

## **SIMULATED TEACHING: A PRAGMATIC APPROACH IN TEACHING OF HOME SCIENCE**

**GEETIKA SHARMA**

Department of Education, Lady Irwin College, Delhi, India

### **ABSTRACT**

This article substantiates the use of simulated teaching/role play as one of the unique method for teaching of Home Science. Pedagogy of spontaneous and extempore enactment can be used effectively by an able teacher with a pragmatic approach to let people build their own knowledge as per their needs and exigencies. The paper also talks about the advantage injected by involving the children in direct-purposeful experiences and contrived experiences insightfully. It also suggests many advantages of using this technique followed by handful pitfalls which can be managed by a trained teacher tactfully. Learning should bring about a desirable change. Therefore, a teacher should intuitively select the experience to be provided.

**KEYWORDS:** Teaching, Own Knowledge

“Every role that I play is a gift and is something that I approach differently.”

-Jesse Johnson

Home Science is the study of both science and art. It is science in a manner that prudent planning of objectives, techniques, matter, event and evaluation are required for it. It is an art, because the teacher needs the trait such as responding to the needs, curiosity and advancement of pupils, empathetic personal relationship and competency in working with children and adults. The success of any program depends on the teacher. She has the accountability for acknowledging the requirements of pupils and encouraging their collective participation, by instigating novel ideas, revamping old customs and tradition, persuading actions and nurturing prudent practices.

Unprecedented in the history of education has the teacher of Home Science recognized to play such a pivotal role in the existing time. In this panoramic world, societal and technological changes which affect human concerns and personal relationships, becoming a great teacher is a peculiar challenge. Home Science can be effective only as it, mitigate the problems brought by changing scenario.

Intermittently it is perplexing to realize how rapidly the world is operating or in which direction it is heading. Changes bring about a revolution and old patterns may no longer be desired. All this have a remarkable influence on our culture and it simultaneously changes the way of teaching.

Evolution in Science and technology are directly associated with the transformation which will further has an impact on the structure and composition of family life. There is a concurrence, nevertheless, that a teacher should know, What to teach? Why to teach? How to teach? And accomplish euphony between the aims of education and the demand of the pupils. To accomplish this, a teacher needs certain proficiency. This proficiency, supplementing and fortify one another

need to be supervised in relation to the conditions confronted by the home science teacher of today. One of them is teaching effectively. This is probably the most important of all the proficiencies associated with the successful teacher. It is meticulously related to and even reliant on all the other proficiencies.

Subsequently, effective teaching deals with each and every pupil, his exigency, curiosity and aptitude and of the rapidly changing sphere in which pupil lives, the developmental issues he faces and his mental potentiality. It also calls for an essential learning operation which is conducive for creating an atmosphere where learning can happen in the most encouraging manner that every pupil will desire to learn. Stimulation should be in a manner where pupils can have a critical, independent and creative thinking which will further escalate the effective teaching. Simultaneously, it is essential for the pupils to be able to clear their doubts and to express them in a meaningful manner and also learn to appreciate others ideas

Teaching is worthwhile when the most pertinent method of teaching is used and persistent practice in using them skillfully, will entrench for triumph in teaching. Finally yet importantly, is the need for continuous evaluation. Only by reviewing what is being done, how it is being done and what has been achieved, and what still needs to be done can the teacher know to what extent she is able to attain the objectives of Home Science.

Utmost effectiveness in teaching will result from the skillful inception of opportunities and conditions, at the same time furnishing of learning encounter in which pupils will acquire knowledge, master their skills and develop an attitude required to meet their exigencies appropriately. Essentially, effective learning takes place through pupil's experience.

The potential to fabricate learning situations materialize from an understanding of the basic principles of learning and their inferences for teaching. Learning is a continuous, purposeful and an active process involving all the senses affected by physical and social environment along with individual differences. In other words, for continuous learning, the teacher can begin from previous knowledge, help the child to accommodate and assimilate the new one, adjust the pace to the learner's capacity and reinforce the learning by repetition and pleasant association. For making learning purposeful, the teacher can clearly state the objectives and strive towards achieving the same followed by an appraisal of the progress. By making use of Audio-Visual aids and by following the Edger Dale's Cone of Experience, hence involving all the senses, the teacher can make learning process active. The teacher can make the physical scenario pleasant by suitably planning it as per the learning process and social environment can also be taken well care by paying appropriate attention to group dynamics and class sociogram and by providing a friendly and positive atmosphere. Lastly, by keeping an eye on the learning capacities of a set of children, a teacher can carefully plan her program of activities catering to both under achievers and overachievers. All efforts to be made to avoid rote memorization and teaching through purposeful, real and concrete way should be followed.

