DOCUMENT RESUME

ED 318 477 IR 053 036

AUTHOR Van Zijl, Philip
TITLE The Integrated Resource Centre as a Developmental Agent.
PUB DATE 86
NOTE 12p.
PUB TYPE Viewpoints (120) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Libraries; Audiovisual Centers; *Cost Effectiveness; *Developing Nations; *Educational Technology; Foreign Countries; Higher Education; Learning Resources Centers; Library Materials; *Library Role; *Resource Centers; Shared Library Resources
IDENTIFIERS *South Africa

ABSTRACT

This paper advocates the introduction of integrated resource centers in the developing sectors of South Africa as a means for creating technologically and media-literate generations in the Post-Apartheid Era. These centers would offer opportunities for students to utilize educational media in all formats, thereby reducing the resistance to technology that arises from a lack of acquaintance with and confidence in modern technologies. It is suggested that academic support units in schools coordinate and cooperate with each other and share their resources and the resultant costs. The resource center is presented as having two components: (1) the library component, which is responsible for the acquisition of materials, the provision of technical services, media utilization, and information services; and (2) the educational technology component, which is responsible for educational staff and student development, media production, purchasing of hardware, maintenance and repairs, booking, circulation, and rental. The unique needs of South African students are discussed, and the benefits offered by resource centers to these students are assessed. The economic viability of implementing integrated resource centers that provide access to all media is examined, and the principles of resource center staffing and administration are noted. (11 references) (SD)

THE INTEGRATED RESOURCE CENTRE AS A DEVELOPMENTAL AGENT

PHILIP VAN ZIJL
TECHNIKON MANGOSUTHU

1. INTRODUCTION

The concept of utilising information services in a developmental context in support of the educational, economic, industrial and social programmes has become widely accepted.

Because Africa consists of largely tradionally non-literate and non-print oriented societies and cultures (Ogunsheye, 1976:99), the problem in most African countries at present is not only finance, but also relevance with regard to the content of libraries and educational programmes, as well as to the types of information and educational support services that should be developed for Africa. We in Southern Africa should take cognisance of developments in the rest of Africa.

Some Southern African Third World tertiary institutions are adapting to the challenge of the newer educational media in an attempt to accelerate development (Van Zijl, 1986:139).

Because of the immense technological backlog the sub- continent is facing, all possible alternatives to traditional First World approaches that are often directed to a different set of objectives in the utilisation of educational technology should be investigated. The integrated Resource Centre model, by providing access to the latest educational media and technological developments, could make a useful contribution to the creation of a media and technologically literate generation.

The Resource Centre offers an opportunity for the utilisation of educational media in all formats by offering the necessary supportive infrastructure, whilst at the same time diminishing resistance to all forms of technology which arise from a lack of acquaintance with and confidence in modern technological developments.

All academic support units operate in close proximity to each other. Because of functions that are often interrelated,this arrangement leads to greater convenience, and distances which might form barriers to utilisation are eliminated.

Materials are made available on a co-ordinated basis and this prevents expensive unnecessary duplication.

The application of the integrated Resource Centre gains a new perspective when one takes into consideration the manpower requirements of the developing world, which requires not only trained manpower, but people with creative problem-solving talents to cope with the technological challenges of the 21st century.

2. DEFINITION OF TERMS

2.1 EDUCATIONAL TECHNOLOGY

The educational spin-off of the technological process has been the development of various multi-media formats and equipment. The educational application of multi-media is part of educational technology.

The concept of educational technology involves " ... the development, application and evaluation of systems, techniques and aids to improve the process of human learning" (Beswick, 1977:39).

Educational technology can therefore be defined as the eductional application of scientific developments in the technological field. This concept also includes the agent through which education must take place, the methods used to facilitate education and the management of the practice of educational technology.

2.2 THE RESOURCE CENTRE APPROACH

In essence the Resource Centre consists of two components:

* the library component responsible for the acquisition of all materials (including books and audio-visual material), the provision of technical services (such as ordering, cataloging and physical preparation of material), utilisation (such as media utilisation and study areas) as well as an information service;

* the educational technology component responsible for educational / academic staff and student development, media production, central purchasing of hardware, hardware repairs and maintenance, hardware inventory, hardware booking and circulation, film and video rental and master copy collection (Lor and Welch, 1983:87).

Some overlapping may occur in the technical services, such as ordering and administration, as well as in the duties of lower grade workers and in the responsibilities of the media co-ordinator if such a person were to be appointed.

