TRAINING OBSERVATION IN SCHOOLS.

Scheme proposed by The Royal Sanitary Institute for training observation on building and hygienic appliances in schools.

The "Education Act, 1918," provides: in clause 2 (a) (1)

"for including in the curriculum of public elementary schools, at appropriate stages, practical instruction suitable to the ages, abilities, and requirements of the children,"

and in view of the Technical Classes to be attended by children on leaving school, it is proposed that during the latter part of their school life as much preliminary technical observation as possible should be carried out by them on the school premises, and that a certain amount of technical language and knowledge of materials and appliances should be acquired in connection with the observations.

Besides serving as an elementary ground work for technical instruction, the practical training in observation and the intelligent understanding of appliances would have its definite application to the after life of all scholars in their homes and in their work.

It should be clearly understood that the purpose of this scheme is not to take the place of laboratory or science teaching, but to inspire an intelligent observation and understanding of ordinary appliances and surroundings.

The instruction could be undertaken by any competent teacher who had qualified in practical sanitary science on a syllabus such as that indicated by the examination of The Royal Sanitary Institute, which was drawn up as a desirable part of the qualifications for all teachers.

The practical observation of appliances connected with Hygiene and Sanitation may be usefully carried out in schools on the lines laid down in the following method:—

METHOD.

A school class of thirty, arranged in patrols of five, round six tables of models, one of each group acting as Patrol-leader. Patrol-leaders to ask questions of the Instructor when needful, and to communicate the information to the other members of the patrol, each patrol having a different group of models.

At the end of a quarter of an hour patrol A, having had help from the Instructor in observing the models on the table, and having received suggestions as to where to look for such appliances in use, starts on a tour of the building, lasting a quarter of an hour, under the guidance and responsibility of the Patrol-leader. They then return to their tables in the class room to verify their observations and to talk over them, to make rough drawings of the models

before them, and from memory of the appliances seen in position. No written account or notes are to be made.

The Instructor, having parted with patrol A, turns to patrol B, and gives the same kind of help on the next set of models, and, at the end of the second quarter of an hour, starts them on their tour.

This is repeated to each patrol in turn during the one and a half hours. The later patrols will begin their sketching of models before their tour of inspection.

The following week the same plan is pursued, the patrols being shifted up to the next table, patrol B starting first.

The Instructor will imbue the Patrol-leaders with the idea that they must encourage the dull to understand and to hunt for the appliances because the quick need less help; and that there must be no fault findings, no comparisons made, no marks or awards, and no punishments. The Patrol-leaders must be impressed with the practical truth, that where interest is aroused and is keen, all necessary discipline is supplied.

PROGRAMME—AUTUMN TERM.

Boys and Girls, ages 13–14.

Observations of :—

1. <i>Taps.</i>	4. <i>Light—Natural and Artificial.</i>
2. <i>Locks, fastenings, etc.</i>	5. <i>Air and Sound.</i>
3. <i>Water-Supply and Drainage.</i>	6. <i>School Building Construction.</i>

For setting up the models, a square table for each patrol may be formed by pushing two double desks together, each table to be supplied with a different group of models and the ordinary tools used in fitting the appliances.

Group 1.—*Taps, Plugs.*

Taps for basins.	Gas taps.
Taps for drinking water.	Radiator taps.
Main taps.	Basin plugs and outlets.
Ball cock.	Trap cleansing plug.
Washers.	

Group 2.—*Locks, Fastenings and Hinges.*

Door locks (working parts visible).	Window latch.
Door latch.	Window fasteners.
Springs and locks.—Bolts.	Sash pulleys and cords.
Box hinges.—Door hinges.	Spring blinds.

Group 3.—*Water Supply and Drainage.*

Water pipes.	Closet basins.
Filter.	Flushing cisterns or waste preventer.
Drinking fountains.	Traps and gulleys.
Cistern.	Soil pipes.
	Man-holes and inspection chambers.

Group 4.—*Natural and Artificial Lighting.*

Coloured glass.	Windows.	Reflection.
Rough plate and ribbed glass.	Skylights.	Colour of walls and ceilings.
Maximum light glass.	Printed type.	

ELECTRIC LIGHT.

Switch.—Plug.—Lamps.
Wire and coverings.—Fuses.
Meter and method of reading.

GAS.

Burners.—By-pass.—Mantles.
Taps.—Pipes.
Meter and method of reading.

The groups and items are set out for the Autumn term as an illustration, and the idea could be developed for the Spring term. During the Summer term there is more opportunity for outdoor occupations, and the class might be modified to encourage observation and interest in the common accessories in roads and streets and public undertakings, fire stations, gas and electric works, water works, stone yards and destructors.

E. WHITE WALLIS,

Secretary.

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