

## Information needs of the teachers of Orange Farm

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The purpose of this research project was to determine what the information needs are of teachers in a black metropolitan informal settlement. A group survey was conducted on a sample of 206 teachers from 42 primary and secondary schools in the Orange Farm area. The results were processed by computer and cross tabulation was performed on the data to identify any possible influences of variables like sex, age and type of school. The findings are discussed and in view of the picture that emerges of a complete lack of library services or any other available resources, recommendations are made. The most important recommendation is that a mobile library service for the teachers should be started with the co-operation of the educational authorities, local government and the Provincial Library Services.

Die doel van hierdie navorsingsprojek was om die inligtingbehoefes van onderwysers in 'n informele swart metropoli-taanse gebied vas te stel. 'n Groepopname is uitgevoer op 'n steekproef van 206 onderwyser uit 42 laer en hoër skole in die Orange Farm-gebied. Die resultate is rekenaarmatig geprosesseer en kruistabulering is gedoen om moontlike invloede van veranderlikes soos geslag, ouderdom en soort skool te bepaal. Die bevindinge word bespreek en in die lig van die beeld van algehele gebrek aan biblioteekdienste of enige ander hulpbronne, word aanbevelings gemaak. Die belangrikste aanbeveling is dat 'n mobiele biblioteekdiens vir die onderwysers ingestel moet word met die samewerking van onderwys-owerhede, plaaslike owerhede en die Provinsiale Biblioteekdienste.

This article reports the results of an empirical study that was undertaken to determine the actual information needs of the teachers in Orange Farm. A profile of their needs was considered pertinent to the development of any library and information service.

In the informal settlement of Orange Farm and surrounding areas to the South of Johannesburg, Gauteng, there are more than 40 schools with none of them having library facilities. Where school libraries are available in South Africa, they are on the whole 'totally under-utilized' (Le Roux 1992:44). This can be blamed on a number of factors, but one of them surely is the teachers' lack of familiarity with library services. In the opinion of this researcher information literacy should start with the teachers. Physical accessibility of information alone is not enough. Intellectual accessibility together with societal and psychological accessibility are imperative for information use. Provision of information to the teachers of Orange Farm was therefore identified as a high priority issue and the logical starting point for the introduction of some kind of library and information service. The culture of information use will hopefully be diffused through the school community. Fairer-Wessels and Machet (1993:109) also identify the provision of reference works to teachers as one of the services that are urgently needed in the black communities.

### History of the Orange Farm Settlement

The Group Areas Act (1950) made provision for separate settlement of racial groups in metropolitan areas. After influx control laws were repealed in 1986 migration from rural areas increased dramatically. Poverty was augmented by over population in the urbanization process.

In the former political dispensation, cities represented the First World while the Homelands represented the Third

World. The growth rate of the black population was a doubling of numbers every 27 years. The imbalance between population growth and economic growth resulted in a lack of housing (Ferreira 1993:13-16). A conglomeration of fastly erected shelters and shacks started to appear on the fringes of cities. Many of these developments started on property not owned by the squatters. Any type of building material was and is still used: cardboard, corrugated iron, paraffin tins, canvas, pieces of wood, plastic, and so on. To remedy the situation the government started with so-called organized squatting. A piece of land would be earmarked for this, divided into small plots and serviced with water and sewerage. In 1991 the number of informal settlements was calculated at approximate 3 million (Ferreira 1994:18).

These alternative housing schemes are legal and work on a self-help basis (Vali, Rispel & Motale 1994:28). Housing is considered to be the responsibility of the individual with assistance from the public and private sectors. The authorities lay down policy concerning ownership, standards and finance. The resident initiates the building of a home (Ferreira 1993:20).

Orange Farm as an informal town was established in 1987. It is situated 25 kilometres South of Johannesburg next to the N1-Highway near Grasmere and Evaton. It is on the Vereeniging-Langlaagte railway line with the station two kilometres from the centre of town. Stands of 250 square metres have been marked out, each with a pit lavatory and one tap for every eight stands. Gravel roads, water trenches, informal shops and an open terrain for sports complete the infrastructure (Ferreira 1993:21). The inhabitants mostly use plastic, hardboard and corrugated iron as building material, but brick houses are also being erected. They can own the land and most residents live there of their own choice

(Mtshelweni 1989:23). According to Ferreira (1993:22) the community appreciates the physical space, privacy and access to economic activities.

