of the diploma requirements. This will equate to a minimum of 5 for all students 9-12.</p>
1.3 Gaston representative will meet with local Chambers of Commerce and Economic Development Boards annually to develop and strengthen relationships and learn of new opportunities for students. Connecting with these groups will develop a strong pipeline of opportunities for students in the network to spend time	<p>During SY16-17 meetings will be scheduled with the following organizations to develop partnerships:</p> <ul style="list-style-type: none"> <li>• Hillsboro Chamber of Commerce</li> <li>• Gaston City Council</li> <li>• McMinnville Economic Development Partnership</li> </ul> <p>These meetings will be</p>	<p>Gaston will expand partnerships by connecting with at least 6 new businesses each year and building partnerships with at least 2 new businesses each year that will provide additional internship opportunities.</p>

working in business settings during and after high school.	repeated annually or as needed.	
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**Area 2 – Improved student access to CTE programs of study with particular attention to historically underserved students.**

<b>Project Outcome</b>	<b>Progress Markers</b>	<b>Expected Results</b>
2.1 Female and male students will forecast for and participate in manufacturing program in equal percentages.	<p>Year one (SY16-17):</p> <ul style="list-style-type: none"> <li>Female students will be personally recruited to participate and given priority in seat space.</li> <li>All middle schools will be required to take a CTE/Industries Exploratory to build a pipeline of students for both pathways.</li> </ul> <p>Year two (SY17-18):</p> <ul style="list-style-type: none"> <li>Continuation of year 1 activities.</li> </ul>	Instead of only 8% of girls (to 92% boys) taking manufacturing classes at Gaston, the percentage of males and females participating will be equal (50% to 50%).
2.2 Expand the number of low-SES students who have access to the manufacturing and business programs of study and dual credit offerings	Beginning in year one (SY16-17), all middle schools will be required to take a Careers/Industries Exploratory to build a pipeline of students for both pathways.	<p>200 high school students will have access to manufacturing and business CTE courses with dual credit by 2017.</p> <p>The SES makeup of both the manufacturing and business classes will reflect the student population of Gaston (currently 50% low-SES).</p>

**Area 3 – Increased rigor in technical and academic content alight 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>
3.1 Students will demonstrate proficiency in using technical software and equipment. These skills will give them direct access to career opportunities immediately after high school graduation, after additional training or postsecondary attainment.	<p>Students will produce 50 electric guitars to sell in the first year of business as a first product for the blended business and manufacturing facility.</p> <p>Students will produce hundreds of small products to sell at the new student run business. This might include:</p>	<p>25% of students who take all manufacturing classes will be able to immediately be employed in manufacturing field upon high school graduation.</p> <p>75% of students will be employable with post-secondary training</p>

	<p>hats, shirts, coffee mugs, sweat pants, vinyl stickers, banners, plaques, bobble heads, custom guitars. All products will use manufacturing technologies including any of the following: laser engraving and cutting of products, CNC routing of wood, plastic and non-ferrous metals, graphic design using various vinyl cutting and placing techniques, as well as, 3D printing in multiple mediums of product.</p> <p>Students will manufacture products developed using computer aided drafting (CAD), computer aided machining (CAM), and industry standard manufacturing techniques in a manufacturing facility.</p>	
3.2 Students will market, sell, and run business operations for the manufacturing business, and develop additional businesses as appropriate. Students will create business plans, accounting, and market services.	<p>Students will use best accounting practices to measure profits and losses in their business.</p> <p>Students will work with partners to develop business plans.</p> <p>Students will work with partners to practice skills such as bookkeeping, applying for financing, etc.</p>	<p>Students will develop and maintain a sustainable manufacturing business by 2017.</p> <p>Students will investigate, develop and be on path of sustainability for additional businesses including possibly a marketing/branding agency for local companies or even neighboring district enterprises.</p>
<b>Area 4 – Increased student awareness of career opportunities through exposure to employers.</b>		
Project Outcome	Progress Markers	Expected Results
4.1 Students will attend career fairs and career-focused days so that they are exposed to the various	Students will attend at least one manufacturing and/or business fair a year.	Students will be able to articulate at least three new different career opportunities that are available in the CTE

