

F.L.A.M.E.
(Firetrucks Leaving and Meeting Emergencies)

A Simulated Learning Experience Designed for 4 and 5 year-Olds
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Rationale

Since there remains a distinct shortage of planned and organized materials in Social Studies for early childhood, the simulation game F.L.A.M.E. was created. The simulation gives children a chance to learn about a fire department and, more importantly, to make critical decisions about human beings through role playing and information sharing. The rationale for using this technique is based on the idea that Social Studies in Early Childhood Education should deal with the child and the child's own environment.

In implementing F.L.A.M.E., teachers act as guides. It is their responsibility to prepare the students for effective participation in the simulation and to insure that it functions smoothly. It is very important that teachers be explicit about the students' experiences with the game. They must also aid the students in examining their views of the real world.

Educators have shown that an open concept in the classroom stimulates growth and an environment in which the child can actively participate will provide understanding and a basis for formal thought processes. Hilda Taba¹ believes "In order to learn to think, the student must do the thinking instead of absorbing the products of thought processes performed either by the book or by the teacher."

¹Hilda Taba, The Taba Curriculum Development Project in Social Studies, Addison-Wesley Publishing Company, Menlo Park, California, 1969.

What makes up thinking and in what kind of situations do students "learn to think"? Hilda Taba identifies three cognitive tasks involved in the thinking process: (1) Concept formation, (2) Interpretation of data, and (3) Application. F.L.A.M.E. is a simulated learning situation which develops all three of the cognitive tasks defined by Taba.

The first of Taba's tasks is concept formation. This involves organizing information into a system of classes or groups. F.L.A.M.E. develops this area by having the students make maps of the fire truck. In map making students work with concrete facts. They are required to verbally label and identify items according to a common property. For example, there is one symbol which represents each ladder in the game. This symbol differs from the one used to represent the axe or the hose.

The second cognitive task described by Taba is interpretation of data. This involves the students in relating various kinds of information given on their maps and determining cause and effect relationships. For example, while playing F.L.A.M.E. each student must look for cause and effect relationships between the parts of the fire truck and their uses. An understanding of these relationships is essential in rescuing a person from a burning building.

The third cognitive task is application. This involves the students in applying what they know, facts and generalizations, to problem solving. In the game this task is developed in the role playing portion where the students are given a role card which loosely defines the types of persons they will role play (name and reason for being involved in the problem situation). The students playing a role work in groups of five to discuss the problem concerning the fire. They must use previously acquired knowledge of the map and the generalizations they have formed in the previous steps of the game to reach a decision upon which all members of the group can agree. Then representatives of the group participate in the role playing situation.

DESCRIPTION OF THE SIMULATION

F.L.A.M.E. concerns a hypothetical fire at the residence of the Jones family. The fire was accidentally started by a match in a trash can. The fire department was called. The family tried to extinguish the fire but failed. The fire truck arrived as the fire was spreading and the family was escaping the burning home. All pupils participate in the learning and problem solving by contributing different information concerning the fire and the fire truck. Each child is assigned a role to play. The members of each simulation group decide what to do about the problems facing the family and the firemen.

MATERIALS AND SETTING IN IMPLEMENTING THE SIMULATION

Part I: Materials needed - Flannelboard, felt pieces representing parts of a fire truck which will include a ladder, an axe, fan, wheels, siren, a flannelboard outline of a fire truck and a paper outline of a fire truck for each child.

Instructional setting - the children are gathered in a semi-circle around the flannelboard.

The simulation starts with the group discussing the parts and equipment of the fire truck and their uses. The flannelboard outline of a fire truck will be placed on the flannelboard. Each child will be given a part of the fire truck and will show and discuss its purpose. He will then place his part on the flannelboard outline. The rest of the group then draws the part on their individual paper outline. When all parts have been identified and recorded, then each member of the group will have the same information.

Part II: Materials needed - a completed flannelboard of a fire truck.

Instructional setting - the children are gathered in a semi-circle around the flannelboard.

