Making High School More Relevant for Students: Career Pathways
Background information to the School Board - August 16, 2019

In the fall of 2017 grade reconfiguration in Stillwater Area Public Schools was completed, allowing Stillwater Area High School (SAHS) to serve students in grades 9-12. In addition to adding approximately 700 ninth graders to the school, we also welcomed approximately 30 new staff members. As such, we began to work together as a staff to determine the new identity of our high school, beginning with a careful examination of our strengths and areas for growth. Following that examination, we formed three Vision Teams (which include both staff and students) to consider how we could better meet the needs of our student, including one team that was dedicated to improving the academic experience for ALL SAHS students.

Using the Human-Centered Design Thinking approach, this team began working in earnest in the spring of 2018. After extensive Empathy work that involved a survey of dozens of SAHS students about their high school experience, three goals emerged:

- Increase student **ACHIEVEMENT** for the “majority in the middle”
- Prepare students for the future by increasing **OPPORTUNITIES** to engage in a variety of passion and interest-based offerings
- Offer programming that allows all students to find **RELEVANCE** in their coursework.

After visiting and researching multiple school districts (including Alexandria, Mounds View, White Bear Lake and Burnsville) that offer a **PATHWAYS** (often called “career pathways” or “career clusters”) program, the team selected this concept as a model to address these goals. A **PATHWAY** can be defined as a series of “structured and connected education programs and support services that enable students, often while they are working, to advance over time to better jobs and higher levels of education and training.” (Dion, 2018)

The team has identified four areas as potential **PATHWAYS** at SAHS:
- BUSINESS
- HEALTH SCIENCES AND HUMAN SERVICES
- ENGINEERING, MANUFACTURING, TECHNOLOGY, AND NATURAL RESOURCES
- ARTS

Within each **PATHWAY**, multiple **PROGRAMS OF STUDY** emerged. While the term **PATHWAY** for our purposes represents a broad classification, **PROGRAMS OF STUDY** represent more specific progressions under each **PATHWAY** heading. For example, the ARTS Pathway could include Programs of Study in “Performance,” “Fine Arts,” and “Journalism & Communications.”
The Vision Team has conducted a comprehensive course audit of all electives in the high school curriculum in order to align existing courses to specific PROGRAMS OF STUDY. As this audit progressed, an important guiding principle was the idea of alignment to PATHWAYS offered at regional post-secondary institutions (Century College, University of MN, St. Thomas University).

Additionally, the team conducted a quantitative analysis of each PROGRAM OF STUDY in order to assess health and viability as each PROGRAM OF STUDY should include a natural 9 - 12 grade progression of courses, early college credit opportunities, community partnership opportunities, and offer alignment to jobs and careers that are in demand and allow students to earn a living wage. While some of the draft PROGRAMS OF STUDY are already robust, there are also some that should be considered under development for another 1 -2 years before we can confidently offer them to students and families as a viable PATHWAY experience.

Partnering with our community is another important component of the PATHWAYS concept. We’ve already been in conversation with both the Greater Stillwater Area and the Woodbury Area Chamber of Commerces, and have met with a number of community businesses and professional organizations that have expressed a strong interest in partnering with the school district to develop solid work-related experiences for our students. These opportunities would align with our proposed PATHWAYS/PROGRAMS OF STUDY and provide the relevance our students desire.

Going forward, it is our hope to repackage our existing course registration guide to reflect the proposed PATHWAYS and PROGRAMS OF STUDY, so that students and families are more aware of how the SAHS curricular offerings offer relevance and opportunities to experiences outside of the traditional classroom. This will require support from the School Board, the SAHS staff, and the entire school district community.
“Why Do I Need To Learn This?”

Making high school more relevant

CAREER PATHWAYS

School Board Work Session - August 20, 2019
Doing well in preparing students for 4 year secondary education. Need to improve opportunities for secondary education options that are not 4 year. Gap between what many students needs and interests are. Missing chances to align better with job market and financial capacity of students to attend.

Community Members

4.0 ★★★★★☆☆ (65 people)
SAHS
Innovation Team
Designing With Students in Mind

The team’s objective is to redesign the high school experience to better meet the needs of ALL students.

