

STEM Library Specialist

QUALIFICATIONS:

- Professional Educator's License with Library / STEM experience
- Meets standards for library sciences and media specialist

GOALS:

- To ensure that students and staff are effective, ethical users and creators of information, media, tools, and ideas.
- To coordinate an information literacy curriculum and strategize with classroom teachers to integrate STEM, literacy, innovative learning practices, and 21st century literacy skills into the classroom.
- To provide support of learning throughout the school, and provide services in the learning environment best suited for the skills at hand.
- To collaborate with the Academic Technology team in the creative integration of 21st century learning skills across the curriculum.
- To promote enjoyment of and appreciation for reading, writing, making, and learning.

GENERAL RESPONSIBILITIES:

Leadership:

As a leader in information literacy and STEM education, the STEM Librarian creates a physical and digital learning environment where collaboration and learning excels. This leader is forward-thinking and researches all of the latest methods and practices for engaging the 21st Century maker, to provide new learning experiences for the individual. The STEM Librarian:

- develops learning experiences that are aligned to goals and integrated across the subject areas.
- facilitates the use of emerging technologies related to research and STEM.
- assists students and teachers in locating and using information resources.
- utilizes current research, reading strategies and instructional methods.
- collaborates with other teachers to utilize information resources and to integrate technology and STEM across grade levels.
- uses a variety of materials and teacher strategies to stimulate and maximize student learning.
- maintains and curates an active professional learning network (PLN).
- takes an active role in professional library and technology organizations.

STEM Instruction and Integration:

The STEM Librarian understands that the library's mission is not only be a place where students can consume knowledge, but create knowledge. As the 21st Century library's role evolves, the STEM Librarian facilitates student projects in a student-directed, design-thinking environment-the Quest Academy Innovation Lab. They facilitate STEM by:

- igniting the passion of design thinking using myriad tools, such as 3D printing, autocad, laser cutting, vinyl cutting, and numerous other tools of the maker movement.

- promoting computer science education through tools such as, but not limited to: Arduino, Makey-Makey, Raspberry Pi, Codecademy, microcontrollers, and other exciting means.
- coordinating student engineering ideas by finding resources and allowing student project ideas to become reality.
- Integrating STEM projects into the lower grades with activities and projects (using Sphero, Tynker, BeeBot, Parrot MiniDrone, for examples), and coming up with unique ideas for PreK, K on up- to engage in.
- developing a variety of formal and informal assessments to monitor student intellectual growth.
- promoting enjoyment of design, creation, and sharing.

Learning Environment:

One of the most important part of the STEM Librarian’s talent is to maintain and provide an engaging “knowledge commons” for the students to collaborate in. The STEM Librarian provides a variety of initiatives and programming to bring students into the space, and to integrate modern literacy skills with classroom curriculum. They do this by:

- maintaining a vibrant and inviting physical and online space that promotes participatory learning experiences, collaboration and intellectual growth.
- providing equitable access to resources and information to all learners.
- evaluating and selecting materials and technologies that support the curriculum and the school’s philosophy.
- developing and reviewing periodically, a collection of approved library materials with special emphasis on selection, challenged materials, and procedures for weeding.
- following and modeling established policies, laws (including copyright), principles of intellectual freedom and ethical behavior.
- creating a supporting an engaging digital learning space, whether through our LMS, a blog, YouTube tutorials, or other online site that provides differentiated engagement on another level for students.
- collaborating with administration on the library media budget, making sure that it reflects the priorities of the entire school community.

PREFERRED QUALIFICATIONS

- Advanced degree from an accredited college/university.
- Expert level of technology and 21st century learning understanding and application.
- Deep knowledge of content standards, effective instructional strategies, and assessment driven instruction.
- Strong Google Apps for Education skills (Docs, Sheets, Slides, Sites, etc).
- Highly effective communication, listening, collaboration, and interpersonal skills.
- Demonstrated ability to function as a positive collaborative member of a team.
- Demonstrates experience with use of various educational technology platforms.
- Extensive involvement in reflection and professional learning.
- Ability to design and deliver quality professional development for teachers and administrators.
- Effective written, verbal, and technology based communication skills.

CORE COMPETENCIES:

In addition to the tasks outlined above, it is the responsibility of the STEM Librarian to:

- Understand and support Quest's mission and philosophy and to promote a positive image of the school
- Contribute to a harmonious school atmosphere by working cooperatively with all colleagues.
- Respect the confidentiality of private information relating to students, colleagues and the operations of the school.
- Refrain from establishing close relationships with colleagues, students, parents or trustees that would compromise professional integrity.
- Demonstrate responsibility and punctuality.
- Display flexibility in responding to new situations and expectations, a positive attitude and a helpful, nonjudgmental demeanor.
- Show willingness to consider and implement suggestions for improvement.
- Model the good character traits that Quest students are expected to embody.