## สาระสังเขป

## แนวทางสำหรับการจัดหาอุปกรณ์อำนวยความสะดวก ในการชมเทปโทรทัศน์ในห้องสมุด

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บทความนี้ได้กล่าวโดยย่อ ถึงการจัดหาอุปกรณ์ อำนวยความสะควกในการชมเทป
โทรทัศน์ตามที่ต่าง ๆ ทั่วโลก ตลอดจนแนวทางการพัฒนาการจัดหาดังกล่าวในห้องสมุดสถาบัน
อุดมศึกษา และห้องสมุดประชาชน ผู้เขียนได้ยกตัวอย่างความก้าวหน้าในการให้บริการเทป
โทรทัศน์ในห้องสมุดสถาบันอุดมศึกษาของสหราชอาณาจักร และประเทศสิงคโปร์ รวมถึงห้องสมุด
ประชาชนของประเทศสหรัฐอเมริกา แคนาดา สหราชอาณาจักร ไอร์แลนด์ ฝรั่งเศส ช่องกง
และสิงคโปร์ นอกจากนี้ยังได้เสนอแนะแนวทางที่เหมาะสมสำหรับห้องสมุดสถาบันอุดมศึกษาของ
ประเทศในเขตอบอุ่น และเขตร้อนในเรื่องของการจัดหาโสดทัศนุปกรณ์ เครื่องอำนวยความ
สะควกในการใช้อุปกรณ์ อุปกรณ์หลักนานาชนิด ความปลอดภัยและสิ่งอำนวยความสะควกต่าง ๆ
รวมทั้งแนวทางสำหรับห้องสมุดประชาชน โดยเน้นในเรื่องของอุปกรณ์และสิ่งอำนวยความสะควก
นอกจากนั้นยังวิจารณ์ถึงการใช้เครื่องเล่นโทรทัศน์ชนิดบันทึกลงแผ่น (optical disk players) ใน
ห้องสมุดสถาบันอุดมศึกษา และห้องสมุดประชาชนด้วย

# Guidelines for the provision of video viewing facilities in libraries

Anthony Hugh Thompson\*

In recent years I have been extremely fortunate to have visited a number of academic and public libraries in Europe and Asia and have seen a variety of approaches to the provision of video programmes and playback facilities. From these visits it has been possible to discern certain patterns of development emerging and based on these I would like to suggest the following Guidelines for the provision of video viewing facilities in academic and public libraries. But first a brief description of video provision in various parts of the world.

In academic libraries, the lead has been taken by polytechnic and college libraries, with university libraries generally falling behind in their recognition of this valuable educational resource (1). The most developed facilities in an academic library that I have encountered are to be found at Brighton Polytechnic (UK) which now has over 60 heavily used video playback units (for the purposes of this article a video playback unit consists of either a videocassette recorder or player or a video disc player, and a television receiver or monitor, usually colour) each serving one or two people, in its various site libraries. Over 8000 programmes are available on open access. The video cartridges (Brighton is currently using the cartridge system, but is facing the problem of change to a current videocassette system) are partially integrated, being shelved in separate subject sequences at the ends of each aisle of books, so that users have to pass the video and other audiovisual materials on their way to the books on the same subject. The video playback units situated close by are operated by the users themselves.

A similar well developed situation exists a Plymouth Polytechnic, although the videocassettes and the equipment are located in a section of the library devoted to audiovisual materials, thereby probably reducing its effectiveness slightly.

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Other major polytechnic developments include the Ngee Ann Polytechnic in Singapore which is setting up a service with 33 video viewing units in the Media Resources Section of the library. The Singapore Polytechnic currently has 30 plus units in use and this will increase to 110 when the new library extension is completed. For climatic reasons, it is not normally possible for libraries in S.E. Asia to integrate print and video materials, as audiovisuals need to be kept in continuous air conditioning. Thus the programmes tend to be stored separately under staff control, and are issued for use in the main library or that section of the library devoted to audiovisuals. The users usually operate the equipment themselves. The equipment usually consists of multi-standard videocassette recorders and players, with multi-standard colour television receivers. Video is very popular with students in S.E. Asia; the Singapore Polytechnic had a 250% increase in use in three weeks when the library expanded from 6 to 30 video units. Singapore leads the world in the number of video cassette recorders per head of population-86% of homes are reported to have VCR's (2).

