INFORMATION RETRIEVAL FOR EDUCATIONAL RESEARCH AND FUTURE PROSPECTS IN NIGERIA

By
Monica A. Greaves

ABSTRACT

A good information retrieval system of bibliographical data for educational library’s users such as teachers, researchers, administrators, practitioners in the field and the students will facilitate the selection of materials that will be most relevant and helpful to the users. The existing services for information to educational researchers are discussed and general suggestions as to the setting up of an education information service in Nigeria are made. Also, attention is called to the three major existing bibliographical services in the field of education which include Educational Resources Information Centre (ERIC), the British Education Index, and the International Educational Reporting Service of UNESCO.

Before discussing information retrieval systems in education, there are a number of factors to consider. First of all, who are the people who need to use educational literature, what are their requirements and how do they find their information at present? There have been a number of studies of this question in overseas countries, which indicate that materials on education are used by a variety of groups of people, i.e. (a) researchers, (b) teachers in university departments of education and teacher training colleges, (c) practitioners in the field (d) administrators (e) students in training (f) occasionally members of the general public e.g. parents, employers etc. These groups often overlap, e.g. university lecturers sometimes do research. Investigations by the University of Bath library (UK) indicate that researchers and university lecturers were able to give a clearer account of what they needed and how they found information than other groups. School teachers had more difficulty in finding information and defining what they wanted. They were often posted in isolated places far from libraries and had also to keep up with developments in their own subjects, as well as educational innovations. There was a shortage of time in most cases, and there was too much to be read. Hence there arose a need for a good information retrieval system of bibliographic data, which not only showed what existed in the field, but also enabled a user to select what is going to be most relevant and helpful.

The field of education is quite a mixture of subjects. The core of the subject is in teaching methods and aids, examinations, testing, administration and history of institutions, whilst marginal subjects include psychology, which is a scientific subject, and sociology which is a less precise type of subject. The librarian collecting materials for educationists has some problem with selection. Materials on teaching methods in any subject merge with the materials on the subject, materials on educational psychology merge with those on clinical psychology and so on. An examination of the acquisitions of the University of London Institute of Education, the largest specialist education library in the U.K. reveals that only 25% of the intake is classified in a general bibliography (i.e. The British National Bibliography) as education. The other 75%; has to be selected from vast numbers of items listed under almost every other subject. The selector may be guided by the fact that some subjects such as sociology, psychology, and medicine usually contain items important to education. This is some indication where to look. There is no
question, however, of purchasing all materials in these fields as 90% of them are irrelevant. Not only would money be wasted, but the volume of the materials would itself create an impediment to extracting the few materials relevant to education. Selection requires trained personnel with a background of contact with many different educational users, and familiarity with their needs.

Another problem, which arises in the field of librarianship is the use of the term 'education'. This is often applied to a library, a booklist, or a bibliography. The preposition 'for' or 'about' is very often missed out. Items 'for' education, are on the subjects taught which are not the subject of this paper. Their inclusion in materials 'about' education is largely irrelevant and causes a great deal of confusion for the selecting librarian.

Education libraries very considerably, depending on which group of users each is mainly intended to serve. Three broad categories of education library may be identified although libraries within one of these categories are by no means identical in contents.
1. There are a few libraries which concentrate on one aspect of education only e.g. National Institute of Adult Education, UK.
2. Libraries which specialise in the whole field of education and its related subjects. These libraries are mostly connected with departments and institutes of education in universities where students are doing postgraduate work in the field- Their needs in other subjects are catered for by other libraries attached to the institution. Libraries also included in this group are ministry libraries and libraries of non-university research institutions.
3. Libraries which have education as a special interest, but cover many other subjects as well. These are mainly libraries of teacher training institutions in which students have a general education as well as teacher training. These institutions are often isolated so that the library has to cater for all student needs. What kinds of materials contain information on education? Most existing research services concentrate on reports of research, both completed and in progress (including theses and dissertations) and serials, some of which are annual reports. These materials carry the most up-to-date information. Published monographs, i.e. books, take time to produce and are likely to be less recent in their information. These are covered mostly by national bibliographies and are more suitable to fulfil the needs of practising teachers and students who require summaries and reviews which are easily assimilated.