<p>components of career fields beyond what may be covered in a classroom. Industry partners will also present in classes to students about career opportunities.</p>	<p>Students will visit and tour at least three manufacturing and/or business site a year. Industry volunteers will work with and speak to the students about their jobs at least 3 times a year.</p>	<p>area of focus at the end of the school year. Some will be able to articulate the requirements to pursue at least three different career opportunities that are available in the CTE area of focus at the end of a school year. Students will network with industry experts and be able to use those connections for future job inquiry.</p>
<p>4.2 All business students who take at least two business classes will gain leadership and business skills through participation in DECA.</p>	<p>All business students will compete in at least one focus area of DECA. By competing in DECA, students can network and gain new skills and build confidence in skills.  At least 20% of DECA students will compete at a level that qualifies them for national competitions.</p>	<p>Students will have experience and confidence competing in leadership focus areas and be able to translate the skills learned in the process into resume building skills.  By year two (SY17-18) GHS students will be a competitive force in competitions with students placing in various events.  By year three (SY18-19) GHS will have at least one or two students qualify for more advanced national competitions</p>

#### **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
<p>5.1 – Students will train in real business settings and learn how to meet workforce needs by bridging the skills gap, increasing employability skills, and providing a way for employers to “test drive” their next generation of worker through internships and job shadows.</p>	<p>Students will gain skills in a job setting where manufacturing skills will be emphasized and employability skills will be taught to meet the needs of employers who are looking for employees in high demand occupations.</p>	<p>Students who complete the program will be trained to enter the workforce with a solid background in safety, manufacturing techniques, high tech computer aided machining, employability skills and appropriate business building skills.</p>

		Companies will hire and colleges will enroll students who graduate from our plans of study.
5.2 Students will graduate with high tech training and real world business applications.	GJSHS will add at least one certification area each year for the next three years.  GJSHS will provide OSHA certification, and proficiency certifications in laser, CNC, 3D printing and vinyl graphics.	Students who graduate with manufacturing focus will have earned at least one certification that will assist them in getting a job right out of high school.

## F. Activities and Timeline

See the embedded Appendix G table below for the proposed activities and timeline

### Appendix G – Activities and Timeline

Activity	Outcome(s) addressed	Timeline	Person(s) responsible
Build facility. This will include signing contracts, gaining permits, and breaking ground. Have facility user ready by first day of school in 2016.	2.2, 3.2, 4.2, 5.1, 5.2	Begin ASAP. Completion expected by September 1, 2016	GSD Business Manager  GSD Facilities Manager
Attend CTE Revitalization Grant required meeting	1.3	February 2016	GJSHS Principal  GJSHS Facilities Manager or GJSHS CTE teacher
Attend OACTE Conference	1.3	April 2016	GJSHS CTE teacher(s)
Organize and host partner advisory meetings	1.1, 1.3, 4.1	Quarterly beginning Spring 2016	GJSHS Principal
Set up meetings with local Chambers of Commerce and Economic Development Boards	1.1, 1.3, 4.1	Spring 2016 and then ongoing	GJSHS Principal
Purchase Business texts that are DECA aligned	4.2	Spring 2016	GJSHS Principal  GHS Business Teacher/DECA Adviser

Recruit student participation through forecasting and other processes	1.3, 2.1, 2.2, 4.1, 4.2	Spring 2016	CTE Teachers GJSHS Principal
Verify teacher certifications for CTE courses/dual credit	1.2	Spring 2016	CTE Teachers GJSHS Principal  Portland Community College
Design custom electric guitars (CAD) project as an introductory teaching tool for CAD technologies	1.2, 3.1, 5.1, 5.2	Summer 2016	GJSHS Manufacturing Teacher
Build custom electric guitars (CAM) project with students as an introductory teaching tool for CAM technologies	1.2, 3.1, 5.1, 5.2	Fall 2016	GJSHS Manufacturing Teacher
Develop a student store	3.2, 5.1	Fall 2016	GJSHS Business Teacher
Develop a business program web page	3.2	Fall 2016	GJSHS Business Teacher
Create business accounts to sell products on the internet	3.2, 5.1, 5.2	Fall 2016	GJSHS Business Teacher
Promote DECA, a Career Teach Student Organization to the business classes	4.2	Spring 2016	GJSHS Business Teacher
Design and produce laser made products	3.1, 3.2	Fall 2016	GJSHS Manufacturing Teacher  GJSHS Business Teacher
Design and produce vinyl graphic products (stickers, t-shirts, hats, sports graphics, banners etc.)	3.1, 3.2	Fall 2016 - ongoing	GJSHS Manufacturing Teacher  GJSHS Business Teacher
Partner with industry supporters and provide their businesses with Gaston expertise and products to support industry needs not available in house (i.e. laser engraving for Fordyce Design and manufacturing)	3.1, 5.1	Fall 2016	GJSHS Manufacturing Teacher  GJSHS Business Teacher