User operation of equipment and handling of software is now commonplace in academic libraries, although a few still retain staff control of software and sometimes even hardware-often purely as a necessary and sensible security precaution. Some libraries place the video playback units or television sets in full view in the main library with headphones for sound distribution; some 'conceal' it in less obvious areas of the library or keep the equipment in separate or even locked rooms. It is obvious from visual comparisons of these services that 'concealing' equipment in any way leads inevitably to far less use than if it were openly displayed. Some libraries fully integrate videocassettes in the bookstock, some partially integrate (as at Brighton) while some totally separate. Partial integration wherever possible seems to be the most useful to the user as it locates the video programme near the other material on the same subject, permits browsing and advertises the presence of video in the library stock particularly when the playback units are situated close by and users see the programmes being used in the main library area. Full integration leads to the videocassette getting 'lost' in the book sequence, as they look just like books at first glance, while total segregation, although normally essential in tropical countries, means that alternative methods of making users aware of the video facilities must be found if video is to receive proper use.

Formats used, apart from the EIAJ Cartridges now sadly obsolete, are normally U-Format \(^3\) inch cassettes, particularly where in house production is carried out in this format (although an increasing number of institutions originate in this format but copy onto VHS for playback throughout the institution and the library) and VHS itself. One of the university libraries in the UK which has developed a service using 15 video playback units, Brunel, is the only library system which I

know of that has adopted the Sony Betamax system. The Phillips V2000 system is to all intents and purposes obsolete for library purposes now that Phillips has announced its intention to manufacture VHS machines. Where it has been used in libraries it has not met with a great deal of success. With the development of the videocassette player, an increasing number of libraries now use these in preference to videocassette recorders as there is no danger of erasure and they are more economical to purchase. Then only a minimum number of videocassette recorders need be maintained for off air recording, copying and original programme production. When observing the use of audiovisuals in most academic libraries, it very quickly becomes apparent that out of the range of audiovisual formats-film, tape slide etc. it is really only video that users like to and do use. In many libraries that have developed audiovisual services based on a range of formats one can see time and again all the videocassette recorders in use, while the tape slide, filmstrip/cassette units stand idle. Copy a tape slide programme or a film to videocassette and there is a much greater chance that it will be used, however inadequate is the technical quality of the transfer.

For the most part, public libraries in the USA, Canada and the United Kingdom have developed video services as an extension of fending services. In Ireland, France, Hong Kong and Singapore video services have been developed which are seen as an extension of reference services. It has always been a surprise and disappointment to me that the fascinating and I believe excellent developments in the library of the Pompidou Centre in Paris have had no effect on library development in the UK in recent years. Indeed, about the only notice it received was a rather unkind article in the Library Association Record (3) yet similar developments have taken place elsewhere. Hong Kong Urban Council Libraries have been running an excellent video reference service in one of its city branch libraries for some years now-offering six individual or small group viewing units, as well as an 'on the hour, every hour' group viewing programme for up to 30 people, using projection television. The Hong Kong New Territories Library service is developing similar services, which can also be found in Sabah State Libraries in Malaysia, and in the National Library Service of Singapore, which is currently introducing video reference services in its central and branch libraries. Dublin Public Libraries already have such facilities in some branches (4) and are developing a major service in its new central library. Here colour televisions will be situated in the middle of a walking 'mall', with comfortable chairs and headphones for up to four people, with the programmes being transmitted from a staff control counter nearby. However, the first UK video reference service I know of is now being developed at three libraries in Camden. Surely video must be seen as a natural extension of public reference/information services.

Where reference facilities are found, it is normal for the cassettes and the equipment to be under staff control, with the signal being sent by wire to the viewing area where users listen through headphones. This solves normal security problems and helps the equipment to be properly and economically used.

In France, as in Ireland, viewing areas are located in the main library area, where all users are bound to see it. This advertises its presence, encourages 'gawpers' who become the next users. In the Far East, video viewing areas are usually separated from the main library and are adjacent to the store room where the cassettes are kept in continuous air conditioning.

The equipment used is either U-format, in those libraries who established reference services some years ago, such as Pompidou and Hong Kong, and VHS in Singapore and Ireland.

So what "guidelines" can be suggested based on these developments?

#### A. Academic Libraries

#### 1. Equipment

Two video cassette systems are currently suitable for library use.

- (a) U-format. (low band). This system tends to be used in libraries that have either been using video for some years (it being the only suitable system available at the time the service was instituted) or where the television production facility within the institution uses the U-format. For library playback, except where projection television is used, it is really too good, is more expensive than other systems, has only short length tapes and a more limited range of commercial publications available. Sony's own U-matic machines appear to be the most robust for library use.
- (b) VHS. This system tends to be used in libraries which have developed video services more recently; or where U-format is used for origination, but copied onto VHS for playback throughout the institution; it is more economical, gives adequate picture quality; has longer tapes and a very wide range of commercially published programmes available. The most popular machines are those manufactured by Matsushita under the brand names of National and Panasonic, the NV8200 Recorder and the NV8170 Player having proved to be very successful for library use. Not all machines in library use need to be recorders, and economies can be made by purchasing a majority of playback only units. Hitachi VT-PIO video players are also proving to be successful in libraries in S.E. Asia.
- (c) Other systems. Few libraries use either Betamax or Phillips Video 2000 systems. There is currently no reason to recommend these systems for library use.

