

# MASS LITERACY, GENERAL EDUCATION, DISTANCE LEARNING AND INDEPENDENT LEARNERS: A ROLE FOR PUBLIC LIBRARIES

S. NII BEKOE TACKIE  
*DLAS, University of Ghana, Legon*

## INTRODUCTION

Adult Education and distance education are contemporary issues in the world today. They are both types of strategy for educating the citizenry of a country. As strategies for education they have implications for libraries. Libraries are considered to have "a major educational responsibility as well as unique services and resources to contribute to the development and maintenance of life-long literacy skills and knowledge."<sup>1</sup>

Education and development are directly linked. Socio-economic development embodies such factors as economic growth, urbanisation, nation-building and an increase in popular political participation. A major obstacle to faster socio - economic development is the rate of human resource development. Modernisation in any country requires trained personnel; it also requires the welding together of ethnic or regional groupings into national entities. Such integration requires a nation-wide system of socialisation.

All societies have methods of socialising their young and inculcating in them moral, social and political values. In modern societies socialising the young is done through formal education (the

school system) while in traditional societies it is usually done through the family.

Schools tend to be modernising influences on the young. They encourage functionally necessary attitudes of achievement orientation, problem-solving and reliance upon scientific experiment rather than authority.

UNESCO has identified, and emphasised the promotion of education as a basic human right and as a key component in any developmental programme... Thus, in 1990 the United Nations proclaimed an International Literacy Year, to focus public attention upon the extent and danger of illiteracy and to mobilise action to combat it. Combating illiteracy requires the existence of a massive infrastructure of formal and informal education facilities, an efficient system of production and distribution of printed matter and a cultural climate favourable to reading. It also requires the marshalling of all the nation's resources - legal, economic, social and technological.

## ADULT EDUCATION

Formal educational institutions are not the only agencies capable of providing the required socialisation. The learn-

ing experience of children in school can be duplicated for unschooled adults by other organisations in the community. Adult education is the process by which individuals who are no longer of school age can develop their attitudes and expand their knowledge and their awareness of the world, and acquire needed skills.

'Mass literacy', 'functional literacy', and 'non-formal education' are terms that are used interchangeably with the term 'adult education'. They invariably refer to the same concept of providing a means of education other than formal to people who for one reason or the other could not take advantage of the existing school system. Adult education, however, embraces other terms as well. These are 'continuing education' and 'individualised or independent learning'. These last two terms are often used to refer to those who have gone through formal education or part of it and are pursuing continuing education or independent learning to improve on their educational status. For the purpose of this paper "adult education" is used as an all-embracing term for the various terminologies.

Statistics show that a high percentage of adult illiteracy exists in Africa as a whole. For example estimated illiterate populations aged 15 years and over in sub-saharan Africa from 1970 to the year 2000 indicate that the rate of illiteracy is increasing rather than decreasing as is happening in the developed countries.<sup>2</sup> In Ghana, it was estimated that there were 5.6 million illiterate adults as at 1987. This figure is now put at 6 million.<sup>3</sup> It has also been noted

that though impressive progress has been made in formal education, two-thirds (2/3) of the population of Ghana still remain illiterate and that 40% of those who have been to school have lapsed into illiteracy.<sup>4</sup> Adult education has been of concern to all countries. In the industrialised countries no effort is spared in providing adult and continuing education for the citizens.

## ADULT EDUCATION IN GHANA

Adult education in Ghana dates back to the missionaries who used reading primers and the Bible to teach local adults. Jacobus Capitein (1717-1747) a Ghanaian Chaplain schoolmaster of the Dutch Reformed Church first translated the Lord's Prayer, the Ten Commandments and portions of the catechism. These formed the basis of literacy teaching of adult Fante converts in the 18th century. In South-Eastern Ghana the Basel missionaries conducted weekly evening literacy classes for their adult converts. Other missionaries who promoted literacy through the church were the Scottish missionaries from 1918; the Breman missionaries between 1847-1918 and the Wesleyan Methodists.

Colonial government participation in adult education as Antwi<sup>5</sup> notes, was seriously given attention with the publication of the Phelps-Stokes Reports of 1922 and 1924. There was, however, little government activity in adult education until the 1940s, when the government launched a mass literacy campaign in 1948 acting on two reports: "Mass Education in an African Society"<sup>6</sup> and "Education for Citizenship in Africa."<sup>7</sup> The campaign was thought of

as a movement in community development with emphasis on mass literacy, first aid and hygiene, group discussion, village theatre and community organisation.