Visit, tour and possibly job shadow at manufacturing businesses	1.1, 2.1, 4.1	On going	GJSHS Manufacturing Teacher
Partner with businesses to provide apprenticeship and employment opportunities.	1.1, 4.1, 5.1	On going	GJSHS Principal
Work with other high school manufacturing programs to produce parts for a common manufactured product between “companies.”	3.1, 3.2, 5.2	Summer 2016	GJSHS Manufacturing Teacher

#### **G. CTE Program of Study Design**

GJSHS has both a manufacturing and business CTE program of study approved by ODE.

CTE revitalization funding will enable the school to expand the number of courses offered so that more students are able to pursue CTE and dual credit. The manufacturing and business programs of study are aligned with state academic content standards, industry-recognized technical standards, and employability skills.

As outlined previously, students will gain up to 6 manufacturing dual credits and 24 business dual credits which will prepare them for postsecondary and career pathways. The dual credits can be applied to postsecondary coursework and will be transferable to job skills. The unique hybrid offerings of manufacturing and business, with a real-world student-run business operation will offer students employability skills required for high wage, high demand occupations. An article in Forbes highlights the skills employers most seek in new staff, which includes hiring employees that can plan, organize, prioritize, and work on teams.<sup>3</sup> GJSHS students will gain those skills through this program by learning how to build a business plan and put it into action, and/or by developing a design and taking it through the manufacturing stages with peers.

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<sup>3</sup> <http://www.forbes.com/sites/susanadams/2014/11/12/the-10-skills-employers-most-want-in-2015-graduates/>

The program is designed to be culturally responsive to meet the needs of historically underserved students by significantly expanding the offerings with a specific focus on the large population of students with low-SES and female participants, as outlined in Section I: Equity.

The table below outlines the proposed expansion CTE manufacturing and business offerings for GJSHS students:

	Middle School	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
All Students (7-12 <sup>th</sup> Grades)	Careers/Industries Exploratory	Computer Applications Personal Finance- Dual Credit Woods – Dual Credit		Careers – Dual Credit Advanced Math Business English	
Manufacturing Pathway Focus	JH Woods	Intro to Manufacturing Intro to Business- Dual Credit BA 101 Intro to Engineering		Advanced Manufacturing Manufacturing and Safety Manufacturing and Design	
Business Pathway Focus	Computers	Intro to Business- Dual Credit BA 101		Business Law – Dual Credit BA 227 Marketing/ Entrepreneurship – Dual Credit Accounting – Dual Credit	

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

Manufacturing and Business are growing industries with high wage and high demand opportunities in the region. The proposed expansion of both CTE programs of study will support Gaston students to pursue manufacturing, business or a hybrid of both courses of study with dual credit opportunities.

Business high wage, high demand occupations: As students take advantage of the dual credit business coursework, they will be able to earn up to 24 quarter credits that can be applied to a major or minor in Business. The median hourly wage range for business occupations is

\$35.38. The table below highlights business occupations that are high wage and high demand in the region:<sup>4</sup>

<b>Occupation</b>	<b>Expected Regional Job Growth</b>	<b>Approximate Average Salary</b>	<b>Educational Requirements and Connection to Proposed Program</b>
Accountants and Auditors	16.9%	\$66K	Bachelor degrees in business that Gaston's classes will provide credit toward.
Administrative Service Managers	16%	\$78K	Bachelor degrees in business that Gaston's classes will provide credit toward.
Advertising Sales Agents	4.2%	\$51K	Only require a high school degree but with the internships and experiences our classes offer, students will have resume ready skills for better marketability.
Bookkeeping, Accounting and Auditing Clerks	19.5%	\$38K	Only require a high school degree with some post-secondary training but with the internships and experiences our classes offer, students will have resume ready skills and coursework for better marketability and immediate employability.
Budget Analysts	8.6%	\$69K	Bachelor degrees in business that Gaston's classes will provide credit toward.
Business Operations Specialists	14%	\$63K	Bachelor degrees in business that Gaston's classes will provide credit toward.
Financial Analysts	25.8%	\$96K	Bachelor degrees in business that Gaston's classes will provide credit toward.
Financial Specialists	15.9%	\$66K	Bachelor degrees in business that Gaston's classes will provide credit toward.

