

Learning today, Leading tomorrow.

1. Students have a dislike for the subject of biology
2. Students are not mentally prepared for the subject
3. Students find biology difficult
4. Students do not pay attention to this topic
5. Teachers may not have explained the topic properly to the students
6. Teachers may not have taught the topic with the help of educational equipment and models
7. Students may have been absent when the topic was explained

❖ **Hypothesis** : Hypothesis is a possible way to solve the problem. These inference streams lead to the solution of the problem. Therefore, the hypothesis for the presented problem are as follows:

1. If children are taught activities about biology through educational equipment model charts or animation videos, they can understand better
2. If the teacher explains the topic by showing the model to the children, the child can understand better
3. If the importance of the subject is explained to the child and the subject is studied, the subject seems important
4. If the child's knowledge of that subject is taken from previous knowledge to new knowledge, the child can understand better.

❖ **Research work** : The research work was done on the basis of the hypothesis that has been formulated to remove the aversion towards biology subject of students of standard 11th and 12th science stream. In the research work, the students were taught the human circulatory system in biology through the interactive method i.e. narration method, after which an exam was taken which is the pre-test. From this exam it was found that the children understood this method less. After that, the students were taught this topic again through models, charts, videos and then the post-test was taken again in which it was found that the children understood better. The students were evaluated on the basis of both the tests.

❖ **Research evaluation : Evaluation method** : Questionnaire

Evaluation : The condition of the class of standard 11th and 12th before implementing the experimental line as a solution to the problem and the condition after doing the experimental work has been evaluated.

Average increase = 13.4 – 8.8 = +4.6 marks

Every student has shown improvement in Post-test than Pre-test.

❖ **Results / Conclusions**

- All students scored higher in Post-test.
- Average 8.8 in Pre-test while average 13.4 in Post-test i.e. almost 52% increase.
- Every student improved, no student's marks decreased.
- The use of multimedia (Animation Video) increased both interest and understanding among students.
- The new teaching method (Animation video, audio-visual method) proved to be more effective than the traditional method.
- An increase in students' comprehension, ability to concentrate and memory power was observed.
- Through experimental study, the results of students increased by an average of 4–6 marks.

❖ **Applicable** :

- The results of the post-test show that the knowledge of the students has increased, so the teaching method used has proven to be effective.