A New Makerspace at STRIDE!

What is a Makerspace? A Makerspace is a space with tools, supplies, and resources that encourage creativity and innovation, and allow for open-ended projects that students plan, design, and execute with minimal direct instruction from a teacher. It's a place for students to learn and practice collaboration, problem-solving, communication, and critical and creative thinking, and it's a place for hands-on learning and experimenting. Ideally, teachers serve as facilitators, encouragers, and guides, and the students take the lead in their learning, as inventors, artists, engineers, mathematicians, scientists, and "Makers".

Some schools have high-tech Makerspaces with 3D printers, laser cutters, and robotics. Others have low-tech Makerspaces with basic tools and recyclables. We will be starting with donated items and lots of recycled items. As the Personalized Learning Coordinator, I'm here to help you design learning experiences in the Makerspace that will support, enrich, and/or extend your curriculum. There may also be opportunities to have students come to the space for unstructured "Tinkertime", in which they choose their own projects.

Here is a sample of projects that have been done in the past year at my other school:

- Made frames (not just wood!) to display writing projects for the year
- Designed and tested puff mobiles, marshmallow launchers, watercraft to hold 10 pennies, earth-quake proof structures, anemometers, kites, desalination systems
- Made puppets, props, costumes for class plays
- Built communication devices to experiment with sound
- Biomimicry inventions and habitat diorama
- Designed model zoos using geometry requirements
- Built models/maps of communities they were studying
- Made model clocks for practicing time-telling in a foreign language
- Designed ramps and experiments to measure slope
- Designed museum displays about constitutional amendments and the civil rights movement
- Made letters out of objects that start with the same letter (a B out of buttons)
- Musical instruments

Where

Diane has set aside a corner of **room 178** with a large Baker's Rack for storing supplies. In order to get our space up and running by the time the room is done being used for MAP testing, **I'm inviting and encouraging everyone to take a look around your home and classroom for items that you no longer use**. I will label boxes and put them on the shelves of the rack, so if you bring items in, just drop them off there or in my room (175). For now, we will *not* collect basic carpentry tools. This may be something we consider at a later time. See the back of this page for suggested items. As we don't have unlimited space, please ask me first before bringing other items.

Thank you! Ruth Thom, Personalized Learning Coordinator

Makerspace Supply Wish List

- Large sturdy pieces of cardboard
- Small pieces of lightweight wood (no bigger than a foot)
- Popsicle/craft sticks/toothpicks
- Straws
- Cotton balls, Pom poms
- Corks
- Bottle caps (any kind)
- Plastic lids, small plastic containers
- Small boxes (shoe box size or smaller)
- Felt, fabric
- Foam pieces, pool noodles, sponges
- Any small plastic or wood odds and ends
- Art/craft supplies
- Twist ties
- Rubber bands
- Pipe cleaners
- Modeling clay
- Yarn, string, rope, ribbon
- Buttons, beads
- Paper/plastic cups, bowls
- Any kind of tape/glue
- Gears, wheels
- Cardboard tubes (TP, paper towel, wrapping paper)
- Tissue paper, foil
- scissors
- Embroidery thread
- Spools
- Stencils
- Stickers
- Newspaper

Needed for Organizing

- Plastic shoeboxes with lids--lots!!
- Plastic tubs, baskets—all sizes
- Trays—paper tray size and cookie sheet size (great for containing small items)
- Rubbermaid containers with lids, various sizes

10 Reasons to Create a Makerspace

1. Builds Perseverance – Failure Is a Lesson, Not an End
2. Inspires Further Investigations
3. Encourages Rethinking the Concept
4. Teaches Basic Problem Solving
5. Helps Students Focus
6. Engages Minds and Encouraging Questions
7. Provides a Way of Expression and Conversation
8. Provides a Connection between Lessons and the Real World
9. Facilitates Ideas and Innovation Instead of Rote Memory
10. Provides a Memorable Lesson That Improves Understanding

https://www.thetechedvocate.org/10-reasons-to-create-makerspaces-in-your-school/

"Makerspaces Address Differentiation and Multiple Intelligences

Makerspaces, like the new school library learning commons model, are flexible, adaptable learning environments that can address differentiation and multiple intelligences, modifying the educational experience **for those who learn differently**. According to Martinez and Stager (2013), "hands-on learning through the sort of rich projects advocated by makers offers flexible opportunities for students **to learn in their personal style or styles**" (p. 22). As Fleming (2015) asserts, makerspaces are "uniquely adaptable, learning environments that our students need, want, and will flourish in" (p. 46). Makerspaces, by their nature, reflect community interests and needs and adapt as those interests and needs evolve over time."
https://curiositycommons.wordpress.com/makerspaces-the-benefits/