Assessment of Infrastructure Facilities of High Schools – A Survey

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Abstract

The main aim of the study was to find out the significant difference between infrastructure facilities of high schools. Survey method was adopted for this study. The sample consists of 150 high schools in Thoothukudi and Tirunelveli districts. Simple Random Sampling Technique was used. Questionnaire for Assessment of Infrastructure Facilities (2017) was developed by the investigator used to collect the data. The statistical technique used was mean, standard deviation and 'F' test. The findings of the study were: i) There is no significant difference among rural, urban and semi urban area high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities. ii) There is significant difference among below 5 years, 5 to 10 years and above 10 years establishment of high schools in their facilities for facilities for co-curricular activities and facilities for student welfare and iii) There is significant difference among government, government aided and private high schools in their facilities for co-curricular activities. The educational implications and suggestions for further study are also given as per the findings of the study.

Keywords: Infrastructure Facilities, High Schools.

Introduction

Learning takes place effectively only when congenial environment is provided for children in school which are parts of his social environment. The school is a factor of tremendous importance in education. The more the emphasis on speeding up the learning process, the more will be the emphasis on good infrastructure. Non-functional, meagerly equipped and unattractively decorated school plants have given place to plants with superior lighting, attractive decoration, comfortable seating, useful service facilities such as library, multipurpose room, functional playgrounds and class-rooms with chalk and bulletin boards, sinks, work areas, filing and storage facilities and pupils' lockers. This study is the theoretical outlook about the research concerned and leading to locate the study in its right perspective.

Need for the Study

An ideal school building should be planned spaciously, functionally and with pleasing architectural features. It should stand out in the village or the city as something of which the local community can be proud of. Proper furniture and equipment are the essentials for the successful working of a school. Improper seating arrangements lead to physical deformities and thus endanger the health of the pupils. If the desks be of the wrong kind or if benches be used instead of desks, curvature of the spine, contraction of the chest, roundness of the

shoulders and a confirmed stoop may result as physical injury. Bad discipline, irritation, discontent and discomfort may result as moral injury and inability to sustain attention and concentration owing to lack of bodily ease may result as mental injury. The fact that furniture may need to be shifted frequently in today's secondary class-room implies that it may be movable besides being flexible, adaptable and durable. So the investigator has taken up this present study for investigation.

Operational Definitions of the Key Terms

Assessment: Assessment refers to measure the infrastructure facilities of high schools.

Infrastructure Facilities: Infrastructure facilities refer to the fundamental facilities and systems serving in a school necessary for its economy to function. It typically characterises technical structures such as buildings, equipments, furniture, water supply, sewers, electrical grids, telecommunications, and so forth, and can be defined as the physical infrastructure facilities essential to enable, sustain, or enhance school living conditions.

High Schools: It refers to the high schools up to X standard in Thoothukudi and Tirunelveli districts.

Objectives of the Study

1. To find out the significant difference among rural, urban and semi urban area high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

2. To find out the significant difference among below 5 years, 5 to 10 years and above 10 years establishment of high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

3. To find out the significant difference among government, government aided and private high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

Null Hypotheses of the Study

1. There is no significant difference among rural, urban and semi urban area high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

2. There is no significant difference among below 5 years, 5 to 10 years and above 10 years establishment of high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

3. There is no significant difference among government, government aided and private high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

Methodology

The researcher adopted the survey method to study the infrastructure facilities of high schools.

Population and Sample

The population for the present study consisted of the high schools in Thoothukudi and Tirunelveli districts. 150 high schools were taken for this investigation. They were selected randomly from each school.

Tool use for the Study

The investigator has used self made tool. Questionnaire for assessment of infrastructure facilities (2017).

Statistical Techniques Applied

The statistical applications mean, Standard deviation and 'F' test was applied for the study.

Delimitations of the study

- The study is conducted in high schools only.
- The area chosen for conducting the study was only at Thoothukudi and Tirunelveli districts.

Data Analysis and Findings of the Study

Null Hypothesis 1

Table 1

DIFFERENCE AMONG RURAL, URBAN AND SEMI URBAN HIGH SCHOOLS IN THEIR INFRASTRUCTURE FACILITIES

Dimensions	Source	Sum of squares	Degrees of freedom	Mean square variance	Calculated 'F' value	Remarks
Facilities for Curricular Activities	Between	4.892	2	2.446	0.499	NS
	Within	720.901	147	4.904		
Facilities for Co-Curricular Activities	Between	10.834	2	5.417	1.272	NS
	Within	626.160	147	4.260		
Facilities for Teacher Welfare	Between	0.961	2	.481	0.112	NS
	Within	628.132	147	4.273		
Facilities for Student Welfare	Between	2.624	2	1.312	0.169	NS
	Within	1144.209	147	7.784		
Facilities for Teaching and Learning	Between	5.159	2	2.579	0.559	NS
	Within	678.281	147	4.614		
Infrastructure Facilities	**Between**	**17.059**	**2**	**8.529**	**0.388**	**NS**
	Within	**3231.134**	**147**	**21.981**		

[For (2, 147) degrees of freedom at 5 % level of significance, the table value 'F' is 3.06]

It is inferred from the above table that there is no significant difference among rural, urban and semi urban area high schools in their facilities for curricular activities, facilities for co-curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities.

