Safety in Maker Centered Learning, Career and Technology Foundations and Career and Technology Studies

Background:

Student participation in Maker Centered Learning, Career and Technology Foundations (CTF) and Career and Technology Studies (CTS) is a valuable learning experience for students in grades K to 12. Ensuring staff and student safety is a core component of these experiences.

The Assistant Superintendent, Corporate Services will be responsible for the administration of this administrative procedure.

Definitions:

<u>Power Tools</u> - Power equipment used in the construction of student made products within Career-based learning environments such as Career and Technology Foundations and Career and Technology Studies.

<u>Shop Certified</u> - Approved by the Foothills School Division Manager of Risk.

<u>Innovation and Design</u> - The Foothills School Division framework connecting Maker Centered Learning, Career and Technology Foundations, and Career and Technology Studies (Ref. AP216).

<u>Maker Centered Learning</u> – Play based learning experiences where students are able to experiment with electronic, robotic, programmatic and similar modern environments to engage in innovation, design and problem solving.

<u>CTS – Career and Technology Studies program</u> is a competency-based curriculum designed for senior high school students. Students develop competencies for daily living, personal interest, career planning and preparation as well as entry into the workplace and post-secondary programs. CTS offers multiple entry points and recognizes prior learning and experiences.

<u>CTF – Career and Technology Foundations</u> is an exploratory curriculum designed to expose students to a variety of potential career possibilities while learning to collaboratively plan, create, appraise and communicate. The common CTF program of studies applies to grades 5-9 courses, and experiences in the areas of Human Services, Business, Communication, Resources or Technology occupational clusters

Procedures:

- 1. Role of the system
 - 1.1. Ensure structures limiting access to power tools are in place including but not limited to electrical lock-out mechanisms, limiting room access/unique keys, etc.
 - 1.2. Ensure that instructional spaces where power tools are to be used are designed to meet the needs of said use including but not limited to storage spaces, ventilation, fire control, etc.
 - 1.3. Ensure that processes are in place to maintain equipment.
 - 1.4. Support training of "shop certified" guest teachers.

- 1.5. Build consistent training expectations and opportunities for "shop certified" staff.
- 1.6. Support a consistent continuum of supports for students around the safe use of power tools and equipment that differentiates for student readiness.
- 1.7. Support collaboration between other schools in the community to establish guidelines around which tools are appropriate at which levels.
- 1.8. The division will approve the equipment, tools, infrastructure, and layout of any Innovation and Design space including purchased and donated equipment.
- 2. Role of the principal
 - 2.1. Ensure that only staff assigned and trained in the safe use and operation of power tools can use said tools for the purposes of student learning.
 - 2.2. Ensure that only trained staff can access and supervise students in the use of said tools. This supervision includes but is not limited to other teachers, educational assistants, guest teachers, community members, and others.
 - 2.3. Ensure that students cannot operate power tools without a trained supervisor.
 - 2.4. Ensure that all power tools meet CSA/UL specifications and are in good working order. Any equipment not CSA/UL rated needs to be approved by the Manager of Risk and Materials.
 - 2.5. Ensure that Innovation and Design programming within the school is scheduled in spaces that can safely meet the operational and instructional needs of the program.
 - 2.6. Ensure that class size adheres to relevant legislation such as the *Area Capacity Utilization Report*.
 - 2.7. Ensure a consistent continuum of supports for students around the safe use of power tools and equipment that differentiates for student readiness and needs.
 - 2.8. Facilitate collaboration between other schools in the community to establish guidelines around which tools are appropriate at which levels.
 - 2.9. Facilitate collaboration between schools to ensure that program outcomes are met safely.
- 3. Role of the teacher
 - 3.1. Ensure students operating power tools have received training on the equipment including safe operation and have demonstrated competency.
 - 3.2. Ensure that safety is a component of instruction throughout the term.
 - 3.3. Ensure that students cannot operate power tools without supervision.
 - 3.4. Ensure that learning spaces are clean and safe.
 - 3.5. Ensure that students do not operate power tools without a trained supervisor.
 - 3.6. Implement a consistent continuum of supports for students around the safe use of power tools and equipment that differentiates for student readiness.
- Reference:
 AP216: Maker Centered Learning, Career and Technology Foundations and Career and Technology Studies

 Innovation and Design SharePoint Site

Curriculum Corner and Staff Learning Link

Attachments: CTF/CTS Safety Manual