

DOCUMENT RESUME

ED 029 477

EF 003 261

By-Allen, Phyllis G.; Miller, A.

Living Accommodation for Young People. Report of An Exploratory Review.

British Ministry of Technology, Garston, Watford, Herts (England). Building Research Station.

Pub Date [67]

Note- 16p.; Miscellaneous Papers 12

Available from-The Librarian, Building Research Station, Garston, Watford, Herts., England

EDRS Price MF-\$0.25 HC-\$0.90

Descriptors-Acoustics, Behavior Patterns, Boarding Homes, College Housing, Furniture, Heating, *Housing, Housing Needs, Interior Space, *Literature Reviews, *Physical Design Needs, *Physical Environment, Residential Schools, Sanitary Facilities, *Young Adults

The Building Research Station has embarked on a series of case-studies on the provision of living accommodations for single young people in the 15 to 24 age group in England who live away from home because of education, training or employment. An exploratory review of the existing literature on the subject was made. Discussed are some of the results of the review which seem likely to be useful to administrators, managers and designers responsible for various aspects of projects in this field. Areas included are as follows--(1) governmental recommendations for colleges, halls, and hostels, (2) sanitary facilities, (3) utility rooms, (4) means-communal facilities, (5) fittings and furniture in individual rooms, (6) access arrangements, (7) room heating, (8) sound insulation, (9) room size, (10) user experience, and (11) acknowledgements. (RK)

ED029477

Living accommodation for young people

Phyllis G Allen and A Miller

Miscellaneous papers 12

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

EF003261

LIVING ACCOMMODATION FOR
YOUNG PEOPLE -
REPORT OF AN EXPLORATORY
REVIEW

Phyllis G. Allen and A. Miller, B.Sc.,
A.R.I.B.A.

This Current paper gives the results of an exploratory review of types of living accommodation for young people who are resident away from home because of education, training or employment. Information has been obtained, from the literature, on administrative and design experience with various types of project. Some reports of user experience are also included and there is an extensive list of references.

Miscellaneous papers

Details of Miscellaneous Papers issued are given, with summaries, in the Station's QUARTERLY LIST OF PUBLICATIONS which may be obtained regularly on application to:

The Librarian,
Building Research Station,
Garston, Watford, Herts.

Extra copies of this paper are available; a charge may be made for supplies in quantity

Building Research MISCELLANEOUS PAPERS
are Crown Copyright

"PERMISSION TO REPRODUCE THIS
COPYRIGHTED MATERIAL HAS BEEN GRANTED
BY G.W. Gevona, Press + Publ. Officer,
Building Res. Station
TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE U.S. OFFICE OF
EDUCATION. FURTHER REPRODUCTION OUTSIDE
THE ERIC SYSTEM REQUIRES PERMISSION OF
THE COPYRIGHT OWNER."

LIVING ACCOMMODATION FOR YOUNG PEOPLE -
REPORT OF AN EXPLORATORY REVIEW

by Phyllis G. Allen and A. Miller, B. Sc., A. R. I. B. A.

INTRODUCTION

The 1961 Census showed that young people in the 15 to 24 age group in England and Wales numbered some six million. Three million aged 15 to 19 and over 1½ million aged 20 to 24 were single, and ½ million of the former group were still at school. Thus some four million were either in employment or undergoing training or higher education, and all these numbers are likely to have increased as the more numerous members of younger age-groups have entered the 15 to 24 range.

The Building Research Station has embarked on a series of case-studies of the provision of living accommodation for single young people of this age-group who live away from home because of education, training or employment, and as a preliminary made an exploratory review of the existing literature on the subject. Much of the information brought together was of interest apart from the immediate purpose of the exercise, and this report discusses some of the results of the review which seem likely to be useful to those responsible for various aspects - administration, management or design - of projects in this field.

There are two main categories of living accommodation for single young people living away from home:

Living in lodgings, rooms, flatlet or flat, with or without provision of meals.

Living in college, hall of residence or hostel, or in some other accommodation directly associated with an educational, training or employment establishment or specially provided for single young people.

A substantial part of the information obtained relates to institutional accommodation, in which for the most part the basic provision is a separate bedroom or bed-sitting room for each person, though in some cases sharing of rooms by two or more young people may be an alternative. Arrangements for meals, leisure, recreation, ablution, etc., may however vary considerably. The terms 'college', 'hall of residence', and 'hostel' themselves illustrate the differences. Although they are terms of considerable flexibility, and examples of each can probably be found which do not differ appreciably in the type of facilities they provide, nevertheless, each has a distinct meaning or area of application.

At the Universities of Oxford and Cambridge all undergraduates are members of a college although only a proportion live in college (the remainder being in approved lodgings). This means that even those in lodgings are subject to the discipline and care of their college and 'enjoy its communal amenities and facilities as well as the imponderable advantages of belonging to a community smaller than the university itself'. * Some of the undergraduates accommodated 'in college' are in the actual college buildings, and others may be in separate buildings, some known as 'hostels', which generally provide only sleeping, ablutionary and sanitary accommodation, though in a few of the more remotely placed buildings breakfast may be provided. The term 'hall of residence' is not used at Oxford or Cambridge.

* University Development, 1947-1952, University Grants Committee - Cmbd. 8875, H. M. S. O., July 1953.

