

Effect of JurisPrudential Inquiry Model of Teaching on Academic Achievement Of Secodary School Students

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Abstract:

The study was aimed at comparing the effectiveness of Jurisprudential method of teaching and Conventional method of teaching in Social Sciences to 9th class. The study was conducted in ZPH School, Chennethapalli Mandal, Anantapur District of Andhra Pradesh. After simple random selection of the school, the students were purposefully selected, one section as control group and the other section as experimental group. Experimental group consists of 40 students and control group with 40 students. Pretest and post test was conducted for both groups. Control group was taught by the School teacher and the Experimental group was taught by the researcher with lesson plans prepared based on jurisprudential enquiry model of teaching, in the similar condition. Treatment duration was forty days. After the treatment the post test was given to both groups for measuring the achievement, which was developed by the researcher. Data were analyzed by applying t-test and the significance of difference between mean was calculated. The group which was taught through jurisprudential inquiry was superior in CCE based competencies than performance of the control group.

Introduction:

Social science is defined as an integration of experience and knowledge concerning human relations for the purpose of citizenship education. Barth and Shermis (2013), defined social science as a field of study that deals with the integration of knowledge, experience and effective use of resources for the purpose of citizenship education. Teaching social sciences present teachers with a unique set of challenges not always found in other disciplines. According to Lazar (2012), social science teachers need to understand that they teach students and not content, if they are to be effective. According to Brophy on Effective classroom management (1983), "is highly probable that teachers who approach classroom management, as a process of establishing and maintaining effective teaching environment, tend to be more successful and achieving than teachers who place more emphasis on their roles as authority figures or disciplinarians". It means that teacher should adopt such a method of teaching where specific climate in the classroom is generated through which the desirable characteristics or qualities could be developed among children. Hence, such a method of teaching is required through which the social characteristics could be developed among the children. Jurisprudential Inquiry Model (JIM) of teaching is one of the approaches has its own advantages. The advantage of this method is that open climate for discussion, which is a major feature of child-centered approach in the classroom.

Jurisprudential Inquiry Model Approach

The dictionary meaning of Jurisprudence is the knowledge or skill to deal with issues in legal fashion. Donald Oliver and James Shaver (1974) developed an approach to teaching that allows students to think systematically about contemporary issues. With this model, the students get opportunities to develop public policy stances and dialogue skill by using three types of competence that is (i) an understanding of the value's framework of Indian creed; (ii) mastery of the intellectual skills of legal reasoning; and (iii) knowledge of contemporary public issues.

Academic Achievement

Academic achievement of students refers to the knowledge attained and skills developed in the school subjects. Crow and Crow(1969) defined it as the extent to which a learner is profiting from instructions in a given area of learning. Good achievement in schooling could be the partial contributions of an individual's gender sensitivity, cognitive, affective (attitude) and psychomotor domains. Adodo (2007), argued that one key for the success of students' academic achievement is the teacher. Vein, Ibrahim (2000) believed that teachers' qualifications and exposure can go a long way to bring about pupils' high academic achievement.

Need And Importance

Social Science has been identified as the subject within the school curriculum that is used as a vehicle for equipping students with the requisite knowledge, skills and values, attitudes and dispositions relevant for producing functional and effective citizens (Ministry of Education, 2005). Social science draws upon such disciplines as economics, geography, history, political science and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. Many scholars, among them Wesley (1946) Onyabe (1979), Makinde (1979), Adaralegbe (1980) and Adedoyin (1981), have asserted that the basic goals of social science education are to prepare young people to be humane, rational, skillful in decision making, participating and responsible citizens in a world that is becoming increasingly complex and interdependent. Hence, there is a need of good teaching approach is required to fulfill the aims of Education.

Resent Study

The Jurisprudential Inquiry model is based on the exploration and reflection of social issues that people usually have conflicting thoughts and differences on. The process of the Jurisprudential Inquiry Model includes: 1.) Orientation to the case 2.) Identifying the Issue(s) 3.) Taking a position 4.) Exploring the stance 5.) Refining and qualifying the position 6.) Testing the assumption about the facts, definitions, and consequences. Hence present study is an attempt to find the "Effect of Jurisprudential Inquiry Model of Teaching on Academic Achievement of Secondary School Students".

Objectives

- 1.To compare the effectiveness of Jurisprudential inquiry model of teaching over the Conventional method of teaching Social science on Academic Achievement of the students belonging to control and experimental group
- 2.To compare the effectiveness of Jurisprudential inquiry model of teaching over the Conventional method of teaching Social science on Academic Achievement of the students belonging to different Gender and Community groups.

Hypotheses

- 1.The Experimental Group will be significantly higher than the Control Group on Academic Achievement
- 2.There will be significant effect of JIM on Academic Achievement of the students belonging to different genders, and Community groups.