It started off as a formal town but housing could not be made available at the required rate and an informal town developed. On average seven people live in each house. Initially 500 plots (3500 people) were proclaimed, but houses started to appear on every open piece of land (Ferreira 1993:51).

Van Niekerk (1990:72) is of the opinion that Orange Farm presents a solution, especially for people who are serious about home ownership. In this way urbanization is being turned into a virtue instead of a problem.

To illustrate the rate of expansion in the area the following statistics can be quoted (South Africa. Central Statistical Service 1991).

1985	Population	00 519 (1985 Census)
1990	Population	48 036
	Formal houses	20283
	Informal houses	27750

None the less, Eskom has made good progress in providing the area with electricity. This will have a direct effect on the kind of information service that can be started in the area.

## Survey

### Sampling

In order to build up a profile of the information needs of teachers in black schools, it was decided to use an ideographic research strategy and conduct a sample survey on the target population of teachers in primary and secondary schools in black townships (Mouton 1996:133).

As a sampling frame 280 teachers from 42 schools from Orange Farm and environments were used. These 280 teachers were enrolled at the Rand Afrikaans University for continuing education courses. Of this group 206 respondents were used because they attended the class on the day of the survey.

### Questionnaire

A questionnaire was used as a data collection instrument. The questionnaire was developed to comply with the requirements for computerized statistical processing for quantitative analysis. Attitude was not tested, so structured closed and open questions were used. The responses to open questions were coded before processing took place. A pilot study resulted in the rephrasing of some of the questions to rule out any possibility of misunderstanding.

The questionnaire was divided into the undermentioned four sections that will also be used as headings for the discussion of the results:

Section A: Personal information

Section B: Information needs concerning teaching career

Section C: Personal information needs

Section D: Use of information resources

The questionnaires were handed out in class with the researcher present to answer all questions. This is a combination of a postal survey and a structured interview. The advantages are obvious; it is more personal than a postal or telephone survey; the fact that the operation is done in class time with the formal consent of the lecturer gives additional status to the survey; the questionnaire is completed within a given period of time and this method usually renders a higher response rate than a postal survey. In this particular instance the response rate was 90%.

A disadvantage was the fact that one person could not control the completeness of each questionnaire at hand-in time. If this could be done a response rate of near 100% could be attained.

## Analysis of data

### Personal information

#### Gender

The sample had 30.1% male and 69.9% female respondents. Gender proved to be the most important variable influencing personal preferences for recreational reading.

#### Language ability

Reading, speaking and writing abilities in different languages were measured on a five-point scale registering from none to very well. An interesting observation was made, namely that mother tongue does not correlate with reading and writing ability.

#### Educational qualifications

The picture that came forward here is distressing. The large proportion of teachers with standard 10 (grade 12) as their

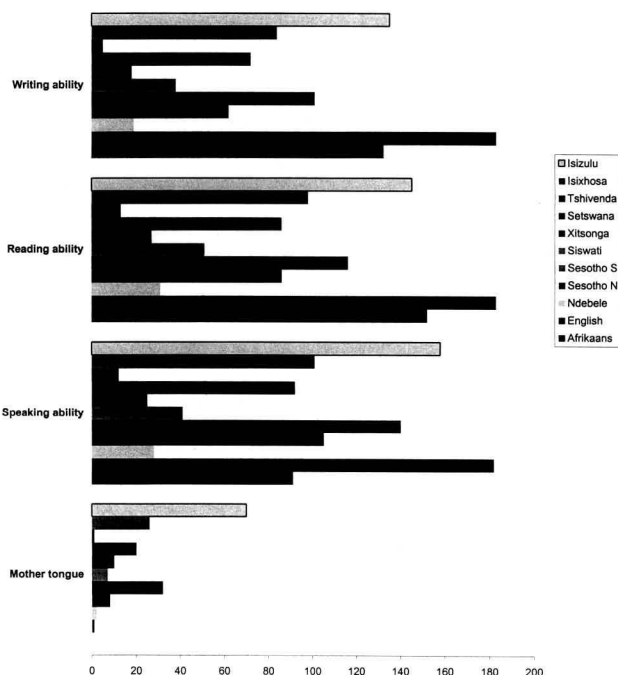
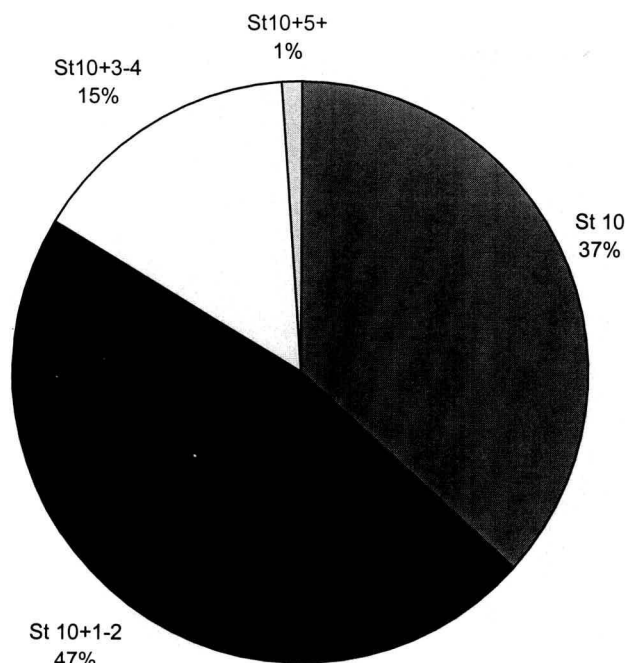