Halls of residence have been established at universities other than Oxford and Cambridge and at other educational establishments. The facilities they provide may range from something approaching the corporate life of 'living in college' to board and lodging and a sharing of recreational accommodation. Membership of a hall of residence is usually, though not always, confined to those actually resident, thus differing from Oxford and Cambridge college membership.

University or college hostels (other than those at Oxford and Cambridge) also vary in what they provide. Some may be indistinguishable from halls of residence and others may provide only lodging and part board with the minimum of recreational accommodation. In general, however, a hostel would not be expected to provide the full range of facilities and corporate life of a good hall of residence. There is also a variety of hostel accommodation available for categories of young person other than students or for young people in general.

GOVERNMENTAL RECOMMENDATIONS FOR COLLEGES, HALLS AND HOSTELS

GENERAL

Department of Education and Science - The Department has now not only the Teacher Training College responsibility of the former Ministry of Education, but also the responsibility of the University Grants Committee for Colleges, Halls and Hostels. Staff from both groups have combined, and a report based on their cost studies and consequent recommendations is in preparation. Earlier recommendations are as follows:

Students in Teacher Training Colleges - A room of 140 ft² is reasonable provision. The view is expressed that 'in terms of area per student the space required for the student's private and personal needs is practically constant'.

University students - The accepted minimum room size is 110 ft². In practice, it has been possible to achieve 140 ft² by economies in other parts of the living accommodation. The method of costing has been based on the study bedroom unit, i. e. the room and its share of the ancillary accommodation. The same recommendation has applied to resident members of domestic staff. Resident members of the academic junior staff are allowed the equal of two study bedroom units.

Ministry of Health - Nursing and other hospital staff - The Ministry's recommendations refer to those having to live in and those not having to do so. Within the former category, two classes are considered:

Those provided with hostel accommodation with full board and lodging and with laundry services;

Those allocated accommodation in which they will live privately, undertaking their own housekeeping services, including catering.

Six scales of accommodation are mentioned, but two only would seem appropriate to this study: that for student nurses, domestic staff and other junior groups of staff paying similar board and lodging charges; and that for staff nurses, house officers and other grades of staff similarly paying, and for pupil midwives. Plan examples in the recommendations show study bedrooms with a minimum floor area of 120 ft². Also shown are single bedrooms of 90 ft² with a living room 150 ft². Nursing students and nursing staff require living conditions comparable with those of students and staff elsewhere.

Home Office - Police Officers - There are Home Office recommendations for police officers and police cadets. Bedrooms for single men are to include a built-in hanging cupboard and should be 100 ft². This is a minimum rather than a standard size.

Ministry of Housing and Local Government - Single workers and other single young persons - The housing waiting lists of Local Authorities are not open to young single persons in training, but they are to those having special employment such as midwives and district nurses. Young nurses may be accommodated in re-development schemes. However, the Ministry has envisaged some special needs, and these are catered for through housing societies as well as by the

The room size recommended for apprentices and students is 108 ft² minimum, and for workers 140 ft² is desirable. Dwelling size for a one-person residence is given as 320 ft² net floor area with also 28 to 30 ft² for general storage.

Development Corporations of New Towns are finding a need for hostels and for bed-sitting room and one-bedroom dwellings for young workers, as also are firms in their areas.

Ministry of Public Building and Works has a long experience of hostel provision and of other residential accommodation over a wide range of categories. There was, for example, the programme of agricultural hostels which they entrusted to outside architects in the early summer of 1941. Although this was mainly dormitory accommodation, it showed what could be done with standard sketch plans and pre-fabrication. Also, the experiment of moving a large number of workers to a desired area and there providing for them, not only living quarters but also very considerable recreational and welfare facilities was quite new to this country.*

The Ministry is also responsible for Service Department residential accommodation, which comprises mainly barracks and married quarters. Four men may occupy a screened-off half of a barrack room or there may be eight men to a room. N. C. O.'s in charge of a barrack room have a single room.

Other types of hostel accommodation include common lodging houses, overnight hostels, holiday hostels and sports hostels. Some of these may not be specially for the 15 - 24 age group.

SANITARY FACILITIES

Students in Teacher Training Colleges - One bathroom and one w. c. is suggested to every five or six students. The scale may be more generous if showers are substituted for baths.

University students - Ancillary or associated accommodation, such as bathrooms and lavatories, is required, but the scale of provision is left to the promoter's discretion within the cost limit.

Nursing and other hospital staff - Student nurses, domestic staff and other junior groups of staff - separate bed-sitting room with washing facilities; one bath (or shower) and one w. c. for every four to six persons. For staff nurses, house officers and others similar, also pupil midwives - separate bed-sitting room with a lavatory basin; one bathroom and w. c. for every three or four persons.

Residential accommodation for single police officers - One w. c. for up to five women or for up to seven men, two for six to ten women or for eight to fourteen men; above eleven women or fifteen men, 20 per cent; wash-basin and slipper baths for men or for women on the men's scale for w. c. s; showers and urinals for men on the scale of one up to nine men, two for ten to twentyfour men, and three for twentyfive to sixty men.

