

MAKER SPECIALIST (YOUTH)

(Range 114)

DEFINITION

Performs creative and technical work in a MakerSpace setting that focuses on developing and delivering innovative programming in a DIY environment for youth and teens that embeds necessary skills for future success.

SUPERVISION RECEIVED AND EXERCISED

Receives direct supervision from the Teen Services Department Head or assigned Department Head.

RESPONSIBILITIES:

Essential and marginal functions and responsibilities may include, but are not limited to the following:

1. **MakerSpace Operations Support:** Ensures the efficient operation of a MakerSpace environment that inspires creativity, exploration, problem solving, critical thinking, project management, and collaboration. Provides guidance to youth/teens on the manufacturability of projects and design of prototypes. Schedules youth/teens in the use of a variety of MakerSpace, DIY, and STEAM-related tools, equipment, and software programs. Instructs youth/teens with specialized use of tools, equipment, and software that allow creation, invention, and learning. Recommends and implements procedures, guidelines, and goals related to MakerSpace activities. Collects and compiles a variety of data including innovation growth. Recruits and supports volunteer mentors and ensures an effective relationship between mentors and youth/teens. Maintains a welcoming, safe, and efficient learning environment.
2. **Technical and Manual Support:** Assists with the maintenance of MakerSpace, DIY, and STEAM-related materials, equipment, and technology. Performs functions in the operation of materials and equipment, including setup, troubleshooting, updating, and maintaining hardware, software, and other related equipment including but limited to audio/video production, green screen technology, virtual reality equipment, instruments, robotics, sewing machines, 3D printers, drones, cameras, and lighting. Assists with inventory control and routine maintenance checks including identifying malfunctions and repair needs. Conducts a variety of MakerSpace training sessions for customers and staff including basic in-house safety. Provides recommendations for applicable equipment, tools, and supplies. Utilizes a variety of electronic devices, sound recording equipment, and software programs including but not limited to 3D modeling, coding, graphic design, fashion design, music production, video editing and production, and robotics.
3. **Program and Promotional Support:** Develops, implements, and promotes MakerSpace services, programs, activities, and events. Builds and implements project-based learning strategies and programs with a STEAM focus. Researches and develops innovative maker programs and activities; ensures and maintains calendar of events. Provides tours of MakerSpace learning and activity areas for teachers, students, schools, interested groups, and guests.

MAKER SPECIALIST (YOUTH)
PAGE 2

4. **Customer Service and Communication:** Provides exceptional internal and external customer service to create positive relationships and experiences. Interacts extensively in person, over the telephone, and electronically in the general correspondence with customers, staff, other library systems, outside agencies, partners, collaborators, and vendors. Provides information about Library District activities, facilities, and services. Responds to public and staff inquiries in a courteous and timely manner. Effectively maintains positive internal communication between Library District branch staff, departments, and Administration.
5. **Community Impact:** Provides community outreach to a diverse group of youth/teens, parents, teachers, and community members. Conducts visits to schools, community centers, and other organizations to promote MakerSpace activities and library services. Confers with library users and community groups to assist in inspiring, creating, planning, organizing, and implementing services and programs to improve literacies to include self-directed and project-based learning, workforce development, collaboration, and critical thinking; and to encourage greater patronage of the Library District.
6. **Professional Development:** Stays abreast of new trends and innovations in the field of connected learning, DIY and MakerSpace, and youth/teen technical services and programs; attends training activities related to the latest innovations and practices in the field. Attends meetings and conducts training sessions onsite and offsite, and participates in sharing ideas and issues in support of collaborative projects across networks. Assists with special projects and participates in committee work, as needed.
7. **Other Responsibilities:** Provides reference and other services to youth/teens and other library customers by searching files, the collection, and automated library systems to locate requested information or materials. Maintains compliance with Library District and branch- specific policies and procedures and effectively explains these to customers and staff. Operates library and general office equipment including copy machine, scanning services, print stations, telephone, and fax machine. Promotes and supports the overall mission of the Library District by demonstrating courteous and cooperative behavior when interacting with public and staff.

Marginal Functions:

1. Assists in other departments as assigned.
2. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

1. Informal learning environments and connected learning principles, applications, and culture including innovative service models, collaboration, HOMAGO, STEAM, self-directed, project-based, and interest-driven learning.
2. Various hardware and software programs and associated technologies commonly found in MakerSpace environments including but not limited to audio/video production, green screen technology, virtual reality equipment, robotics, cameras, lighting, etc.