Figure 1 Language ability



**Figure 2** Educational qualifications of the teachers

highest qualification is unaccountable for, in the light of many qualified teachers presently having to leave the profession due to the rationalization process. The only positive aspect for this particular sample, is that they are all enrolled for education courses at the Rand Afrikaans University.

#### *Community activities*

The lowest score was attained by political activities, while church activities and sports and recreation were ranked first and second respectively. Overall the involvement in community activities is high. This is a positive scenario for the assumption that the teachers have an influence in the community.

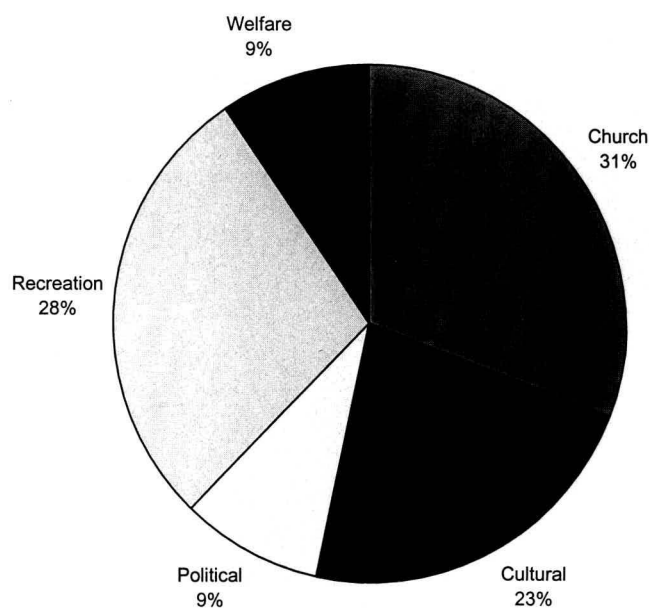
#### *Age groups*

Almost 90% of the sample are under the age of 35. So most of the respondents still have a long career ahead of them. In the cross tabulation of the data, age as a variable did not have any significant influence as indicated by the Pearson Chi-square value.

#### Information needs concerning teaching career

##### *Primary or secondary school*

Primary school teachers formed 60% of the sample. This variable was responsible for statistical significant ( $p = 0.0059$ ) differences on the 1% level of meaning for the two groups in their responses to the question dealing with the need for subject knowledge. Primary school teachers rated the importance of subject knowledge much lower than did secondary school teachers. The difference between the answers of the two groups to the question on the need for information for preparing lessons, was statistically significant ( $p = 0.0455$ ) on



**Figure 3** Community activities

a 5% level of meaning. Primary school teachers did not give a high rating to this need.

#### *Currently available information sources*

To this question 77.7% of respondents replied that they had no access to information sources.

#### *Information categories*

Knowledge of teaching methods was rated highest in importance, followed by subject knowledge and then pupil problems lower down the scale.

#### *Kinds of information sources*

The response to this question still reflects the dependence on the textbook. Handbooks were rated most important, with teaching manuals and subject literature in second place. Bibliographic tools like indices and bibliographies received the lowest ratings. This can be an indication of a lack of knowledge of information retrieval tools.

#### *Types of information services*

There is clearly a need for all kinds of information services. More than 94% of the sample put media training, exhaustive searches, and information for problem solving as the most needed services.