Manufacturing high wage, high demand occupations: If students focus on the Manufacturing pathway, they will have the skills to immediately intern and/or be hired by our partner manufacturing companies. Additionally, up to 6 dual credits can be applied to postsecondary education. Manufacturing is one of the fastest growing industries in the region according to Worksystems Inc.<sup>5</sup> See a sampling of manufacturing positions in the table below:<sup>6</sup>

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<sup>4</sup> Source for occupation information from [www.qualityinfo.org](http://www.qualityinfo.org)

<sup>5</sup> Source: <http://www.worksystems.org/research/advanced-manufacturing-sector-report-2014>

<sup>6</sup> Source for occupation information from [www.qualityinfo.org](http://www.qualityinfo.org)

<b>Occupation</b>	<b>Expected Regional Job Growth</b>	<b>Approximate Average Salary</b>	<b>Educational Requirements and Connection to Proposed Program</b>
Welders, Cutters, Solderers, Brazers	14.3%	\$40K	Only require a high school degree but with the internships and experiences our classes offer, students will have resume ready skills for better marketability.
Tool and Die Makers	17.2%	\$54K	Only require a high school degree but with the internships and experiences our classes offer, students will have resume ready skills for better marketability.
Sheet Metal Workers	20.9%	\$55K	Only require a high school degree but with the internships and experiences our classes offer, students will have resume ready skills for better marketability.
Advanced Manufacturing positions <sup>7</sup>	20%	\$79K	Bachelor degrees in business and job training that Gaston's classes will provide credit toward and internship experiences will prepare for better marketability and skill.

As further detailed in Section L: Communications, the pathways and occupations will be shared explicitly with students, parents, and community through strategic outreach. Additionally as word of mouth will spread about the program as Gaston Made business production expands.

## **I. Equity**

Living in a small rural community, Gaston students have fewer opportunities to access career and technical education avenues when compared with their peers in larger more centralized districts in the tri-counties area. Additionally Gaston has approximately 50% of its students identified as students in poverty (SES) and 19% of students qualifying for special education services. Gaston is committed to ensuring the expanded reach of the CTE program will actively seek out and serve historically underserved populations and help all rural students gain access to high wage, high demand manufacturing and/or business pathways with dual credit opportunities. The proposed program will intentionally target female participation and serve an increased

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<sup>7</sup> Source: <http://www.worksystems.org/research/advanced-manufacturing-sector-report-2014>

number of low SES populations. For all Gaston students, the increased rigor of a hands-on, real-world manufacturing and business experience will open possibilities currently not afforded to the rural population.

The project is designed to increase participation, support, and retention of historically underserved students to pursue the manufacturing program of study. The grant team has developed strategies to recruit and retain more historically underserved students. First, all students currently participating in textile and sewing courses will receive an invitation to all Manufacturing field trips. Efforts to recruit more female participants are already underway at the recent Manufacturing Day. As a result of their attendance, female students were excited about the prospect of increased access to manufacturing classes and potential career paths. Second, the Introduction to Manufacturing course will be co-taught by a female educator, and a female science teacher who is undergoing the certification process will be able to teach additional manufacturing courses next year. Female role models in the field can support expanded interest for the nontraditional participants. Third, beginning in the 2016-17 school year all middle school students will be required to take a Careers/Industries Exploratory class, which will expose all students, including females and students living in poverty, to the pathway opportunities. Fourth, once the facility is constructed students will be able to visit the site and experience the excitement and rigor of an industry-standard manufacturing course of study. Overall, the expanded reach will ensure that more students will be able to pursue the CTE Manufacturing program of study.