**“I Hear and I Forget, I See and I Remember, I Do and I Understand”**

**-Famous Chinese Proverb**

All acquisitions of knowledge results from experience, but the excellence in learning is influenced by the quality of the experience undergone. Therefore, the assortment and provision of experiences, elucidation of goals, illustration of skills and the stimulation of pupils' involvement is of utmost importance in the learning exercise.

Teachers adopt numerous methods in teaching-like discussion method, laboratory method, demonstration method, demonstration-cum-discussion method, field trip method, problem solving method, project method, group work, assignment method, simulation/role play, etc. Each of these methods, if taken separately, has its own facet and impetus.

According to Cruickshank and Armaline (1986), "Field experiences have emerged as a critical dimension in the teacher preparation process. Indeed, in recent years much has been written regarding the efficacy and effects of field experience involvements for pre-service teachers". Simulation/role playing is one of the vogueish methods of teaching Home Science specially attuned to unravel why people behave in a manner as they do in some circumstances. It gives us an opportunity to "see ourselves as others see us". However, it differs from skits and other dramatizations in being spontaneous and unrehearsed. It is one of the spontaneous expressions of the child. Therefore, in teaching of Home Science, this method is of vital importance and can be effectively and intelligently implemented in the same.

According to Ruben (1999), "Simulations, games, and other experience-based instructional methods have had a substantial impact on teaching concepts and applications". Simulation refers to the replica of real world proceedings and exercise in a secured milieu. Simulations aim to dispense an occurrence as close to the genuine thing as possible; however, a simulated proceeding has the supremacy of allowing the learners to 'reset' the milieu and try other approaches and tactics. This permits learners to develop experience of a particular situation by exercising their extensive learning and proficiency.

This perspective is quite often used in those branches of knowledge where students necessitate establishing experience and virtuosity, but security assurance or cost determinant prevent this occurring in the actual world. For example, medical students are permitted to practice diagnosis and treatment on mock-up medical simulators that can react in refined and relatively realistic manner. Antithetically, flight simulators are used by aeronautical engineers and trainee pilots to comprehend how an aircraft would respond in a numerous situations without ever quitting the ground. The use of simulation is apparent and recognizable in some other areas also such as "simulated courtroom" in law. **In some branches of knowledge like Home Science the difference between a simulation and a role play task may be negligible, specifically where the task is focused on the synergy between people.**

Simply browsing through the Home Science textbook and listening to teacher do not aid the students to have direct and contrived experience of things. In simulated teaching, when the students get a chance to play as if they were really facing a particular social scenario, or they were different persons and their understanding advances much beyond what is gained through browsing a book or listening to a teacher. From the spontaneously role playing of a simulated situation, the students not only develop a rational understanding of a problem, but also experience sentiments similar to those felt in the social relations of life.

A visual model has been constructed by Edger Dale which is composed of various stages beginning from the bottom with concrete experience and move towards more and more abstract as it reaches to the top. According to him, the cone is based on progression of abstraction and not difficulty and also on the number of senses involved in gaining an experience.

During the 1960s, Edgar Dale theorized that "learners retain more information by what they "do" as opposed to what is **heard, read or observed**". Here, the cone of learning has been placed upside down in order to emphasize the importance of direct-purposeful and contrived experience provided by

“Doing the real thing, simulating the real experience and doing a dramatic presentation” which is the most active form of participation and hence maximum retention.

Cone of Learning		
After 2 weeks we tend to remember		Nature of Involvement
90% of what we say and do	Doing the Real Thing	Active
	Simulating the Real Experience	
	Doing a Dramatic Presentation	
70% of what we say	Giving a Talk	Passive
	Participating in a Discussion	
50% of what we hear and see	Seeing it Done on Location	
	Watching a Demonstration	
	Looking at an Exhibit Watching a Demonstration	
	Watching a Movie	
30% of what we see	Looking at Pictures	
20% of what we hear	Hearing Words	
10% of what we read	Reading	

Source: Cone of Learning adapted from (Dale, 1969)

**Figure 1**

The philosophy of pragmatism laid stress on the practical application of ideas by acting on them to literally analyze them in human experiences. The pragmatist lay down attainable standards so as simulated teaching. Alike, pragmatism simulated teaching counteract with the problems and try to sort it out from practical and rational point of view. Like the central theme of pragmatism is an activity so as simulations. Pragmatism strongly advocates the experimental method. It welcomes everything that has a practical utilization. They believe that philosophy unfolded from educational practices. It is an extensive practical and utilitarian philosophy.

