

MAURITIUS RESEARCH COUNCIL

REPORT ON THE AWARENESS WORKSHOP FOR LABORATORY ATTENDANTS, 13 – 17 SEPTEMBER 2004

This report summarises the background and the outcome of the Awareness Workshop for Laboratory Attendants (13 – 17 September 2004) organised by the Mauritius Research Council (MRC), with the support and collaboration of the Ministry of Education and Scientific Research (MoESR), and the Mauritius Institute of Education (MIE).

Background

In its recent presentation (8th July 2004) of the report of the Steering Committee on Science Education to the MoESR¹, the MRC highlighted seven priority initiatives for completion before the end of 2004:

- Refurbishment of a 20' X 8' container to be used as a semi-mobile laboratory prototype for primary schools,
- Creation of a model science room for primary schools,
- Investigating the use of low cost equipment for scientific experiments,
- Training in the writing of science and mathematics curriculum with technical assistance from Indian institutions,
- Organising an awareness workshop for laboratory attendants,
- Setting up of the Mauritius Association of Science and Technology Educators (MASTE), and
- Investigating the use of internet-based teaching and learning resources for the promotion of science and mathematics in schools.

The importance of conducting an Awareness Workshop for Laboratory Attendants emanated from a survey conducted by the MRC through the above Steering Committee, identifying an increasing need for secondary schools to have laboratory attendants possessing a variety of skills and knowledge to provide effective support in the teaching programmes being delivered.

In this context, the MRC established contact with the Indira Gandhi National Open University (IGNOU), which already runs a comprehensive training programme for laboratory technicians in schools in India. IGNOU indicated that it would provide two resource persons to assist in conducting the above workshop:

Dr Ved Goel Director, International Division
Dr (Ms) Vijayshri School of Sciences

¹ Report on the Teaching and Learning of Science in Schools – Republic of Mauritius: Recommendations and Action Plan 2004 – 2006, Mauritius Research Council, June 2004.

To facilitate the planning and coordination of activities for this workshop, the MRC set up an Organising Committee. Membership for the Organising Committee, which includes representatives of MoESR, was proposed by members of the Steering Committee on Science Education (please see the list of members of the Organising Committee at the end of this document).

Preparation for the Awareness Workshop for Laboratory Attendants

In preparation of the workshop, a survey was carried out among a few schools that are representative of the current range of secondary schools in Mauritius (urban, rural, high and low performance). The objectives of this survey were to meet science teachers (biology, chemistry and physics) and laboratory attendants working in secondary schools to discuss the following:

- Current organisation and management of the laboratory,
- Tasks and duties of laboratory attendants for each science subject,
- Skills and knowledge needed to perform these tasks and duties,
- Weaknesses in the current set-up, and
- Areas where training would be required.

All laboratory attendants interviewed during this survey were in favour of an awareness workshop and expressed high interest in the proposal to set up a formal training programme. Both laboratory attendants and science teachers agreed that training was needed in the following areas:

- Laboratory organisation and management,
- Basic laboratory techniques, skills and maintenance,
- Hazards and standard precautions in the laboratory,
- Safety and First Aid procedures for the laboratory, and
- Basic IT skills.

Evaluation of the Awareness Workshop for Laboratory Attendants

The Awareness Workshop for Laboratory Attendants was conducted during the week of 13th – 17th September 2004. To ensure that all secondary schools could benefit, the workshop was conducted as a one-day session run in each of the four educational zones using a designated school as venue. The participation of laboratory attendants based in secondary schools in Rodrigues was facilitated through the Commission for Education and Training.

In this context, the MoESR made preliminary arrangements for hosting of the workshop in the halls of the following four selected secondary schools:

Zone	Secondary school	Date
1 (P-Louis/North)	D Ramphul 6 th Form College	13 September 2004
2 (B Bassin-R Hill/East)	Marcel Cabon SSS	14 September 2004
3 (Curepipe/South)	F Boyer de la Giroday SSS	16 September 2004
4 (Q Bornes-Vacoas/West)	Sir A R Osman 6 th Form College	17 September 2004

The resource persons covered zones 1 and 2 on the first two days, then following a break on Wednesday 15 September, covered zones 3 and 4 in the remaining two days.

In view of the variable usage of English among laboratory attendants, as discussed by the Organising Committee, assistance of a moderator was provided by the MIE to help in translating and to ensure maximum participation/debate from those attending. The following MIE staff provided assistance:

Dr (Mrs) S Rajcoomar	Head, Department of Science Education
Dr A Rumjaun	Senior Lecturer (Biology)
Mr D Ramroop	Senior Lecturer (Chemistry)

A total of **147** laboratory attendants participated in the workshop, representing an average of 85% of the total expected participation. The attendance recorded for each zone is given below.

Zone	Expected attendance	Actual attendance	Percentage turnout
1	58	48	83
2	48	33	69
3	42	37	88
4	27	29	>100

Laboratory attendants from all five secondary schools of Rodrigues participated in the workshop. In addition, six laboratory attendants from the MIE and two laboratory attendants from the Mauritius Examinations Syndicate (MES) participated.

All participants found that the information presented was useful and added to their knowledge. Laboratory attendants were of the view that, in the future, training should be done before joining the laboratory for work. This would ensure that recruited persons are already equipped with a range of basic skills and knowledge to provide immediate assistance in the teaching of science in secondary schools.

Issues relating to good laboratory practice, safety, awareness of hazards, First Aid, basic maintenance knowledge and IT skills, were identified as the most important areas that would be expected to form part of a training programme for laboratory attendants. Participants also expressed an interest in receiving practical guidance in:

- Preparation methods for solutions used in biology and chemistry,
- Procedures for setting up apparatus in biology, chemistry and physics,
- Precautions and safety relating to the handling, use and storage of chemicals and reagents,
- General procedures for fire safety in the laboratory, and
- Basic trouble-shooting for resolving laboratory equipment malfunction.

Follow-up of the Awareness Workshop for Laboratory Attendants

Following the Awareness Workshop for Laboratory Attendants, all secondary schools have been contacted to inform them that the presentations made by the resource team from IGNOU are available on the web site of the MRC at www.mrc.org.mu/LabAttendants.htm, where they can be viewed and downloaded. It has been proposed to each school that this information is made available to all laboratory attendants working in their institution, including those who did not participate in the workshop.

ORGANISING COMMITTEE MEMBERS **Awareness Workshop for Laboratory Attendants**

Names	Organisation
Mr E K Ng Wong Hing	Ministry of Education & Scientific Research
Mr B Lutchmiah	National Inspectorate Ministry of Education & Scientific Research
Mrs M Seetulsing	Mauritius College of the Air
Dr (Mrs) V Hunma	Mauritius Examination Syndicate
Dr (Mrs) S Rajcoomar	Mauritius Institute of Education
Mr A Mangoo	PSSA
Mr S Dulloo	Education Officers' Grade A Union
Mr R Naga	Bon Accueil, FVI College
Mr G Ramsahye	UPSEE
Mrs A Gunness	SPSTSU
Mr Sungeelee	Dr R Chaperon SSS
Mr H Gungadin	Royal College, Port-Louis
Mrs S Maudarbacus	Royal College, Curepipe
Mr M Thodda	Ministry of Education & Scientific Research