

Module 1

1. There are many hats that my cooperating teacher must put on, but there is one hat that brought up a discussion between the two of us. I asked him about being able to address morals and values that are accepted in society, and he said that problems have been known to arise between parents and students regarding the teacher taking part in parenting. There are parents that believe that a teacher should only be allowed to teach the assigned concentration of knowledge and skills in which they are qualified to teach. This idea is much different than schooling at a university level due to students being legal adults.

The teacher plays the role of a coach. He must constantly encourage practice and repetition so that his students retain the knowledge presented. He makes sure that he repeats everything important as many times as it takes. He also makes sure he addresses students by name, giving them the positive feedback they need.

The teacher plays the role of a technician. He needs to know the equipment and the facilities that he uses. He needs to know how to service and maintain equipment that has been misused or overused. Without constant maintenance, the lab no longer becomes an aid for the learning activities.

The teacher plays the role of a police officer. When unacceptable behavior takes place, he must have rules and consequences to prevent the behavior from continuing. He gives the students an opportunity to resolve conflicts peacefully and on their own; if they can't do that, further action takes place where parents and other faculty are involved.

The teacher plays the role of a safety inspector. He must make sure that all students treat dangerous equipment with respect. He makes sure that every student keeps their personal safety equipment in the lab so that no one comes to class unable to participate. We have discussed safety policies, and he is always open to suggestion and help in keeping the place a safe environment.

2. The facilities associated with technology education consist of a classroom, a metalworking shop, a woodworking shop, and a computer drafting and design lab. Although it is nice to have each of the areas brought together, within view of surrounding windows, and at one's close reach, I would be nervous trying to monitor all of the open areas at one time.

The classroom is set up with the basics such as desks, chalkboards, and reference materials. The class is usually brought into this room for discussions and bookwork. Bookwork is a deterrent to poor behavior in the lab.

The metalworking shop consists of a hot metals foundry, several welding stations, a milling machine, different machines for sheet metal bending, and work benches for the planning and assembly of projects. Having no experience in physically doing foundry work or welding, this room makes me feel a little lost and I would need additional

training before having students use this equipment. Students work on transferring their projects from one station to the next until they have had experience in all areas.

The wood working shop is set up with a band saw, several sanders such as belt, disk and drum, work benches with vices, table saws, planer, jointer, and a miter saw. I have had the opportunity to work with special education students in building holiday decorations. It appears that students have also used this lab for construction technology. Students have built dog houses using the same techniques that larger houses are built with.

The computer drafting and design lab is set up with enough computers to accommodate every student, but they are yet to be used because the teacher wants the students to develop spatial intelligences by constructing two dimensional drawings from three dimensional objects on paper. The center of the lab appears as if it were a conference room making it easier to help students. Sitting down with the students at this large table makes it easier for me to monitor all of their work at once.

3. Of two metalworking shop classes, there is only one female taking the course. There are three females taking drafting and design. When I talked to the teacher about the issue of gender ratio, he said that it is difficult encouraging females to take these courses because of the classes being predominantly male. He said it is illegal to hold a class that places gender restrictions, so that option can't be pursued. I talked with a teacher from the Stout Technology Education Conference and the idea of having projects that relate to nature or medicine may increase a desire for females to take the course. I can see where females would not be as interested in tool boxes, ice fishing pop-ups and automotive symbols. I would like to actually put this theory to the test and see if I couldn't turn the numbers around just by better selection of projects.

4. In metalworking, the concepts being taught are the abilities of laying out dimensions from a design, forming metal with molding and bending, cutting metal with turning and cutting, and the fastening of parts together. In the design class, students are learning how to draw, measure, scale, and visualize the relations between two and three dimensional objects. The teacher believes that manual skills will help students understand more automated machines without necessarily having used them. A few students who excel in these classes have the opportunity to use a couple CNC machines. If the students aren't able to be accommodated, there are opportunities for them to take college credits at other locations. The teacher says that some equipment that are too highly advanced may scare students away from taking the course.