Four models exist for the utilisation of educational technology. They are based on the following principles:

Segregation: Here no formal co-operation exists between the library and the unit/department responsible for educational technology. Each has its own field of specialisation.

Peaceful co-existence: There is no, or very little, formal co-operation, and the units respect each other's independence.

Partnership: Although the units are independent, there is a well developed relationship and formal co-operation. Usually there is a formal division of responsibility between the two units.

Integration: Here we find a library and media unit integrated into a single structure and led by a single director (Lor and Welch, 1983:87-88).

The heads of the two units in the integrated model have parallel positions in the organisational scheme and should both report directly to the director. The hierarchial and organisational structure of individual institutions will depend largely on the size of the Resource Centre and the extent of the services offered.

2.3 SOUTHERN AFRICAN THIRD WORLD

Because of Apartheid policies, South Africa has been divided into geographic regions based roughly on ethnicity. Some of these homelands have opted for so-called "independence", namely Transkei, Bophuthatswana, Ciskei and Venda. The rest of the homelands, although part of the Republic of South Africa, have limited "self-governing" status, each duplicating educational structures, local government etc.

Consequently, the Republic of South Africa is divided into First World or developed, a predominantly White component, and a Third World / Black sector.

When the term Southern African Third World is used, it applies at present (mid - 1989) to the underveloped or Black sector of the RSA, and would therefore include the proliferation of ethnically based states.

3. THE APPLICATION OF THE INTEGRATED RESOURCE CENTRE IN THE SOUTHERN AFRICAN THIRD WORLD CONTEXT

The predominant emphasis of this paper is the application of the Resource Centre on the tertiary educational level.

The possible applications of the Resource Centre as offering solutions to educational problems will be discussed in more detail than the other relevant aspects.

3.1 EDUCATION

The implementation of the Resource Centre, in the role of keeper of educational material and active participant in the educational act has numerous implications for Third World education.

The student as well as the lecturer in the Third World context have distinct problems and needs. The graduate of the Third World tertiary institution has a far greater educational role to play than his First World counterpart. In the Third World it is not only the graduates of the Faculties of Education that serve their communities as teachers. In the Third World professionally qualified persons are often forced to assume the roles of trainers and leaders over and above their professional duties, due to such limitations as inadequately qualified and trained staff and the demands made by the extended family.

The training methods to which graduates have been exposed will ultimately influence the manner in which these graduates will later conduct their own in-service training programmes. If teachers have not been exposed to educational technology, and more importantly, have not become literate in the application of the technology of education during their training, it is unlikely that they will demand such literacy from their students. The potential of the application of educational technology in the developing world has been widely recognised. The application of non-book materials in education extends the teacher's capabilities. These multi- media can provide additional learning experiences which would have been out of reach with traditional teaching methods and they can therefore supplement good teaching (Schramm, 1977:17-18).

The Human Sciences Research Council (HSRC) investigation into the provision of education for the Republic of South Africa specifically mentions the implementation of educational technology to improve the quality of Black education in the Republic (HSRC, 1981:49). Conditions prevailing in Black education in the RSA such as, large classes, insufficient qualified teachers and limited physical facilities can be alleviated by the application of educational technology.

The students who live in the Third World environment have specific needs and the educational system of which they are part should satisfy these needs. The service that the Resource Centre delivers should be directed to the effacement of the academic backlog many students experience - it is therefore the students who should be the main beneficiaries of the integrated Resource Centre philosophy.

Once a common educational problem has been diagnosed, the educational expertise and facilities are available to address the problem. The remedial educational strategy may

be reinforced by the acquisition or production of relevant audio-visual programmes. Although many first-year students have problems in common, each student is also unique. He may possess unique talents and may differ from his fellows regarding his educational background, level of expertise in various subjects and language proficiency. Each student can follow such programmes at a pace commensurate with his individual talents and needs.

Audio-visual programmes may be produced to introduce new students to the different components of the Resource Centre and to acquaint them with the skills required to operate and benefit educationally from the hardware and services. The students would be able to utilise programmes on an on-going basis to reinforce their knowledge when required.

The Resource Centre can also make provision for students who wish to produce their own programmes and materials. If this practice is encouraged a high level of utilisation of non- book materials and media-literacy in its widest form would be attained. These educational skills are particularly important with the training of teachers.

The importance of expanding the cognitive world of many of the Third World students becomes apparent in the context of the technological seclusion of the Third World itself. If lectures are supplemented with and illustrated by audio- visual programmes, educational deprivation can be considerable remedied, since many previously vague, foreign or abstract concepts can be exemplified and be incorporated into the students's world of experience.