Other important sources of information in this field include primary materials, e.g. school record cards, children's essays. Some of these materials are confidential and are kept at the institutions concerned. It is difficult to control them but in some countries, it has been suggested that registers are kept, in others, notably the USA, educational records are stored on magnetic tapes for access by researchers. However, these materials, which are basic to a research project, have to be sought from individual institutions. There are also some audio-visual materials on education, which might be useful to the educationist e.g. a film of a teacher teaching. The bulk of these are however, for education. An education library might include materials about audio-visual aids for teaching, but a researcher, doing a project on these would have to seek the actual aids in a centre which provides them for schools.

It would be useful at this point to describe briefly some few of the major existing bibliographical services in the field of education. A recommendable publication is a guide to the literature of education by Michael Humby.4 It covers British, American, Australian, European and international bibliographic services in education. Over 500 items are listed which are aids to searching for materials. There are notes on most items. U.S.A. One of the earliest national systems for information in education was set up in 1964 in the U.S.A. The Educational Resources Information Centre (ERIC) now has its headquarters at the National Institute of Education, Washington. There is a network of 16 clearing houses, each specialising in a particular aspect of education, acquiring, indexing and abstracting all documents in their field. The bibliographic information is transferred on to magnetic tapes. This data base is available on-line, that is to say,
one may make consultation at a visual display unit, which resembles a television screen. Relevant information form the system will appear on the screen in answer to a query. This service may also be carried out at a long distance from the computer store, e.g. from a store in the U.S.A., information is available on-line in London. The tapes themselves are available for use by institutions which have suitable equipment. In addition, the U.S. Government Printing Office publishes Resources in Education (RIE) monthly.  This is a printed index to research reports taken from information given on ERICTAPES. Macmillan Information publish the monthly Current Index to Journals in Education (CUE) also from the tapes. There are annual and larger cumulating of these monthly indexes. There is a document reproduction service which can send a reader a hard or microfiche copy of any item selected from the indexes. The U.S.A. is one of the largest producers of educational documents in the world.

UK. In the UK the picture is rather different. The bulk of the materials is much smaller. Serials are covered by the British Educations Index, 7 which appears quarterly and is cummulated annually. A list of research has until recently been produced by the National Foundation for Educational Research in the UK8. This began in 1950, as a list of researches in education and educational psychology by A.M. Blackwell. 9 The current fist is now on magnetic tape. 10

In the UK, libraries of university departments and institutes of education act as centres, in their respective localities, for enquiries on education, which cannot be dealt with by either the Colleges of Education or the public libraries. They supplement the work of the libraries in teacher training institutions and also provide some service on educational matters for practising teachers in their area.

International services in Europe

There exist also international services in the field of education A German language service was set up in 1964. The 'Documentationsring Padagogik (DOPAED) is centered in West Berlin with a network of 13 West German libraries, 2 Austrian libraries and 1 Swiss library. The service publishes a bibliography 11 which is computer produced. The network has been regarded as a model for other cooperative services in this field.

A more recently initiated international system, not yet fully operational, includes member countries of the Council of Europe and is known as EUDISED (European Documentation and Information System for Education) The centre is at Strasbourg (France).

Developing countries

The International Bureau of Education in Geneva is the organisation currently most concerned with developing countries. Founded in 1925, it became an integral part of UNESCO in 1969. of special interest is the International Educational Reporting Service (IERS) 12 which began in 1974. Its principal aim is to provide information about innovations in education to decision makers and practitioners in developing countries. There are links with other UNESCO centres throughout the world.

Africa. In 1962, a regional centre for Educational Documentation and Research was created by Unesco in Accra, Ghana. This centre was closed in 1967 for budgetary reasons. Since then, there have been two regional centres, one at Khartoum for school building research and one for educational planning and administration at Dakar. In 1970. Unesco reorganised the centre at Dakar to form the Regional Office for Education in Africa. (BREDA — Bureau Regional d’Education en Afrique-)

In 1974, this office issued a document for the International Institute of Educational Manning’s 13 governing board which met in Dakar that year. It was entitled Educational
Documentation Services for Africa. In general it indicates that documentation services for education in Africa are inadequate.

**Nigeria.**

The above named paper gives little information about specific countries. Under Nigeria, in the list of institutions dealing with educational research, are the Department of Education and institutes of education of five universities, Ahmadu Bello, Ibadan, Ife, Lagos and the University of Nigeria, Nsukka. There is no particular reference to their library services in this field.

A few preliminary investigations have been made to see what specialist services exist. In 1972, Decree no. 31 setup the Nigerian Educational Research Council to encourage research, "to maintain a central register for educational research projects and to publish periodically a list of completed educational research projects" 15. A research library was to be maintained and research results were to be deposited there.

