Introduction:

The National Science Education Leadership Association (NSELA) recommends all science education leaders advocate, establish and maintain safer school working/learning environments for science teachers and their students by implementing practices and policies that support safer teaching/learning environments. At a minimum, schools must meet the legal duty or standard of care owed to their students and teachers in science classrooms and laboratories.

The science education leader needs to work with teachers and administrators to develop practices and policies relative to safety and duty of care. The laws in all 50 states generally recognize that every person owes a duty of care to another to avoid causing them to experience injury from exposure to unreasonable risks of harm from their action or inaction. This “duty of care” requires that each person exercise at least ordinary care that the other person not be injured. “Negligence” is the failure to exercise due care or reasonably fulfill one’s duty of care owed to another, which results in injury or loss to another person. (National School Boards Association). In the education context, extensive case law supports that school districts, administrators, science supervisors and teachers owe a duty of care to their students to prevent them from being exposed to unreasonable risks of harm. School districts as employers and the administrators who supervise STEM teachers owe teachers the same duty of care. In order for school districts to properly meet their duty of care to their students and teachers, certain minimum requirements or standards must be met.

Statement:

NSELA urges that all science education leaders develop an effective policy statement based on case law in order for school officials to meet the legal duty of care owed to their science teachers and students. (e.g., Duty of care in a school environment - https://www.schoolgovernance.net.au/news/duty-of-care-in-a-school-environment-how-long-is-a-piece-of-string#:~:text=%20Duty%20of%20care%20is%20common%20law,or%20engaging%20in%20school%20activities%20that%20are%20off-site.)

In meeting duty of care, they need to advocate/support the adoption of health and safety laws/standards at the local, state and federal levels in the workplace, in addition to implementing and following better professional safety practices including:

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1. Hire and Retain Qualified, Competent Staff and Properly Supervise:

School administrators and supervisors have a duty to hire qualified, certified and competent employees to teach students. This means hiring teachers who are properly trained in the specialty they are to teach with sufficient knowledge to meet their duty of care. In addition, school districts must provide their teachers with continual and appropriate safety professional development, i.e., annual fire extinguisher training. School administrators and teachers must keep abreast of all changes to safety codes that may affect their classrooms/laboratories. These employees must also be appropriately supervised in the performance of their job requirements to ensure student safety is not jeopardized. If there are allegations of misconduct or failure to perform, these allegations must be addressed promptly and appropriate action taken.

All allegations, investigations, and actions must be recorded and filed. School Districts may be held liable for the negligent hiring or retention of employees who fail to meet the duty of care causing injury. Science leaders must develop safety protocols that ensure and advocate:

   a. Appropriate access, use and maintenance of science/STEM classrooms and laboratories’ safety engineering controls (e.g., eyewash, ventilation, fume hoods, etc.) appropriate for the class, activity and level;

   b. School adoption of standard safety operating or administrative procedures for science/STEM classrooms and laboratories (appropriate use, storage and disposal of hazardous chemicals, biologicals, etc.). These procedures must be adopted and approved by the local Board of Education; Board of Education should minimally be noted as having read

   c. Appropriate access, use and maintenance of safety personal protective equipment when dealing with biological, chemical and physical hazards (chemical splash goggles, safety glasses with side shields, non-latex gloves, etc.).

2. Provide Adequate Supervision of Students:

The duty of care requires the adequate supervision of students and teachers at all times. This duty of supervision includes adequate supervision of students and teachers while engaged in science/STEM classes, labs, and field experiences. The level of supervision required varies relative to the risk of harm and the age of the student. Science leadership needs to help develop a policy which fosters the following components:

   a. Duty to Warn – Science leaders must develop safety protocols which include advising students and teachers of the potential risks of harm to their safety prior to and during use of potentially hazardous equipment, materials, etc. For example, remind students scalpels are sharp and can cut skin before dissecting plant specimens.
b. Duty to Inspect for Safety Hazards – Science leaders must develop safety protocols applied before, during, and at the close of activities, actively monitor student behavior, equipment, etc. to help foster a safer working/learning environment and prevent harm to students and teachers.

c. Duty to Enforce Safety Rules – Science leaders must develop safety protocols which consistently enforce appropriate safety behavior and follow a well-defined progressive discipline policy for violations of established rules and procedures for students and teachers.

3. Provide Appropriate Instruction Commensurate with The Level of Risk and the Age of The Student:

Science leaders must develop safety protocols which require instruction that keeps students and teachers out of harm’s way during school related activities. In situations where there may be ongoing exposure to potential hazards (e.g., laboratories, field work sites, etc.), safety instruction must be required to be provided on a continual basis. Failure to warn of such hazards or providing a means of avoiding or reducing such hazards constitutes a breach of the duty of care owed to students and teachers.

Appropriate Safety Instruction includes:

a. Duty to Notify of Safety Practices & Procedures – Science leaders must develop safety protocols involving the review of safety practices and procedures by students and teachers. These protocols must be reviewed and approved by the local Board of Education on an annual basis. In addition, students should be required to sign a safety acknowledgement form stating they will adhere to the safety practices established by the school and teacher. See NSTA’s “Safety in the Science Classroom” at http://www.nsta.org/pdfs/SafetyInTheScienceClassroom.pdf for a sample form. In addition, a safety disclaimer form should also be used to help keep the teacher and school out of harm’s way legally. See NSTA’s “COVID-19 Pandemic Safer Science/STEM Online and Face-to-Face Learning Environments Instruction Disclaimer Statement” at https://www.nsta.org/covid-19-pandemic-safer-science.

b. Finally, teachers must be trained and required to do a safety hazard analysis, risk assessment and corrective safety actions before any lab or field work is initiated. All earned certifications must be kept on file.

c. Duty to Model Appropriate Safety Practices – Science leaders must develop safety protocols requiring teachers to always model appropriate safety techniques with students prior to having them work with equipment or carry out procedures.

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4. Provide a Safer Learning Environment:

Schools must provide classrooms/laboratories appropriate for the conduct of the foreseeable activities in that classroom/laboratory. Science leaders have a duty to make sure science activities are only be performed safely in that teaching/learning environment. Failure to take appropriate safety precautions or provide reasonable safety warnings relative to foreseeable injuries enhances school district, administration, science leadership and teacher liability.

A Safer Learning Environment includes:

Duty of Maintenance - Science leaders must develop safety protocols that ensure science/STEM classroom and laboratory engineering controls and personal protective equipment are operational and meet the manufacturers’ standards. Along with current safety recommendations. For example, if the ventilation cap on a chemical splash goggle was removed, take the goggle out of operation.

Conclusion:

The NSELA encourages science leadership to be cognizant of the fact that the duty of care is a factual determination and liability for an injury resulting from a breach of the duty of care depends on individual circumstances surrounding the incident. Factors to be taken into consideration as to whether a school district, administration, science leadership or science/STEM teacher met their duty of care and therefore may not be liable for the injury resulting from an accident include but are not limited to: Student’s age and level of maturation, type of risk, precautions taken to prevent injury, training, level of supervision, legal safety standards and professional standards in the respective industry.

References:


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Credits:

The NSELA Board of Directors wishes to sincerely thank the following individuals for developing this NSELA position statement:

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