

Effect of Concept Attainment Model and Concept Attainment Model integrated with Cooperative Learning on Teaching Sanskrit of Class VIII Students

Jain. V^{1*}, Upadhyay. H²

ABSTRACT

The main objective of the present research work was to see the Effect of C. A. Mand C.A. Mintegrated with C. Lon attainment of Sanskrit concepts .For achieving the present objective of the study the investigator divided the purposeful sample of 207students into two groups i.e. Experiment Group & Control Group the investigator first administered Standardized Sanskrit Grammar Achievement Scale(SGAS) as Pre-Test , than applied 30 days treatment on both the group i.e. Experiment Group were taught the concepts of the Sanskrit Grammar according to C.A.M Method & Control Group were taught by C. A. Mintegrated with C.L Method. After treatment the investigator administered Standardized Sanskrit Grammar Achievement Scale(SGAS) as Post-Test on both the groups and after scoring the Pre-Test and Post-Test the final Gain score was obtained . For analysing the data Analysis of Variance(ANOVA) was used. The results revealed that there was a significant difference found for Area & Method at 0.01 level of Significance, Area X Gender, Area X Method, Gender X Method at 0.05 level of Significance between the C.A.M group & C. A. Mintegrated with C.L group. It proves that the C. A. Mintegrated with C. Lis the best way to teach concept of Sanskrit.

Keywords: *C.A.M, C.A.M integrated with C.L, Standardized Sanskrit Grammar Achievement test.*

Teaching a language is a multidimensional task which requires different techniques and methods compared with teaching other subjects. In order to study a language either as a first or second language, one makes an effort to develop and integrate four basic skills which are listening, speaking, reading and writing. However, it is difficult to improve all these skills all at once in terms of teaching a Sanskrit language since proficiency in learning a Sanskrit language differs

¹ Research Scholar, R.D.V.V,Jabalpur, M.P.

² H.O.D, Education Department, Hawabagh Women's College, Jabalpur, M.P.

*Responding Author

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from an individual to another, whereas a native language can be learnt by all the members of a society to some extent. Therefore, it is necessary to make use of various methods, techniques and models which will minimize the differences within a classroom and help learners to participate in lessons equally. Many researches has been done specially in term of C. A. M Anjum(2014),Das (2013), Kalani (2008-09), Superivadi (2009-10))compared C. A. M with Traditional Method and they found that C.A.M is significantly better than that of Traditional Method.

From the above researches it was observed that most of the researches has been done in abroad very few researches in India, Verdines Arredondo (2006), Maritza Reyes Baquero (2011), Adeyemi (2008) studied on C.L Method with Traditional Method and they found that C.L is significantly better than that of Traditional Method. Further investigator realises that C.A.M Method is effective only for the average and above average students then what about the below average students. To overcome this problem the investigator decided to integrate C.A.M with C. L. Therefore, the investigator keen to know what will be happen if C.A.M integrated with C.L? Thus the investigator selected the present research work.

OBJECTIVE OF THE STUDY:

For the purpose of experimentally verifying the proposition in the area of the study, the framed objective is-

- To Compare Gender & area wise the mean score of Achievement in Sanskrit of C.A.M with C.A.M integrated with C.L group of class 8th students.

Hypothesis :

- There is no Significant Gender & area wise and their interactional difference between the mean score of Achievement in Sanskrit of C.A.M and C.A.M integrated with C.L group of class 8th students.

METHODOLOGY:

In the present study the investigator used Non-Equivalent Control Group Design.

Sample:

For achieving the objectives of the present study, the investigator selected a purposive sample of 207 students from Class 8th were selected from Rural and Urban Area of Jabalpur District (M.P) (Rural Area-C.A.M Group: Male 15, Female 27; C.A.M integrated with C.L group: Male 18, Female 24 and Urban Area-C.A.M Group: Male 30, Female 23; C.A.M integrated with C.L group: Male 44, Female 26)

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Tools of Study:

The tools used for the present study are given below:

(B) Measures of Independent variables

1. Standardized Sanskrit Grammar Achievement test.

Number of Items - 70 Questions

Types of Question – Objective type Questions each carry 1 marks.

Time Limit – 40 minutes was given.

Reliability – Reliability of SGAT was established with the help of Test- Retest Reliability Method. The Test- Retest Reliability coefficient was found to be 0.83.

Validity–The Content Validity of SGAT was established by having a discussion with the subject experts in the field of Sanskrit Grammar. On the basis of expert’s opinion, it was found that SAGT has High Validity.

