



OPINION OF B.ED. STUDENTS REGARDING USE OF JURISPRUDENTIAL INQUIRY STS MODEL FOR TEACHING ENVIRONMENTAL ISSUES IN BIOLOGY

Dr. Mrs. Manasi Mehendale (Page 125-129)
Vice Principal, Adarsha Comprehensive
College of Education and Research, Pune.

SRJIS IMPACT FACTOR SJIF 2016: 6.177
Date of Issue Release: 04/05/2017,
Volume: SRJIS, Mar-Apr, 2017, 4/31

ABSTRACT

The present study is focussed on analysis of the opinion of B.Ed. students regarding use of Jurisprudential Inquiry STS Model for teaching of public policy issues reflected in Biology text book of standard XII. Researcher developed a program based on Jurisprudential Inquiry STS Model and implemented the same in a college of Education in the Pune city. A feedback sheet has been used to get opinions of the students. The findings show that the students recorded favourable response regarding use of teaching aids, role of the teacher and benefits of the Jurisprudential Inquiry STS model.

Keywords: *Jurisprudential Inquiry STS model, Environmental issues*



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

1.1 Introduction:

Without the cooperation of its members society cannot survive, and the society of man has survived because the cooperativeness of its members made survival possible. It was not an advantageous individual here and there who did so, but the group. In human societies the individuals who are most likely to survive are those who are best enabled to do so by their group. (Montagu, 1965)

1.2 Need and Importance of the study:

Adults are characterized by maturity, self-confidence, autonomy, solid decision-making, and are generally more practical, multi-tasking, purposeful, self-directed, experienced, and less open-minded and receptive to change. All these traits affect their motivation, as well as their ability to learn. (Pappas, 2013)

Consolidation of democracy through education, Modernisation of society through awakening of curiosity, development of attitudes and values and building up certain essential skills, Science education should be an integral part of school education and ultimately

become a part of all courses at University stage are some of the important recommendations of Education commission.

So considering recommendations of education commission the researcher selected Jurisprudential Inquiry STS Model.

1.3 Statement of the Problem:

Analysis of the opinion of the B.Ed. Students regarding use of Jurisprudential Inquiry STS Model to teach environmental issues reflected in the standard XII Biology subject content.

1.4 Definitions of the important terms:

- **Jurisprudential Inquiry STS Model:** Original J.I.M. model modified by Pederson to create a jurisprudential inquiry STS model of teaching that effectively lends itself to the study of science, technology, and societal issues in the classroom.

1.5 Objectives of the study:

To analyze the feedback of the B.Ed. students regarding programme based on Jurisprudential Inquiry STS Model.

1.6 Research Question:

- Whether B.Ed. students feedback indicate the usefulness of the program based on Jurisprudential Inquiry STS Model ?

1.6 Assumptions:

- To be sensitive student teacher about emerging issues such as environment, population, gender equality, legal literacy, critical understanding of ICT, yoga education, etc. (SPPU Revised B.Ed. syllabus for Two year B.Ed. Program annual pattern 2015)

1.7 Scope, Delimitations and Limitations of the study:

Scope: The present study-

focuses on the use of Jurisprudential Inquiry STS Model of Teaching as an effective teaching strategy for B.Ed. students who offered Biology as an Additional Pedagogy course in Second Year of the B.Ed. two years course.

Delimitations:

- The study is limited to the one college of education affiliated to SPPU.
- Implemented a part of the J.I.M. STS Model.

Limitations:

The fatigue, past experiences, mood, motivation levels of the B.Ed. students which may affect their responses are beyond the control of the researcher.

1.8 Program Based on J.I.M. of Teaching:

The program based on J.I.M. of teaching is related with the Eight issues reflecting from standard XII Biology subject. Most of these issues are related with environmental problems. The content in Standard XII Biology text book reflecting environmental issues is as follows-

Table 1 Units in the Standard XII Biology Text Book Indicating Environmental Issues

Chapter No.	Chapter Title	Content
9	Organisms and Environment – I Habitat and Niche	Environmental issues: agrochemicals and their effects, solid waste management, Green house effect and global warming, ozone depletion, deforestation, case studies.
19	Organisms and Environment – II	Environmental issues: air pollution and its control, water pollution and its control and radioactive waste management.

After deciding units related with environmental issues, researcher selected Solid Waste Management and Air pollution for experiment. Teacher prepared Lesson notes based on Jurisprudential Inquiry STS model. From each chapter one issue was identified. After preparing lesson notes researcher conducted two sessions based on selected issues on the B.Ed. students who offered Biology as an additional pedagogy course in two year B.Ed. syllabus.

1.9 Research Methodology: For getting feedback of B.Ed. students' teacher followed 'survey method.'

1.9.1 Population and Sample:**Population:**

All B.Ed. students of Second Year B.Ed. revised course who offered Biology as an Additonal Pedagogy course in Secondary co education Marathi Medium Schools affiliated to SPPU.