Innovation Team includes teachers, students and administrators
Empathy Work Completed 2018-19

Students feel ...
- overwhelmed with the amount of homework.
- there is not enough time to do work.
- like there aren’t enough extended learning opportunities (beyond school offerings).
- like they do not understand what skills are needed beyond high schools, and/or qualify as skills instruction.
- like they don’t have enough time in their schedule or that the schedule is flexible enough.
- unaware of the relevance of our course offerings.
Our Plan to Redesign SAHS

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Relevance</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting the needs of <strong>ALL</strong> student with renewed focus on the “academic middle”</td>
<td>Developing career pathways and programs of study based on industry and regional college programs</td>
<td>Creating options for students to apply experiential learning through partnerships with local businesses</td>
</tr>
</tbody>
</table>
What Are Career Pathways?

- Pathways let students explore a variety of careers through specific coursework aligned to industry and regional college programs.
- Exploration continues with opportunities that allow students to follow their interests and prepare for further study, training or work experiences.
  - These opportunities may lead directly to careers or to a variety of post-secondary options.
Our Vision for Pathways

- **Business**: Entrepreneurship/Marketing/Management
- **Arts**: Performance, Fine Arts, Communications
- **Engineering, Manufacturing, Technology, and Natural Resources**
- **Health Sciences and Human Services**

Align our current course offerings within Pathways
# Health Sciences & Human Services

*It is recommended that students attending a 4 year private college, complete 3 years of a World Language.

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Biotechnology &amp; Medical devices</th>
<th>Health Care</th>
<th>Exercise Science</th>
<th>Education</th>
<th>Public &amp; Human Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Human Anatomy &amp; Medical Terminology</strong></td>
<td><strong>Anthropology</strong></td>
<td><strong>Personal Fitness</strong></td>
<td><strong>Speech</strong></td>
<td><strong>Law and Justice</strong></td>
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<td></td>
<td><strong>Personal Fitness</strong></td>
<td><strong>Personal Fitness</strong></td>
<td><strong>Food Science</strong></td>
<td><strong>Unified PE</strong></td>
<td><strong>Fish and Wildlife</strong></td>
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<td></td>
<td><strong>Fitness for Life</strong></td>
<td><strong>Fitness for Life</strong></td>
<td><strong>Weight Training</strong></td>
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<tr>
<td><strong>Grade 10</strong></td>
<td><strong>Veterinary Science</strong></td>
<td><strong>Exercise Science</strong></td>
<td><strong>Education</strong></td>
<td><strong>Public &amp; Human Services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advanced Weight Training</strong></td>
<td><strong>Psychology 1</strong></td>
<td><strong>Psychology 2</strong></td>
<td><strong>Law and Justice</strong></td>
<td><strong>Fish and Wildlife</strong></td>
</tr>
<tr>
<td></td>
<td><strong>AP Psychology</strong></td>
<td><strong>AP Psychology</strong></td>
<td></td>
<td><strong>Fish and Wildlife</strong></td>
<td><strong>Fish and Wildlife</strong></td>
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<tr>
<td><strong>Grade 11</strong></td>
<td><strong>Behavioral Analysis</strong></td>
<td><strong>Psychology 1</strong></td>
<td><strong>Psychology 2</strong></td>
<td><strong>AP Psychology</strong></td>
<td><strong>AP Psychology</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Biotechnology</strong></td>
<td><strong>Fish and Wildlife</strong></td>
<td><strong>AP Psychology</strong></td>
<td></td>
<td><strong>AP Psychology</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chemistry</strong></td>
<td><strong>CIS Human Physiology</strong></td>
<td><strong>Weather Training</strong></td>
<td></td>
<td><strong>AP Psychology</strong></td>
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<tr>
<td></td>
<td><strong>AP Chemistry</strong></td>
<td><strong>CIS Exploring the Teaching Profession</strong></td>
<td><strong>AP Psychology</strong></td>
<td></td>
<td><strong>AP Psychology</strong></td>
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<tr>
<td><strong>Grade 12</strong></td>
<td><strong>916 Medical Careers</strong></td>
<td><strong>Sociology</strong></td>
<td><strong>916 Law Enforcement</strong></td>
<td><strong>Careers in Education</strong></td>
<td><strong>Criminal Justice</strong></td>
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<tr>
<td></td>
<td><strong>CIS Human Physiology</strong></td>
<td><strong>916 Medical Careers</strong></td>
<td><strong>916 Cosmetology</strong></td>
<td><strong>916 EMT</strong></td>
<td><strong>Photography 1</strong></td>
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<td></td>
<td><strong>916 Dental Occupations</strong></td>
<td><strong>916 EMT</strong></td>
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</tbody>
</table>