Procedure:

In order to collect the data for the present study, the investigator administered a Standardized Sanskrit Grammar Achievement Test as a Pre-Test before treatment on Class 8th students of all the 3 groups (C.A.M Group & C.A.M integrated with C.L Group) of Rural and Urban Area of Jabalpur District. Then investigator applied 30 days treatment on all the three groups. After one month treatment the investigator again administered Standardized Sanskrit Grammar Achievement Test as a Post-Test on all the three groups of class 8th students of Rural and Urban Area of Jabalpur District. Gain scores was obtained after scoring pre & post- test (Post-Test score – Pre-Test score = Gain score).

Statistical Analysis –

Data was analyzed by Two Way Analysis of Variance(ANOVA).

RESULT AND INTERPRETATION:

Table No .1, 2X2X2 Summary Table of ANOVA for Sanskrit Achievement Of class VIII Students

Source	df	Sum of Squares (SS)	Mean Square (MS)	F
Area	1	68.307	68.307	5.746**
gender	1	3.141	3.141	.264
Method	1	232.883	232.883	19.590**
Area * gender	1	46.603	46.603	3.920*
Area * Method	1	52.207	52.207	4.392*
gender * Method	1	53.473	53.473	4.498*
Area * gender * Method	1	10.941	10.941	.920
Error	199	2365.644	11.888	
Total	207	17540.000		

** Significant at 0.01 Level, * Significant at 0.05 Level

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Table No. 2, Area, Gender, Method, Number, Mean, S.D Value of Academic Achievement Scores in Sanskrit of class 8th Students

Area	Gender	Method	N	Mean	Std. Deviation
Urban	Male	C.A.M	30	7.9667	2.00832
		C.A.M +CL	44	10.6818	5.56890
		Total	74	9.5811	4.65526
	Female	C.A.M	23	8.2609	2.24048
		C.A.M +CL	26	7.8846	4.72717
		Total	49	8.0612	3.73836
	Total	C.A.M	53	8.0943	2.09637
		C.A.M +CL	70	9.6429	5.41077
		Total	123	8.9756	4.36165
Rural	Male	C.A.M	15	5.2000	1.20712
		C.A.M +CL	18	9.0556	2.01384
		Total	33	7.3030	2.56765
	Female	C.A.M	27	6.5185	1.57798
		C.A.M +CL	24	9.2083	1.99955
		Total	51	7.7843	2.22992
	Total	C.A.M	42	6.0476	1.57654
		C.A.M +CL	42	9.1429	1.98250
		Total	84	7.5952	2.36500
Total	Male	C.A.M	45	7.0444	2.20491
		C.A.M +CL	62	10.2097	4.85237
		Total	107	8.8785	4.24644
	Female	C.A.M	50	7.3200	2.08434
		C.A.M +CL	50	8.5200	3.70460
		Total	100	7.9200	3.05068
	Total	C.A.M	95	7.1895	2.13529
		C.A.M +CL	112	9.4554	4.43956

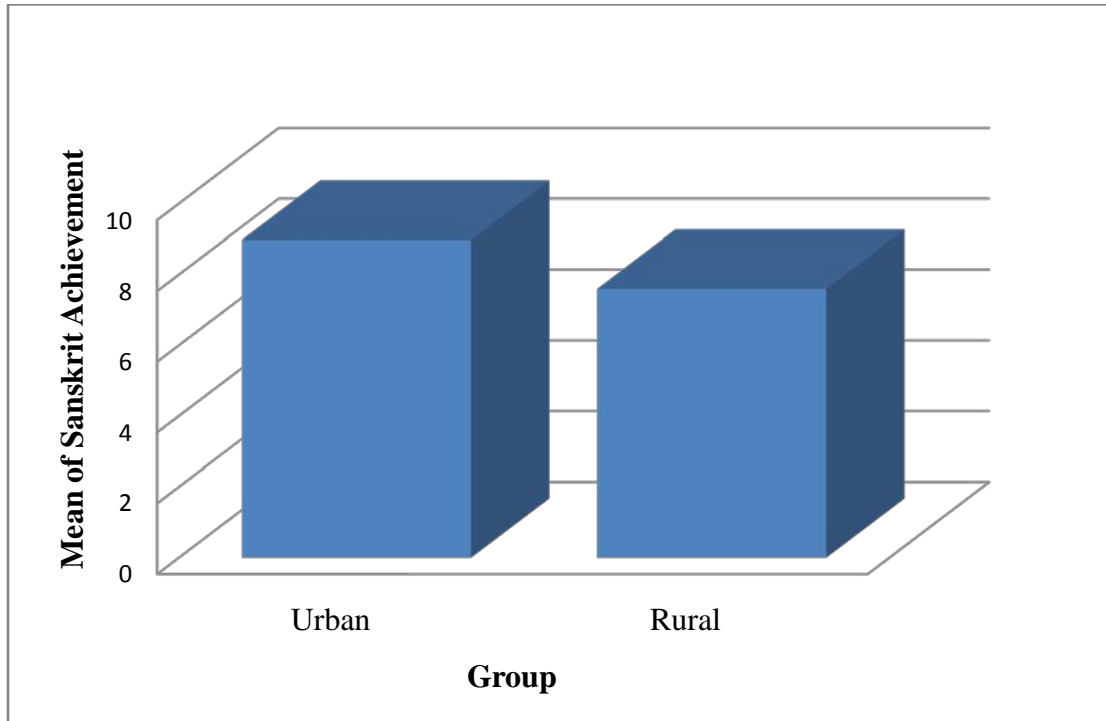
Effect of Area on Academic Achievement in Sanskrit of Class 8th students