Apart from mass education, the colonial government took cognisance of the need to train a section of the citizenry "with a real power of independent judgement and the capacity to play an effective part in public life."<sup>8</sup> Thus, in 1945, the Colonial Office appointed the Elliot Commission to examine the need for advanced education in West Africa. This eventually led to the establishment of the Department of Extra-Mural Studies of the University College of the Gold Coast in October, 1948 which subsequently became known as the Institute of Adult Education of the University of Ghana in 1966 after undergoing a number of changes in nomenclature. To complement the efforts of the Colonial Government, a voluntary organisation, the People's Educational Association (PEA) was formed in 1949 to harness the growing enthusiasm for education by the citizens.

In the period leading to independence the Convention Peoples Party (CPP) in its general election manifesto in 1951 said, as part of its social development policy that "... the Party lays special importance on Adult Education and will see to it that a planned campaign to liquidate illiteracy from this country in the shortest possible time is vigorously undertaken..."<sup>9</sup> In pursuit of that the National Assembly approved the 'Plan for mass literacy and mass education' in August, 1951. The following year,

the campaign was launched in six language areas - Asante-Twi, Ewe, Fante, Dagbani, Ga-Adangme and Nzema. After the overthrow of the CPP government in 1966, very little attention was paid to adult education in the country until the PNDC era.

Adult education in Ghana currently enjoys a lot of support from both governmental and non-governmental agencies. Lots of activities are taking place both at the university-based adult education level and at the mass literacy level. University-based adult education has been the most consistent way of providing adult education in Ghana. Throughout the lean years when adult education enjoyed little or no support from governmental agencies, the Institute of Adult Education kept faith with its commitment to the provision of education for those who for one reason or the other could not take advantage of formal education.

The Provisional National Defence Council (PNDC) government realising that the development of the full manpower resources of the country is a key element in ensuring the fullest and most productive development of the country, created a Non-Formal Education Division (NFED) within the Ministry of Education in 1986 during the launching of the Education Reform Programme. With an estimated 6 million illiterate adults in Ghana, the NFED launched a Mass Literacy and Social Change Programme (MASSLIP) for Ghana in 1990. The broad objectives of the programme were derived from the United Nations General Assembly's

1962 definition of a literate person, notably that:

“A person is literate, when he has acquired knowledge and skills, which enable him to engage in all those activities in which literacy is required for effective functioning in his group and community and whose attainments in reading, writing and arithmetic make it possible for him to continue to use these skills towards his active participation in the life of the community.”<sup>10</sup>

One of the specific objectives of the programme is to “broaden the reading interests of learners and establish an attitude of reading for pleasure through the provision of follow-up literacy material.”<sup>11</sup> The NFED has since the launching of the programme established literacy centres with facilitators and supervisors to teach the illiterate population throughout the country. It has also set up two post-literacy centres (libraries) on pilot basis at Apam and Tono/Vea areas to cater for the newly literate to prevent them from relapsing into illiteracy.

Another agency which has been providing literacy to the illiterate rural communities is the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT) which is a non-governmental organization committed to analysing Ghana’s unwritten languages, developing literacy programmes and translating the Bible.

## DISTANCE EDUCATION

Apart from adult education one other strategy that governments all over the

world are adopting to ensure a highly literate and well educated citizenry is Distance Education. Formal education has made a lot of strides, yet all over the world it has been discovered that more and more people are becoming increasingly illiterate in an ever increasingly complex society; that population growth, economic conditions and other social factors have made it increasingly impossible for governments to keep up with the provision of formal educational facilities for all the citizens who desire to educate themselves. This is particularly more so in the developing countries including Ghana. In Ghana every year the universities are only able to admit a fraction of qualified applicants who are desirous of pursuing higher education.

As has been pointed out already formal education is not the only method capable of ensuring a well educated citizenry. Indeed the learning experience of the formal school system can be duplicated for people outside the formal school system. Thus in the United Kingdom, there is the open university system to cater for those who cannot take advantage of the formal education system, while in developing countries like India, Malawi, Tunisia, Zambia, Nigeria, Tanzania and Zimbabwe, Distance Education method has been adopted to circumvent the vacuum created by the inadequate formal education system.

