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# The Importance of Hands-On Learning

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One of the worst things the schools did was taking out the hands-on classes such as art, music, sewing, woodshop and auto mechanics. These classes provide four important avenues for both education and success. They motivate kids who love hands-on activities to remain interested in coming to school and learning. They also teach practical problem solving and for some students, serve as refuges from bullies. A fourth and final advantage of teaching classes such as auto mechanics is introducing students to the highly skilled trades. Highly skilled trades such as mechanic, certified welding and electrician are bright spots in the economy where there are lots of high paying jobs.

Now to go back and discuss in more detail each one of the four benefits. I was a child where being able to make things at school was a great motivator. When I was in elementary school, art, sewing and woodshop gave me a reason to want to go to school. If these classes had been absent, school would have been boring, difficult torture. My ability in art was always encouraged, and both my mother and my teachers encouraged me to draw and paint many different things. I loved getting recognition for several of my best elementary school art projects. Art became the basis of my career designing cattle facilities. My career fits into the category of industrial design. Industrial designers work with engineers to develop many different types of products. When the iPhone was invented, Steve Jobs was the artist designer who designed the user interface. The engineers had to make the phone work.

Today there is a severe lack of practical problem solving in our leaders. The mess with the government shut down is a good example. Many policy makers are totally separated from the real world of practical things. Practical things do not always work right and people skilled in the real world learn how to improvise. When I made a mistake on a

sewing project, I was sometimes able to fix it and other times I could not. Mistakes I made cutting the fabric wrong on a sewing project taught me that I had to slow down. I had to be more careful before I cut the material. Learning how to slow down and think before I acted, was an important skill that served has me well throughout life. Even when every effort is made to do things right, there always will be a few mistakes. When I supervised the construction of cattle facilities I had designed, I learned that mistakes may occur on the best, well managed projects. I had to work with the construction crew to improvise and fix them. On the other hand, a project must be well planned so small mistakes do not turn into project wrecking screw ups.

When I was in high school, I was bullied and teased. One place I was not bullied was when I was participating in electronics lab and the model rocket club. The students who were interested in these specialized activities were not the kids who bullied me. I was socially awkward but I fit in perfectly with the other students who liked to make stuff.

Lastly, there is a huge shortage in this country of people to fill jobs in the highly skilled trades. There are many high paying jobs for auto mechanics, certified welders for the oil industry, electricians, and workers to fix power lines. There are jobs that are intellectually challenging and there is great job security. Fixing cars cannot be outsourced to a foreign country. Throughout my career, I have worked with many people in the skilled trades area. To get kids interested, they need to be exposed to the challenging world of hands-on careers before they graduate from high school. The most fun I ever had at work was sitting in the job trailer on a construction site and brainstorming with the guys on how to build things.