From Table No.1 it can be seen that the F- Value for Area is 5.746 which is significant at 0.01 level of significance with $df = 1/199$. It indicates that the mean scores of Academic Achievement in Sanskrit of class 8th students who belonging to Urban and Rural Area of Jabalpur District differ significantly. So there is significant effect of Area on Academic Achievement in Sanskrit of class 8th students. Thus the null Hypothesis that “There is no significant effect of Area on Academic Achievement in Sanskrit of class 8th students” **is rejected**. Further the mean score of Urban area is 8.976 which is significantly higher than that of Rural Area whose mean score is 7.5952 [Vide Table No. 2]. It may, therefore be said that Academic Achievement in Sanskrit of

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class 8th Urban Area students was found to be significantly superior than that of Rural Area students, which is shown in Graph No.1

Graph No.1, Sanskrit Achievement of Urban & Rural Area Class VIII Students



Effect of Gender on Academic Achievement in Sanskrit of Class 8th students

From Table No. 1 it can be seen that the F- Value for Gender is 0.264 which is not significant. It means that the mean scores of Academic Achievement in Sanskrit of class 8th Boys and Girls did not differ significantly. So there was no significant effect of Gender on Academic Achievement in Sanskrit of class 8th students. Thus the null hypothesis that there is no significant effect of Gender on Academic Achievement in Sanskrit of class 8th **is not rejected**. It may, therefore be said that Academic Achievement in Sanskrit of both Boys and Girls of Class 8th students were found to have almost same.

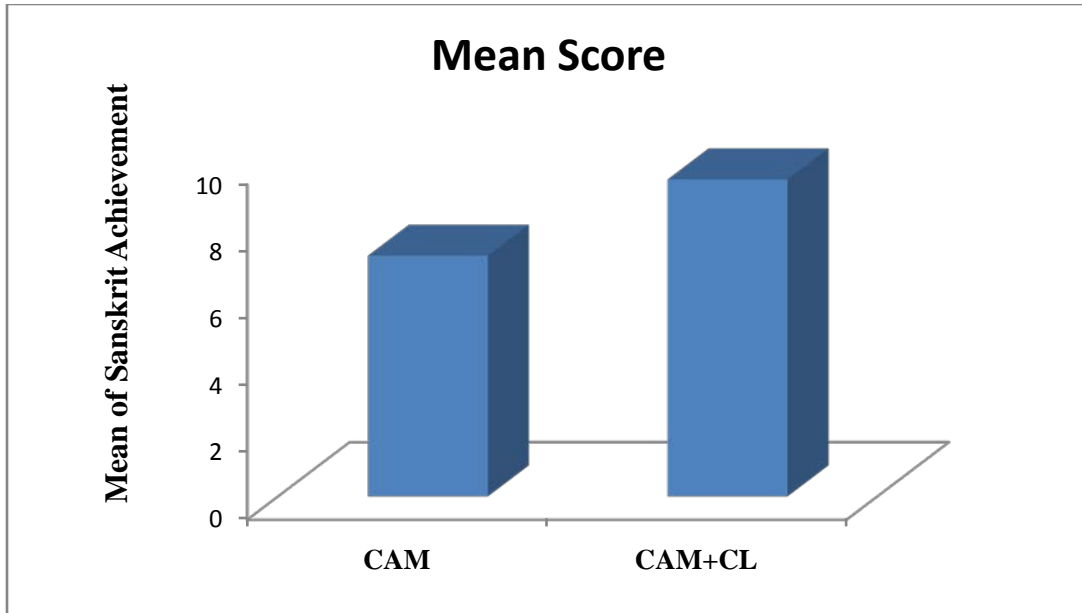
Effect of Method on Academic Achievement in Sanskrit of Class 8th students