MAKER SPECIALIST (YOUTH)
PAGE 3

3. Emerging STEAM technology, trends, principles, and best practices.
4. Teen and youth culture, including social media.
5. Teen and youth development, coaching, and instruction.
6. Techniques for interacting with youth/teens from varied socioeconomic, geographical, linguistic, cultural, and ethnic backgrounds.
7. Program and project management including development and implementation; and instructional principles, practices, and techniques.
8. Library District mission, strategic initiatives, and terminology.
9. Library District policies, procedures, and guidelines.
10. Pertinent federal, state, local laws, regulations, and ordinances.
11. Correct business English including spelling, punctuation, and grammar.

Ability to:

1. Support informal learning-centered environments for youth/teens.
2. Inspire, youth/teens by fostering curiosity, creativity, and innovation in a DIY learning environment.
3. with youth/teens of varied ages and abilities.
4. Enjoy tinkering and inventing.
5. Develop a culture of making and innovation in STEAM.
6. Foster a welcoming and safe learning atmosphere.
7. Establish and maintain effective working relationships, both internal and external, during the course of work.
8. Work creatively, collaboratively, and effectively to promote teamwork.
9. Demonstrate a patient and receptive attitude toward youth/teens including those with special needs and disruptive behaviors.
10. Create and maintain instructional materials for project-based learning, and related MakerSpace equipment and services.
11. Use technology and other creative methods to facilitate learning and exploration.
12. Describe technical concepts to a non-technical audience.
13. Quickly learn and teach basic and intermediate operation of equipment and new technologies.

MAKER SPECIALIST (YOUTH)
PAGE 4

14. Foster a culture of exceptional customer service; serve library customers and staff with patience, tact and courtesy.
15. Act in a manner that promotes a harmonious and effective workplace environment and demonstrate support for diversity, equity, and inclusiveness.
16. Exercise initiative and good judgment.
17. Work effectively under pressure.
18. Work quickly and accurately and perform multiple tasks concurrently.
19. Inspire, motivate, create, plan, develop, organize, and prioritize work assignments for efficient results.
20. Accept change and maintain flexibility.
21. Understand, interpret and explain Library District, branch, and department policies and procedures.
22. Maintain knowledge of Teen Services and/or Youth Services.
23. Work both independently and as part of a team.
24. Communicate clearly and concisely, both verbally and written.
25. Maintain accurate records, files, and equipment inventory.
26. Maintain the mental capacity for effective interaction and communication with others especially youth/teens and adults from underserved and underrepresented communities.

Skill in:

1. Either video or audio production; or fashion design and construction; or robotics; or coding and 3D modeling and printing; or graphic design; or use of diverse materials to create such as wood, plastic, fabric, Styrofoam, papier-mâché, etc.
2. Various MakerSpace hardware, software, and equipment including but not limited to Photoshop, ProTools, video/audio production, coding, green screen technology, robotics, 3D modeling and printing, virtual reality content creation, video cameras with accompanying accessories, and STEAM-related gadgets (Arduino microcontrollers, Raspberry Pi, etc.).
3. Use of hand and power tools, equipment, and other technologies related to MakerSpace activities such as laser and vinyl cutting, and wood and metalwork.
4. Instructing others in the use of innovation and connected learning-related hardware, software, and equipment.
5. Troubleshooting and resolving equipment malfunctions.

MAKER SPECIALIST (YOUTH)
PAGE 5

Training and Experience:

High school diploma or GED equivalency required; Bachelor's Degree preferred. Two (2) years direct experience using and working with equipment normally found in a MakerSpace (3D printers, audio/video editing and recording software, etc.) required. Two (2) years' experience working with youth ages 11-17 required. STEAM-related background preferred.

License, Certificate, or Requirements:

Possess, or have the ability to obtain, a valid Nevada Driver's License at the time of hire.

AED/CPR certification within six (6) months of date of employment.

Physical Requirements:

The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Mobility to work in a technical environment, use standard office equipment and specialized technical equipment, and stamina to sit or stand for extended periods of time; strength to lift and carry up to 20 pounds; vision to read digital displays, computer screens, mobile devices, and printed materials; and hearing and speech to communicate in person, over the telephone, or electronically.

Tasks require color perception, visual perception, audio perception, and oral communications ability.

Environmental Requirements:

Work is subject to travel.

FLSA: EXEMPT
CBA: MANAGER UNIT
DEVELOPED: MAY 3, 2010
REVISED: JUNE 13, 2012
AUGUST 2, 2012
FEBRUARY 21, 2014
MARCH 12, 2018