Published reports of student response to accommodation do not usually emphasise problems of sharing toilet facilities in halls and hostels. Sharing as such seems to be accepted, in particular for w. c. s and bathrooms. Individual contacts have referred to: peak periods of use; hot water supply; state of cleanliness; and convenience of access to bathrooms. Provision of a wash-basin in a bedroom (whether study bedroom or bed-sitting room) seems to be general in a majority of new schemes. The reason for this seems to be not so much student convenience as to facilitate letting for visitors and conferences during vacations.

Difficulties with sharing w. c. s and bathrooms seem to be associated with quality of management as well as with student's behaviour and attitudes. The ratios of provision for w. c. s and wash-basins require of course in practice to be seen against standards of provision of these facilities elsewhere in the building.

* Hostels for the Ministry of Agriculture, The Architect's Journal 5th March 1942, pp. 167-187 and 12th March 1942, pp. 196-C; The Builder, 21st August 1942, pp. 152-6.

UTILITY ROOMS

Students in Teacher Training Colleges - The need of men students for a small service or utility room is perhaps less urgent than that of women students, but both sexes will require somewhere to do a small amount of washing and drying of clothes and tea making. Women students will need slightly more elaborate provision since they will probably do more washing and ironing and will wish to have special facilities for washing and dressing their hair. But in neither case need the utility room exceed 100 ft² in area and for men it may well be smaller. It is generally sufficient to provide about one such room for every ten students.

University students - Ancillary and associated accommodation including utility rooms may be required, but the scale of provision is not stated other than that this must be made within the cost limit.

Nursing and other hospital staff - Student nurses, etc. - one kitchen utility room should be provided for every four to six persons; staff nurses, etc. - similar provision.

Residential accommodation for single police officers - Drying room with hanging and drying equipment, minimum area 50 ft². Cleaning room 80 ft² plus 2 ft² for each person - room to have bench with sink (h. and c.) gas rings and facilities for ironing and boot cleaning should be provided as appropriate.

Variations at any of the above types of facilities may include separate laundry provision.

The Y. M. C. A. and the Y. W. C. A. as well as other special agencies have valuable experience in the provision of hostel accommodation for young single people.

MEALS - COMMUNAL FACILITIES

The Y. W. C. A. states: 'Recent surveys into the kind of accommodation needed nowadays by young women show that apart from not wanting to be tied to hostel meal-times they actively want to do their own housekeeping. This is the fashionable way to live'.

At some schemes the Y. W. C. A. provides flatlets, i. e. a bed-sitting room with a small kitchen and a bathroom, or two bed-sitting rooms sharing these facilities. At some other schemes, the Y. W. C. A. has bed-sitting rooms on a ratio of six or eight young persons (in single or shared rooms) to a kitchen-meals unit, where the young people prepare their own meals.

Kitchen-Utility-Breakfast-rooms - Students occupying single rooms may need a common meeting ground where they can get together informally in small groups for light meals, hot drinks, etc. This type of provision adjacent to a small group of student's rooms means that a student can maintain the privacy of his own room if he wishes and yet not be unsociable. These rooms are of course additional to the normal dining hall for the use of all members of the hall of residence or hostel, or such other arrangements as may be made for residents' main meals.

The alternative to the dining hall for residents can include on the one hand the use of college refectories for all meals and on the other the admission of non-resident students to some or all meals in the dining hall of the hall of residence or hostel.

FITTINGS AND FURNITURE IN INDIVIDUAL ROOMS

Sleeping - Proper bed space is of first importance. None of the literature looked at suggests that the bed should be folded up or otherwise disposed of when the single room is used for activities other than sleeping. A bed, of course, can be used for daytime resting. If given an appropriate side-fitting under which it can partly slide, a bed then becomes an adequate substitute for settee, chairs or benches. A bed also provides a convenient putting-down place for sorting papers and other possessions, and for the temporary disposal of large and perhaps awkwardly shaped articles such as draughtsmen's or photographer's equipment, or sports gear. Since some people may find it convenient or necessary to read or write in bed, the bed requires a good light. Bed widths may be 2 ft 6 in. or 3 ft. Bed lengths of 6 ft 3 in. or 6 ft 6 in. are usual. A bed size of 6 ft 9 in. by 2 ft 8 in. has been suggested at least for some rooms, and a back rest, as the result of a

study of experience at five colleges. The space required or allowed around the bed to suit the changing needs of a series of users, varies. It is possible to make a bed adequately with the bed surrounded on three sides by walling, or with a fully fitted bed, as in ship's cabins and caravans. Studies of furniture arrangements in small bedrooms have shown a direct relationship between room shape and size with bed position. People often wish to change round the position of furniture, and if room dimensions preclude this there is likely to be criticism.

Undressing and dressing - Specific provision for this purpose may, at minimum level, be limited to a hook on the wall or back of a door, or a chair on which to place clothing and a small shelf for toilet requisites. Storage requirements for clothing as well as for other possessions are a separate issue.

Ablution - Experience hitherto indicates that with central corridor access the most economical arrangement is for the service lines to follow the line of the corridor. Consequently wash-basins are frequently fitted on inner partitions rather than external walls. A common arrangement is to have entrance door, wardrobe, dressing table and wash-basin all occupying the partition separating room and corridor. Contract furniture suppliers are developing prefabricated parts and combinations of parts comprising basin, room heater, enclosed storage and open shelving for partition walls and also for the inner walls of individual rooms. Such prefabrication may determine room dimensions, or vice versa.