Variables

Independent Variable : Method of Teaching 1. Conventional Method 2.Jurisprudential Inquiry model of Teaching

1. Dependent Variable : Academic Achievement
2. Moderate variable : 1.Gnder 2.Community

Design : Quasi experimental Design was adopted for the study.

Sample : The population of the study was considered as Chennethota Palli Mandal of Anantapuramu district of Andhra Pradesh was selected by simple random sampling procedure. From the population, ZPHS Chennethota Palli was selected randomly based on the following steps: 1. The strength of the students greater than 200. 2. Availability of Telugu medium students with two sections. 40 students of class ninth one section considered as control Group and the other section 40 of the same school were formed as an Experimental group with purposive sampling technique.

Methodology

The experimental treatment involves “Socratic Dialogue” on public policy issues in a framework of values through ‘Jurisprudential Inquiry Model of Teaching’. The selected students were having fair vocabulary for suggesting, discussing and making analogies as per the syntax of the Jurisprudential Inquiry Model. The study was an experimental method involving equivalent groups consisting 40 students in control Group and 40 students in Experimental group. The experimental group was taught Social science through Jurisprudential inquiry model.

Tools

1. Lesson plans in social sciences prepared based on Jurisprudential inquiry model approach
2. Academic Achievement test developed in some areas of social science by the researcher

Statistical Techniques

1. Analysis of Variance (F-test) and t-test

Data Analysis:

Comparison of Academic Achievement based on control and Experimental Groups after intervention

HYPOTHESIS1: There is no significant difference between control and Experimental groups in their Academic Achievement after intervention.

Table: Achievement of control and Experimental Groups after intervention

Competence	Group	N	Mean	S.D	df	t-value	
Conceptual Understanding (AS₁)	Control	40	8.88	2.64	78	9.310*	Significant at 0.05 level
	Experimental	40	16.60	4.53			
Reading the text (given), Understanding and Interpretation (AS₂)	Control	40	2.85	1.39	78	9.16*	Significant at 0.05 level
	Experimental	40	5.33	0.997			
Information skills (AS₃)	Control	40	1.43	1.035	78	12.811*	Significant at 0.05 level
	Experimental	40	4.43	1.059			
Reflection on contemporary issues and questioning (AS₄)	Control	40	2.80	1.990	78	10.01*	Significant at 0.05 level
	Experimental	40	6.98	1.732			

Mapping skills (AS₅)	Control	40	1.83	0.844	78	13.46*	Significant at 0.05 level
	Experimental	40	4.80	1.11			
Appreciation and sensitivity (AS₆)	Control	40	2.43	1.238	78	13.727*	Significant at 0.05 level
	Experimental	40	6.15	1.189			
AS-Total	Control	40	20.20	5.689	78	16.974*	Significant at 0.05 level
	Experimental	40	44.28	6.936			
AS-Gain total	Control	40	2.73	2.088	78	22.378*	Significant at 0.05 level
	Experimental		26.43	6.365			

* = significant at 0.05 level

The above table indicates that the hypotheses are rejected. Therefore, there is a significant difference between mean scores of control and Experimental group student's achievement in abilities of Social science. Experimental has marginally gained in total academic achievement. Hence, The Experimental group students significantly improved their achievement through JIM.

Comparison of Achievement in Social science with gender

HYPOTHESIS: There is no significant difference between male and female students in their achievement in Social science with respect to various academic standards.

To test the above hypotheses, t-test is used. The results of t-test are shown in the table

Table : Achievement Score of Male and Female Students after intervention

Competence	Gender	N	Mean	S.D	df	t-value	
Conceptual Understanding (AS₁)	Male	18	17.	4.187	38	0.50 ^{ns}	Not significant at 0.05, level
	Female	22	16.27	4.872			
Reading the text (given), Understanding and Interpretation (AS₂)	Male	18	5.33	0.840	38	0.047 ^{ns}	Not significant at 0.05, level
	Female	22	5.32	1.129			
Information skills (AS₃)	Male	18	4.44	1.097	38	0.104 ^{ns}	Not significant at 0.05 level
	Female	22	4.41	1.054			
Reflection on contemporary issues and questioning (AS₄)	Male	18	7	1.49	38	0.082 ^{ns}	Not significant at 0.05 level
	Female	22	7	1.939			
Mapping skills (AS₅)	Male	18	4.89	1.079	38	0.452 ^{ns}	Not significant at 0.05 level
	Female	22	4.73	1.62			
Appreciation and sensitivity (AS₆)	Male	18	5.83	1.425	8	1.551 ^{ns}	Not significant at 0.05 level
	Female	22	6.41	0.908			
AS-Total	Male	18	44.50	4.274	38	0.183 ^{ns}	Not significant at 0.05 level
	Female	22	44.09	8.629			
AS-Gain total	Male	18	27.06	5.104	38	0.562 ^{ns}	Not significant at 0.05 level
	Female	22	25.91	7.315			

ns: not significant at 0.05 level

The above table indicates that the hypotheses are accepted. Therefore, there is no significant difference between mean scores of male and female student's achievement in Social Sciences abilities after experimentation. It means that JIM teaching was similar impact on male and female students.