#### Personal information needs and behaviour

##### *Frequency of reading*

Regular readers made up 62.9% while the rest of the group indicated 'sometimes' as the appropriate description of their reading behaviour. As far as their preferences for bibliographic forms are concerned, it is good to notice the strong position of the book in comparison to newspapers and magazines.

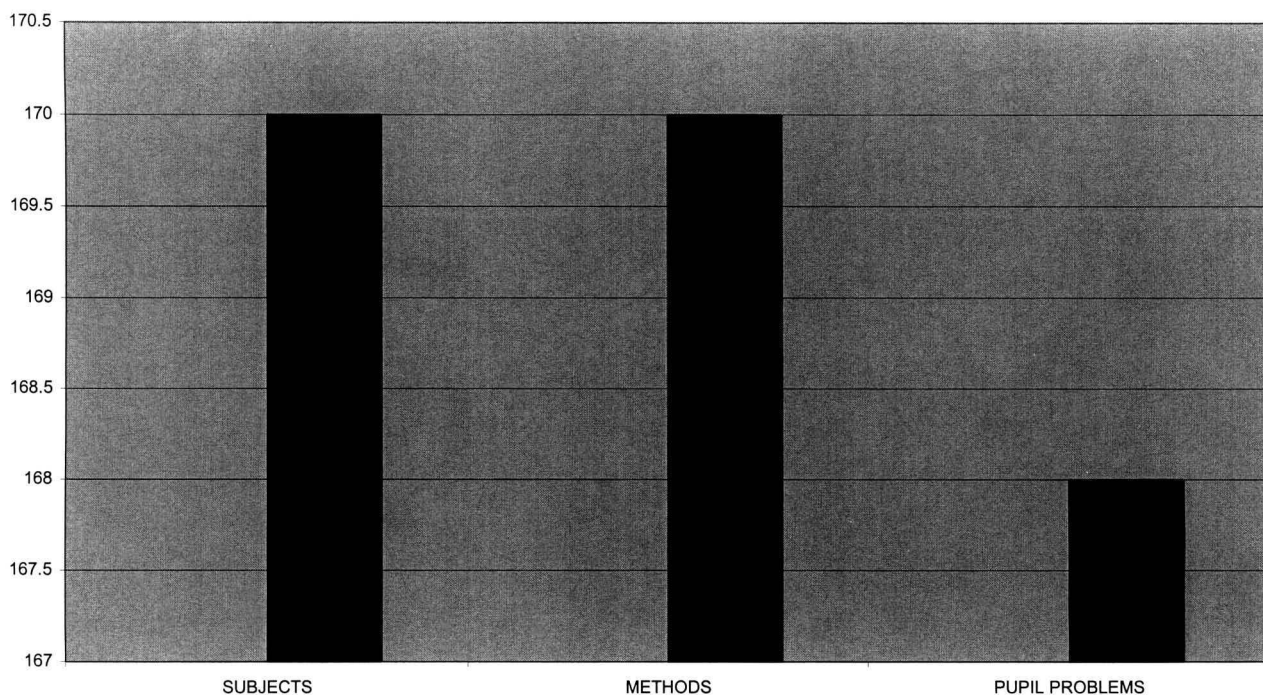


Figure 4 Information categories

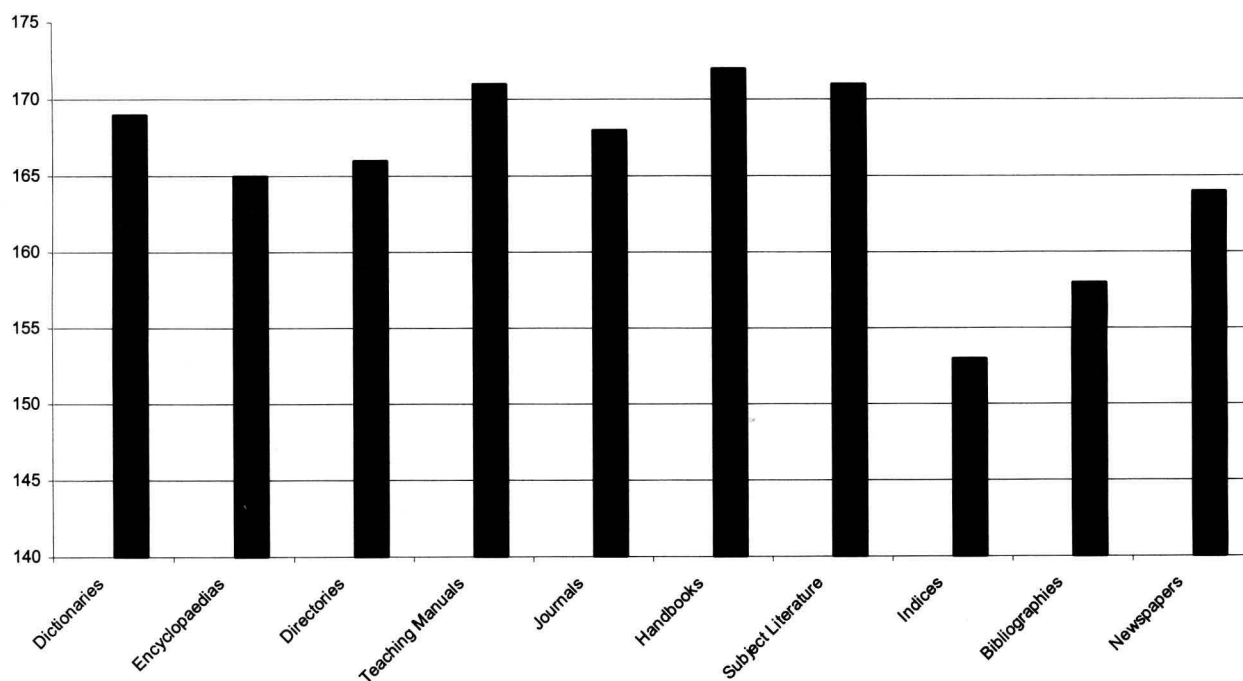


Figure 5 Information sources

*Types of literature preferred for recreational reading*

The priority list starts with short stories, love stories and traditional stories, and ends with horror stories.

*Subject interest*

The variable with the strongest influence on reading interest was gender. The results showing statistically significant differences between the sexes were predictable. Arts and crafts, cookery and housing are obviously more appealing to women and common law, politics, history and sport are more likely to interest men.

*Use of information resources*

*Library use*

Nearly 70% do make use of some kind of library not withstanding the fact that 27.4% indicated that the nearest library to their school is more than 20 km away and 25.8 % indicated that the nearest library to their home is more than 20 km away. The public library was used mostly (60.2%).

*Current use of information resources*

Apart from the library the respondents use the under-mentioned resources in the order as listed below:

