

CHAPTER 5.

CONCLUSION AND INTERPRETATION

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First second and third chapter comprised of Introduction, Review of Related Literature and Methodology used in the study. The following fifth chapter deals with Conclusion and Interpretation after the analysis of data gathered which includes findings, scope for further studies, educational implications and conclusion.

5.1. Findings

Interpretation of data is an important part of research as it fulfils the main purpose of the study. In the present study "A Study of Alternative Conceptions in Biology among 12th Class Students", data was collected through Two Tier Diagnostic Test and an unstructured interview schedule and analyzed qualitatively. Misconception and alternative conceptions were found more in the concepts like sexual reproduction in humans and reproductive health. There were few misconceptions in the sexual reproduction in flowering plants, fruits and seeds. However there were very less misconception in the concepts like asexual reproduction.

Sources of alternative conceptions are the possible origins from where unique and different types of concepts arrive in learner's mind. In the present study, sources of alternative conceptions or misconceptions were diagnosed as lack of content knowledge, language barrier, teacher and social interactions, textbook, naive concepts and daily life experiences.

5.2. Educational implications

Science education has always been prone to lot of misconceptions due to many reasons like its abstract nature, conventional methods of teaching are followed till now, no and low scope for application and experimentation. Hence

- Study tried to find out the misconception among students, which can also be studied on student-teachers or teachers.
- The study was done using a qualitative design, hence making space for carrying out similar research using quantitative design.
- Study was done including samples from only Nuapada district of Odisha, hence same study can be stretched to other parts of Odisha and India.
- Due to unavailability to samples in physical classrooms, caused due to covid-19 pandemic, teaching and intervention to minimize the misconception and alternative conception was not the focus of the study. Researches can be done showing the intervention for the same.

5.4 Conclusion

Many a time teachers and facilitators fail to understand students thinking and understanding before his/her alternative conception, leading to a negative impression for child, poor teaching learning environment and meaningless classroom approaches. If every teacher started understanding the cause and source of alternative conception among student, the purpose of learning would definitely improve. Understanding students misconceptions and alternative conceptions will also give a more child centric approach to teaching learning process.