Different community wise comparison with Academic Achievement

Table : Descriptive statistics of students achievement in Social science with different community groups

Competence	Caste	N	Mean	Standard Deviation
Conceptual Understanding (AS ₁)	SC	12	16.83	3.927
	ST	4	17.25	3.862
	OBC	17	15.35	5.465
	GENERAL	7	18.86	2.734
	Total	40	16.60	4.534
Reading the text (given), Understanding and Interpretation (AS ₂)	SC	12	5.33	1.073
	ST	4	4.50	1.29
	OBC	17	5.53	0.8
	GENERAL	7	5.29	1.11
	Total	40	5.33	0.99
Information skills(AS ₃)	SC	12	4.17	0.937
	ST	4	3.50	1.291
	OBC	17	4.59	1.12
	GENERAL	7	5	0.557
	Total	40	4.43	1.059
Reflection on contemporary issues and questioning (AS ₄)	SC	12	7.17	1.586
	ST	4	7	0.816
	OBC	17	6.53	1.94
	GENERAL	7	7.71	1.799
	Total	40	6.98	1.732
Mapping skills (AS ₅)	SC	12	4.83	1.115
	ST	4	4.25	2.217
	OBC	17	4.71	0.985
	GENERAL	7	5.29	0.48
	Total	40	4.80	1.114
Appreciation and sensitivity (AS ₆)	SC	12	5.75	1.357
	ST	4	6.75	0.957
	OBC	17	6	1.118
	GENERAL	7	6.86	0.9
	Total	40	6.15	1.189
AS-TOTAL	SC	12	44.08	5.368
	ST	4	43.25	8.732
	OBC	17	42.71	7.760

AS-GAIN	GENERAL	7	49.00	5.228
	Total	40	44.28	6.936
	SC	12	26.08	6.082
	ST	4	25.75	9.287
	OBC	17	26	6.103
	GENERAL	7	28.43	6.876
	Total	40	26.43	6.365

HYPOTHESIS : There is no significant difference in the mean scores of achievement in Social science abilities among the students belongs to different community groups.

To test the above hypotheses, the one-way ANOVA is used. The summary of ANOVA table is shown below.

Table : ANOVA Table for students achievement in Social science abilities for various caste groups

	Source of variation	Sum of squares	df	Mean square	F
AS1	Between Groups	64.44	3	21.48	1.049*
	With in Group	737.156	36	20.477	
	Total	81.600	39		
AS2	Between Groups	3.444	3	1.148	1.170^{ns}
	With in Group	35.331	36	0.981	
	Total	38.775	39		
AS3	Between Groups	6.991	3	2.330	2.281 *
	With in Group	36.784	36	1.022	
	Total	43.775	39		
AS4	Between Groups	7.644	3	2.548	0.839^{ns}
	With in Group	109.331	36	3.037	
	Total	116.975	39		
AS5	Between Groups	3.025	3	1.008	0.800^{ns}
	With in Group	45.375	36	1.260	
	Total	48.400	39		
AS6	Between Groups	7.243	3	2.414	1.816^{ns}
	With in Group	47.857	36	1.329	
	Total	55.100	39		
AS-TOTAL	Between Groups	202.779	3	67.593	1.454 *
	With in Group	1673.196	36	46.478	
	Total	1875.975	39		
AS-GAIN	Between Groups	34.394	3	11.465	0.267 *
	With in Group	1545.381	36	42.925	
	Total	1579.775	39		

*significant at 0.05 level, ns =not significant at 0.05

The above table indicates that the null hypotheses for AS2, AS4, AS5, AS6, accepted and the null hypotheses AS3, AS-TOTAL, and AS-gain are rejected. There is significant difference among the children belong to different communities in their achievement in Social sciences. The students belonging to OBC are secured low score and the students belong to General category secured high when compare with other community groups in Social science.

Discussion Based On The Results

1. The results of the analysis show that the experimental group achieved significantly better than the control group. One can infer from this result that the jurisprudential model was more effective than the conventional method in promoting students' understanding of social science abilities. This finding which shows the superiority of jurisprudential model of STS over the conventional method.

Recommendations

1. This study has shown that jurisprudential model of STS could effectively enhance the understanding of Social science concepts in students and subsequently improved their performances significantly in the subject more than the conventional method.
2. Social Science curriculum developers, educators and teachers should try and popularize and incorporate jurisprudential model into the teacher training curricula at all levels. More also social science educators and teachers should also see to the production of textbooks and teacher guides based on jurisprudential model of teaching and learning.

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