ENVISIONEERING CENTER TECHNICAL DIRECTOR

<u>DISTINGUISHING FEATURES OF THE CLASS:</u> This is an important technical position involving responsibility for planning, training and overseeing the technical operations of the Portville Envisioneering Center. The work is highly technical and requires specialized training. An incumbent trains students and community members on the use of computer numerical control technology, such as 3D design, electrical engineering, and robotics materials fabrication. An employee of this class will work with manufacturers to ensure tools and technologies are installed correctly and up to date. Work is performed under general direction of the Superintendent of Schools with wide latitude allowed for the exercise of independent judgment. The position involves responsibility for maintaining the highest standards of quality in procedures and participant safety. An <u>Envisioneering Center Technical Director</u> does related work as required.

TYPICAL WORK ACTIVITIES:

- Facilitate access to traditional and digital technologies for community, staff & students;
- Sets up, calibrates, standardizes and teaches new procedures for a variety of Envisioneering Center technology to Envisioneering Center participants;
- Trains participants in laboratory techniques and new methods;
- Conducts research and special studies in the development of new techniques;
- Prepares reports on the activities for each section and maintains procedure manuals, quality control
 manuals and other records:
- Consults with manufacturers or subject matter experts on difficult or unusual problems;
- Maintains an inventory of laboratory supplies and equipment to assure continuous operation of the laboratory:
- Keeps abreast of latest developments in fields represented by the Envisioneering Center;
- Programs specific parameters and sequences for individual print jobs;
- Monitors quality of job output for correctness and image quality;
- Troubleshoots equipment problems and performs daily, weekly and monthly maintenance on equipment as required;
- Collaborate with industry professionals, suppliers and sales representatives to schedule presentations by subject matter experts;
- Researches and makes recommendations with regard to lab equipment and software purchases;
- Collects information regarding lab use and may prepare a variety of reports.

FULL PERFORMANCE KNOWLEDGES, SKILLS, AND ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of modern technology laboratory practices, techniques, equipment, terminology and safety precautions practices;
- Thorough knowledge of the operation and maintenance of digital 3D printers, printing tools, techniques and terminology;
- Working knowledge of modern engineering practices and techniques;
- Good knowledge of the tools, terminology and uses of equipment used in preparation of printed materials;
- Good knowledge of the operation and maintenance of computer numerical control fabrication technology to cut, carve, machine, and mill in wood, MDF, plastics, foams, and non-ferrous metals (like aluminum):
- Good knowledge of the safe operation and maintenance of welding equipment;
- Good knowledge of the principles of occupational safety and health, Right-To-Know law for fabrication and material safety;
- A high degree of skill in the operation of a personal computer and in the use of computer-aided design systems;
- Ability to manage multiple tasks with frequent interruptions;
- Ability to understand and follow complex technical oral and written instructions;
- Ability to organize and maintain accurate records and files;
- Ability to maintain confidentiality;
- Ability to communicate, interact and work effectively with others;
- Manual dexterity;
- Mechanical aptitude;
- Thoroughness;
- Dependability;
- Resourcefulness;
- Physical condition sufficient to perform the essential functions of the position;

MINIMUM QUALIFICATIONS: Either:

- a) Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a Bachelor's degree in Drafting, Design, Mechanical Engineering or a closely related field and two (2) years of experience in these fields utilizing related technology; or
- b) Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an Associate's degree in Drafting, Design and/or Mechanical or Materials Engineering and four (4) years of experience as defined by (a).

<u>SPECIAL REQUIREMENT FOR APPOINTMENT:</u> In agencies where required, possess and maintain an appropriate class drivers's license.

SPECIAL REQUIREMENT FOR APPOINTMENT IN SCHOOL DISTRICTS / BOCES:

Per regulations of the Commissioner of Education, to be employed in a position designated by a school district or BOCES as involving direct contact with students, a clearance for employment from the State Education Department is required.

CATTARAUGUS COUNTY CIVIL SERVICE