Ghana now has adopted the Distance Education method to alleviate the problems of inadequate access to formal education that beset the country today. The three older universities namely the

University of Ghana, the Kwame Nkrumah University of Science and Technology and the University of Cape Coast, as well as the University College of Education of Winneba have embraced the Distance Education method to solve the problem of rejecting large numbers of qualified applicants as a result of inadequate facilities in the universities. However, it is only at the University College of Education at Winneba that the programme has actually taken off with 300 students who are all teachers.

Distance Education has been defined as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and time from the learner. The distance student is thus placed in a situation where he has much greater chances than a conventional student in selecting what to learn, when and how he or she wants to learn. Indeed Titmus<sup>12</sup> notes that the main intention of distance learning from its primitive form which was termed correspondence education, was to offer educational opportunities to people who for any reason could not attend conventional classes. Distance learning, he continues, has also been attractive because it provides economies of scale and has proved popular with learners because it offers freedom to choose when and where to study. For Rowntree<sup>13</sup> distance learning is learning while at a distance from one's teacher - usually with the help of pre-recorded, packaged learning materials. The learners are separated from their teachers in time and space but are still

being guided by them.

As has been noted earlier, mass literacy and distance education are strategies for educating the citizenry and thereby ensuring a predominantly literate society. As strategies for educating the citizens of a nation, they have implications for libraries.

## **PUBLIC LIBRARIES AND ADULT EDUCATION**

Much has been written on the role of libraries in education generally. When one begins to look at the role of libraries in adult education and now distance education, however, then it is the public library whose role comes into sharper focus. This is because the public library which serves all community needs is best placed to cater for those who find themselves learning outside the formal system of education in which libraries are an integral part.

Indeed, Monroe<sup>14</sup> examining library involvement in adult literacy programmes in the United States, argues that public libraries had their roots in widespread concern for literacy in the 17th century, while Coleman<sup>15</sup> notes, in her discussion on the role of the American Library Association in adults and literacy education, that the growth of literacy education programmes in libraries in the 1970s and 1980s is not an isolated phenomenon in the field of librarianship; that the role of public libraries in the continuing education and lifelong learning of the out-of-school adult was discussed in America as early as the 1930s. She points out that current literacy education programmes take the library's role in the community

beyond being a centre for book collections to serve the independent learner, towards being an alternative education centre actively involved in building the learner's reading skills.

In Ghana the role of the public library in adult education has been recognised. Haizel<sup>16</sup> speaking on the role of libraries in adult education as far back as 1970 indicated that in a developing country like Ghana, where average incomes are low, it is very essential that an effective public library service is provided. He suggested that libraries and reading rooms in the rural areas will represent a significant source of supply for many literates who are cut off from the possibility of obtaining books. Without this help, the primary school and adult education and the literacy campaigns cannot produce the results expected of them. Neither can schools inculcate the habits of reading nor can individuals embark upon that self-education which will enable them to play an effective part in modern society. A person tends to read the books that are within reach and we have to reckon with the danger of people retrogressing into illiteracy because of lack of a readily available source of books. This applies to new literates of the mass literacy campaign and the follow-up material they require, as those who have gone through stages of the formal education system.

We may add that the distance education effort may well fail without the active assistance of the public library system. It is a well known fact that most homes in Ghana do not have the atmosphere conducive to studies. Noise,

poor lighting, poor ventilation, poor furniture or lack of it and lack of privacy are some of the numerous problems that the independent learner faces. Invariably all learners from both non-formal and formal sectors of education find their way into the public library for a quiet place to seat and study.

The public library system in Ghana from its inception has been involved in adult education in the sense that it provides materials on various subjects for those pursuing continuing education or independent learning. The public library system, it is known, supported the People's Educational Association (PEA) by conveying literacy materials of the Association to its members in the rural communities in the 1960s.

The Ghana Library Board, which has the mandate to set up public libraries in Ghana is currently involved in the functional literacy programme of the Non-Formal Education Division. The Board which is a member of the National Implementation Committee offers professional guidance and assistance in the provision of suitable materials for the learners and the post-literate. Carson<sup>17</sup> notes that the "inclusion of the Ghana Library Board was to help promote the reading culture in the post literature (sic) era." The Board played the useful role of mounting displays and exhibitions of materials at the post-literacy pilot projects at Apam in the Central region and Tono/Vea in the Upper-East region.

