

AN INVESTIGATION INTO THE AVAILABILITY AND  
USE OF TEACHING AND LEARNING MATERIAL IN  
MULTIGRADE CLASSES IN THE FREE STATE

REPORT OF A SURVEY

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## **Introduction**

This investigation was undertaken in ten farm schools in the vicinity of Bloemfontein. All these schools have classes where one teacher teaches more than one grade. The aim of this investigation was to look at the availability and use of teaching and learning materials in the multi-grade classes.

This survey was undertaken during June to October 1998 by personnel of the Research Institute for Education Planning (RIEP). Persons involved were Prof J P Strauss (project leader) and Mr F C Human (researcher).

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## CHAPTER I

### ACKGROUND

#### **Introduction**

In 1997 there were approximately 809 000 learners in 2 863 schools in the Free State, with 515 000 learners in the primary school phase. There are 1 901 farm schools, which are nearly two-thirds of all the schools in the Free State. More than 1 600 of these schools have one or two educators. The majority of these farm schools do not enroll more than 100 pupils, and seven grades are taught in the primary school phase. The result is that an educator has to teach more than one grade in the same classroom. This multi-grade teaching forces the educator to use his/her time effectively.

#### **Purpose of the investigation**

The purpose of the project is to examine and analyse the availability of language and mathematics learning materials in ten multi-grade classes in the Free State.

#### **Selection of schools**

The ten schools with multi-grade classes were selected in collaboration with officials of the section for Farm Schools at the head office of the Department of Education of the Free State. Official permission was granted by the Free State Department of Education (FSED) to conduct research in these schools. The schools that were selected have been Vergezocht, Rodewal, Sonskyn, Boesmanskop, Korea, Lockshoek, Ditlatse, Papiessvlei Intermediate, Byelkanderkoms, Uitkoms Intermediate

One of the conditions for selection that was put to them, was to consider schools which they thought to be in a better position than others, and where not all the grades are being taught in one class. The section for Farm Schools has a development plan for farm schools. According to that plan, specific schools will be identified and called green spots. These green spots will assist other schools in their vicinity, especially with regard to teaching aids and other materials. At the moment some of these green spots have been identified, although the plan is not in operation yet. In their deliberations with the school management developers (SMDs), a list of 10 schools was provided. Some of these schools have been identified as green spots.

#### **Multi-grade classes**

The grouping of the grades in classes mainly depends on the number of learners in the school and thus also the number of educators.

The following is a grouping of learners in the multi-grade classes:

Table 1.1: Grouping of learners in multi-grade classes

SCHOOL NAME	CLASS 1		CLASS 2		CLASS 3		CLASS 4	
	Grades	No of Pupils						
Byelkanderkoms	5, 6, 7	21	3, 4	22	1, 2			
Boesmanskop	7	22	6	26	4, 5	48		
Ditlatse	6, 7	16	4, 5	21				
Korea	6, 7	35	4, 5	30	2, 3	47	1	14
Lockshoek	6, 7	15	4, 5	25				
Papiesvlei	8, 9	18	6, 7	37	4, 5	37		
Sonskyn	6, 7	16	4, 5	13				
Uitkoms	5, 6, 7	24	3, 4					
Vergezocht	6, 7	21	4, 5	13				
Roodewal	4, 5	27						

Only two of these multi-grade classes, one at Boesmanskop with 48 learners and one at Korea with 47 learners, can be considered as big classes. There are three more classes with 30 or more learners.

### State of the school buildings

The condition of toe-five schools can be described as good or excellent. In two cases the schools need reparation. Although Lockshoek Farm School is very neat, it has no ceilings. Papiesvlei school has good buildings for the senior classes, but poor ones for the junior classes. The condition of the remaining three can be considered as average. The classrooms are neat and can be considered as conducive to learning, with the exception of Papiesvlei, that is described as overcrowded. (Appendix A)

### Conclusion

With more than one grade per class, the educators must plan their teaching activities in such a way that all the learners are being kept busy in a constructive way.