From Table No.1 it can be seen that the F- Value for Method is 19.590 which is significant at 0.01 level of significance with $df = 1/199$. It indicates that the mean scores of Academic Achievement in Sanskrit of class 8th students who were taught by C.A.M method group and C.A.M integrated with C.L method Group differ significantly. So there was a significant effect of Methods on Academic Achievement in Sanskrit of class 8th students. Thus the null Hypothesis that “there is no significant effect of Methods on Academic Achievement in Sanskrit of class 8th students” **is rejected**. Further the mean score of C.A.M integrated with C.L Method is 9.4554 which is significantly higher than that of C.A.M Method whose mean score is 7.1895 [Vide Table No. 2].It may, therefore be said that Academic Achievement in Sanskrit of class 8th

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students who were taught by C.A. Mintegrated with C.L Method was found to be significantly superior than that of those who were taught by C.A.M Method. It is also shown in Graph No. 2. As the investigator realizes during teaching that students enjoy learning with C.A.Mintegrated with C.L Method, feel proud to be a member of a group and celebrate when a group member is recognized for achievement. This method enhances student satisfaction with their learning experience and develops student's social skills.

Graph No. 2, Achievement in Sanskrit of CAM Group & CAM +CL Group of Class VIII Students



Effect of Interaction between Area and Gender on Academic Achievement in Sanskrit of Class 8th students

From Table No.1 it can be seen that the F- value for interaction between Area and Gender is 3.920 which is significant at 0.05 level of significance with $df = 1/199$. So there was a significant effect of interaction between Area and Gender on Academic Achievement of class 8th students. Thus the null hypothesis that "there is no significant effect of interaction between Area and Gender on Academic Achievement of class 8th students" **is rejected**. The mean score of Rural Area Girls is 9.2083 whereas the mean score of Rural Area Boys is 9.0556 which is almost same [Vide Table No. 2]. Further the mean score of Urban Area Boys is 10.6808 which is significantly higher than that of Urban Area Girls whose mean score is 7.8846 [Vide Table No. 2]. It may, therefore be said that the Academic Achievement in Sanskrit of class 8th Urban Area Boys who were taught by C.A.Mintegrated with C.L Method was found to be significantly superior than that of Rural Area Boys & Girls. The investigator while teaching with C.A.Mintegrated with C.L Method that Urban Area Boy recognize that all group members share a common fate i.e all sink or swim together here. C.A.Mintegrated with C.L Method develops the Social Coherence skill among students.

Effect of Interaction between Area and Method on Academic Achievement in Sanskrit of Class 8th students

From Table No.1 it can be seen that the F- value for interaction between Area and Method is 4.392 which is significant at 0.05 level of significance with $df = 1/199$. So there was a significant effect of interaction between Area and Method on Academic Achievement of class 8th students. Thus the null hypothesis that there is no significant effect of interaction between Area and Method on Academic Achievement of class 8th students **is rejected**. Further the mean score of Urban Area students who was taught by C.A.M integrated with C.L is 9.6429 which is significantly higher than that of Urban Area students who was taught by C.A.M whose mean score is 8.0943. Rural Area students who was taught by C.A.M integrated with C.L is 9.1429 which is significantly higher than that of Rural Area students who was taught by C.A.M whose mean score is 6.0476 [Vide Table No. 2]. It may, therefore be said that Urban Area students who were taught by C.A.M integrated with C.L were found significantly higher Academic Achievement in comparison to Rural Area class 8th students. The investigator feels that Urban Area student easily understand the concept by using this method. It is also helpful for above & below average level learners. Further above average level learner understand the concept better while they explain the concept to below average learner. Students enjoy this group process by supporting one another.