#### 2. Equipment facilities

Whatever system is chosen, the learning experience is greatly enhanced where the facilities now common on more expensive videocassette recorders and playerspicture search, slow motion and stop frame—are included, as this permits the user to browse, revise, look at only the sequence he requires, as he would with a book.

#### 3. Multi-standard equipment

In countries where there is little local commercial video production, the use of multi standard videocassette recorders, players and TV receivers is recommended, allowing the library to acquire programmes' from a variety of countries whose transmission standards may differ.

#### 4. Security

This could influence the approach to accessibility to software and equipment. U-format and cartridge tapes and equipment do not have the same "stealability" as VHS tapes and equipment and this could influence the library's approach to open access to videocassettes and equipment.

#### 5. Facilities

#### I. Temperate Countries

As an ideal, both tapes and playback facilities should be available for the users selection and operation in the normal library environment. Open displays of video facilities advertise the service and break down "barriers" between the traditional print and the more modern media.

## (a) Shelving of materials

Video casseries should be partially integrated, that is kept in a separate sequence on shelves as close as possible to the books on the same subjects,

## (b) Equipment location

In all cases the playback equipment should be on open display in the main library and as near to the materials as convenient. Services where the playback equipment is outside the normal library reading areas or is "hidden away" are rarely successful. The equipment should be user operated by placing the videocassette recorder or player and television set under the users control, either in carrels or on open tables, or best a mixture of both. Headphones, connected to the headphone socket of the TV set via a multiple distribution box provide the sound facility.

#### (c) Environment

The best viewing environment is where the TV set and the cassette recorder are placed next to each other at table top height, with the users seated in soft, comfortable chairs, very necessary for long term viewing.

The screen should always be  $10-20^{\circ}$  below eye level for greater viewing comfort. Headphone cables should be shortened to a maximum of  $1\frac{1}{2}$  metres, to ensure that the video user sits reasonably close to the TV screen and takes up no more room than a book user.

#### II. Tropical Countries

In tropical countries videocassettes ideally need to be stored in a continuously air conditioned room and issued from there for use in the adjoining library which is normally air conditioned during opening hours. This generally means that audiovisual materials have to be kept separately from print materials, but are used in the main library wherever possible.

The situation to be most avoided is that where the videocassettes and possibly the recorders are stored in a room which is air conditioned only when the library is open, and left without air conditioning when the library is closed. This will lead to rapid changes in temperature and hence humidity and can lead to serious damage to both videocassettes and recorders. No air conditioning at all would be preferable to this situation, though in some climates this will also inevitably lead to earlier than normal deterioration of tapes and recorders.

## (a) Shelving of materials

Video cassettes should be shelved in a separate sequence in an air conditioned store from where they can be issued for use. If duplicate cases are available, the original empty cases with a synopsis of the programme can be partially integrated into the main book sequence for browsing and selection purposes, or displayed in the audiovisual rooms if this is separate.

## (h) Equipment location

Playback equipment can be on open display in the main library in carrells or in freestanding groups with easy chairs and nearby the storeroom, or kept in a separate audiovisual area of the library. This second method is less effective than the first unless steps are taken to advertise the audiovisual area to all library users. This can best be done by having one or more additional videoplayers and television sets mounted on a wheeled trolley that can be stored in the air conditioned store at night and wheeled into a focal point of the main library when this is airconditioned during the day. A selection of videotapes from the libraries collection can then be displayed throughout the day and a suitable large notice can draw users attention to the audiovisual collection and its whereabouts. Multiple headphones or an induction loop system can be used for sound reproduction if required with this display unit. It is very hard indeed for most people to see a 'live' television screen and not stop for long enough to watch and "get the message".

### (c) Environment

This viewing environment will be the same as for temperate countries, as in paragraph 5.I.c above.

- 6. Secure systems—user operation with staff control of equipment and cassettes. These alternatives to the systems in paragraph 5 above are suitable for those libraries using VHS and facing security problems or for libraries in tropical countries where it is necessary to store videocassettes and videocassette recorders in separate air conditioned rooms or where it is felt that an element of staff control would be beneficial.
  - (a) Libraries in temperate countries with security problems

    Here the videocassettes are stored separately in an extra case at the staff control counter. The original empty cases can be partially integrated on the open shelves for browsing and selection. The videocassette players are also located and secured at the staff control counter. On request, the staff select the required cassette and place it in a vacant videoplayer. A television receiver and the remote control key pad of the videocassette recorder or player are situated either in an open area of the library or in a carrell nearby and connected to the videocassette recorder by long cables. By operating the remote control users can retain full control over their viewing while cassette and recorder remain under staff control. Viewing areas and headphones are as described in 5.1.c above. Such systems can be found in University College Cardiff, where the National NV 8200 VCR is used, and in the language laboratory of the Pompidou Centre Library in Paris.