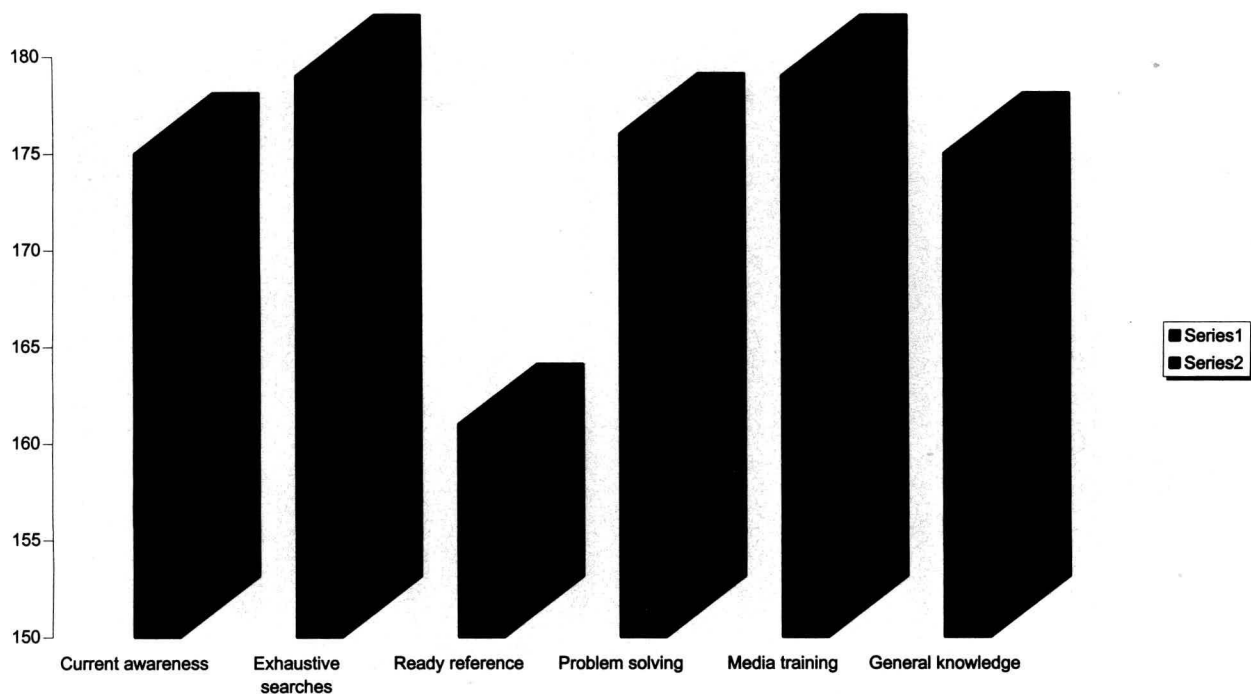


Figure 6 Needed information services

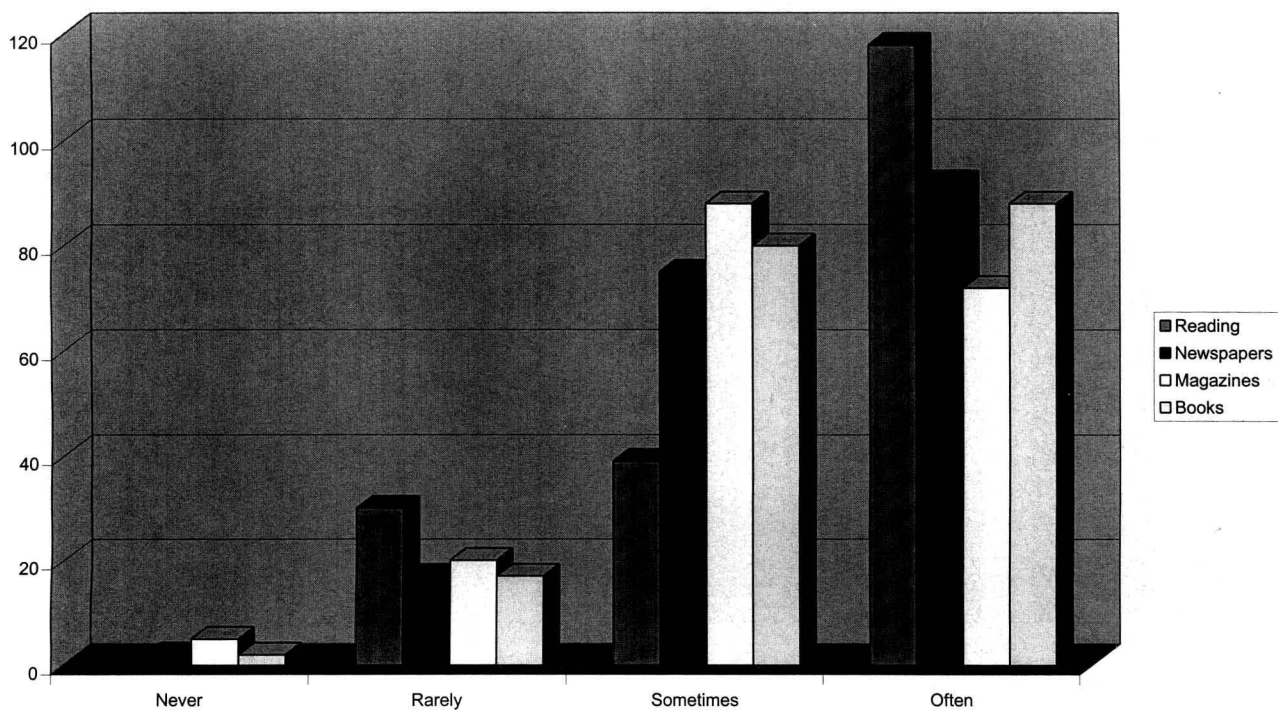


Figure 7 Reading behaviour

- Own collection
- Borrowed
- Television
- Radio

*Importance of access to information for teachers*

The respondents (93%) indicated that access to information was very important.

*Information for formal studies*

Of the respondents 140 had difficulty in finding relevant in-

formation for their studies.

*Need for library services*

The opinion of the respondents came out very strongly on this matter. A large proportion (95.7%) supports library service for the teaching staff; 97.8% want library services for pupils and 94.5% for the whole Orange Farm community.

*Opening times of such a service*

Weekdays, during and after school hours, attracted 274 votes as against 88 votes for Saturdays.