If ablution is to take place within the room, then so also may there be a modicum of washing of personal clothes and the need for these to drip. Wet outdoor clothes may also require drying. There may be separate drying facilities, but there is with this the inevitable risk of 'borrowing' and theft. Standards of 'borrowing' vary with people, places and customs. At one scheme there is warm storage for spare linen and towels, etc., and some airing storage of this type might be usefully provided more generally. Provision for hanging towels so that they can dry freely after use is required whether or not there is a wash-basin within the room.

Meals - individual facilities - A requirement to have occasional or regular meals in one's own room cannot be ignored. This may include a need for simple or more elaborate cooking or only for a hot drink. For young workers especially, there may be a need for socket outlets to be used for the electric toaster, saucepan, frying pan or kettle, or for a small cooker. Views differ among administrators and designers on the desirability of individual provision for these needs. At some schemes no socket outlets suitable for these purposes, or for an electric fire, are available. Arguments against such provision are based on capital and maintenance costs, fire risk, electricity load and the ease with which repayment meters can be tampered with. It should be possible to surmount these objections or else to ensure that alternative provision of an acceptable type is available. Space for a table is needed.

Storage fittings and other furniture - Storage needs may vary markedly with category of user as well as type of individual. The minimum recommendation for students is a 3 ft run of enclosed wardrobe type storage for clothes and 4 ft for staff or other more permanent or special users. Furniture designers have a special interest in these items. One review of the subject has suggested no real progress can be made until there is:

'interchangeability between ranges, which calls for a system of dimensions agreed between the furniture and building industries, which in turn must be based on proper research into user requirements'.

Open shelving and other features such as pin-up boards, mirrors, etc., which may be of special importance to user convenience and enjoyment are unlikely to be critical to the design in their size or siting. Size and convenience of siting to suit users should be possible. Other requirements, such as a desk with drawers and cupboards and space for activities, will also vary with types of users.

ACCESS ARRANGEMENTS

The access arrangements at modern schemes of college, hall and hostel living have much in common with conditions in modern blocks of flats. Three main types are:

(a) Staircase access - Rooms or sets opening directly off the staircase. There is

of entrances and staircases at fairly close intervals. This type of internal access is traditionally associated with Oxford, Cambridge and Durham Colleges.

(b) Corridor access - Staircase (with or without lift) from which internal corridors lead the full length of the building, with rooms or sets on one or both sides. There is horizontal communication the full length of the block on each floor, and one or two entrances and staircases can serve a long block. This type of plan is traditionally used in hotels and welfare institutions.

(c) Composite access - Staircases (again with or without lift) spaced further apart than in type (a), and having short lengths of corridor or other access space, leading to a larger number of rooms and sets than would be served by a staircase in type (a). The outstanding examples of this are the South Side Halls, South Kensington.

Corridor access may be provided in one of the following ways:

Enclosed balcony or corridor with rooms on one side;

Corridor with study bedrooms and/or bedsitting rooms on one side and service rooms on the other;

Corridor with rooms on each side;

A service core with rooms off the outer sides of the flanking corridors.

ROOM HEATING

Provision may be to one of the following three standards:

(i) Central heating to approximately 64°F (more rarely to 68°F), having as part of the system a fan or some other means by which additional heat may be obtained. This latter may be only a supply point to which occupants may attach their own electric heaters for extra topping-up in cold weather. Prepayment meters are usually an essential feature of this provision.

(ii) Central heating to about the same temperature as (i), but no means of supplementary provision of any type. This precludes topping-up and occasional warmth when the central heating system is not operating.

(iii) Central heating in communal areas (and perhaps also the warden's flat) and fixed individual heaters with prepayment meters in personal rooms. Condensation because of low heating can be a problem in such cases, particularly for rooms with a high proportion of roof and external wall surface, unless means to prevent this are taken.

The Building Research Station has considerable experience of user response to modern methods of space heating including under-floor warming and warm air systems.

SOUND INSULATION

The reduction of sound transmission between rooms, between floors, and from communication areas, is essential for user comfort. With appropriate planning, special constructional details to avoid structure borne sounds, the provision of carpeted or cork floors, upholstered furniture and heavy curtaining, and reasonable user behaviour, sound transmission can be satisfactorily reduced. Corridor noises seem to be a special nuisance, and carpeting should be considered for students, and where young people such as nurses or doctors are on shift duties.

ROOM SIZE

Although 108 ft² is the minimum of recommendations quoted for bed-sitting rooms and study bedrooms, it is known that smaller sizes have been considered. Building Research Station studies of family housing have shown some 80 per cent of user acceptance or more of rooms where:

	<u>Floor area ft²</u>
Use is restricted to sleeping and directly associated activities - single bedrooms in general housing, usually occupied by a younger member of the household:	75
Use is as above, but there are special storage needs:	120
There are many activities with other special storage needs - used as bedsitting rooms by a lodger, student or other young person.	110-135

USER EXPERIENCE

Dr. Thoday's studies make a useful starting point, since she found: 'students alone in lodgings were more like those living at home in their participation in university life - particularly in mixing with other students. Students sharing lodgings with several others participated in university life more like students in Hall'.