## (b) Tropical countries

Basically the same system as 6 (a) above except that the videocassettes are stored and the playback equipment permanently located in constant air-conditioning in a separate storeroom located on one side of the main library. The storeroom should be capable of being opened up to provide a staff control counter during the day when air conditioning is available in the main library. By partially integrating the empty original videocassette cases into the main library sequence and by placing the television receivers in open view the service is brought fully to the users attention yet the videocassettes and recorders or players are kept and operated under optimum conditions.

It is generally the practice in tropical countries to separate the audiovisual materials from the main library, housing them in a separate area of the library with an air conditioned store adjacent to it. However this results

in less use because of user lack of awareness of the service and must be overcome by advertising the service as in 5.11.b above. However, if a suitable storeroom adjacent to the main library can be found, and the main library is air conditioned during the day, then all the advantages of an integrated system can be achieved.

#### B. Public Libraries

For security reasons and because some public library users may be less familiar with the equipment or may not wish to operate it themselves, it is best that the videocassettes and the videocassette recorders or players should remain under staff control. Public library video reference services may require three different types of facility-group viewing, straight playback to individuals or small groups, and individual user operated playback-depending upon the needs of the library users and the existing services provided.

#### 1. Equipment

#### (a) U-Format and VHS.

U-Format is used in a number of public libraries where the video reference service has been established for some years, as in Hong Kong and Paris at the Pompidou Centre. However, because of costs, tape lengths, programme availability and because the public library will obtain a wide range of programmes, some of considerable length, VHS is now the more suitable system. In countries with little commercial video production, multi standard machines will enable a far wider range of programmes to be used.

## (b) Group viewing.

Where group viewing facilities are required, projection television of some sort is more suitable than several receivers connected to the same source.

#### 2. Facilities

## (a) Shelving of materials.

In both lending and reference services videocassettes should be stored under staff control. Extra dust proof cases can be used to house them, while the original cases with the synopsis of the programme are displayed in the main library area for user browsing. (Like audiocassettes, videocassettes have a value to the dishonest, whether they want the original programme or not). The erasure prevention tab on the videocassette should always be removed before library use commences.

## (b) Group viewing.

This can take place in a separate room where loudspeakers provide the sound track, or in the main library area where either an induction loop or an infra red headphone system should be used. The staff controlled

videocassette recorder should either be within line of sight of the projection TV screen, or have a black and white television monitor by the videocassette recorder to keep a constant check on picture quality and tracking.

## (c) Straight playback to individuals or small groups.

Whenever possible television receivers should be placed at strategic points in the main library to advertise the availability of the video reference service. These should have two to four comfortable chairs grouped around them with multiple headphones fed from the television headphone socket. TV screens should be in direct line of sight from the staff control counter where the videocassette recorder is housed. Where line of sight is not possible, a monitor should be placed by the videocassette recorder for picture control.

## (d) User control over playback.

User operated playback will be necessary for individual study of language courses. Open University and other distance learning programmes and other programmes that require intensive study. Here again the videocassette recorder should be housed at the staff control counter with long cables connecting the remote control unit and the television set which should be placed in a carrell nearby. Line of sight from the staff counter avoids the use of extra monitors and also allows better staff control of the users activities in the carrell.

## (e) Use of video players.

It is not necessary for public libraries to use videocassette recorders for each playback facility, the majority of units held should be videocassette players, recorders need only be used to fulfil legitimate off air or copying requirements of the library.

## C. Optical disc players

Some libraries in USA and UK already use optical video discs, but experience of this system is still limited. However, the range of players available and the catalogue of programmes continue to grow slowly. Initially for public libraries and as more educational programmes get into optical video disc catalogues, for academic libraries, the optical video disc players do present a more economic and more effective playback medium for commercially produced programmes, and they also permit much greater interaction with the video medium. Discs and players are now reaching acceptable price levels and picture quality on playback is exceptionally good. And unlike videocassettes, discs do not wear out if handled properly.

Optical disc players can be used in conjunction with videocassette recorders and players, and they use the same playback facilities. Where interactive programmes are to be used as in paragraphs A. 6 or B.2.d above, the remote control unit of the player can be placed with the television set in the carrell giving the user complete control, while the disc and player remain under staff control at the central counter.

The other two video disc systems have little to commend them to academic or public library use at present-the discs in both these systems being very fragile indeed, very easily damaged and of limited lifetime.

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#### Authors note

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