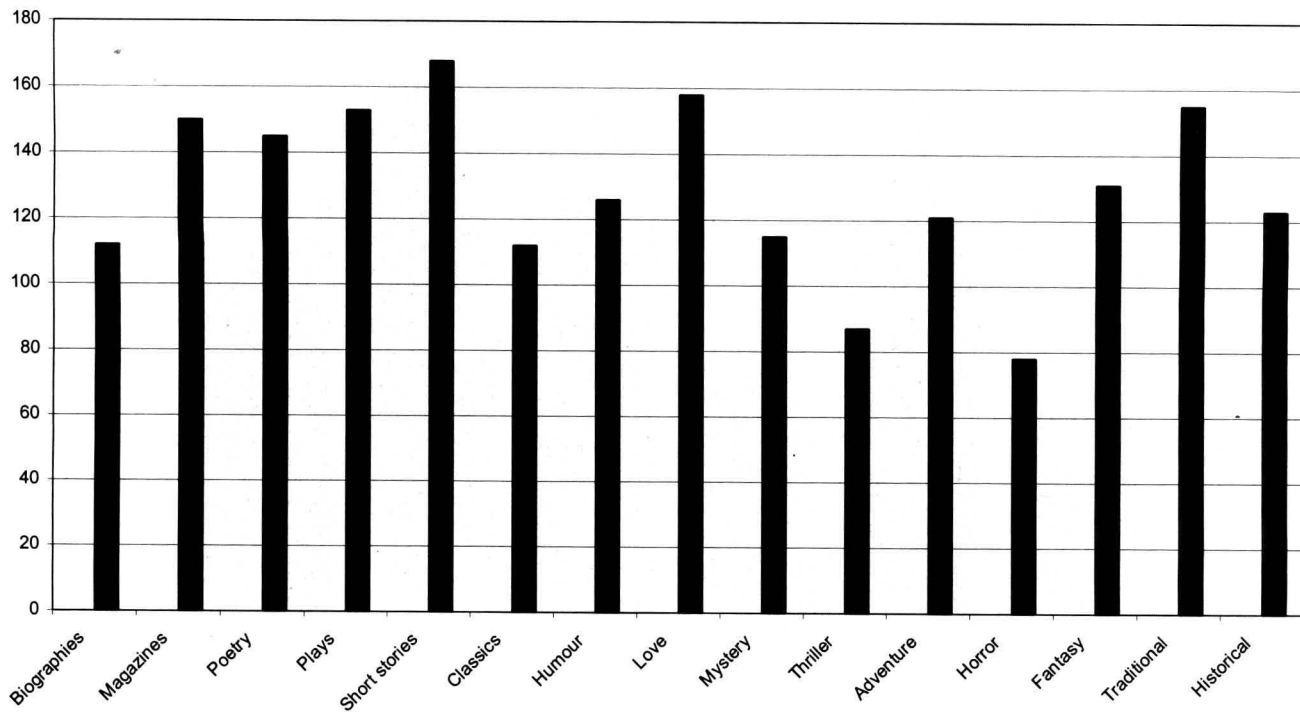


Figure 8 Recreational reading

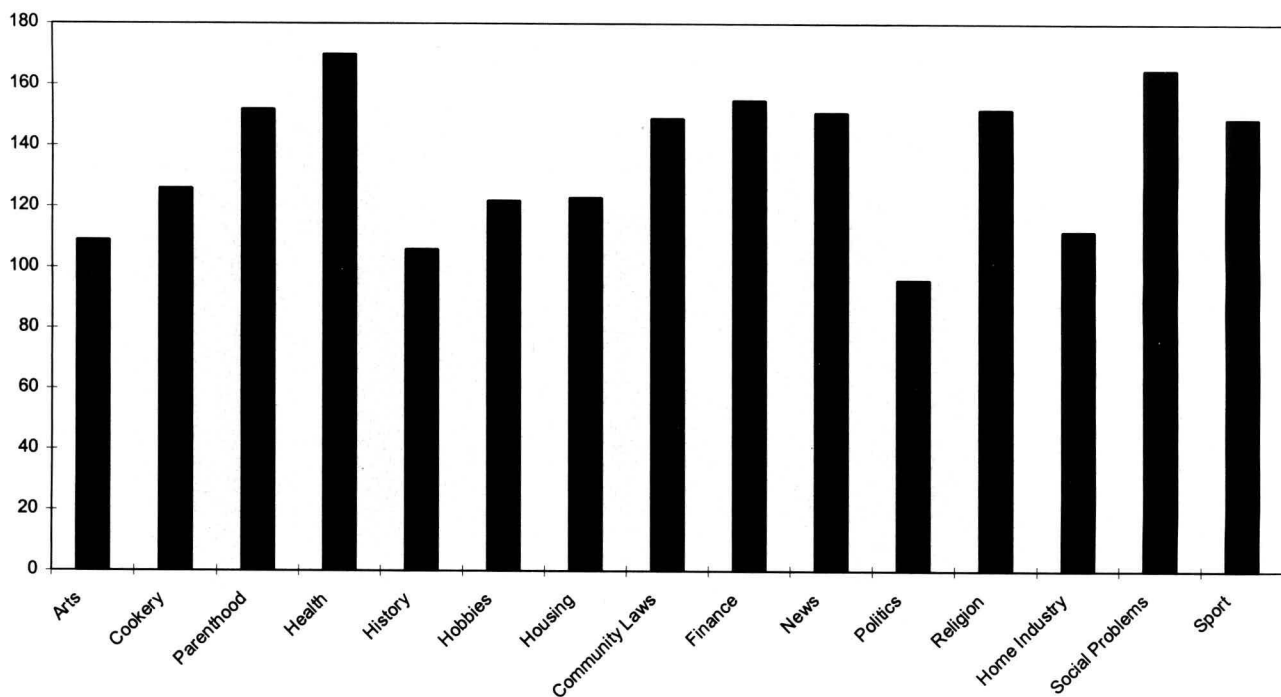


Figure 9 Subject interest

*Facilities available at their schools*

Electricity is nearly generally available, which is very important for the use of information technology in services.

**Findings and recommendations**

The study has proved that a dire need exists for information services in schools in the Orange Farm Settlement. Although the research was restricted to a certain geographical area it can be accepted that similar conditions will be found in other black townships.

The new Curriculum 2005, based on the principle of Outcomes Based Learning, will only strengthen this need (Faasen & Metcalfe 1997:8). Information will and should be the cornerstone for both teachers and pupils for independence from lectures and a change to a style of lifelong learning.

It has been discussed often in the literature that public libraries and school libraries (where they exist) should work closer together. In the present financial circumstances and in the light of the burden that the Department of Education must bear, provision of libraries to all schools seems very

**Table 1 Facilities**

Facility	Count
Electricity	164
Overhead projectors	020
Cassette players	022
Computers	034
TV and video players	003

idealistic. The researcher agrees with Le Roux (1992:46) that, in view of the present circumstances, alternative models for school media centres have to be considered.

Public libraries have always catered for staff and pupils after school hours. There is also a shift in many public libraries towards a stronger focus on the educational function (Harris 1992:10–13). They have the infrastructure as well as the sources. The respondents in this study also indicated that they mostly use the public library. The rigid lines drawn between the functions of different kinds of libraries should be reconsidered. Scarce resources should be used to the ultimate if the information profession takes up the challenge of remaining relevant in a fast changing South Africa.

Therefore, in the case of Orange Farm, it is suggested that the Provincial Library Service together with the local government and the educational authorities get involved in rendering a service.

