
DEVELOPMENT OF SOFT SKILLS THROUGH SCIENCE EXHIBITION- TEACHERS OPINION

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Abstract

The science exhibition form excellent device for scientific minded youths to continue their scientific spirit and to become future scientists. Through this science exhibition the learner's science interest, scientific attitude and scientific aptitude are stimulated and that act as a motivator to secured high marks in the science subject. This study has the objectives of finding out the effectiveness of science exhibition which stimulate the science education among the secondary teachers.

Now, each and every school must conduct the science exhibition regularly once in a year. They have to submit the report to the chief educational officer (CEO) in their concern district. How can we identify the effectiveness of science exhibition? Whether it is depending upon the educational status, social status and economical status of the parents? Or whether it depends upon the type of school? And whether it is in the hand of the teacher? Whether it depends upon the gender? Some of the questions in this study are to be answered.

The investigator have prepared and validated the tool. The study has identified a stratified random sample of 100 teachers. The strata were Government, Government-Aided & Matriculation schools in Madurai & Virudhunagar Districts.

The study has found out that the teacher at secondary level in 2 districts (Madurai, & Virudhunagar) does not shown the significant differences in developing soft skills based on the type of school and gender. If there is a change in our curriculum to conduct science exhibition may develop the soft skills. But we could not generalize based on these two districts teachers opinion.

Introduction

Learning by doing is the principle of teaching science. The things learnt by teachers through purposeful activity are permanently affixed in the minds of the teachers. The truth is verified by experimenting knowledge can be acquired and scientific attitude may be developed. Experience activities are important in modern teaching. So science should provide ample opportunities for practical work. Teacher must have soft skills to handle the classes lively.

Generally in a classroom, teachers are giving opportunities for cognitive experiences to their learners. Experience in what happens to us and what goes on in our mind. Every experience has three aspects cognitive, affective and psychomotor. For total development we should not ignore the other aspects namely affective and psychomotor. Work experience develops conative aspects of the teachers, one of the work experience related to science is science exhibition.

Science exhibition is a forum for the display and dissemination of various activities. It is a device for acquainting the parents and people of the locality with the science work that is done in the school. It is a place where the teachers submit their projects through their students as assessment.

Science exhibition involves not only exhibits but also the development of soft skills through lecture-cum demonstration. It stresses the lecture-cum demonstration pattern than the individual exhibit. Every teacher is a gem in his/her own right. There are talents to be nurtured and potentials to be explored, when the teacher learns form his/her perspective in a holistic environment, creativity and endless possibilities of the future unfold. The teacher evolves in to a leader of tomorrow because of development of soft skills.

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The science exhibition is held to focus attention on science activities, to stimulate the interest of the teachers and parents in science, scientific investigation, scientific hobbies etc., to offer opportunity for them to exhibit their talent to provide constructive suggestions for them. It provides an excellent method of sharing the science projects of individuals in small group, or entire classes with other teachers with in the school, other schools, in a community and the schools of the entire regional area.

Science exhibition may be a motivating force for individual projects and class work. It can stimulate the soft skills like dedication, flexibility, respecting others opinion, accepting others views, making proper evaluation etc.

Science exhibition form excellent device for scientific minded youths to continue their science education and to become future scientist. Even the parents may be stimulating factor to make their child become scientist. The idle mind is a devils workshop. If the spare time of children is left vacant, their mind will be filled with mischief and undesirable activities. So leisure time should be used properly. Through this science exhibition the individual difference expressed effectively in their leisure time activities. For this purpose, schools should conduct the activity oriented curriculum like conducting the science exhibition.

Hence this study has aimed to find out the opinion of teachers in developing soft skills through science exhibition.

Objectives of the Study

1. To find out the opinion of teachers in developing soft skills through science exhibition.
2. To find out the difference in percentage of the teachers opinion in developing soft skills through science exhibition in terms of type of school and gender.

Hypotheses of the Study

- The opinion of teachers in developing soft skills through science exhibition is average in all aspects.
- The Teachers opinion on developing soft skills through science exhibition is average in terms of type of school and gender.

Term and Definitions

Soft skills: A cluster of skills which make a man social and interdependent.

Science Exhibition: refers to the lineup of projects and lecture-demonstrations.

Delimitation and Scope of the Study

The study was confined only among the secondary teachers in Madurai and Virudhunagar District. The subgroups identified for this study were type of school. The finding of the study will reveal that the science exhibition stimulates the soft skills in secondary school teachers. It cannot be over generalized and considered as an overall reflection of other districts secondary teachers. However it may give an idea about the development of soft skills through science exhibition.

Instrumentation

Rating Scale

In order to find out the teachers opinion on development of soft skills through science exhibition, the investigator has prepared and validated a rating scale for the study. The Agree was given 2 marks, Undecided was given 1 mark and Disagree was given 0. Thus the scoring for the tool was done.

Establishing reliability of the tool

The prepared tool was given to sample teachers of 30 to find out the reliability. After a months' time the same tool was given to them. The correlation coefficient found out was 0.76. It is very high correlation. Hence the tool is considered to be having reliability.