There is a library at the Institute of Education, Ahmadu Bello University, Zaria, described in an article in the Nigerian Library Association Newsletter by Mu'Azu H. Wali 16. The library appears to have the makings of an information service for education, with a consultancy service and a research/resource centre. There is also a specialist library at the College of Education, University of Lagos. The University of Ibadan has a separate library in the Faculty of Education for undergraduate students, but as yet there are no separate facilities for researchers in the field of education.

There are many libraries of colleges of education throughout Nigeria. As many of these are isolated, they must cater for the general education of their students. To what extent they cater for educational research is unknown but it is likely that some of them might have some relevant materials.

In order to get some first-hand information about the bibliographical needs of educational researchers in Nigeria, a questionnaire has been circulated to the staff of the faculty of Education, University of Ibadan. 17 This represents only a small section of one user group and only their need for research information has been questioned. The provision of text-books for their students would require separate investigation as the factors involved are rather different. All staff who have so far responded to the questionnaire are involved in some kind of research. Some have done their own projects, others participate in group research, others supervise students doing higher degrees and almost all have experience of research overseas. They all use books, pamphlets, serials, annual reports and research reports. The unusual point to note here is that although education is a localised subject, all respondents make use of materials from overseas. Obviously this is because not much material is written in Nigeria and one has naturally to turn to the countries which produce a larger volume of literature on education.

This combined with the fact that many staff have also done research overseas, gives a comparative influence to the research at the outset, a factor not always present in UK or USA research, where it is possible to be nationally self-sufficient to a greater degree where educational literature is concerned. This picture of the situation indicates the need to be familiar, and have access to bibliographical tools, which guide the reader to relevant materials in education. A variety of subjects from sociology of education to curriculum development, philosophy and history of education were indicated as specific interests of the respondents. However, very few have so far recognised the three bibliographical items named, i.e. ERIC, the major American bibliographic service, the British Education Index and the International Educational Reporting Service of Unesco. The last, which is specially for developing countries does not seem to be known at all. Most people indicated that they read 'journals' and some named a few. The Nigerian Educational Research Council as a source of information has not so far been mentioned nor the Regional
Office for Education in African at Dakar.

The trend which seems to be appearing in the replies indicates that respondents are definitely involved in research, they require a large variety of materials from overseas as well as from Nigeria, but their knowledge of bibliographical tools is not adequately extensive. A specialist librarian is undoubtedly required first to collect together the materials and develop a research collection, then to assist and demonstrate how this collection can be used to full advantage. A very helpful asset would be a 'current awareness' service.

The appointment of a specialist librarian at each institution engaged in educational research is a basic need. This person would then ensure that adequate bibliographic tools and materials are available. Their task would include the preparation of an education index indicating which overseas materials were available locally, more important however, would be the recording of Nigerian materials available. These would not be listed by any overseas agency, and the listing of these, although of prime importance in Nigeria, is also a service to the educational community of the world at large. In the same way as Nigerian are making use of overseas materials, so their own materials might be of value outside this country, especially in other African countries.

Suggestions for an information retrieval system.

Each institution where research is carried out should have an index of the materials available in the immediate locality. These local catalogues may be merged in time, to form a national union catalogue, perhaps based at the Nigerian Educational Research Council. Multiple copies may be printed and circulated so that each library concerned may have a copy. A copy also may be sent to the Regional Office at Dakar as part of a regional African education catalogue. Local and overseas materials available in this country may be merged in a local catalogue and possibly a national catalogue, but when sending bibliographic records outside the-Country, it is likely that only Nigerian items, not duplicated elsewhere would be required.

It is a good idea also to investigate the possibility of having a document reproduction' service, so that any local item in the index may be duplicated (with permission of the owners) and sent to a researcher requesting it, as a result of using the national or regional catalogue.

It would be convenient to have a separate educational research catalogue, as well as the catalogue of books of a library used by students in training for their everyday basic? reading. The educational research material in this catalogue need not be located in one specific library, although there should be a policy to collect all materials, not located in other libraries, which might otherwise might be lost. Some catalogue materials might be in a main university collection e.g. theses, journals, and some might be in other nearby institutions. The important point is to list all available materials and indicate their locations.

