The LearningWorks
educational values

"*To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science. . .*" --Albert Einstein

The LearningWorks is an interactive learning community. Our primary goal is to engage students in their own learning process – to change their role in their education from "passenger" into "driver."

We use the study of Sciences, Engineering and Technology to teach problem solving, collaboration, creativity and effectiveness. We want students to learn by doing and making – with their hands, when possible.

We aim to increase students' confidence, to raise their expectations of themselves, to guide them in use of their own curiosity, creativity and motivation.

Safety

Students are entitled to physical and emotional safety at all times.
Students need a sense of their own physical, emotional and intellectual rights, and a sense of respect for the same rights of others.

We will encourage and require students to interact with each other with honesty, integrity and with respect. Competition will be focused against conditions and constraints and not against each other. i.e., Students compete, together, against time, gravity, and/or other constraints.

We will create conditions enabling students to engender a warm and forgiving community in which they can laugh at themselves – despite background music in their lives.

Collaboration

TLW will teach the value of collaboration. We believe it's better for students to learn three principles collaboratively than to learn five principles alone.

TLW students will work in partnership. No one works alone on a mission although perhaps a team separates into single nodes for faster accomplishment of tasks.

Gifts and Skills, Logic and Intuition

Innate intellectual gifts become even more effective with good focus and application. But even then they do not replace well-honed and effectively-applied **learned skills**. Both are valuable. Similarly, **logical thinking** has its value, and **intuitive leaps** have theirs.

An important skill is knowing when and how to apply which.

We aspire to help students:

- find, focus and apply their own intellectual gifts.
- develop new skills.
- sharpen existing skills.
- develop a sense of which to use for different applications.

Questions

Questions are often more valuable than answers.

Relevancy of info is critical. Students need to learn selection and rejection of questions as a thinking skill.

Students will be encouraged to ask questions at all times. i.e. Students will *never* be told 'Now is not the time for questions' at TLW programs.

Examples of good question streams:

> *What is the fastest way to elevate this platform 15 degrees? Is it more effective to do this with a geared or a non-geared motor?*
>
> *Why did the robot behave differently on two separate runs, even though the measurable conditions were identical?*
>
> *Physics can be found everywhere. Why is the sky full of light and fluffy clouds today, when yesterday there was a cloudless sky. . . but the weather feels the same?*

Respecting differences allows us to be different

We are all on the same learning team. But people learn differently, at different paces and rhythms, and learn with different styles. We will respect different these differences at all times.

We value:
Inclusion over exclusion
Elegance of solutions
Accuracy
Logic AND intuition in a healthy relationship
Peer review; Inviting criticism strengthens validity of results
Willingness to change approach/opinion/etc w new evidence