**A: Workshop Administration and Safety Guidelines**

**for K12 Makerspace Tools, Machines, and Equipment**

1. Purpose and scope of this set of documents

Tools, machines and shop equipment can pose a range of potential hazards. The risk of injury and property damage can be reduced by setting and following safety guidelines, by training users appropriately, and by creating an environment where fabrication activities can be supported safely.

This set of documents is specifically intended for Makerspaces and digital fabrication labs in K12 environments which have an emphasis on hands-off digital fabrication equipment, and are restricting or eliminating heavy manufacturing machinery.

These documents provide guidance and templates for facility managers to adapt for their specific environments.

A: Workshop Administration and Safety guidelines. (this document)

B: Facilities and Operations Guidelines: guidelines for the establishment and ongoing administration of a fabrication facility

C: Tool Classification: this document establishes a framework for classifying tools, machines and equipment.

D: Training and Supervision guidelines. This document establishes a framework for appropriate user training, shop supervision, and supervisory authority designations for users based on tool classifications.

E: Training record. Sample/template student training record

F: Guidelines for the safe use of specific tools and equipment.

G. Self-Inspection Checklist. Guide for the facility manager.

**2. General Workshop Safety Rules**

All shops and fabrication spaces shall post space-specific safety rules that cover, at a minimum:

1. Practice good housekeeping.

* Prevent slip/trip hazards by keeping floors clear and clean, and wiping up any spills immediately.
* Properly collect and dispose of waste according to regulatory standards
* Keep a “sharps” container for disposable of blades
* Maintain clear aisles and store stock and supplies in an orderly manner.

1. Do not wear loose clothing or jewelry.
2. Do not wear sandals or open-toed shoes.
3. Tie-back long hair and long beards to prevent entanglement in rotating parts.
4. Wear safety glasses with side shields (or goggles) whenever active work is in progress in the shop or fabrication space. Use additional personal protective equipment as required or appropriate.
5. Keep all tools in good condition with regular maintenance.
6. Examine each tool for damage before use and take any damaged or defective tools out of service immediately. Bring the problem to the attention of the Facility Manager, Supervisor, or Monitor.
7. Operate tools according to shop and manufacturer’s instructions and do not remove or defeat equipment safeguards. Consult the Facility Manager, Supervisor, or Monitor before starting a new operation or if you have any questions.
8. Keep fingers and hands clear of the point of operation by using push sticks, fixturing, jigs, hooks, pliers, or other holding devices.
9. Use brushes, hooks, or other tools to remove chips and shavings - never use hands or fingers.
10. Avoid distractions and never distract someone else while operating shop tools.
11. Report all accidents, injuries, and unsafe conditions to the Facility Manager, Supervisor, or Monitor as soon as possible.