Primate Society of Great Britain Conservation Care Grants Report

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"Primates for Posterity: Assessment of a short conservation education program on 15-17 year old High School and Higher Secondary School students in Tamilnadu, India"

Grants received from PSGB= GBP 500

Aims:

- To assess the credibility of a *short* conservation education program on the primate conservation and environment related knowledge and attitude of 15 to 17 year old students.

- To test the authenticity of creative tools in conservation education such as Jungle sounds.

- To ensure that students find guidance through the career lecture in the program regarding the various career opportunities available in conservation thus laying the foundation for green careers and ensuring primates for the posterity.

Study Site description:

Four schools (2 from each area) were selected from two areas in Tamilnadu, India: **Coimbatore district** and **The Nilgiris District.**

Coimbatore City is located at 11°00 N latitude and 77°00 N longitudes. It is located in the North Western part of the state and bordered in the west by the Western Ghats. It is a buzzling city with a population of 930882 (excluding other blocks and municipalities of the Coimbatore District) (Census of India, 2001). The student population (schools only) of Coimbatore is 162226 in 155 Matriculation/Higher Secondary schools.

One test school and one control school were selected from Coimbatore. The pilot study of the project was conducted in an independent school from Coimbatore.

The Nilgiri District is located in the Western Ghats in Western Tamilnadu located at 11°24' 0N latitude and 76°42' 0E longitude. It has a population of about 762141 people and a student population of 40172 students in 52 Higher Secondary schools (Census of India, 2001). The Nilgiri District is divided into six taluks namely Coonoor, Gudalur, Kotagiri, Kundah, Panthalur, and Udhagamandalam (*Ibid*). The project was conducted in two schools from the Kotagiri taluk.

School syllabus:

All the schools selected for the project were of either Matriculation & Higher Secondary or ICSC & ISC syllabus.

Participants:

The participants of the project were 15 to 17 year old male/female High school and Higher Secondary school students. About 350 students (excluding the Pilot school) participated from the 4 schools. About 140 students from the actual number of 350 students were selected through Simple Random Sampling technique (Foreman, 1991) for the analysis.

Volunteers and Volunteer training:

Two volunteers were recruited from the Department of Zoology, PSGR Krishnammal College for Women, Coimbatore to help in the implementation of the Project. The volunteers underwent a half day training program organized by the Principal Investigator where they were trained to help the Principal Investigator in implementing the project.

Background research/Prior works:

Primate Diversity & Conservation in India:

The Indian subcontinent is rich in a variety of flora and fauna on one hand and cultural multiplicity and traditional disparity on the other. Tamilnadu is the fourth largest state in India and has rich primate diversity: 5 species (*Macaca radiata, Macaca silenus,*

Trachypithecus johnii, Loris lydekerranius, Semnopithecus entellus) and 2 subspecies of non-human primates (Johnsingh 2001, Kumar 2001). The state of Tamilnadu faces numerous conservation issues such as habitat degradation (Kumar, 2001), poaching (Sunderraj, 2001, Kumar, 2001) illegal timber smuggling, illegal ganja cultivation, pilgrimage, fragmentation (Johnsingh, 2001) and private ownerships leading to easy logging operation (Kumar, 2001).

Need for Conservation Education: Conservation Issues

Primates have "diverse range of values" (Cowlishaw & Dunbar, 2000, p.2) either as seed pollinators or as gods for the faithful (Southwick & Siddiqi, 2001).It is therefore our responsibility to ensure the survival of these creatures. Conservation education best serves this function by providing the audience with the knowledge, skills, values and attitudes required to protect the environment and thereby ensuring a sustainable and healthy future for generations to come (Suzuki, 1990).

The High school (15 years) and Higher secondary (16 and 17 year old) students in India are trained to choose professional courses or high paying job oriented courses in Universities. Students are generally unaware of the different career choices available and are ill-informed of the consequences of wasting their potential on temporary well paying but unsatisfying career choices. Further the High school and Higher Secondary school students are at a stage where academic competition is rigorous and thereby students are encouraged to score high marks to gain easy admission into prestigious institutions that offer high paying career oriented courses (Verma *et al*, 2002). The rigid school syllabus and time schedule (*Ibid*) leaves the students with little options to gain accurate knowledge about conservation and much less time or power to act on its behalf.

