



W FREQUENTLY ASKED QUESTIONS

What is STEAM?

STEAM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, the arts and mathematics. While originally designed to encourage students to pursue careers in these areas, STEAM education has evolved into a unique approach to teaching and learning that fosters collaboration, communication, creativity and innovative thinking in all

students. The WASD STEAM program encourages students to research, explore, and try different options on their way to a successful result.



Why is STEAM important for our students?

Every job within the 21st Century is likely to require some amount of skill in science, technology, engineering, art or mathematics. The integration of engineering and technology within the mathematics and science curriculum make instruction more meaningful and engaging as well as provides students with critical skills needed for success in the 21st Century.

What has the District done to prepare for STEAM?

During the 2016-2017 school year:

- Board members, administrators and teachers visited numerous STEM schools to learn from other educators who are have implemented STEM Programs.
- The STEAM Ad Hoc group, comprised of board members, administrators and teachers was formed.
- The STEAM Ad Hoc group completed the Carnegie STEM Excellence Pathway Self-Evaluation of the six STEM learning components (teacher development, curriculum, instructional practices, assessment and demonstration of skills, family engagement and real-world connections).
- The STEAM Ad Hoc group identified three priority areas:

Professional

Development, Inquiry Based Teaching and Peer Mentoring and Coaching of Teachers.

- For the 2017-2018 school year, the STEAM Ad Hoc group planned professional development focused on inquiry based instruction.



FREQUENTLY ASKED QUESTIONS (Continued)

Current Implementation Steps?

The WASD implemented the technology infrastructure to support STEAM K-12. Ongoing professional development to enhance teacher knowledge and understanding of inquiry-based learning theory. Additional instructional materials to support inquiry based instruction. Hands on in-service trainings incorporating the use of new instructional materials. In August, the District launched the STEAM page on the district website to communicate our progress with STEAM initiatives to staff, parents and community members.

WHEC

- Identified resources to outfit the STEAM Design Center.
- Began teacher professional development training.
- Planned mid-year deployment of student devices
 - Grades K-2 shared class sets
 - Grades 3 and 4 individual class sets

WREC

- Expanded the use of iPads to a full 1:1 implementation.
- Transitioned the computer lab to a STEAM Design Center.
- Consulted with Office Depot to identify storage and furniture needs for the STEAM Design Center.
- Incorporated STEAM materials provided by WAEF along with donated materials.
- STEAM materials available for classroom use.
- Lesson plans and activities to support the use of STEAM materials.
- Ongoing Teacher training on how to incorporate the materials into instruction.

JSHS

- Currently, over 25 courses incorporating STEAM related content offered as part of the JSJS Program of Studies.
- Reviewed Architect renderings of the STEAM Design Wing at the JSJS with Teacher focus group.
- Reviewing course offerings to align to a STEAM Instructional Framework.



Next Steps?

Continue to develop the WASD STEAM program outlining the following components:

- Instructional Framework
- Curriculum Development
- Staffing Needs
- Facilities Improvements
- Technology Integration
- Opportunities for Community Engagement