Sample:

12 B.Ed. students from one teacher education college affiliated to SPPU in Pune city was the sample.

1.9.2 Tools for the Data Collection: A feedback sheet has been used for data collection.

Final draft of the Feedback sheet: Final draft of the feedback sheet consisted of ten statements. Out of 10 items one statement (statement no 1) was related to Phase I of the model. Statement number two and four was related with importance and benefit of co operative learning. Statement no. 3 is related to Phase III of the model. Statement number 5 and 6 was related with the teachers role. Statement 7 to 9 were related with benefits of the .Jurisprudential Inquiry STS Model. Statement no 10 is related to application of Jurisprudential Inquiry STS model in teaching other branches of science.

अनु क्रमांक	Statement	Response			
		Strongly Agree	Agree	Disagree	Strongly disagree
1	Teacher motivated us to use Library and other resources	75	25	0	0
2	We learnt how to learn in co operation with other students.	66.67	33.33	0	0
3	Board of Arbiters is a novel concept in teaching.	58.33	41.67	0	0
4	We realised the importance of co operative learning.	66.67	33.33	0	0
5	Teacher given sufficient time to read the issue related news in newspapers, magazines etc.	83.34	8.33	8.33	0
6	All students in Biology class got opportunity to participate in discussion	100	0	0	0
7	Awareness increased about various aspects of the issue under discussion.	75	25	0	0
8	Students got opportunity to assume different roles.	50	50	0	0
9	Solution to the problem is the important aspects of this process.	83.34	16.66	0	0
10	Topics in Physics and Chemistry can be discussed with this method.	16.66	25	58.34	0

Observation: 100% students strongly agree that they got opportunity to participate in the discussion. More than 75% students strongly agree about increase in awareness about various aspects of the issues under discussion and solution to the problem is the important aspect of the process. 66.67% students strongly agree about co operative learning. More than 75% students strongly agree about motivation by the teacher to use library resources and allowing sufficient time for reading.

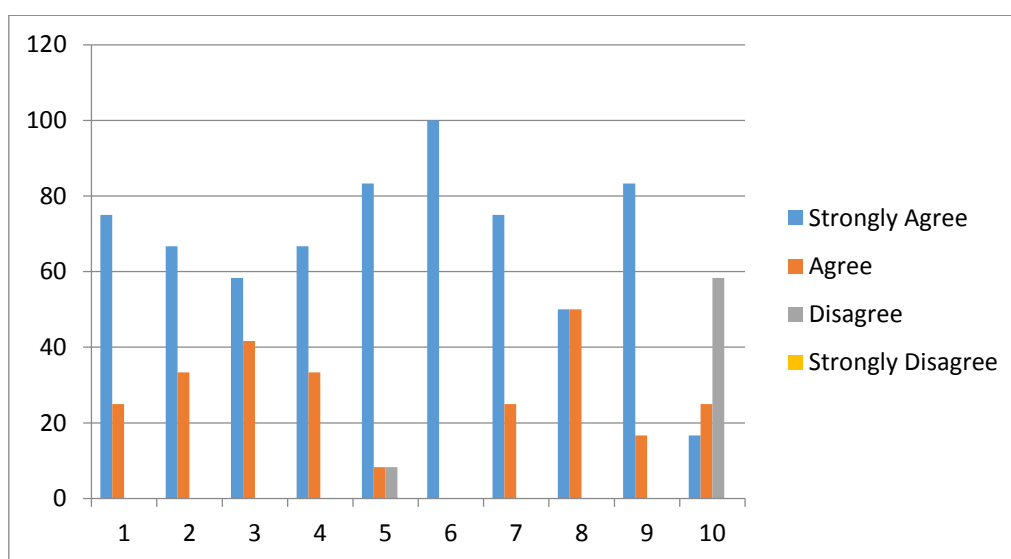


Figure 1 Analysis of the B.Ed. students opinion about program based on Jurisprudential Inquiry STS model

Findings: The students in B.Ed. course record favourable responses about benefits of Jurisprudential Inquiry STS model, teacher role in implementing Jurisprudential Inquiry STS model,

Conclusion: The program based on Jurisprudential Inquiry STS model is useful for B.Ed. students having Biology as a teaching method.

References:

- Bonnstetter R & Pedersen J , *The Jurisprudential Inquiry Model for STS*, retrieved June 2016 [http://plato.acadiau.ca/courses/educ/GMacKinnon/Educ4143/graphics/Juris.%20Inquiry%20Model%20for%20STS%20\(chapter%209\).html](http://plato.acadiau.ca/courses/educ/GMacKinnon/Educ4143/graphics/Juris.%20Inquiry%20Model%20for%20STS%20(chapter%209).html)
- Montagu A (1965) cited by David W Johnson and Roger T Johnson, *An Overview of Cooperative Learning*, retrieved June 2016 <http://www.co-operation.org/what-is-cooperative-learning/>.
- Pappas Christopher (2013), *8 Important Characteristics of Adult Learner*, retrieved on June 2016 from <https://elearningindustry.com/8-important-characteristics-of-adult-learners>