The Resource Centre offers students access to computer applications. Computer terminals, micro-computers, a computer laboratory or even personal computers can be utilised under supervision and in a controlled environment. This application of the Resource Centre can make a considerable contribution to the technological literacy of the students. As an additional service to users, the computers may be utilised as word processors.

Often students are self-conscious about their own lack of knowledge or progress and are reluctant to ask their lecturers for help. Potential learning experiences will not be lost if students are trained in self-study methods and are subsequently given the opportunity to learn in privacy and at their own pace.

The informational needs of Third World students can be anticipated. These needs are often related to the fact that students are assuming new social roles and are attempting to bridge the gap between the First and Third World. They are often uncertain as to the

rules that apply in their new social role and may feel a need for guidance regarding etiquette and career selection.

The social needs of the inhabitants of the Third World have changed as a result of urbanisation which has brought far-reaching changes in the social order. The entrants to the new social order, the students, require guidance regarding their roles and responsibities in such an order. First-year students, especially, feel a particular need in this respect.

The Resource Centre can play a role in this regard. Often information about a social role is of a personal nature and fears of being ostracised by peers exist.

The Resource Centre can provide programmes which can informally or incidentally educate students regarding their new social roles.

The second category of users that would benefit directly from the application of the Resource Centre at tertiary level would be the academic staff by means of staff development programmes incorporated in the philosophy of the Resource Centre.

The Resource Centre should act as a catalyst between the teacher and the learner. The Resource Centre should therefore provide the facilities for both teacher and learner to utilise educational technology as comprehensively as possible.

In a South African context most lecturers do not have experience or training in addressing the academic problems experienced by Black students which are the result of the inferior education they have received at the Primary and Secondary level.

Lecturers may require assistance with designing curricula that are relevant to Third World needs, or may need help in discovering, applying and implementing teaching methods that are applicable to the needs of Third World students.

The Third World community as a whole would also benefit. The educational component of the Resource Centre has a wider function than the purely academic. It can also be applied in alleviating other needs of the users and can even fulfil needs which are expressed on a community level.

The involvement with the community may be in the form of exhibitions or shows and may include participation in rural development, literacy programmes and agricultural extension services, such as the provision of a venue and the supplying of equipment for meetings. An essential community service could be provided by offering a 24-hour study facility to students and a media production service to teachers.

The potential of the application of audio-visual programmes and materials in the education and training of illiterates or semi-literates has been widely accepted (Baker, 1981:70, 222), (Frylinck, 1983:89), Kotze, 1980:24-25).

The Black in Africa has an oral tradition, and therefore he is more susceptible to audio-visual material than is generally believed. New concepts and experiences have to be learned by him, and through the technology of education, information can be packaged and disseminated in accordance with the individual's personal aesthetic and expressive symbolism. In other words, the information can be tailored to the specific needs of the individual (Amadi, 1981:53).

The Resource Centre can provide its own material and is therefore not dependent on material which originates from a foreign country or which has a foreign content, propounds a foreign ideology or is produced in a foreign tongue.

Although a few cultural programmes may have recreational value, the majority of programmes managed by the Resource Centre at a tertiary level are academically oriented. However, in a rural setting the Resource Centre can, in a limited way, provide recreational programmes, as the facilities for showing such programmes exist.

In the Third World context the Resource Centre can serve the community by gathering oral accounts and by placing them on magnetic tapes. Cultural practices, traditional music and costumes may also be recorded in various formats and may be preserved. The Resource Centre provides the facilities thus to preserve and to extend the indigenous cultural heritage.

3.2 ECONOMIC FACTORS

The reality that education is a prerequisite for economic and technological development has been realised by both First and Third World countries. In the Third World especially this fact is proved by the high percentage of the average national income that is spent on education. In the United States of America, the technological advancement of the 1960's and the utilisation of educational technology went hand in hand. Schramm (1977:18) quotes examples of a number of Third World states that have applied educational technology in an attempt to accelerate education.

The economic viability of the utilisation of all media in teaching has become increasingly acceptable, since the effectiveness of the teaching staff can be optimised (Lor, 1978:196-197). The resultant increased productivity on the part of both teacher and learner is also economically salubrious.