It infuses a sense of reality in education and makes learning more purposeful. It converts schools into workshops and laboratories. It assigns an experimental tint to education. Pragmatism helps in inculcating values through his own experience encounters and makes the child self-reliant, confident, positive, vibrant and zealous in the same manner as simulated teaching do.

According to Hashweh (1987), “Simulated teaching consisted of a critical-incident technique. The effects of subject-matter knowledge were apparent here through the teachers' use of evaluative structures and responses to critical incidents”. Simulation in teaching is used at different levels of instruction. For example a teacher is trained practically well along with theoretical exposure. The pupil teacher needs to be trained in simulated scenarios before actually sending her to school for formal teaching as it removes the risk of being new to the facility and also stress of being in a real milieu. According to Grossman, et al (2009), “The teacher education is organized around a core set of practices in which knowledge, skill, and professional identity are developed in the process of learning to practice during professional education”. The teacher has to furnish her role in an artificial environment to empathize with the actual teacher. Only by this way a teacher can accomplish her goal in an excellent manner. Instead of telling a child does and do not he should be put into simulation or role playing so that a teacher can outshine as a successful educator.

According to Ms. Alice McKinney, following are the steps employed for role playing:

- **“Select a situation by”**- Listing and causing the problem after class discussion and of general interest of the target group or presenting in a story form up to the event to be roleplayed.
- **“Defining the situations and roles by the class”**- Teacher must define the roles of the target group and audience. If roles are well described and thoughtful children will volunteer themselves.
- **“Present the situation by taking roles assigned”**- Even before the presenter begins, one child can summarize the situation as to time, place, role and what has happened till that point. The leader may stop role playing as soon as a solution has been discovered or action is longer constructive.
- **“Follow-up Discussion”**- One of the most crucial steps of a role-playing technique is discussed. Pupils in the audience can suggest other ways of interpreting the rules and bringing about a desired result. At the end teacher will attend to the issue and to keep it objective and not personal. She will help the pupil to see why people act as they do and to see how dramatically the interpretation of one role may alter the whole scenario.

Brown (2014) stated that “Simulation activities can be used in teacher education to augment the traditional field-experience approach”. The efficacy of a teacher will highly depend on the training provided to her. “We are what we learn”. The teacher must offer a relevant scenario to the pupils and should plan the outcome in mind first. As in better planned situation stands a greater chance of success. The teacher must stick to one concept at a time only as more can devastate a good situation, less is best.

Following advantages of simulated play-way teaching method makes it one of the best methods of teaching:

- Through this technique self-expression and creativeness develop in the children. Hence, cognitive along with conative powers.
- Verbal abilities are also sharpened by being a part of this technique.
- Children learn to tackle problems in a realistic environment. This caters to the use of critical and evaluative thinking.
- This technique helps to understand self behavior and behavior of others in a very rational and genuine way. Strengthen the relationship of student-student and student-teacher.
- It has the potential for in-depth learning unlike superficial learning.
- Provision for instant feedback is also there.

In spite of having the above stated advantages it still faces some pitfalls such as:

- If problem given to the pupil is not real to them or if they are self-conscious, they will not act instantly.
- All the students are not interested and willing to participate and get engaged.
- This technique fails to prove fruitful if over used or inappropriately used.
- Most of the teachers lack the technical knowledge required for its implementation.

- It is a time consuming technique.
- All the topics cannot be taught by using it.

## CONCLUSIONS

A particular, systematic procedure of accomplishing a task is known as a method or technique. Method of teaching is supremely important in teaching any branch of knowledge. Different disciplines have different simulation technique. One method cannot be recommended for teaching any specific topic of Home Science. A program which provides for a variety of experiences under varying conditions probably produces effective learning outcomes. Soeren, et al (2011) suggested “program developers need to be mindful using role-play in an interprofessional context and point to the importance of deliberate and skilled facilitation in meeting desired learning outcomes”. Pragmatism has brought democracy in education. The children must understand the way their own affairs are managed, so that they get ready for real life situations. Simulated teaching is the technique of learning and getting trained to develop the capability in an individual regarding problem solving. It has been termed as role playing strongly, in which the learner performs the character in an artificially furnished milieu. For a simulation exercise to be constructive, it is mandatory that the scenario reflects real practice and authentic situations as closely as possible. They provide a captivating and drenched experience for the students. Nevertheless, Post-Simulation discuss is as important as setting the objectives for the class. The main purpose of roleplaying is to develop understanding of feelings due to active and experiential learning.

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