The second part of the simulation has to do with discussing the use of the fire truck's parts and equipment. Problems such as the following will be discussed:

- (1) A person is on the second floor of a burning building.
- (2) A school has excessive smoke.
- (3) A door of a burning bank is jammed at night.

The group is encouraged to discuss what parts and equipment are to be used by referring to the flannelboard outline of the fire truck. Discussing uses for these parts and equipment is important to each member of the group and his understanding as the simulation progresses.

Part III: Materials needed - four fireman hats made of platter-sized paper plates, role cards for each child playing a role. Each card will have a picture of the role. (Roles are listed in the appendix.)

Instructional setting - students who are family members are gathered around the dinner table and the firemen are at the firehouse.

The third part of the game starts with the problem of the fire at the Jones' residence. The fire can cause many things to happen to the property and the people involved. The family could be rescued safely or accidents could happen. The house could have smoke damage, fire damage or be completely destroyed. The fire could spread or be contained. Innocent bystanders could become involved or stand idly by. These effects of the fire have to be considered by the group. To do this, the role playing members use the cards which define the roles in the fire.

Using the five member groups, each group is assigned two roles to discuss. Two members of the group will eventually act out the roles.

Before the roles are acted out, maximum time should be allowed for discussion until a group decision is reached, and the reasons are clearly set down for the decisions that are made.

Role playing will take place as a large group activity. At the end of the role playing, a discussion can take place.

APPENDIX A

INTENDED LEARNINGS FROM THE SIMULATION

Map Symbols: Placing

Pupils will learn the names of the parts of the fire truck and their uses. The parts are placed on the fire truck after careful discussion of the relationship between the fire fighting equipment and the parts of the truck.

Map Symbols: Using to Make Decisions

To make intelligent decisions about fire fighting, certain kinds of knowledge and understandings are necessary. Map symbols for this simulation represent a part of this body of knowledge.

Social Structure and Its Relation to Decision

The group, through its role playing, is led to see that different people in the community have their individual views about what is their responsibility in fire fighting and prevention. Differences in opinions and impasses have to be broken for consensus in the group.

Group Process: Group Decision Making

The group learns to make a decision solely on the data at hand. In addition to knowledge, the children gain experience in awareness of the family and firemen's responsibilities and feelings.

PROBLEMS

(After you have completed putting all the parts on your map.)
The following discussion questions will require the children to refer to the map in problem solving situations.

PROBLEM I

A person is on the second floor of a burning building. These questions will help guide you in this task:

1. What equipment will the firemen need to rescue the person?
2. What equipment will the firemen need to fight the fire?

PROBLEM II

A school has excessive smoke because of a fire in the furnace room. These questions will help guide you in this task:

1. What equipment will the firemen use to get the smoke out of the school?
2. What equipment will the firemen need to fight the fire?

PROBLEM III

A door of a burning bank is jammed at night. These questions will help guide you in this task:

1. What equipment will the firemen need to get the door open?
2. What equipment will the firemen need to fight the fire?

ROLE PLAYING CARDS

Card No. 1 - You are the Fire Chief. It is your job to see that each fireman is doing his job.

Card No. 2 - You are the Driver of the truck. You take care of the knobs and handles on the truck to make sure the other firemen get the water they need.

Card No. 3 - You are the Hoseman. You hook up the hose to the fire hydrant. You put the water on the fire.

Card No. 4 - You are the Captain. You help the driver by telling him where to park the truck. (Park the truck near the fire hydrant.)

Card No. 5 - You are the Father. You are reading the newspaper when the fire starts.

Card No. 6 - You are the Mother. You emptied an ashtray into the waste basket. A spark from the ashes started the fire.

Card No. 7 - You are the son, your name is Danny Jones. You are watching TV when the fire starts.

Card No. 8 - You are the daughter, your name is Sue Jones. You are talking on the telephone when the fire starts.

Card No. 9 - You are a policeman, Officer Brown. You are on duty near the Jones' house. You help to keep people and traffic away from the fire.

Card No. 10 - You are the neighbor, Mrs. Smith. You live down the street from the Jones'. You are a grandmother. You are walking down the street.

APPENDIX B