Another point which sometimes causes problems is the storage of research materials. Some of these will be books, which will stand on shelves, possibly in a classified order, as used by the library. Serial would be kept in sets, bound if possible, and perhaps in alphabetical order of title. Many materials however, are papers or pamphlets which cannot stand on the shelves. Binding is expensive and often the other alternative is to store them in boxes, which are closed completely to keep out the dust. If boxes are used for a fairly extensive collection of papers, it is more practical to store each item under running number or accession number, adding items to the end of the sequence each time. A classified arrangement is not very practical. There are difficulties in maintaining a classified sequence. The insertion of items in their proper place in classified order, as they are added to the collection, requires frequent redistribution of the contents of the boxes. The process is prone to mistakes in arrangement, and frequent handling of flimsy materials results in their physical deterioration. Research workers often select what they think may be useful from the catalogue. They need only ask for a few items to be fetched, from which they may make further selection. They do not need to browse throughout the whole
collection. The role of the librarian, in this case, is to supply a good subject index to the materials, possibly with abstracts, so that the reader may select easily without going through volumes of materials. Dealing with materials for research is sometimes different from dealing with a book collection. Computer based bibliographic information systems, as described earlier in this paper usually operate on a method of identifying each item by a unique number, known as an 'address' by which the item may be located.

Another question is that of the physical form of the catalogue. It is better in Nigeria, that a manual system is used initially, as many libraries do not have access to a computer, especially to on-line facilities. It is always possible at a latter stage, perhaps at national or international level, to transfer the relevant records to magnetic tape. Cards are possible for the manual system. They may however be larger than the usual 3x5 inches as the card may need to contain an abstract. Entries on paper in ring binders (sheaf catalogue) are also a possibility, as they are adequately durable, if the catalogue is only used by a limited number of people.

There must be at least one main entry, which contains all particulars of the item, and this would be the only information which would need to be supplied to a computer system.

If properly 'tagged', the item should be traceable by author, title, subject, sponsoring body etc. with use of a computer. The extra supporting indexes described here would be used in a manual system where every approach has to be a heading, for a person to trace a document in an alphabetical file.

The main entity would be similar to the example shown in Appendix A, taken from the International Educational Reporting Service of Unesco. Although it is useful to use same format as an international agency like Unesco, it is also necessary to consider local conditions. In the initial stages of an educational information service, there may be a shortage of specialist staff, so that it may be difficult to maintain writing of abstracts for all items. It is time consuming to write abstracts, and all the more so, when special indexing terms have to be written into them, as shown in the sample in Appendix A. A reasonable short-out would be to give just the index terms after the document description. It is better to have a complete catalogue in an adequate, abbreviated style, than to have more elaborate entries and many items missing. The ERIC system gives the index terms, followed by an abstract which does not deliberately include these terms. This again may be easier to write.

These main bibliographical entries would be kept in an accession number order, there would be, in the manual system an author index, consisting of the names of authors in alphabetical order. Beside each name would be written the document numbers which would refer the user to the main file.

e.g. ojq, Joseph 2468

For the subject index, one might consider the Uniterm system described by CD. Needham in Organising knowledge in libraries. 18 This particular post-coordinate system is chosen because it requires no special equipment and it is fairly easy to set up. Several index terms are assigned to each item. They are entered, each one on a separate card at the top. Under the term there are a number of columns. The numbers appearing in the columns represent the items to which this index term has been assigned. The terms have to be coordinated at the search stage to form a subject, e.g. Schools and Buildings. Infants and Psychology. The user extracts the cards with the terms relevant to his enquiry and finds the numbers which appear on all of the extracted cards. These represent the items which have all the relevant terms in their subjects. In order to be able to match up the numbers quickly on the various cards, each card is arranged so that numbers ending with the same figure are in the same column. See Appendix B.

Various problems, such as the assignment of local accession numbers, and their possible re-use in national and international systems or the, re-numbering of items at different levels of the system would need further thought and discussion at the planning stage.
One very important matter is how the indexer arrives at these particular indexing terms. Normally a specially compiled thesaurus is used. A thesaurus, in Librarianship, is a lexicon in which the words are grouped by relationships which include synonyms and near synonyms. Education is a subject which has local emphasis and each country should have a thesaurus with its own local terminology. As Nigeria does not have thesaurus, it would be possible to use another English language one, as a basis.

The Unesco: IBEeducation thesaurus 19 is likely to be suitable. It is up-to-date. The second edition was published in 1975 and copies are available from Unesco. It is already used by the Regional Office in Dakar. It is however, a thesaurus to be used at international level; later in the paper I will discuss the local adjustments required.

