

Teaching Biology using Dance and Games to the Middle School Children

Miss. Sai Shri Ramamurthy

M.Sc., B.Ed, School of Education, Christ (Deemed to be University), Bengaluru, Karnataka, India

ABSTRACT

This paper is on the action research done based on control group and experiment group method. The control group was taught using the lecture method and the experiment group was taught using dance and games method. This research was done using class 6 students the concept taught was The Skeletal system, NCERT Science textbook.

The students of the experiment group was allowed to play imaginary cricket and were allowed to dance. A class test was conducted after the session which consisted of both objective and descriptive type of questions. The class average of the control group was 80% and the class average of the experiment group was 95%.

KEYWORDS: Activity based learning, control group, experiment group, slow learners

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INTRODUCTION

Two heterogeneous groups with equal number of fast learners, moderate learners and slow learners were selected in the Bangalore urban district. One group was taught using lecture method and adequate help was given to revise the concept. One group, the experimental group was allowed to dance and play imaginary cricket.

Hypothesis:

1. There is no significant difference between the performance of the two groups.
2. There is a significant difference between the two groups.
3. There is no significant difference between the performance of slow learners
4. There is a significant difference between the performance of the slow learners.

Methodology of the research:

The experiment group was allowed to bowl an imaginary ball thereby the movement of the ball and socket joint was taught. The students were also allowed ride an imaginary cycle thereby showing the movement of the joint in the hip.

The students were asked to do robot dance using their elbow and knees helping them to learn hinge joint.

The students were asked to do a freestyle dance using their head, neck and their spinal cord to Help them learn movable and immovable joints, pivotal joint and the vertebral column.

Wrist rotations and ankle rotations were done to show the movement of synovial joints.

Sit-ups was done to learn the structure of pelvic bones.

The control group the teacher does the movements and the students only watch, listen and learn.

In the experiment group, a chance was given to each and every student to do a 3 minutes workout session.

Once the students did the workout the skill of probing questions were used to help them learn.

Precautions taken:

The arrangement of the furniture was carefully done. The space for the students to do a small workout session was well cleaned and the teacher closely monitored the students.

Only the volunteers were asked to do a workout but since the entire group was interested, all the students were given a chance but the workout time was kept to 3min.

Observation:

It took lesser time for the experiment group to learn the concept than the control group.

The slow learners in the experiment group were more interested and volunteered to answer, the slow learners in

the experiment group participated actively in the discussions.

Results and discussions:

The experiment group performed better in the class test. The class average of the experiment group was 95% and that of the control group was 80%.

The slow learners in the experiment group performed better than the slow learners in the control group.

There is a significant difference between the performance of the students in the control group and the students in the experiment group.

Limitations of the study:

This study was conducted in a spacious classroom with limited number of students. The students in the experiment group were very much interested to learn the concept using

activities. There was enough space to arrange the furniture to make sure that the children do not get hurt.

Reference:

- [1] Jeronen, E., Palmberg, I., & Yli-Panula, E. (2017). Teaching Methods in Biology Education and Sustainability Education Including Outdoor Education for Promoting Sustainability—A Literature Review (Vol. 7, Ser. 1). Education Sciences. doi:doi:10.3390/educsci7010001
- [2] Skoning, S. N. (2008). Movement and Dance in the Inclusive Classroom. TEACHING Exceptional Children Plus, 4(6).
- [3] Grabel, L., & Appel, L. F. (n.d.). Science Choreography: A Movement-Based Approach to Biology Teaching. In M. Weir,* (Ed.), CBE-Life Sciences Education (Vol. 12). DOI: 10.1187/cbe.13-07-0131