In spite of the Ghana Library Board's involvement in adult education over the

years, it must be stressed that the Board's participation in adult education in Ghana does not go far enough. Presently, the service to its literate clientele is confined to only the regional libraries and branch libraries in some major towns in the country. This arises out of the total breakdown of its Mobile Library Service and Book Box Service which were used to reach the remotest parts of the country with reading materials for the pockets of rural literates. It is worth noting that in the static libraries, adult readers have virtually been driven away by the large student clientele that patronise the library to read their own materials, and by the lack of suitable reading materials to meet their needs. Again the Board is no longer actively involved in the programmes of the Non-Formal Education Division.

With regards to Distance Education, no effort was made by the planners to find out whatever role the public library system can play in its implementation. On the other hand the Ghana Library Board is also not known to have made any case for the good role it can play in the Distance Education programme. Against this background what role should one expect the public library of tomorrow to play in mass literacy, general education and distance learning?

### EXPECTATIONS IN THE 21ST CENTURY

As we approach the 21st century, the public library should be expected to revive its moribund service to its traditional literate adult clientele. It should be expected to lend more support to

adult education providing agencies and be actively involved in the provision of adult literacy to the mass of illiterate adults that form the greater percentage of Ghanaians. Again the public library system should be expected to look out for new community interests and to anticipate their needs; thus distance learning students should be part of the public library's focus in the 21st century.

For the public library to fulfil these expectations certain pertinent issues would need to be addressed. Issues like that of finance; poor perceptions about the library on the part of successive governments and development planners, and the Ghanaian society in general; failure of the public library itself to recognise opportunities and seize them, all inhibit the public library in its role as "an essential part of the life of an educated community..."<sup>18</sup>

Finance has been identified as the most debilitating problem facing the public library system in Ghana. Finance affects every aspect of the running of the public library service. It is suggested that as part of its focus towards the next millennium, the Ghana Library Board should make a positive statement to government by way of a memorandum on its role in the eradication of illiteracy in Ghana and how it can affect the development of human resources of the country and therefore the overall economic development of the country. This statement which is long overdue will fall in line with the Government's Vision 2020 aspirations towards the development of the country's human re-

source as a vital cog in the economic development of the country.

Linked to the positive statement being advocated, should be the formation of a political lobby which will ensure that the legislators and the executive realise the importance of libraries and increase the library budget rather than cut it. Faced with economic difficulties, legal obligations alone are not enough to compel governments in African countries to give adequate funds to services that do not bring in immediate and tangible rewards like money. Lobbying for an increase in the public library budget should not be limited to the national level only. It should be from district level through the regional level to the national level. There is no doubt that there are individuals both within and outside government who may have benefited immensely from the services of the public library and who may be very sympathetic to the cause and plight of the public library service in Ghana. The Ghana Library Board should identify such personalities and approach them. The Ghana Library Association should also play a major role in such a venture.

The stock of the public library has traditionally been geared towards the needs of literate adults to the detriment of the semi-literate and illiterate adults. The stock of the public library should begin to reflect a trend towards satisfying the needs of the newly literate adults from the non-formal education sector. It should again take cognisance of the needs of the illiterate members of the society. For this group of poten-

tial users books are not relevant. Audio and visual media would be better suited for their needs.

In the coming years, there should be more efficient and effective collaboration between the public library system and adult education providing agencies such as the Non-Formal Education Division and the Institute of Adult Education. There should also be an active involvement in adult education.

For a more direct involvement in adult literacy, the public library system should encourage literacy education agencies to hold classes on the premises of public libraries. This should not pose any problems of accommodation since at least at the regional level all the libraries have either an auditorium (as in Bolgatanga and Tamale); an exhibition hall (as in Accra) or a summer hut (as in Cape Coast, Koforidua, Kumasi, Sekondi, Ho and Wa), for extension activities. This will enable the learners to become acquainted with the library and its services. Thomas<sup>19</sup> has noted that low literacy tends to be passed from generation to generation. A supportive family gives a child the opportunity to develop skills. It also gives reading a practical value in a social context. Thus, getting acquainted with the library may enable the adult learners to become members of the library while they, as parents, will encourage their children to use the library.