## CHAPTER 2

### VISITS TO SCHOOLS AND OBSERVATIONS

#### **First visit**

The first visits to these schools were hampered by unrest in education during June 1998. All the schools had however been visited, but no observation on the use of material could be made. Some of the schools were busy with mid-year tests or examination.

As this was the first visit to these schools, a broad observation was made to put the teachers at ease. The observations at the schools were made according to a questionnaire. In the first part of the questionnaire, particulars of the schools and of the facilities in general were noted. The rest of the questionnaire was concerned with the subjects in more detail. A summary of all the questionnaires, as well as some photos of the schools, is attached.

#### *Text books*

All the teachers indicated that they do have textbooks, while only one school indicated that the pupils do not have textbooks. Different schools are using different books, as indicated in appendix A.

#### *Medium of instruction*

Teachers and learners mostly use English as medium of instruction, but in some schools Sotho is also used in the class.

#### *Teaching aids*

In the maths lessons, quite a number of objects are being used. Worksheets were observed in two schools, while overhead projectors are also being used in two of the schools.

#### *Wall charts*

Some wall charts were on display in the schools, but most of them have not been changed during the period of the investigation.

#### *Group work*

The learners were grouped together in grades, and it was also possible to do group work within grades. No real group work was however observed during the period of investigation. Discipline in most of the schools was very strict, and learners were not allowed to talk in class. This prohibited learners to discuss any work in groups.

#### **Second visit**

During the second visit to these schools, the availability of materials to produce teaching aids was investigated. Questions were also posed to the teachers as to disturbances there might be preventing the school from being a first class school.

### *Materials for the educator*

The basic materials for teachers to prepare lessons, namely books to write in, pens and textbooks, were available in most of the schools. Large sheets to prepare lessons on, as well as thick khoki pens, were only available at four schools.

### *Materials for learners*

Textbooks are only available at seven schools, some being out of stock. Exercise books are readily available, while pens, pencils and rulers are lacking in a few schools. Additional reading material and old magazines and newspapers are only available at half of the schools.

### *Problems experienced by schools*

Different schools experience different problems. Altogether, the most pressing problems, as rated by educators, are

- the lack of transport for learners that have to travel long distances
- lack of sport facilities
- lack of transport for teachers
- no photocopiers
- a need for book cases for learners
- lack of telephones.

### *Conclusion*

It seems that most of the teachers do have the necessary materials to prepare lesson, but preparing wall charts might be a problem at some schools. Additional reading material is not readily available. Problems experienced by teachers do not reflect teaching or learning problems. The photocopier can however assist the educator in his teaching task. For further details see appendix B.

### **Third visit**

During the second visit to the schools, teachers were told that they would have the opportunity to present a lesson that would be videotaped. The purpose of this activity was to see

- if they can use teaching aids (Some of the lessons are not a language or maths lesson.);
- if they still teach in the traditional way, or whether they are attempting to do it the OBE way;
- how effective can they use the teaching aids.

The lessons were videotaped and the findings were afterwards recorded on forms (included). The findings on the twenty lessons have been summarised. (Appendix C)

From the summary it is clear that the lessons were very teacher-centred, with the differences of the different learners being neglected. The learners were very passive during the lessons, waiting only to be told which parts they should memorise. The subject matter was not related to real life situations.

## *Conclusion*

Teaching in the multi-grade classes is centred around the teacher. The teacher takes the initiative, while the learners are listening passively.

## **Fourth Visit**

### *Purpose of the fourth visit*

The fourth visit to the schools involved the completion of a questionnaire, as well as an observation as to changes that have taken place in the display of teaching material and aids.

### *Report on changes*

Very little changes have taken place in the classrooms. One school has received an overhead projector from a nearby school that has been closed down. The teacher can now present lessons using the OHP after some assistance was rendered to her during our visits. Another school is in the process of changing their classroom by putting a library adjacent to the classroom on advice of a literacy initiative. Pictures on the walls of most of the schools have not been changed. As this visit was near the end of the term, little teaching took place and learners were outside the classrooms. (Appendix D)

### *Responses to questionnaire*

From the questionnaire it was clear that the educators have ample teaching experience in primary school teaching, as well as in teaching multi-grade classes. On average the educators attended five to six workshops over the past 3 years, which included workshops on extra mural activities.