Effect of Interaction between Gender and Method on Academic Achievement in Sanskrit of Class 8th students

From Table No.1 it can be seen that the F- value for interaction between Gender and Method is 4.498 which is significant at 0.05 level of significance with $df = 1/199$. So there was no significant effect of interaction between Gender and Method on Academic Achievement of class 8th students. Thus the null hypothesis that “There is no significant effect of interaction between Gender and Method on Academic Achievement of class 8th students” **is rejected**. Further the mean score of C.A.M integrated with C.L Method Boys is 10.2097 [Vide Table No. 2] which is significantly higher than that of C.A.M Boys & Girls. It may, therefore be said that Boys who were taught by C.A.M integrated with C.L Method were found to have significantly higher Academic Achievement in comparison to that of Boys & Girls Achievement who were taught by C.A.M Method. Students supporting one another by take responsibility of a group and provide opportunities for students to listen multiple voices and consider multiple perspectives while using C.A.M integrated with C.L Method.

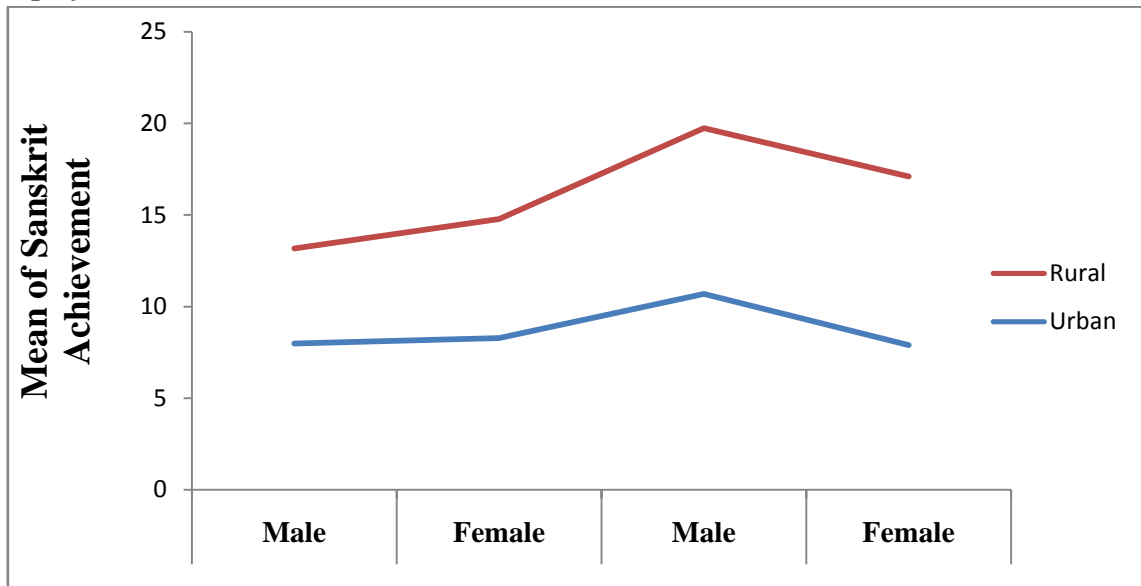
Effect of Interaction among Area, Gender and Method on Academic Achievement in Sanskrit of Class 8th student

From Table No.1 it can be seen that the F- value for interaction among Area, Gender and Method is .920 which is not significant. So there was no significant effect of interaction among Area, Gender and Method on Academic Achievement of class 8th students. Thus the null hypothesis that “There is no significant effect of interaction among Area, Gender and Method on Academic

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Achievement of class 8th students” is **not rejected**. Further the mean score of Urban Area Boys who was taught by C.A.M integrated with C.L is 10.6818 which is significantly higher than that of Rural Area Boys who was taught by C.A.M integrated with C.L whose mean score is 9.0556. Rural Area Girls who was taught by C.A.M integrated with C.L is 9.2083 which is significantly higher than that of Urban Area Girls who was taught by C.A.M integrated with C.L whose mean score is 7.8846 [Vide Table No. 2]. It is shown in Graph No. 3. It is clear that C.A.M integrated with C.L method makes students easier to create link between subject matter studied at school and out of school, thus increasing the relevance of school learning for students.

Graph No. 3, Achievement in Sanskrit of Urban & Rural Area, CAM Group & CAM +CL Group of Class VIII Students



CONCLUSION

On the basis of above discussion it is clear that:-

1. The C.A.M integrated with C.L is the best method than that of C.A.M for teaching Sanskrit of all level of learners with different ability.
2. Sanskrit Academic Achievement of class 8th students of Urban Area is better than that of Rural Area in C.A.M integrated with C.L Method.
3. C.A.M integrated with C.L Method develops cooperation, social interaction and Team spirit in students.
4. C.A.M integrated with C.L Method makes students active, attentive and alert throughout the class.

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