Civil lawsuits brought for injuries to students are a source of growing concern for teachers, and especially for science teachers. This paper outlines some basic principles by which science teachers may protect themselves from lawsuits, before and during the time that students are engaged in experiments or lab work. Courts in this country have determined that educators have the following obligations to students: (1) adequate supervision; (2) proper instruction; and (3) maintenance of equipment. Accordingly, this monograph addresses each of these concerns. The teacher has the responsibility of thinking through each step of the experiment and analyzing the possibility of harm at each point, both from the process and from the equipment. Obvious potential hazards must be removed, since students cannot be subjected to unreasonable risk. In civil cases, teachers' actions are measured with reference to a hypothetical reasonable person under the same circumstances, or with reference to the doctrine of foreseeability. The best safeguard for today's science teachers is therefore comprehensive and explicit instruction before laboratory work. (TE)
Science Teachers and Liability

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Law in this country has three basic sources. Constitutional law, derives from the U.S. Constitution and each of the 50 state constitutions; statutory law, comes from Congress, state legislatures, units of local government, and so on; and, common law (sometimes referred to as "judge made law") which evolves from the decisions made by judges as cases are heard over the years.

Laws can be divided into the broad categories of criminal law and civil law. Criminal law is composed of felonies, serious crimes such as murder and arson; and misdemeanors, representing less serious crimes. Civil law can be subdivided into contracts and torts, a tort being a wrongful act that causes injury to a person, his or her property or reputation, and for which the injured party is entitled to compensation.

Damages in a civil case can be a substantial sum of money. Compensatory awards, to make the person "whole" or complete again, are sometimes made. Of a more substantial nature is the award of punitive (exemplary) damages, which can literally run into the millions of dollars. These damages are designed to punish a defendant and to give warning to others.

Some acts are violations of both civil and criminal law. For example, a teacher causes injury to a child while attempting to discipline the child. After an investigation by police authorities, the teacher goes on trial in the criminal courts for
assault and battery, for example. Let us assume that the teacher is eventually acquitted. At that point, the parents of the child decide to hire an attorney and sue the teacher. Such action would take place in the civil courts, and the outcome is entirely independent of the results of the criminal trial.

Today, it is in the area of civil charges that there is a concern for teachers. Even the most well meaning, well intentioned teacher can be sued when a student in their custody is injured. Specific classes where the potential for injury is highest would include physical education, vocational classes and science classes. More than one science teacher has been sued when an experiment went amiss, or when a student was injured as a result of misusing equipment during a laboratory session.

How can teachers protect themselves from lawsuits? Should teachers completely forbid students from handling anything other than a textbook? Such paralyzing reactions to lawsuits are not necessary if teachers will follow some common sense principles before and during the time that students are engaged in experiments and/or lab work.

**Preparation**

Courts in this country have been quite clear in determining that educators have these obligations to students:

1. Adequate supervision
2. Proper instruction
3. Maintenance of equipment
These obligations are of importance to all teachers, but particularly so for the science teacher, especially when experiments and other laboratory work is being engaged in. In the following paragraphs each of these concerns, and others, are addressed.

First and foremost, any "hands-on" activities by students must be well thought out and planned in advance. If there is a clear danger to students, the work must be either completely modified to eliminate the danger, or should not be engaged in at all. The teacher has the responsibility of thinking through each step of the experiment, and analyzing the possibility of harm at each point. Not only should the process be considered, but each piece of equipment to be used must also be considered.

We all know that there is never a certainty in anything we do that completely removes all danger from activities that students engage in. The point is, it is necessary to remove the obvious, and potential, hazards. Equipment must be examined with great care. Anything that is not in perfect working order should be kept completely away from students until it is repaired.

Planning is a critical function of the teacher before allowing students to engage in lab work. The teacher must be sure that he/she can fully supervise all students during the course of activities. Adequate supervision is a requirement of teachers when they have students under their care and control. Nothing is worse than designing an activity and having it underway, then discovering that due to its complexity the teacher
cannot adequately supervise all the students as they move along step by step.

Students cannot be subjected to unreasonable risk. Obviously, each time a football coach sends players onto the field, a reasonable risk is involved. However, the coach will provide only equipment in proper working order, will provide the best possible instruction, and will provide proper supervision. So too, must the science teacher provide proper equipment, instruction and supervision. To repeat, all risk can never be removed; but, the cautious teacher never subjects students to unreasonable risks.

For a lawsuit against a teacher to be successful, the teacher does not have to be the direct cause, but rather only the proximate cause. That is, if the teacher's actions or inactions can be linked in time, space, sequence, etc., to the injury, he/she may be held liable. For example, forgetting to properly assemble equipment before an experiment could certainly link a teacher to an injury.

Obviously it is not easy to determine what constitutes "adequate" supervision, instruction, care, etc. A legal doctrine, the reasonable man doctrine, is a sort of yardstick against which the teachers actions will be measured. If sued, the court will seek to find whether the teachers actions measured up favorably against a hypothetical reasonable person under the same circumstances, and possessing similar knowledge, capabilities, etc., of the actual teacher in the same situation.
Another legal doctrine which may be involved is the doctrine of foreseeability. Under this doctrine, a court will seek to discover whether the teacher should have been able to foresee the circumstances and events that led up to an injury. Obviously, some events are not foreseeable, for example, so-called acts of God—a lightning strike from a clear, blue sky, or a perfectly healthy appearing tree limb that suddenly breaks from a tree. Nevertheless, the cautious teacher attempts to foresee any possible danger or hazard long before its possibility, however remote, becomes a factor.

Perhaps one of the best safeguards for today's science teachers is the role of instruction before laboratory work. This instruction should include a careful explanation of all terminology, demonstration(s) by the instructor, proper and improper procedures, hazards involved, and an explanation of steps to be taken in the event of problems. Students should be taught each step of the work in detail, especially safety factors, and tested over the material before they can engage in the activity. Some teachers insist on a 100% test score before allowing students to proceed. Others allow students to work if their safety test score is higher than 80%, for example, but, and this is important, they require students to write out the correct answer in their own handwriting and either sign or initial the corrections. Then, the teacher keeps all students safety tests in a safe and secure area. This is a simple method by which a teacher has proof that they have provided proper instruction.
Some teachers go to great lengths to have proof of their proper instruction. They do so by having their safety instruction video taped. If the instruction is indeed thorough, comprehensive, clear and explicit, the teacher does have a clear record of their instruction. This may be an extreme measure; however, in regions of this country where lawsuits are relatively common, this does provide a good measure of insurance.

Keeping current in the law and any local rules and regulations is an obvious necessity. Federal, state, and local requirements, and any local school district policies involving the transportation, use, storage, and disposal of chemicals is an obvious example. Such regulations do change--the prudent teacher keeps current with such changes.

**Summary**

A short and simple set of guidelines, if properly followed, should prevent injuries and provide the science teacher with ample protection from a lawsuit.

1. Plan activities in advance, in detail.
2. Anticipate any possible problems; plan accordingly.
3. Check carefully all equipment, materials and supplies.
4. Provide safety instruction for all participants.
5. Test over your safety instruction.
6. Supervise all activities carefully.
7. Be aware of, and comply with, all laws and regulations.
8. Exercise common sense.