In considering preferences for various types of accommodation, there are several inevitable qualifications. Financial considerations are often ignored when preferences are invited. Studies show a greater flexibility of requirement than is provided by conventional halls of residence. In fact, 'when preference for recreation as well as for eating and sleeping are considered together, the desired pattern of living suggests the polyglot excitement of a rather athletic Latin quarter rather than the uniform regimen of hall, lecture room..... These desires are certainly not surprising when the currently very much earlier maturity and the very much lesser social uniformity of students is taken into account'.

Peter Marris' study was completed by the end of 1963. He states:

'In their choice of accommodation, students were chiefly influenced by three desires: (i) to be as free as possible from regulations, formalities, or community pressures; (ii) to make friends and enjoy social opportunities, and, (iii) to provide for their physical comfort with the greatest economy of time and money. Colleges or halls are the most sociable and distracting, flats the freest and most time-wasting, lodgings at their rare best a satisfying compromise, with home comforts, a few congenial friends to hand and authority and social distraction at arm's length. Ideally, many would have chosen a form of accommodation which none of the schemes studied then provided; namely, blocks of student flats, or study bedrooms, on or near the university site, with many of the amenities of hall, but without the imposition of a community life'.

Ferdinand Zweig found that those without experience disparaged hall: 'those who are in hall generally like it and those who stay out, prefer their way'. Those with experience of hall, flats or digs said that it was best to stay the first year or two in hall, but later to switch to digs and lastly to a flat.

This order of progression, especially if to an independent flat in the final phase, tends to appeal to parents who see the sequence as a reasonable development of independence, especially for their daughters. It gives essential experience with different ways of living.

ACKNOWLEDGMENTS

Acknowledgments are made to all those who provided the material on which this report is based.

This list of selected refererces is issued also as B. R. S. Library Bibliography No. 196, and an annotated list of foreign references as No. 197. Both are available on request from: The Library, Building Research Station, Garston, Watford, Herts. (Telephone: Garston 4040).

A supplementary list is in preparation.

YOUNG PEOPLE

This section is intended to give some general background material on young people.

The adolescent in Britain:
L. T. WILKINS:
CENTRAL OFFICE OF INFORMATION:
Social Survey Report 148 (P).
London, the Office, July 1955.

Fifteen to eighteen. Report of the Central Advisory Council for Education - England.
G. CROWTHER (Chairman):
MINISTRY OF EDUCATION
London, H. M. S. O., 1959.

Half our future. Report of the Central Advisory Council for Education - England.
J. H. NEWSOM (Chairman):
MINISTRY OF EDUCATION
London, H. M. S. O., 1963.

Higher Education Report of the Committee on Higher Education.
LORD ROBBINS (Chairman)
COMMAND PAPER 2154
MINISTRY OF EDUCATION
London, H. M. S. O., October 1963.

Annual Report 1962-1963.
YOUNG WOMEN'S CHRISTAIN
ASSOCIATION
London, the Association, 1963.

Annual report of the National Council of Y. M. C. A. s, 1963-1964.
YOUNG MEN'S CHRISTAIN
ASSOCIATION
London, the Association, 1964.

Youth and the social order:
F. MUSGROVE:
London, Routledge and Kegan Paul, 1964.
Brief review in New Society, 1964,
September 24th, p. 32.

Census 1961. England and Wales. Age marital condition and general tables, page 27, Table 8, 15-24 age group.
GENERAL REGISTER OFFICE.
London, H. M. S. O., February 1964.

GENERAL

Homes for today and tomorrow:
PARKER MORRIS:
MINISTRY OF HOUSING AND LOCAL
GOVERNMENT.
London, H. M. S. O., December 1961.

New architecture of London. A selection of buildings since 1930.
S. LAMBERT:
BRITISH TRAVEL AND HOLIDAYS
ASSOCIATION.
London, the Association, 1963.
(includes photographs of halls of residence.)

Students' dormitories and homes for the aged:
M. FENGLER:
London, Alec Tiranti, 1964.

Information sheet 1327. Space standards for hostel bedrooms
Architects Journal, 1965, 141 (17)
April 28th.

There are many similarities in design between the arrangements of rooms for single young people and those of old people's accomodation - for this reason a reference to housing for old people is included:-

A survey of housing for old people:
V. HOLE and P. G. ALLEN:
Architect's Journal, 1962, 135 (19) May
9th, 1017-1024, 1026; 1964, 139(2)
January 8th, 75-82.
BUILDING RESEARCH STATION:
Current Papers, Design Series 33
Garston, the Station, 1964.

BIBLIOGRAPHIES

Hostels
ROYAL INSTITUTE OF BRITISH
ARCHITECTS
London, the Institute, July 1947.

Hostels, 1950-1957.
ROYAL INSTITUTE OF BRITISH
ARCHITECTS: Bibliography
London, the Institute, September 1957.

University Buildings, 1955-1961
ROYAL INSTITUTE OF BRITISH
ARCHITECTS.
London, the Institute, September 1961.

Hostels and housing for students, halls of residence, students' clubs and Union buildings 1957-1961
ROYAL INSTITUTE OF BRITISH
ARCHITECTS: Bibliography
London, the Institute, November 1961.