The public library system should provide a wide range of print and non-print material for both illiterates and literacy students. The materials should include

reading materials, workbooks and word-games. Reading materials should be simply written to meet the level of newly literate adults. There should also be wall charts and posters in English and the local languages on fishing, farming, health needs of the people and the environment. The public library system should stock Primers that are used by facilitators to teach learners. Additionally, other relevant materials that facilitators can use to supplement and diversify what they teach the learners, should be stocked by the public library.

The public library should arrange lectures, talks, and debates; film shows; plays and concerts for the benefit of not only adult learners but illiterate adults as well. Lectures, talks and debates should be by opinion leaders and people knowledgeable in their respective fields. These should centre around topical and contemporary issues, and they should be conducted in the local languages.

Film shows should be of a more cultural nature than those shown in commercial cinema theatres. Films on literacy efforts from different parts of the world should be shown. There should be films that will reflect vocations and occupations that may be of interest to the community concerned. Films on contemporary issues like family planning, environmental degradation, health issues and debilitating customary practices like female circumcision could be shown as part of adult education.

The GLB has provided all the regional libraries with video decks and TV sets

for extension services to children. This is a good beginning. Perhaps in due course, district libraries run by the GLB will also have video decks and TV sets for extension activities. The use of the Video decks and TV sets should be extended to cover programmes for adult literate learners as well.

With regards to distance education it should be noted that it involves education through correspondence. This means that distance learners would need supplementary materials just as their colleagues in the formal education system rely on the university libraries for extra material to upgrade their lecture notes. The public library can provide the supplementary materials that the students will need. Through cooperation with distance education agencies the public library can gear its book selection and acquisition towards the course requirements of the distance learners.

A new concept that has been doing the rounds in the provision of information over distances, is the term "virtual." The concept is now widely applicable in almost all spheres of human life. Thus we have terminologies like 'virtual banking,' 'virtual university' and 'virtual library' among others. Cloyes<sup>20</sup> describes a virtual library as universally implying electronic integration of new services with traditional library services... The virtual library provides the resources of other libraries by way of networking, for use by clientele at virtually any location in the world.

The benefits to be derived from access-

ing external sources to enhance a library's ability to satisfy its users is pushing libraries to automate and get online. It certainly would not be out of place to expect the public library to push for automation and go on-line in the very near future. Such a development will be of immense benefit to distance learners. Currently there are public libraries in about half of the 110 district capitals in the country. If all these libraries automate and get on-line it will enhance document delivery to the distance students who otherwise may be handicapped in terms of access to information.

Poor perceptions about the library and librarians on the part of governments, development planners and the society at large has been of concern to librarians in Ghana. Such is the concern that two congresses (1992 and 1997) of the Ghana Library Association discussed at length the image of the librarian and people's perceptions about the library. The reality of the situation is that librarians do not project the image of the library and the profession through publicity. Thus there are misconceptions about libraries generally, but particularly about the public library. Even among regular users of the public library many are unaware of the scope and extent of the services that the library provides and can provide. A lot more are also unaware of the range of facilities that can be used to help answer specialised enquiries or to obtain less obvious material.

It is expected that the public library in the next millennium would embark on

a vigorous publicity campaign to promote itself and the services it offers. Occasionally the public library appears in the press and radio but these are more incidental than planned attempts at publicity. Stoakley<sup>21</sup> has noted that just as a high standard of presentation encourages the use of goods and services and assists in their evaluation and selection, so a high standard of presentation both in libraries and through library publications encourage the use of books and reading and helps publicize the wide range of services available to the public.

The GLB should institute a library week or a library month to be observed every year. As part of the activities for this annual affair, there should be amnesty for defaulting borrowers of library materials, story telling, quiz programmes, exhibitions, film shows, seminars and talks. The activities should be given maximum media coverage. There should be regular publications in the press about the public library and its services. Printing of T-shirts, book-marks, calendars, pens and bags with GLB inscriptions as gifts and for sale to the general public will make people more aware of the services of the public library particularly and librarians and librarianship in general.