3.3 STAFF UTILISATION

The staffing structure of the Resource Centre is very flexible. The various components of the Resource Centre, namely the educational, library, administrative and production components are accommodated in the staffing structure and depending upon the needs of the institution the emphasis of the relative components may be arranged internally. Many posts, in the ranks of the support as well as the professional staff, can be shared by the components of the Resource Centre. In-service training can prove invaluable to ensure effective utilisation of staff in their various roles. The fact that the components of the Resource Centre are usually accommodated in the same building facilitates the convenient sharing of posts and expertise.

The hierarchial structure of the top and middle management level should represent all the components of the Resource Centre, since a system of management by objectives can be implemented more effectively if all components have an input into the management policy.

Resource Centre staff should always be sensitive to the needs of users and channels for communicating potential Resource Centre deficiencies should be created. Junior staff members who are in daily contact with the users and even students should therefore have an input in the management by objectives system.

4. CONCLUSION

Educationalists have to become aware of the potential of educational technology in the developmental process as we are entering the Post-Apartheid Era.

The Post-Apartheid Era should be seen as a process of transition.Tertiary institutions have been the first to enter a form of Post-Apartheid. Many tertiary institutions, mostly the English or Black Universities and Technikons, and even Stellenbosch University, are being faced at present with a unique set of educational problems, with the arrival of Black or so-called Coloured students on their campuses.

These students are products of an inferior education system - 80% of all teachers in Black education are under-qualified (Bot and Schlemmer, 1986:8), but Black students are expected to compete on an equal footing with their more privileged peers.

At Technikon Mangosuthu we are facing many of the problems and challenges that are waiting for most other tertiary institutions in the future.

Our students arrive at the Technikon with a considerable academic backlog. Most have never been in laboratories, draughting studios, or even libraries and their communicative skills are ususally underdeveloped.

We have responded to the challenge by adopting a holistic approach to Educational Technology. All the academic support components have been integrated into one unit: the Resource Centre. It offers the traditional book and periodical collections, as well as an audio-visual media collection, media utilisation areas, i.e. individual study carrels and larger audio-visual rooms, graphics, photographic and television studios, darkrooms, language and reading laboratories, model lecture room, printing facilities and a study room that can be used by students and the community 24 hours a day.

This philosophy has been implemented for over a year. The utilisation and demands for services by students, staff and the community has proved that we are achieving our primary goals.

In a truly Post-Apartheid society, with no educational apartheid in primary and secondary education, the potential educational problems may be compounded. When considering the educational demands of the future, it becomes obvious that the application of Educational Technology will be essential. The integrated Resource Centre could provide the management structures, physical facilities, dissemination and utilisation areas to cope with the new informational demands, which would include also life-long education and re-education as well as community responsibilities.

BIBLIOGRAPHY

AMADI, A.O. 1981. *African libraries: Western tradition and colonial brainwashing.* New York : Metuchen. 265p.

BAKER, L.R.1981. *Development of university libraries in Papua New Guinea.* New York and London : Metuchen. 399p.

BESWICK, N.W.1977. *Resource based learning.* London : Heinemann. 264p.

BOT, M. and SCHLEMMER, L. 1986. *The classroom crisis : Black demands andWhite responses. Durban :* Universityof Natal. 58p.

FRYLINCK,J.H.1983. *The establishment of national library services in developing areas with particular reference to the South African homelands.* Pretoria : State Library. 172p.

HUMAN SCIENCES RESEARCH COUNCIL. 1981. *Provision of education in the RSA. Report of the main committee of the HSRC investigation into education.* Pretoria. 221p.

KOTZE, D.A. 1980. *Library services for developing communities.* Pretoria. : University of South Africa. 34p.

LOR, P.J. 1978. *Die universitieits- en kollegebiblioteek in Suid-Afrika : 'n toekomsverkenning met besondere verwysing na die ontwikkelende struktuur van die tersiere onderwys.* (*In* Suid-Afrikaanse Biblioteekvereniging / South African Library Association: Referate gelewer tydens die konferensie van die SABV gehou te Johannesburg in 1978. Potchefstroom.p.185- 242. / Papers presented at the conference of the SALA held in Johannesburg in 1978. Potchefstroom. p. 185-242.)

LOR, P.J. and WELCH, R.N. 1983. Living Happily Ever After? *Integrated Resource Centres in higher education institutions. Media Management Journal,* 2(4) : 86-88;101-103, Summer.

SCHRAMM, W. 1977. *Big media little media. Tools and technologies for instruction.* Beverley Hills : Sage. 315p.

VAN ZIJL, P.L.v.S. 1986. *The application of the Multi-media library in Southern African Third World Higher Education,* unpublished M. Bibl. dissertation, Potchefstroom University for CHE, January 1986. p.170.