Interim list of references to single person dwellings:
MINISTRY OF HOUSING AND LOCAL GOVERNMENT: Library
London, the Ministry, July 1964.

STUDENT TEACHERS AND TEACHERS

Training college hostels:
MINISTRY OF EDUCATION: Building Bulletin No. 15.
London, H. M. S. O. , 1957.

Education in 1959. Para. 45, p. 80
Training colleges for teachers.
COMMAND PAPER 1088
MINISTRY OF EDUCATION
London, H. M. S. O. , 1960.

Scraptoft Hall Training College,
Leicestershire:
Architects' Journal, 1962, 136(22),
November 28th, 1221-1234.

St. Osyth's Training College for Teachers
Photographs.
Essex Education, 1963, No. 7, July.
Special Building Supplement, pp. 39-40.

Ripon Training College Extensions:
Builder, 1963, 205 (6287), November
15th, 991

West Midlands Training College, Walsall.
Architect and Building News, 1964, 226
(2), July 8th, 73-79.
Architectural Review, 1964, 136(809)
July, 52-56.

Student Survey:
UNION OF LOUGHBOROUGH COLLEGES
Loughborough, the Union, September
1964.

Recognised establishments for the
training of teachers in England and
Wales, Academic Year 1965-6.
DEPARTMENT OF EDUCATION AND
SCIENCE.
London, H. M. S. O. , 1964.

UNIVERSITY STUDENTS

New buildings at Newnham College,
Cambridge.
Architects' Journal, 1938, 88, August
25th, 318-322.

The planning of University halls of
residence. Report of a Commission
appointed by the Committee of Vice-
Chancellors and Principals of Great
Britain and Ireland. Chairman:
J. A. H. Murray.
Oxford, University Press, 1948.

University development, 1947-1952.
TREASURY:University Grants Committee
COMMAND PAPER 8875.
London, H. M. S. O. , July 1953.

Report of the Sub-committee on Halls of
Residence.
Chairman: W. R. NIBLETT.
TREASURY:University Grants Committee
London, H. M. S. O. , 1957, reprinted
1961.

University development. Interim
report on the years 1957 to 1961
TREASURY:University Grants Committee
COMMAND PAPER 1691
London, H. M. S. O. , April 1962.

Non-recurrent grants. Section F.
Expenditure limits; Halls of Residence.
Notes on procedure
TREASURY:University Grants Committee
London, H. M. S. O. 1963.

Special report from the Committee of
Public Accounts
TREASURY.
London, H. M. S. O. , December 1963.

Special Universities Issue
Architectural Review, 1963, 134 (800)
October.

Cambridge new architecture, A guide to
modern buildings, by N. Taylor.
N. HUGHES, G. LEWISON and
T. WESLEY, Editors.
Cambridge, Trinity Hall, April 1964.

St. Anne's College, Oxford.
Architect and Building News, 1964, 226
(12) September 16th, 535-542.

Churchill College, Cambridge.
Builder, 1964, 207(6330) September 11th,
523-530.
Architect and Building News, 1964, 226
(11) September 9th, 493-506.
Architectural Review, 1964, 136(811)
September, 180-187.
Interior Design & Contract Furnishing,
1964. No. 5, Sept./Oct. 254-261.

University development, 1957-1962.
(p. 97 Table 31 Residence of full-time
students during term).
TREASURY:University Grants Committee
COMMAND PAPER 2267
London, H. M. S. O. , 1964.
Report reviewed in: Builder, 1964,
March 20th, 627-629; Architects'
Journal, 1964, 139(22), May 27th, 1184-
1185; Nature, 1964, (4932) May 9th
547-548.

Returns from Universities and University Colleges in receipt of Exchequer Grant, Academic Year 1962-63.

TREASURY: University Grants Committee
COMMAND PAPER 2456.

London, H. M. S. O., September 1964.
(Gives home and university residence of full-time students).

University Grants Committee. Annual survey, Academic Year 1963-64
Paragraphs 24-32. University expansion to 1967-68.

COMMAND PAPER 2571.

TREASURY: University Grants Committee
London, H. M. S. O., January 1965.

Commonwealth Universities Yearbook.
ASSOCIATION OF UNIVERSITIES OF THE BRITISH COMMONWEALTH.
London, the Association, 1965.

NURSES AND NURSING STAFF

Nurses' home and training school.
Western General Hospital, Edinburgh.
Architects' Journal, 1958, 128(3316)
September 18th, 423-429.

Accommodation for nurses and midwives.
Report of the Working Party on Salary Structure.
ROYAL COLLEGE OF NURSING: Studies in Nursing No. 1.
London, the College, October 1961.

Accommodation for nursing staff.
MINISTRY OF HEALTH: Hospital Equipment Note 7.
London, H. M. S. O., August 1963.

Nurses' home, Barnet, Herts. North-West Metropolitan Regional Hospital Board.
Architects' Journal, 1963, 138(16)
October 16th, 803-814,

Edgware, Middlesex. N. W. Met. Reg. Hospital Board. Nursing Staff residence.
Builder, 1963, 205(6288) November 22nd. 1055-1056.

University course in nursing.
F. BROCKINGTON, Prof. of Social and Preventive Medicine.
MANCHESTER UNIVERSITY: Crumpsall Hospital School of Nursing.
Manchester, the University, 1964.

