Course work on safety orientation outline

Business, Management

Safety is important as it plays a crucial role in performing laboratory experiments. Teachers and students should therefore be well informed on various safety issues, liability and responsibilities in order to minimize risks in order to remain safe while in the laboratory. In order to address these concerns adequately two videos one containing safety orientation skills for the teachers and the other for the students can be developed. The following outlines make up the content of the video designed for the teacher.

The video should show the general science safety checklist. The checklist should contain the general items showing the general practices that should be followed while in the laboratory. These are the general rules followed in any science instrumental environment. Other than these genera rules, the checklist should contain specific precautions that the teacher and student should follow while in the laboratory. These are the glassware, chemical and electrical precautions that should be adhered to.

A checklist of common laboratory operating procedures should be included in the teacher video. This checklist outlines the general safety rules, regulated safety rules and classroom management guidelines. This will assist the teacher be informed of the safety rules that have be put in place by the regulating authorities and the generally outlined rules. Classroom management tips like the supervising, maintenance among others should also be given.

Guidelines on what to do to prevent accidents should be illustrated on the video. The teacher should also be informed on what to do when accidents occur in order to minimize is effects. These accidents range from those caused by chemical, fire, cuts and release of body fluids. Ways of identifying

and managing chemicals should also be included in the video with specific issues on purchasing, labeling, storing and disposing of chemicals being addressed.

Protective equipment should be show in the video as one of the major essentialities in any elementary science environment. The teacher should therefore be informed on these in order to prevent injuries and clean-up spills. The video should also indicate whether or not the recommended guidelines cover the physical specifications for class rooms with laboratories, elementary classrooms or science resource rooms. Precautions taken when handling animals and plants should also be contained in the video for the teacher. On animals issues of animal care, animal precaution and experiments with animals should be highlighted. On plants, matters on classroom plants, experiments on plants should also be shown.

In the video, the teacher should also be informed on safety issues considered when planning and conducting field experiments and trips as they affect both planning and implementations of the experiments. Lastly, the video should illustrate the legal responsibilities a teacher should know while in science instructional environments.

On the other hand, a student video should contain the same outline as that of a teacher but in a student’s context. Issues addressed in the teacher video should also be addressed in the student video. However, there is some guideline appearing in the teacher video that should not necessarily be highlighted in the student video. These include the guideline on the legal responsibilities that for science safety. This is because most students have underage hence not legally obliged. The other issue that should not be

mentioned on the student video is that of how to identify and manage chemicals. This is because this is the responsibility of the teacher and not the student. In conclusion, it can be said that the safety orientation outlines for both the teacher video and the student video are similar and therefore the videos will be similar apart from the few identified differences.

Reference

Ryan, K. (2001) Science Classroom Safety and the Law – A Handbook for Teachers. New York: Flinn Scientific, Inc.