Conservation/Environmental Education Institutions in India

India has numerous organizations and institutions that propagate conservation through education. Center for Environmental Education (CEE) is one such environmental education organization operating in India and has published several educational publications (CEE, 2009). Zoo Outreach Organization (ZOO) is another such

organization based in Coimbatore, Tamilnadu, India and conduct conservation awareness programs in North East India, South India, and Bangladesh (ZOO, 2009) like Amphibian Ark and Money Manners (Jayakaran, 2008). Bharathiya Vidyapeeth Institute for Environmental Education Research (BVIEER, 2009) is another institute dedicated to environmental education research located at Pune, India. Others include Osai, Coimbatore Zoological Society and Botanical Gardens, Bombay Natural History Society etc.

Religion & Conservation in India

Further the religious systems followed my majority of Indians such as Hinduism, Islam and Christianity (Census of India, 2001) propagate ethical treatment of animals, love for nature and tolerance for other life forms (Saharia, 1982, Exodus (Bible) 23:4 and 5, Khan, 1980).

The Program

'Primates for Posterity' was designed to suit the students of this age group (15-17) taking all the issues associated into consideration. It sought to provide the participants with a fundamental knowledge of primates, primates in India, the conservation emergency they face, and the various career options one could have in conservation. Further it also assessed the various elements of the program for future applications.

Methodology:

Tools involved:

Pamphlets: Pamphlets emphasizing the aims and objective of the project and its advantages was distributed to the School Principals and concerned authorities personally by the Principal Investigator and Project assistant.

Auditory Special Effects:

An Auditory Special Effects session was designed using the authentic jungle sounds donated by Dr. Simon K. Bearder of Oxford Brookes University. It was designed to

prompt the aesthetic awareness of the participants (Kemple & Johnson, 2002) in addition to serving as a stress buster and curtain raiser after the pretest session.

PowerPoint presentation:

Two PowerPoint presentations namely (1) 'Primates for Posterity': Primates and Conservation' and (2) Career prospects in Conservation: Ready to make a permanent difference' was designed and implemented. To avoid time as a limiting factor and to convey maximum information within the given period of time (1½ hours) PowerPoint presentations were used and they best served the function.

Evaluation:

The prime assessing device used to evaluate the project objectives were Questionnaires. Pretest and posttest questionnaires were used to assess the knowledge and attitude of the students before and after the program. Questions were carefully worded and tested for reliability during the Pilot study. There was a one week interval between the pretest and the post test session. Students were given about half an hour to complete the questionnaire and students with English difficulty were provided with assistance through volunteers. Care was taken both by the Principal Investigator and the Volunteers not to help the participants with the answer or lead them into providing desired answers in the questionnaire.

Results of the project:

1. There was a marked increase in the knowledge score across the participants from the pretest to the posttest. The test group participants scored higher than the control group participants thus indicating the effect of the education intervention on the participants' short term knowledge.
2. The Mountain group participants scored higher than the Lowland participants in knowledge scores indicating the proximity of wildlife as a knowledge determining factor (Kruse & Card, 2004).

3. The attitude score of the participants remained constant before and after the program. Geographical location or Gender had no effect on the attitude of the participants. Religious views of the participants, school policy of environment education (such as Eco clubs and environment related activities) could be the reason behind the constancy of attitude scores.
4. Tools such as Jungle sounds were tested and emerged as the second most favored part of the program next only to 'Primates for Posterity' PowerPoint presentation. Further, 49% of the test group participants found the career lecture to be 'Informative' while 25% found the career lecture to be 'Very Informative'.

Financial Report:

The Following table shows what PSGB Conservation Care grants of £500 were used for:

Item	Money Spent
Jet Airways return flight from London to Coimbatore, India.	£480.00
Bus travel between field sites (to and fro charges)	£6.00
Within field site travel	£5.00
Volunteer expenses:	
Food (total expenses)	£8.00
Total	£499.00

Changes to the Intended methods:

Certain changes were imminent to the project due to time and financial constraints.

- The Role play as proposed in the project was scrapped off the agenda due to time constraints. The Role play would least consume a good 15 minutes while the actual time allowed by the school authorities to conduct the project was an hour and a half.
- The proposed book could not be published due to lack of time and funding.

Other changes:

The proposed link could not be established with the Coimbatore Zoological Society and Botanical Gardens due to time constraints.

PSGB proposed suggestion and its implementation:

It was the suggestion of the PSGB Grants Committee that the Principal Investigator reviews her questionnaire and makes amendments to ensure that the same questions were asked both in the pretest and posttest. Since it is established that like questions (with like words and forms) in the pretest and the posttest could encourage learning due to repetition (Bogner, 1998), same questions were asked both in the pretest and the posttest in a different form and pattern.

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