Currently, the business program at Gaston is serving female and low-SES students on par with the student population. By expanding course offerings, the project will increase the number of students served, including historically underserved students. Further, as GJSHS launches the

DECA student organization and the opportunity for students to create a student-run business, students will be able to develop their passions and leadership skills in a rigorous, real-world school to career pathway. The GJSHS staff is dedicated to supporting historically underserved students to pursue high wage and high demand career and postsecondary pathways in Manufacturing and Business.

#### **J. Diploma Connections**

Gaston students will earn up to 24 dual college credits for business and 6 dual college credits for manufacturing while also satisfying Gaston diploma requirements. Students will gain core academic credits as well as Essential Skills and career related learning experiences through personalized, hands-on projects. The manufacturing program will provide students with broad knowledge of the many facets of manufacturing including, but not limited to 3D printing, laser products, vinyl graphics, CNC router automation, computer-aided drafting, and machine safety. Beyond exposure to the machines and manufacturing skills, students will learn how to become entrepreneurs by designing and building their own products that are sold as business ventures. Through the business program, students will acquire the skills of developing business plans, accounting and auditing models, marketing, managing budgets and business operations, and selling Gaston Made products through a student-run business.

With the space to be able to offer the classes, all students will be required to take at least one CTE credit and one business CTE class to graduate beginning in 2016-17. Additionally, work-studies can also provide up to 2 high school credits toward the diploma. Students that earn 6 or more dual college credits get special recognition during graduation ceremonies for their work toward postsecondary and career success. As outlined previously, the program is designed to

specifically support historically underserved students to gain access to and through the manufacturing, business, or a hybrid of both programs of study.

## **K. Sustainability**

The program is designed to revitalize CTE in rural Gaston by providing a much-needed facility to afford students access to high quality, dual credit manufacturing and business programs of study. Beyond the funding to realize the “Dream, Plan, Build Gaston” vision, Gaston is committed to sustaining an expanded CTE program. To this end, Gaston has a multi-faceted sustainability plan through 1) staffing investments, 2) student engagement and access, 3) a clear on-going funding strategies, and 4) partner collaboration.

**1) Staffing investments:** The proposed budget highlights some key investments to support the program in an on-going manner, including an annual stipend for a DECA adviser and coordinator funded by the Gaston School District. GJSHS currently has three CTE teacher positions that will continue to be supported through the district budget.

**2) Student engagement and access:** Partner organizations have committed their resources and talents to connect students to job-embedded training beyond the grant cycle. GJSHS has also committed to sustaining the program by growing student interest and access by adding a required Careers/Industries Exploratory class for all middle school students beginning in SY2016-17. The DECA program and opportunity for students to run their own businesses will support student interest and participation beyond coursework.

**3) On-going funding strategies:** The funding strategies include Perkins funding, profit generated from student-run business enterprises, district on-going support of classroom materials, and in-kind contribution of time and materials from committed industry partners.

Students already make a profit of \$4,500 to \$7,000 annually for the sale of Gaston Made products, and that profit is anticipated to grow significantly through this program.

4) Partner collaboration: Gaston plans to hold quarterly partnership meetings to maintain a feedback loop with partner organizations that have committed to support the program.

## **L. Communication**

Gaston intends to leverage existing and new communication channels to launch and sustain investment in the “Dream, Plan, Build Gaston” CTE revitalization project. The district has identified frequently used communication avenues such as: the Facebook page which reaches over 1,500 people and is frequently commented on; the district newsletter; local media outlets; the curriculum guide; the GJSHS website with a link to the CTE program; career counseling; booths at Open House, football and other sporting events, Parent-Teacher conferences; IEP meetings; and via courses to inform students of the opportunities. Finally, given the close knit and small rural community, word of mouth will spread by way of Gaston Made product sales and other engagement with industry partners. Targeted communication strategies are outlined below.

Students: GJSHS has developed posters in partnership with Portland Community College to support programs of study that show the career pathways and roadmaps of coursework related to degree and certificate programs. These posters are also available in Spanish. In addition, the career pathways and roadmaps are outlined when students register for dual credit.

Parents: Dual credit materials are sent home with students and families will be made aware of the opportunities through Open House events, the Facebook page and website, and at Parent-Teacher conferences.