Ashford, Middlesex. N. W. Metropolitan Regional Hospital Board.
Resident medical officers' accommodation.

Builder, 1964, 207(6339) November 13th 25-1026.

Residential accommodation for staff.
MINISTRY OF HEALTH: Hospital Building Note 24.
London, H. M. S. O., November 1964.

Building research for the hospital service. p. 3. Costs of nurses homes.
J. C. WESTON.

BUILDING RESEARCH STATION,
Current Papers, Design Series 16.
Garston, the Station, 1964.

The Hospitals Year Book. An annual record of the Hospitals of Great Britain and Northern Ireland.

INSTITUTE OF HOSPITAL ADMINISTRATORS
London, the Institute.

POLICE OFFICERS AND CADETS

Police Section House, Hackney.
Builder, 1951, 180(5640) March 23rd, 411.

Memorandum on the design and construction of police stations:
HOME OFFICE,
London, H. M. S. O., 1955, reprinted 1963.

Earls Court Road, W. 8. Police residence.
Architects' Journal, 1957, 125 May 9th, 694-696 and 711-720.

Report of the Commissioner of Police of the Metropolis for the year 1957.
COMMAND PAPER 487
HOME OFFICE,
London, H. M. S. O., August 1958.

Police headquarters, Aylesbury.
Builder, 1963, 204(6249) February 22nd 378.

Birmingham Watch Committee, residential police school.
Official Architecture and Planning, 1964, August, 935-937.

SINGLE WORKERS AND OTHER SINGLE YOUNG PERSONS

Handbook of the Y. W. C. A. of Great Britain 1961, pp. 33-35.
Establishment of a new Y. W. C. A. club or hostel.
YOUNG WOMEN'S CHRISTIAN ASSOCIATION.
London, the Association, 1961.

Opening of Y. W. C. A. 's West End Youth Hostel, Blandford House, Chiltern Street, W. 1.

Blue Triangle, Journal of the Y. W. C. A. 1962, 81 (3) June/July.

Hostels for the Ministry of Agriculture
Architects' Journal, 1942, 95 March 5th,
167-187; March 12th, 196-198.

Builder, 1942, 163(5194) August 21st,
152-154.

Housing for special purposes. Supple-
ment to the Housing Manual 1949.

MINISTRY OF HOUSING AND LOCAL
GOVERNMENT.

London, H. M. S. O., 1951.

Roebuck Court Flats, Stevenage, Herts.
Architects' Journal, 1961, 134,
November 22nd, 1007-1014.

Copthorne Barracks, Shrewsbury.
Builder, 1963, 205(6284) October 25th
839-840.

Architects' Journal, 1963, 138(20),
November 13th, 1041-1042.

(see also issue for November 1st, 1961,
p. 812).

Point Royal flats, Bracknell, Berkshire.
Architects' Journal, 1964, 139(20),
May 13th, 1099-1112.

Crystal Palace Sports Centre Hostel.
Architect and Building News, 1964,
226(4) July 22nd, 164-169;
Builder, 1964, 207(6324) July 31st,
212 and 216;
Architects' Journal, 1964, 140(7)
August 12th, 385-386; (8) August 19th
441-454.

Hostel extension, Welwyn Garden City.
Architects' Journal, 1964, 140(23)
December 2nd, 1323-1328.

FITTINGS AND FURNITURE IN INDIVIDUAL ROOMS

Housing the student.
S. M. NEUFIELD.
Contract Furnishing, 1959, May. 64-68.

Halls of residence; furniture for study
bedrooms.
R.I.B.A. Journal, 1960, 67, January, 95-97.

Student rooms.
T. M. P. BENDIXON
Design, 1962, No. 162, June, 63-73.

Space in the home. Sleeping,
MINISTRY OF HOUSING AND LOCAL
GOVERNMENT: Design Bulletin 6, p. 14.
London, H. M. S. O., 1963.

Furniture for the Army, designed by the
Ministry of Public Building and Works.
Design, 1963, No. 170, February, 30-35.
Architects' Journal, 1963, 138(12)
September 18th, 615-621; (14) October
2nd, 717-725.

Preferred dimensions for furniture.
Design, 1964, No. 182, February, 19.

Fixed furniture systems.
Design, 1964, No. 182, February, 25
Architects' Journal, 1964, 140; September
2nd, 536 (Furniture, bed-sitter).

'H' modular furniture, designed Spence,
maker John Higgin (Furniture)Ltd.
Architects' Journal, 1964, 139(16) April
15th, 120. SfB Section (72).
(Photograph backing on p. 835).

Design Index. Contract furniture.
COUNCIL OF INDUSTRIAL DESIGN.
London, the Council, June 1964.

A student survey. Thesis report.
T. R. ARMSTRONG, R. BEGG and
K. G. DALLEY.
BIRMINGHAM SCHOOL OF ARCHITEC-
TURE:
University Furniture Group.
Birmingham, the University, 1964.
See also Architects' Journal, 1965, 141(16)
April 21st, 957-969.

Residential spaces, fixtures and equip-
ment. Hostels and halls of residence.
Information sheets:
1323 Bathrooms, laundries, kitchenettes
1324 Hostel bedroom furniture.
1. Storage units.
1325 Hostel bedroom furniture.
2. General data
1326 Environmental standards and
services for hostel bedrooms.
Architects' Journal, 1965, 141(14) April
7th; (15) April 14th.