Establishing Validity of the Tool

According to Garret, H.E. (1967, p365), the index of reliability is sometimes taken as a measure of validity. The investigator consulted subject experts and Education experts and obtained their opinions regarding the validity of the test. This ensures content and face validity of the test. The test is valid one, since item validity was established besides face and content validity.

Sample

The investigator has followed stratified random sampling method for the present study. There were 100 teachers taken for the study. The strata were Government, Government-aided and Matriculation school in Madurai & Virudhunagar Districts only. The investigator used percentage analysis of the study.

Analysis and Interpretation on Data

Hypothesis 1

The opinion of teachers in developing soft skills through science exhibition is average in aspects.

Table.1

S.No	Criteria	Average rating
1.	Develops The Skill Of Guiding Power	1.53
2.	Enhances Mental Maturity.	1.5
3.	Creates The Socially Responsible Person.	1.54
4.	Develops The Leadership Qualities.	1.55
5.	Motivate To Handle And Utilizes The Innovative Technology.	1.51
6.	Teach Us,"We Are The Second Parent".	1.49
7.	Accepts Our Ignorance In The Modern Development In Science.	1.53
8.	Makes Us To Be Dedicative In Our Work.	1.55
9.	Chance To Exhibits Our Innovative Ideas.	1.53
10.	Act As Stimulators To The Scientific Research.	1.58
11.	Increases The Organising Power.	1.59
12.	Stimulates Social Maturity.	1.61
13.	Accepts Our Students Innovative Ideas.	1.58
14.	Develops The Skill Of Utilizes The Leisure Time To Do The References Regarding The Science.	1.54
15.	Avoids Our Unnecessary Talk In School-Timing.	1.49
16.	Make Our Mind Busy To Think About The Science Exhibition.	1.51
17.	Insists Teachers Are Always Learners.	1.55
18.	Increases Our Divergent Thinking.	1.58
19.	Develops Our Personality.	1.49
20.	Increases Our Intelligence Quaint.	1.55

It is evident from Table 1 that the teachers have agreed to the following aspects as they develop soft skills among students through science exhibition. They are: 1. Develops the skill of guiding power, 2. Enhances the mental maturity, 3. creates the socially responsible person, 4. develops the leadership qualities, 5. motivates to handle and utilize the innovative technology, 5. Teaches us " We are the second Parent" 6. Accepts our ignorance in the modern development in science 7 makes us to be dedicative in our work 8. Chance to exhibit our innovative ideas 9. Act as stimulators to the scientific research, 10. Increases the organizing power, 11. Stimulates social maturity, 12.accepts our student's innovative ideas, 13. Develops the skill of utilizing the leisure time to do the references regarding the science, 14. Make our mind busy to think about the science exhibition, 15. Insists teachers are always learners, 16. Increases our divergent thinking and 17.increases our intelligent quotient. The following aspects have been rated as undecided by the teachers for the development of soft skills through science exhibition. They are: 1. Avoids our unnecessary Talk in School-Timing and 2. Develops our personality

Hypothesis 2

The teacher's opinion on developing soft skills through science exhibition is average in terms of type of school and gender.

Table.2 Percentage Analysis of Teacher Opinion on Developing Soft Skills Through Science Exhibition

S.No	Personal variable	Description	Yes	%	No	%	Total
1.	Over All	Over All	53	53	47	47	100
2.	Type of School	Government School Teachers	15	51.72	14	48.27	100
3.		Govt. Aided School Teachers	17	51.51	16	48.48	
4.		Matriculation Teachers	21	55.26	17	44.73	
5.	Gender	Male Teachers	25	52.08	23	47.91	100
6.		Female Teachers	28	53.84	24	46.15	

It is evident from Table2 that the overall teacher's opinion on development of soft skills through science exhibition is above average. Hence the hypothesis stated is rejected. The majority of teachers (53%) have given the opinion that science exhibition develop soft skills among students. The teachers who are working in Govt., (51.72%) Govt. Aided (51.51) and Matriculation schools (55.26) have given opinion that the science exhibition improves the soft skills of students. The male (52.08) and female (53.84) teachers have given the opinion that the science exhibition improves the soft skills of students.

Findings of the study

The teachers have agreed to the following aspects as they develop soft skills among students through science exhibition. They are: 1. Develops the skill of guiding power, 2. Enhances the mental maturity, 3. creates the socially responsible person, 4. develops the leadership qualities, 5. motivate to handle and utilize the innovative technology, 5. Teach us " We are the second Parent" 6. Accepts our ignorance in the modern development in science, 7. Makes us to be dedicative in our work, 8. Chance to exhibit our innovative ideas, 9. Act as stimulators to the scientific research, 10. Increases the organizing power, 11. Stimulates social maturity, 12.accepts our student's innovative ideas, 13. Develops the skill of utilizing the leisure time to do the references regarding the science, 14. Make our mind busy to think about the science exhibition, 15. Insists teachers are always learners, 16. Increases our divergent thinking and 17.increases our intelligent quotient. The following aspects have been rated as undecided by the teachers for the development of soft skills through science exhibition. They are: 1. avoids our unnecessary Talk in School-Timing and 2. Develops our personality.

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