Null Hypothesis 2

Table 2

DIFFERENCE AMONG BELOW 5 YEARS, 5 TO 10 YEARS AND ABOVE 10 YEARS ESTABLISHMENT OF HIGH SCHOOLS IN THEIR INFRASTRUCTURE FACILITIES

Dimensions	Source	Sum of squares	Degrees of freedom	Mean square variance	Calculated 'F' value	Remarks
Facilities for Curricular Activities	Between	1.147	2	0.574	0.116	NS
	Within	724.646	147	4.930		
Facilities for Co-Curricular Activities	Between	30.567	2	15.284	3.705	S
	Within	606.426	147	4.125		
Facilities for Teacher Welfare	Between	3.186	2	1.593	0.374	NS
	Within	625.908	147	4.258		
Facilities for Student Welfare	Between	52.296	2	26.148	3.512	S
	Within	1094.537	147	7.446		
Facilities for Teaching and Learning	Between	3.941	2	1.971	0.426	NS
	Within	679.499	147	4.622		
Infrastructure Facilities	**Between**	**59.976**	**2**	**29.988**	**1.383**	**NS**

| | Within | 3188.217 | 147 | 21.689 | | |

[For (2, 147) degrees of freedom at 5 % level of significance, the table value 'F' is 3.06]

It is inferred from the above table that there is no significant difference among below 5 years, 5 to 10 years and above 10 years establishment of high schools in their facilities for curricular activities, facilities for teacher welfare and infrastructure facilities. But there is significant difference among below 5 years, 5 to 10 years and above 10 years high schools in their facilities for co-curricular activities and facilities for student welfare. While comparing the mean scores of below 5 years, 5 to 10 years and above 10 years establishment of high schools, 5 to 10 years establishment of high schools mean value (43.71, 44.71) is higher than below 5 years (42.41, 44.37) and above 10 years (43.40, 43.43) in their facilities for co-curricular activities and facilities for student welfare.

Null Hypothesis 3

Table 3

DIFFERENCE AMONG GOVERNMENT, GOVERNMENT AIDED AND PRIVATE HIGH SCHOOLS IN THEIR INFRASTRUCTURE FACILITIES

Dimensions	Source	Sum of squares	Degrees of freedom	Mean square variance	Calculated 'F' value	Remarks
Facilities for Curricular Activities	Between	10.765	2	5.383	1.107	NS
	Within	715.028	147	4.864		
Facilities for Co-Curricular Activities	Between	37.756	2	18.878	4.631	S
	Within	599.237	147	4.076		
Facilities for Teacher Welfare	Between	6.771	2	3.385	0.800	NS
	Within	622.322	147	4.233		
Facilities for Student Welfare	Between	2.657	2	1.328	0.171	NS
	Within	1144.177	147	7.784		
Facilities for Teaching and Learning	Between	0.755	2	0.378	0.081	NS
	Within	682.685	147	4.644		
Infrastructure Facilities	**Between**	**66.383**	**2**	**33.191**	**1.533**	**NS**
	Within	**3181.810**	**147**	**21.645**		

[For (2, 147) degrees of freedom at 5 % level of significance, the table value 'F' is 3.06]

It is inferred from the above table that there is no significant difference among government, government aided and private high schools in their facilities for curricular activities, facilities for teacher welfare, facilities for student welfare, facilities for teaching learning and infrastructure facilities. But there is significant difference among government, government aided and private high schools in their facilities for co-curricular activities. While comparing the mean score of government, government aided and private high schools, private high schools mean value (43.84) is higher than government (43.61) and government aided (42.75) high schools mean value in their facilities for co-curricular activities.

Educational Implications

1. Develop the infrastructure facilities for curricular and co-curricular activities like quiz, drama etc., may be given to widen their adjustment.
2. The high schools can develop infrastructure facilities for their administration.
3. Students can be encouraged to actively participate in cultural and academic competitions to develop the facilities for student welfare.
4. Schools should develop their facilities for teacher welfare.
5. High schools infrastructure facilities should be develop for their institutional development.

Suggestions for Further Research

The following are the suggestions for further research studies.

1. A similar study may be undertaken for colleges, higher secondary schools and colleges of education.

2. This study can be extended to university and technical colleges.

3. The sample is taken from Thoothukudi and Tirunelveli districts only. It can be extended to other districts.

4. Some more dimensions were included in infrastructure facilities and can be taken into account for further investigation.

Conclusion

Education is an activity, which goes on in the society, which develops the personality and competency of an individual. Education develops the individual like a flower, which gives its fragrance to the surroundings. In this sense, education is conducive, that it drags a person from darkness, poverty and misery by developing one's individuality in all around development; one becomes a responsible, dynamic resourceful and enterprising citizens with strong and good moral character. One uses all the capacities to develop their own self, society and nation to the highest extent by contributing their best to nation's honours, glory and culture. Education develops the competency and personality of an individual in all fields and aspects making one intelligent, earnest bold, courageous and possessing sound character.

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