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# Recent Trends in Teaching of Life Sciences in Higher Education

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**Abstract:-**

Any teacher desires effective teaching which induces learning. The barrier is, he just might not know how best to teach each of them, especially in one classroom. As students have diverse learning styles in one classroom, He must find out new approaches in teaching that facilitate learning in Life sciences for a broader variety of students with the help of modern trends.

**Introduction:-**

Modern tools helps science teacher for best planning of teaching which can improve student conception in right way and avoid misconception. Some hard topics in Biology can be practiced with these tools most effectively. Demonstrations can be very effective for illustrating concepts in class, but can result in passive learning without careful attention to engaging students. Visual learners learn through seeing and prefer to learn through videos, pictures, and other image-rich teaching tools. Generally there are some learning styles of students' depending upon modes of receiving information. It may be the sensory or intuitive, visual or verbal, active or reflective, and the order in which they receive it sequentially or globally.

**Objectives:-**

- To make class sessions effective.
- To encourage perception and participation of student.
- To enhance collaborative learning.
- To learn science in interesting way with applicable laboratory skills.

- To develop students own scientific thinking.

**Teaching Methods in Biology:-**

Today globalization has generated good vibration and life for higher education. The new era of technology is displacing the out dated traditional methods of learning methodology. In biology education, selected teaching methods will support learning biology. In India the education process are primarily classroom lectures, presentations and laboratory experiments, these are supplemented with audio-visual aids like use of projectors, stereo system and projection of films. Students have to listen, understand and interact.

**Problem-Solving and Process-Based Activities:-**

Several biological topics require approaches promoting experimental problem-solving and process-based skills. It focuses on science investigation processes and the goal is to reach valuable learning results, and students therefore need crucial science content knowledge as well as autonomous learning .It is important to implement teaching methods including both autonomous learning and instructional activities. The implementation of problem-based active learning models have positive effects on students' academic achievements and their attitudes to science courses.

**Group Investigation:-**

Implementation of problem-based learning and group investigation encourages students to think critically through planning, arguing, stating questions and problems, and providing solutions to environmental problems. Student will work on some current issues in his project work

**Field-based activities/ Outdoor Teaching:-**

Fieldwork or outdoor teaching had a positive effect on students´ knowledge, attitude and behavior, Biological field-based activities, e.g., fieldwork and field trips provide students with authentic and interactive experiences and experiential learning opportunities, which increase students´ interest and enhance their learning. Students´ engagement in field-based activities plays an essential role in learning field biology. Fieldwork provides students with a chance to observe nature and the environment and to use scientific inquiry to test ideas and concepts they have

learned in the classroom. It has positive impact on student and long term memory due to memorable experiences.

**Laboratory Teaching:-**

Laboratory environments are places where students can meet real experience and facts along with this he also learns how research is done. In laboratories, students' can develop their experimentation skills, ideas during planning and carrying out small studies. Teachers' role is to activate students' mental activities and to support self regulatory strategies for learning.

**Use of Information and Communication Technology**

Some topics in biology require good perception, imagination ability as most students may not have this ability. Teaching DNA with the help of ICT tools can be exactly demonstrated with its structural details and chemical composition. In this activity, students explore the structure of the DNA molecule and begin to understand how chromosomes, genes, and the base pairs, sugars, and phosphates of the DNA molecule are related. Students view and discuss video segments that describe the role of various genetic units.

**Questionnaire /Check for Understanding:-**

Asking the questions on related topics gives feedback to teacher and effectiveness of teaching methodology.

What is DNA?

Where is DNA found?

Inside what structure are the cell's chromosomes found?

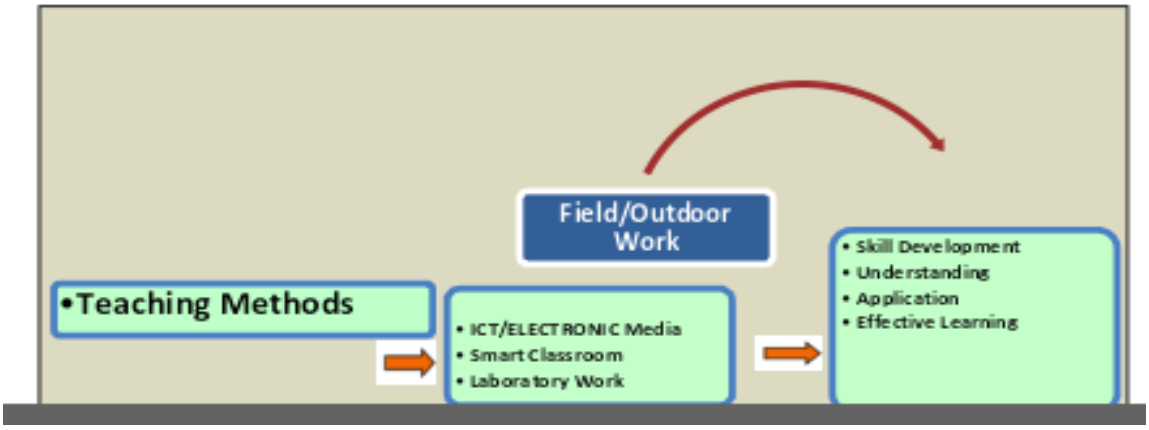
How many chromosomes are there in nearly every one of your body's cells?

What is the shape of the DNA molecule?

How many different types of bases are there in a molecule of DNA?

**Analysis:**

Recent trends in teaching and learning in life sciences with in higher education encompasses many kinds of learning and impact on many other areas of society.




**Conclusion:-**

This research review concluded that teaching becomes easier with computer aided classroom and it supports powerful permanent acquisition of knowledge about DNA structure and other concepts in biology. The teacher must play their role to improve the innovative teaching and learning styles through modern technology. The learning becomes easier and permanent because of audio visual interactive media.

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