MEALS - Communal facilities

Residential Catering.
University Grants Committee
University Building Notes,
London, H. M. S. O., 1966.

ROOM HEATING

The heating of halls of residence. Paper 1
N. S. BILLINGTON:
Instn. Htg. & Ventltg. Engrs. Journal, 1962,
30, July, 109-111.

The heating of halls of residence. Paper 2
E. DANTER:
Instn. Htg. & Ventltg. Engrs. Journal, 1962
30 July, 112-115

Heating for old people:
F. W. BLACK:
BUILDING RESEARCH STATION,
Current Papers, Design Series 19, 1964.
(Compares opinions of old people with
those of younger households with similar
floor heating).

Warm air heating in local authority flats, 1961-62:
F W. BLACK and E. A. MILROY:
BUILDING RESEARCH STATION,
Current Papers, Research Series 11,
1964.

Heating for high density housing. A guide to modern methods in use:
E. A. MILROY and G. A. ATKINSON:
BUILDING RESEARCH STATION
Current Papers, Design Series 26, 1964.
Architects' Journal, 1964, 140(25)
December 16th, 1433-1444.

SOUND INSULATION

Noise in three groups of flats with different floor insulations:
P. G. GRAY, A. CARTWRIGHT and
P. H. PARKIN:
BUILDING RESEARCH STATION
National Building Studies: Research
Paper 27.
London, H. M. S. O. , 1958.

Sound Insulation of dwellings, I & II.
BUILDING RESEARCH STATION,
Digests 88 & 89 (revised)
London, H. M. S. O. , January 1963 and
March 1964.

Noise in student residences:
D. C. R. PORTER:
Architects' Journal, 1965, 141(16)
April 21st, 971-979.

ACCESS ARRANGEMENTS

Access arrangements in high blocks of flats:
D. SHEPPARD:
CENTRAL OFFICE OF INFORMATION:
Social Survey, SS292.
London, the Office, December 1962.

USER EXPERIENCE

Residence and education in civic universities.
D. THODAY.
International Journal of Social
Psychiatry, 1958, Winter, IV(3), 220-227.
Universities Quarterly, 1957, 12(1), 45-56;
1960, 14(3) June, 272-277.

Residence and technical education. Ch. 2,
pp. 22-65. Residence in halls.
D. SILBERTSON and others.
London, Max Parrish, 1960.

The study of universities.
I. The need for disciplined enquiry, by
E. Shils.
II. Living and learning at Redbrick: a
sample survey at Sheffield University,
by P. H. Mann and G. Mills.

III. 1, 800 students of science and technology: a survey of Imperial College,
by P. Linstead, G. A. Barnard and
M. McGreath.

IV. University expansion and the
collegiate ideal, by A. H. Halsey.
Universities Quarterly, 1961, 16(1)
December, 14-58.

The student in the age of anxiety. A
study of students at Manchester and
Oxford during the summer of 1962.
F. ZWEIG.
London, Heinemann, 1963.

Special Universities issue.
Architectural Review, 1963, 134(800),
October. pp. 233-235 The thinking behind
Britain's new universities, by A. Briggs.
pp. 289-298 Student living: approaches to
residential planning, by M. Brawne.

The experience of higher education.
Report for the Institute of Community
Studies.
P. MARRIS
London, Routledge and Kegan Paul,
November 1964.

Studies by students - St. Andrews
University.
New Society, 1964, (81) April 16th, p. 24.

What advice do students get?
A. D. HALL, D. C. LARBALESTIER and
L. MASSEY.
New Society, 1964, (114) December 3rd,
17-18 and subsequent correspondence.

Students' own choice, by three students.
Times Educational Supplement, 1964,
(2585) December 4th, p. 1034.

Hostel planning. 1. The social unit as a
basis of planning. 2. Social and other
influences.

P. G. ALLEN:
Architects' Journal, 1965, 141 (14) April
7th 851-856, (15) April 14th 905-910

Halls of residence (Imperial College): a
user study
L. JONES.
Architects' Journal, 1965, 141(17) April
28th, 1027-1039.

Miscellaneous papers—recent issues

1. GLOAG, H. L., and M. J. GOLD
Museum and art gallery design. A short history of the daylighting of art galleries
2. CROWDER, J. R.
The weathering behaviour of glass-fibre reinforced polyester sheeting
3. HONEYBORNE, D. B.
A laboratory freezing test for natural building stone
4. HAYNES, K. J., and J. RAVEN
The living pattern of some old people
5. BALDWIN, L. W.
Building with the B. R. S. 'V' bricks
6. BUILDING RESEARCH STATION and the JOINT FIRE RESEARCH ORGANIZATION
Thawing frozen pipes by electricity
7. BOWDEN, S. R.
Estimation of aluminium in cements: EDTA method
8. SHORT, A.
Trends in the use of aggregates for concrete in building construction
9. SKOYLES, E. R.
Examples from operational bills
10. SKOYLES, E. R.
Preparation of operational bills
11. WILSON, P. H.
Industrialisation and the Building Standards (Scotland) Regulations; some notable points