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REPORT OF THE SCIENCE DEPARTMENT
TO THE THRID NATIONAL
EDUCATION COUNCIL OF THE ANC (S.A.)

SUBJECTS

The following science subjects are taught in the science department; Chemistry, Biology and Physics

SYLLABI

As set by the National Education Council but we have to adapt them to accommodate the London O'Level requirements since at present students have to be examined by the London G.C.E. overseas examination council.

PROBLEMS

The physics and chemistry syllabi as drawn up by the National Education Council still lack the necessary details. The details promised in the last Council meeting have never been forwarded to the school. This makes it difficult for the teachers of these subjects to know how deep to go into the topics.

TEXT BOOKS

Situation is satisfactory at present, except for (i) Junior Chemistry. Supplies in local bookshops are scanty and irregular. Junior physics book I suggested for Form I has been cut to stock since last year. We only managed to purchase this book once when our class was still small. Since then we have never been able to lay our hands on it again. We are trying to find another suitable text book.

EQUIPMENT

Except for chemicals.

A substantial quantity of equipment has been purchased from the local supplies of scientific equipment.

Chemistry - There is a country wide shortage of chemicals, the supply of which is the sole monopoly of one state company, in the whole country. Shortage of chemicals makes the proper teaching of chemistry very difficult - if not impossible more so that a large number of our students have never done this subject before. Certain basic apparatus for chemistry has also not been available so far.

Biology - Practical work in the subject is hampered by the lack of chemicals, otherwise the situation with biological equipment is fairly satisfactory.

Physics - Basic equipment has been purchased. The main problem with physics equipment as with the other subjects as well is that the quality of most items is quite poor and therefore they are not likely to last long.

Solidarity - We received a big consignment of physics apparatus mostly for experiment in electricity and biological equipment mostly microscope from the G.D.R. This will certainly go a long way in raising the level of the teaching of these subjects.

LABORATORY SPACE

At present two rooms in the building which formerly housed the school have been adapted for use as a laboratory and a store (preparation) room.

Every class has at least one double period (80 minutes) per week for each science subject in the laboratory.

We try to utilise the little working space available by making our students work in groups. Fortunately at present our classes are not big and therefore this is possible. But the numbers of our students are swelling fast and soon the place will be too small to work in as well as unsafe to use as a laboratory.

GAS SUPPLY

This has been one of the biggest problems to solve. The procedure followed in purchasing gas cylinders has so far made it impossible for the school to obtain any. A number of efforts have been made but without any success. The only gas cylinder the school had managed to borrow from construction had to be given to staff members who use gas for cooking purposes.

During his last visit to the school last month the Secretary General promised to look into the possibility of obtaining gas cylinders for the school in Zambia. Our fear is that there may be problems with the fitting.

The local firms such as Shell Gas are more willing to put gas fittings into the building rather than supply us with cylinders. Considering the cost of such fittings, the fact that the present sighting of the laboratory is very temporary and the building itself is old and may be demolished in the near future the school feels such a project is not worth paying for.

Hence at present for fuel in the laboratory spirit lamps and primus stoves are being used. Methylated spirits is very hard to come by and this does not make our problems with fuel any easier.

SCIENCE CLUB

This activity has not been introduced yet but we hope to do so in the near future although we are aware of the limited amount of working space.

RECOMMENDATIONS

1. That in order to alleviate the problems experienced in the teaching of chemistry, solidarity groups be mobilised to donate chemicals needed for basic experiments in this subject. The school would provide the lists of what is needed.

2. That the construction of laboratory building be considered as one of the priorities. Apart from lack of working space, as it is at present we are not even able to accommodate the limited amount of science equipment we have.

3. There is a general shortage of science teachers in the school. Therefore we suggest that a strong campaign be mounted to recruit science teachers. We feel that there is a good number of science teachers who are South Africans some of whom are A.N.C. members or at least supporters. These comrades should be made aware of the existence of this project and the demand for their services.

4. That the Physics and Chemistry syllabi be reviewed with the aim of:-

- i) Stating the aims and objectives of teaching these subjects ✓
- ii) Giving details that will guide the teachers of these subjects as to how deep they should go into the subject-matter.