The visits of the departmental officials were directed at administrative activities. This is the work of school the management developer (SNW). The educators did not receive visits from the learning facilitators (subject advisory services).

Educators want officials of the education department to visit their classes and to inform them on new developments.

The issues that the educators agreed to be important are

- the need for distribution of textbooks;
- the need for teaching material;
- the need for financial assistance to attend workshops.

The need for in-service training by departmental officials, as well as by other institutions, was also mentioned. There was also a plea not to close down farm schools and transfer educators and learners to other schools.

Not all the owners of the farm schools attended the classes of the educators, although they have been visiting the schools more regularly. (Appendix E)

During this visit, each school was supplied with twelve pocket calculators and copies of an English lesson were handed to them. The educators were also notified that, during the next visit, lessons would again be videotaped. A request was made to present a lesson, using the handouts and pocket calculators.

### *Conclusion*

These educators are teaching in isolated circumstances and are not exposed to the interference of subject advisors. They have a need for in-service training.

### **Fifth Visit**

These previously arranged lessons were videotaped and evaluated. Most of these lessons were still teacher centred. The learners, however, were more involved. During the lesson on grammar, every learner had the opportunity to read from his own copy and to really see the question. Learners also had the opportunity to use a calculator to do calculations.

### *Conclusion*

It is necessary that both the educators and learners are exposed to teaching aids. The active integration of the use of the pocket calculator in a Maths lesson is essential. While most of the educators have ample teaching experience, they were not exposed in their training to the use of electronic teaching aids.

## CHAPTER 3

### CONCLUSION AND RECOMMENDATIONS

#### **General observation**

Although the classrooms were not overcrowded, it was sometimes difficult for learners to move around, e.g. to go and write an answer on the chalkboard.

The learners in the multi-grade classes were handled as two groups. While the educator was busy with one group, the other group was doing some classwork. Groupwork was not observed.

Textbooks were used by most of the educators, while not all the learners had textbooks. That forced the teachers to write the classwork on the chalkboard so that learners could do it. No learning materials other than textbooks were used by the learners during the visits to the schools. Photocopiers and duplicating machines are not available at the schools.

As a first observation, the discipline in the classes is good to excellent. In retrospect, it seems that the educators are in fact too strict. The learners are not allowed to reason or to differ from the educator. The result is that correct answers by the learners are often not perceived as correct by the educator. Because of the lack of materials to be used by the learners, educators are usually reading a phrase with the learners repeating it. In the absence of any other teaching equipment, educators make use of the blackboard only. A lot of work has to be copied from the board by the learners. Only one school has an OHP. The non-availability of electricity also plays a role in not using electrical teaching aids.

#### **Other issues that could have an influence on the use of teaching and learning materials**

Educators of farm schools are very isolated from other educators and do not have the opportunity to discuss matters.

Absenteeism of learners can cause a problem to continuous learning, as textbooks are not at every learner's disposal.

The purpose of visits by departmental officials to the schools was mainly of an administrative nature and not to inform educators on new developments in teaching. A number of educators have attended courses especially in the training of sports.

#### **Recommendations**

The following can be seen as recommendations in the use of teaching and learning materials to better education:

Departmental officials (e.g. subject advisors) should visit the schools to support and develop the teachers. These officials can serve as conveyers of knowledge from the Department to the schools.

Financial assistance should be rendered to farm schools to develop materials, as most of them do not have school funds to buy materials. On the other hand, the FSED can supply these schools with materials.

This can be seen as short time solutions. To support and develop educators of multi-grade classes, retraining of these teachers should take place. During this training they should be taught how to

handle multigrade classes, amongst others that the learners should be more involved. In addition to this, new didactical approaches and subject knowledge should be included in the programme.

### **Final conclusion**

The Free State Education Department should involve other agencies and NGOs, as well as tertiary institutions, to assist the subject advisory services in the in-service training of educators. Equal opportunities for all schools should be created to advance the education of all learners. Together with this action, the quality of education in all schools should be monitored to smooth out problems.