Conclusions

Based on the scores of the Experimental Group and Control Group individual post-tests (1 to 5) the following conclusions are listed.

1. The Experimental Group (overall) average shows a steady increase from 80.50% to 95.2% with an overall average of 87.44% It is concluded that the Experimental Group exposed to teaching through Concept Maps have shown a significant improvement of 34.28% from the present average of 53.16 to 87.44%, thus proving the efficacy of teaching through Concept Map (overall).

2. The Control group though with the starting average of 52.66% overall in the pre-test has improved only by 21.76% and the progress through the five tests also shows an erratic pattern of rise and fall. It is concluded that teaching through the traditional instruction method is not as efficacious as teaching through the strategic tool of Concept Maps.

3. It has been found that gender wise the pre-test average of boys is 51.55% and with steady improvement from test 1 to 5 has reached the total average of 83.20%, showing an improvement of 31.65%. The pre-test average of boys in the Control Group of 52.13% and with erratic rise and fall in post-tests 1 to 5 shows an increase up to 72.53% with an improvement value of 20.40%. It is concluded that the boys in the Experimental Group have shown better improvement with the strategic tool of concept maps that the boys exposed to TI methods of teaching in the control group.

4. It has been found that gender wise the girls in the Experimental Group start with the pre-test average of 54.23% and through a steady process of increase had gone on to a total average of 90.27% with an improvement value of 36.04%. The girls in the Control Group start
with the pre-test average of 53.45% and through a process of rise and fall in the one to five tests have reached 77.25% showing an improvement of 23.80%. It is concluded that the girls have scored better in both Experimental Group (90.27%) and Control Group (77.25%) than the boys in the Experimental Group (83.20%) and boys in the Control Group (72.53%)/

5. It has been found that the English Medium participants in the Test group starts with a pretest average of 54.50% and through a process of steady increase reach a total average of 89.03% showing an improvement of 34.53%. The English medium in the Control Group with a pretest average of 55.13% show an erratic pattern of decline and then increase and reaches a total average of 75.87% with an improvement value of 20.74%. It is concluded that the Test group taught through the strategic tool of concept map has shown better improvement averages than the Control Group English medium taught through the TI method.

6. The Tamil medium in the Test group start with a pretest average of 47.80% and through a process of steady increase reach a total average of 81.10% showing an improvement value of 33.30%. The Control Group (Tamil medium) starting with a slightly better pretest average of 48.95% reaches only a total average of 72.25%. Though there is an improvement of 23.30% this falls quite short of the total average of Tamil medium in the Test group which is 33.3%.

7. It is concluded that the Tamil medium Test group has shown an improvement value of 33.3% while the English medium Test group has shown an improvement value of 34.53%. Though the improvement levels are not much improved (34.53% and 33.3%) there is a vast difference between the total average of English medium (89.03%) and Tamil medium (81.10%) which works out to
a difference of 7.93% above the average of the Tamil medium in the Test group. Therefore it can be said that the English medium because of their versatility in language have better understood the concept maps and have expressed meaningful answers having grasped the full significance of the answers which in turn has led to better scores in the post test. Other Communities (OC) in the Test group starts with the pretest average of 58.8%, while the Other Communities (OC) in the Control group starts with 56.67.% in the pretest. While the Other Community (OC) in the Test group have reached the total average of 94.4% which is an improvement of 37.73%, the Other Community in the Control group has shown an improvement of only 24.00% and reaches a total average of only 80.67%. It is concluded that this variation may be due to a variety of factors such as the Other Community in the Control group studying in the Tamil medium hailing from the rural area.

8. There is not much difference in the total average scores of the Backward Community (BC) in the post test (88.5%) and the most Backward Community (87.42%) in the post test. However there is a fall in the post test scores total average of the SC /ST students (82.44%).

9. The Urban segment in the Test group starting with the pretest average of 54.18% passes through a steady process of increase and reaches a total average of 88.76% in the Test group. Interestingly the pretest average of the rural segment in the Test group is 49.92% and reaches a total average of 83.25%. The improvement level for the Urban group is 34.58% while it is 33.33% for the Rural. As opposed to the popular belief that rural students do not fare as good as the Urban students, the post test scores of the Test group show an encouraging pattern of achievement for Rural students in the Test
group. On the other hand the Urban segment in the Control group starts with a pretest average of 53.15% and with a rise and all pattern reaches a total average of 74.49% showing an improvement of 21.34%. The rural segment in the Control group starts with the pretest score of 50.91% and with the same pattern of rise and fall reaches a post test total average of 74.18% showing an improvement of 23.27% which again is in line with the pattern seen in the Test group. It is thus concluded the rural students can achieve better scores when provided with sustained and capable teaching.

10. The financial status with reference to the present study has been confined to two levels only (a) Above Poverty Line (APL) (b) Below Poverty Line. (BPL) because most of the students belong to the Below Poverty Line and even the Above Poverty Line cannot be described as affluent or well to do. Starting with the pretest average of 57.13% the APL segment in the Test group shows a steady progress of increase and reaches 93.19% total average with an improvement value of 36.06%.

11. The Below Poverty Line segments in the Test group starts with the Pretest average of 51.29% and showing a pattern of steady increase reaches 84.74% total average with an improvement value of 33.45%. The Control group Above Poverty Line (APL) segment starts with the pretest average of 56.67% and reaches the total average of 75.22% with an improvement value 18.55%.

12. The Below Poverty Line segment in the Control group starts with the pre test average of 51.78% and reaching 74.24% as total average shows an improvement value of 22.46%. This is the variation of the Below Poverty Line (BPL) scoring better improvement values than the Above Poverty Line Segment.
13. The finding that the Below Poverty Line segment could score better than the Above Poverty Line segment once again leads to the conclusion that the efficient teaching through whichever methodology is used will lead to improvement in score values.