There are a number of reasons for an alternative to the idea of a permanent collection at every school. The most important reasons are the following:

- the cost involved in supplying each school with its own collection
- the lack of suitable permanent structures in the area
- the security situation
- the very real danger of stormy weather and fire hazards
- the lack of professional knowledge in schools to manage the service.

On account of the above it is suggested that mobile libraries should be used.

The following advantages come to mind:

- Can serve a number of schools with the same collection
- Professional librarians can be appointed to manage the library
- An initial reference collection for the teachers can be extended to fulfill in the pupils needs.
- Can be used as a model library service with the newest technology and user-oriented service. In this way a positive image of a library service can be established in the new market.
- Information user education can be given the high priority profile that it should have.

### Why start with the teachers?

One of the most likely reasons for the under-utilization of school libraries is the lack of information literacy on the part of the teachers. Kistan's (1992:205) study on the use of media centres in South Africa shows that the use of the library by staff members was rated by respondents between 0–4 on a ten-point scale. According to Zinn (1997:46) the reason for the negative attitude of teachers to libraries is because they themselves had a lack of access to libraries. If the teachers know how, why, where and when to find information and use it, these skills will not only enhance their teaching and prepare them for the new curriculum, but will filter through to the pupils and the community. By the time services can be extended to the pupils themselves, the teachers will be able to guide them.

The availability of relevant information on the teacher's level, the implementation of a continuous users training program, and the services of dedicated professional personnel as facilitators can be the driving force towards learner-centered, quality education.

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