**Resources**
- Geometry with Computer Science
- AP Computer Science Principles
- Computer Science Advanced Topics

**After School Opp.**
- Debate
- Speech
- Orchestra
- Concert Band
- Varsity Women's Choir
- Choir

**Community Partnership**
- Zephyr Theater
- St. Croix Valley Ballet
- Countryside Photo
# Our Work to Develop Viable Pathways

<table>
<thead>
<tr>
<th>Marketing, entrepreneurship, business management, administration and finance</th>
<th>Performance arts, fine arts and communications</th>
<th>Engineering, manufacturing, and mechanics</th>
<th>Human Services</th>
<th>Natural Sciences, Health Sciences, and Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Care and Management</td>
<td>Foundations of Art</td>
<td>Biotechnology</td>
<td>Biotechnology</td>
<td>Animal care and management</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>Clay/Sculpture I &amp; II</td>
<td>Introduction to Business</td>
<td>Photography I &amp; II</td>
<td>Veterinary science</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>Graphic Design I &amp; II</td>
<td>Geometry with Computer Science A &amp; B</td>
<td>Personal Finance</td>
<td>Biotechnology</td>
</tr>
<tr>
<td>Photography I &amp; II</td>
<td>Drawing I &amp; II</td>
<td>AP Computer Science Principles A &amp; B</td>
<td>CIS Exploring the Teaching Profession I &amp; II</td>
<td>Food Science A &amp; B</td>
</tr>
<tr>
<td>Introduction to Video Production</td>
<td>Metals and Jewelry I &amp; II</td>
<td>AP Computer Science A &amp; B</td>
<td>United Physical Education</td>
<td>Floral Design</td>
</tr>
<tr>
<td>Advanced Video Production</td>
<td>Painting I &amp; II</td>
<td>Computer Science with Advanced Topics</td>
<td>Human Anatomy and</td>
<td>Plant Science</td>
</tr>
</tbody>
</table>

## Adapted from: 2018 ACTE Quality CTE
### Program of Study Framework--Business (Business)

The purpose of this tool is to assess the health and viability of Program of Study identified in the four pathways specific to Stillwater Area Public Schools. Use these descriptions to choose which rating best describes your program of study in relation to each criterion.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not present</td>
</tr>
<tr>
<td>1</td>
<td>Minimally achieved</td>
</tr>
<tr>
<td>2</td>
<td>Moderately achieved</td>
</tr>
<tr>
<td>3</td>
<td>Fully achieved</td>
</tr>
</tbody>
</table>

### Quality Indicators

1. **Student Career Development**
   - Comprehensive career development is coordinated and sequenced to promote and support the career decision making and planning of all students
   - Students and families are provided accurate and timely information on extended learning experiences available through the POS, such as work based learning, CTE and articulated college credit
   - Students and families are provided information on further education and training options, including application procedures, enrollment, financial aid, and the projected educational, employment and earning outcomes
   - Students are provided with accurate and timely information on regional occupational trends and outlooks related to their POS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Not clear</td>
</tr>
<tr>
<td>X</td>
<td>Private School Education and Career Planning Services</td>
</tr>
<tr>
<td>X</td>
<td>Regional Occupational Trends and Outlooks Related to their POS</td>
</tr>
</tbody>
</table>
Opportunities: Building Relevancy, Community Partnerships and Academic Achievement

- Mentorships
- Internships or externships
- Partner/career guided project-based learning
- Capstone Experience
- Extracurricular Activities

Ways to offer more flexible scheduling to make time for applied learning:
- Credit by assessment
- Dual credit
- Online courses

Potential Partners:
Lakeview Health - Twin Cities Orthopedic - 3M - Andersen Windows - Zephyr Theater - Story Arc - WOLD Architects - Kraus/Anderson
We Are Here!

2018-19
- Student and staff interviews/surveys
- Site visits to other schools
- Research/data collection
- Identify Pathways, align current class offerings

2019-20
- Focused PD
- Pilot dual credit courses
- Reformat registration guide
- Consider credit by assessment
- Partner with Century College
- Develop business partnerships
- Explore scheduling options
- Consider freshmen experience
Questions?