There are several writings on the need for marketing of library and information services. Obvious advantages exist for marketing library and information services. The essence of marketing is underscored by the British Library's 1987/88 annual report which noted that "a wider knowledge of the library's purpose and services enables the col-

lections to be used more effectively and be better appreciated by the general public, by users, by the library profession and by decision makers responsible for future funding."<sup>22</sup>

Finally if we really want to develop our human resources and turn our society into a literate one and thereby ensure our economic prosperity then perhaps our government and development planners should adopt the Singapore Experience of planning the library of the future. Sarabatnam<sup>23</sup> writes that Singapore's response to the emerging knowledge economy, information explosion and rapid knowledge obsolescence is to be a learning nation... Lifelong learning and re-skilling the people of Singapore are not choices. They are necessary for Singapore to remain competitive in the global economy. To achieve this the government came up with the Library 2000 Vision which is Singapore's plan to respond to changes and to provide a more relevant and effective information services.

In conclusion, if we agree that illiteracy is a significant brake on development, therefore, we need to educate our illiterate adults; and that the need for distance education has been informed by the problems of inadequate formal education facilities - financial constraints and competing priorities - then it is necessary that all agencies, both governmental and non-governmental should be harnessed to ensure complete success of mass literacy and distance learning. In that regard the public library is

uniquely placed to help in the education of the citizens of the country

#### REFERENCES

1. Helen H. Lyman, "Reading and the adult new reader." Cited from Lucille L. Thomas, "World literacy and the role of libraries." *IFLA Journal*, Vol. 19 No. 2, 1993, p 162-169.
2. *World Education Report 1991*. Paris: UNESCO, 1991, p96.
3. Ministry of Education, *Mass Literacy and Social Change Programme (MASSLIP) for Ghana*. Accra: Non-Formal Education Division, 1989, p4
4. Ministry of Education, "The Educational Reform Programme and the Akuse III Country Strategy Implementation." *Ghana Education Magazine*, Vol. 1, Nov.-Dec., 1993, p9.
5. Moses K. Antwi, *Education, Society and Development in Ghana*. Accra: Unimax Publishers Limited, 1992, p171.
6. *Mass Education in an African Society*, cited from Kwa O. Hagan, "Mass Education and Community Development in Ghana - a study in retrospect 1943-1968." I.A.E. Monographs No. 7. Legon, Accra: Institute of Adult Education, 1975, p3.
7. *Education for Citizenship in Africa*, cited from Moses K. Antwi, *Education, Development and Society in Ghana*. Accra: Unimax Publishers Limited, 1992, p171.
8. David Kimble, *Adult Education in the Gold Coast. A report for the year 1948-49 by the Resident Tutor*, p3.
9. G.G. Metcalfe, *Great Britain and Ghana. Documents of Ghana history 1807-1957*, p706.
10. Ministry of Education, *Mass Literacy and Social Change Programme (MASSLIP) for Ghana*, Accra: Non-Formal Education Division, 1989, p5.
11. Ministry of Education, *Mass Literacy and Social Change Programme (MASSLIP) for Ghana*, Accra: Non-Formal Education Division, 1989, p17.
12. C.J. Titmus, "Self-directed and distance learning: Introduction" In *Lifelong Education for Adults: An International Handbook*. Oxford: Pergamon Press, 1989, p253-254.
13. Derek Rowntree, *Exploring Open and Distance Learning*. London: Kogan Page Limited, 1992, p29.

14. Margaret E. Monroe, "The evolution of literacy programmes in the context of library adult education", *Library Trends*, Fall 1986, p197.
15. J.E. Coleman, "A.L.A.'s role in adult and literacy education", *Library Trends*, Fall 1986, p207.
16. E.A. Haizel, "Libraries and adult education" *Ghana Library Journal*, Vol. iv No. 1, 1970, p39.
17. Charlotte Carson, The state of information provision to rural communities in Ghana: An overview. An unpublished paper presented at a workshop organised by the Non-Formal Education Division, Ministry of Education, June, 1994, p3.
18. UNESCO, *Public Library Manifesto*, UNISIST, 1994.
19. Lucille C. Thomas, "World literacy and the role of libraries." *IFLA Journal*, Vol. 19 No. 2, 1993, p187.
20. Kay Cloyes, "The journey from vision to reality of a virtual library." *Special Libraries*, Fall 1994, p260-263.
21. Roger Stoakley, *Presenting the library service*. London: Clive Bingley, 1982, p83.
22. The British Library, *Fifteenth Annual Report, 1987/88*. London: The British Library Board, 1988, p36.
23. Sarabatnam, Julie S., "Planning the library of the future: The Singapore Experience". *IFLA Journal*, Vol.23, No.3, 1997, pp197-202.