School Staff: Many of Gaston’s staff members are dual credit certified or are applying to become dual credit teachers, so there is tremendous enthusiasm about this program. During in-

service and training, staff will learn about the project and how to increase alignment with their own courses.

Community: Building the new facility will increase interest through which Gaston will be able to educate the community on the purpose of career pathways. Gaston will leverage media outlets that the district has an existing relationship with, including: KGW, Forest Grove News Times, and the Forest Grove Leader. These news outlets have written articles and features on Gaston kids regularly in the past and likely will in the future.

## **V. Bonus Narrative**

### **A. Career and Technical Student Organizations (CTSOs)**

Outside of the ASB (student council) and National Honor Society, Gaston has not provided formal student leadership organization opportunities. Beginning in the fall of 2015, Gaston changed that by offering students the opportunity to participate in DECA. With the mission to “prepare emerging leaders and entrepreneurs in marketing, finance, hospitality, and management,” DECA ties in naturally with the business CTE courses. Students who participate in DECA gain employable skills, build self-confidence, and develop leadership skills. DECA exposes students to peers from around the world, and pushes them learn to network with other students and local community organizations and businesses. This CTSO also gives students the tools to market their talents. Finally, DECA encourages students to give back to their community by supporting community service efforts. This sense of service also increases student pride in their school and serves to inspire others to find ways to make an impact.

Gaston will recruit students to join DECA through business classes and by word of mouth and action. GJSHS is committed to supporting the formation and growth of DECA through dedicated funds that will help supplement student costs until students can self-sustain the program through business endeavors. This proposal will provide DECA students the space, mentorship, and curricular opportunities to expand their business and leadership acumen. The proposed facility will house the DECA students and bolster a sense of student ownership in their learning and active leadership in our community and beyond.

## **B. Middle School Component**

A well-designed CTE program builds from one year to the next and starts early in the middle school years. This alignment encourages students to persist in career and technical education as they advance through their school career. Gaston is fortunate as a school that houses grades 7-12 with middle and high school students in the same building and with the same teachers. This makes it easy for high school CTE teachers to develop relationships with middle school students and to provide middle school students the opportunity to explore career paths. All CTE teachers will share the task of teaching a Careers/Industry Exploratory that will be a yearlong class broken into career focus area units taught by an appropriate teacher. With this proposal Gaston will use the improved facilities to help provide a space for our middle school Careers/Industries Exploratory class so that the 115 students gain hands-on exposure to manufacturing, business, and other career opportunities.

To further encourage Gaston middle school students to dream and plan to participate in high wage and high demand career pathways, Gaston CTE teachers will work with local partners to open up field trips to businesses and colleges to middle school students. In an effort to make this come to fruition, in October 2015, GJSHS agreed to participate in a pilot program with OSU and Chemeketa through the Willamette Promise to give middle school students the opportunity to visit college campuses and engage with college students pursuing different career-focused majors. Participation in this when combined with the Careers/Industries Exploratory class will motivate and guide Gaston students to focus on gaining the skills and knowledge for high wage and high demand career paths.

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

By expanding the business program and gaining experience with manufacturing, Gaston business students will be able to assist other schools with marketing and selling products they produce. The Gaston business teacher is already in negotiations with a neighboring district that has a viticulture program and will be soon producing grape and wine products, and through this proposal, there is the potential for Gaston students to develop the business-side, specifically the brand and marketing plan. Likewise, the Gaston manufacturing teacher is exploring deeper collaboration with other manufacturing teachers statewide to create similar entry Oregon Made products, sold by the Gaston business program.

The Gaston Manufacturing Business model has a potential to be a state model for rigorous, sustainable CTE programming in which students pair business with another field of study to create a functioning business from concept to products sold. As Gaston demonstrates the success of this model, the school will share practices and plans across the state through vehicles such as CTE conferences. Gaston will continue to be an active part of a statewide collaborative that shares resources, ideas, talents, and support materials, and we are committed to leverage the collaborative to share learning from the “Dream, Plan, Build Gaston” proposal.

For the sustainability of this program and the success of Gaston pathway graduates, Gaston staff will meet regularly with industry, postsecondary, and community partners to continue to integrate school to the broader community. If funded to realize our vision, the Gaston Made products and student-run business and Gaston’s future will serve as a model for rural and urban real-world CTE programming across Oregon.