First I will examine the thesaurus. There is an introduction which should be carefully read, then a list of general headings for fields and facets. It is worth examine this list, to get a better idea of the scope of the subject education, and how to define the subject of a particular document. There are seven fields. Field I is the context in which the process of education is carried on, e.g. political structure. Field 2 is the administrative process e.g. legislation. Field 3 contains teaching terms e.g. curriculum, audio-visual construction. Field 4 denotes people, both teachers and students. Field 5 contains terms related to growing and learning, e.g. ability, achievement. Field 6 is the content of the courses, e.g. science, mathematics. Field 7 contains things such as teaching aids. Field 8 is a different kind of field, in which the terms are called identifiers, and they are of place and time. These are proper nouns e.g. at international level, names of countries and continents.

Within each broad field the terms represent groups of more specific terms. Each of these groups is know as a facet. The facets are numbered and each fully expanded in numerical order in another section, the faceted array.

E.g.

In the summary of fields and facets......Field  I Context terms
120 Society In the faceted array... ... ... 120 Society
Social action
Social background
Social change

In the thesaurus there is also an alphabetical array of descriptors (another words for term or keyword) and identifiers. This is a list of specific terms in alphabetical order, and the section most frequently referred to in use. Beside each term is the French equivalent (Useful for interpreting material from French speaking countries). Underneath each term there are various abbreviations followed by other terms.

SN  = Scope note, which explains what the term is intended to cover.
BT  = Broader term, this indicates terms which are wider in scope and include the term in question
NT  = Narrower term
RT  = Related term
MT  = Indicates that the term also appears in the Macrothesaurus of the OECD, which covers a wider social science field. Many terms also have synonyms or near synonyms. UF indicates 'Used for' e.g. Principals

UF School headmasters

This means that the term 'School headmasters' is not used as an indexing term, but that the term 'Principal's is used instead. The direction USE is the reverse of UF, e.g. School headmasters USE Principals.
The last part of the thesaurus is a rotated list of descriptors. This is an index of multiword terms i.e. terms consisting of more than one word. E.g. 'Personnel evaluation' appears under both 'Personnel' and 'Evaluation' so that the correct indexing term is found whichever part of the term is looked up.

The process of assigning terms to documents must now be considered. Each document must be taken in turn, and the subject assessed. It is not always necessary to read the whole document, one can examine the title, the contents list, the introduction, the conclusion and any summary already available. Once the indexer has a clear idea of the subject in his mind, he may select those terms from the thesaurus which express it as nearly as possible. He may be able to check with each field to see if any facet in it is relevant to the document. Not all fields will be represented in the subject of each document. Indexers may look at other terms in the same facet, in the faceted array, and other terms under BT, RT and NT in the same alphabetical array, and ask themselves whether any of these are more suitable than those originally chosen. After being sure that the subject of the whole document is covered the indexer might look for parts of the document which are on separate subjects not covered by the terms already given. These terms given to parts of a document are known as analytical. This additional analysis is time consuming and expensive and may be omitted, according to the general policy of the indexing service. Too large a number of terms for each document results in a large number of entries which slow up a manual search; they also increase the possibility that so many documents will be found, which are marginally relevant to a subject, that they have to be scanned to find the really important ones. This is again time consuming. Detailed indexing is expensive also. Too few terms may lead to loss of important items because they are not indexed under the terms of the query. Only experience with the users needs will help the indexer obtain the balance between too few and too many terms. The indexer should also help the users to search his own index.

The user may consult the thesaurus in order to formulate his query in the terms of the system. The thesaurus is the guide to the correct term for both the indexer and the user. Modifications for the national thesaurus.

The Unesco: IBE thesaurus is for use at an international level by international bibliographic agencies. Most of the terms given in English may be retained in the Nigerian thesaurus, and would cause no problems. However the following might be considered:-

1. Only when a term is not used at all in Nigeria, but there is a used term which is clearly the equivalent, then it should be entered in the thesaurus instead of the international one.
2. Specific local terms which have no international equivalent should be added, these may be terms relating to the national education system.
3. Names of specific places and institutions, historical periods, local laws and similar concepts should be added to the thesaurus. Many of these would be identifiers in Field 8.

This would be the largest addition to the international thesaurus. The correct form of entry in the thesaurus for each proper name must be determined, e.g. The same school should not appear under different forms of name. Some guidance might be given by the Anglo-American Cataloguing Rules 20

When the bibliographic records are cumulated in an international system such as the one at Dakar, terms from the national thesaurus may be 'switched' to those of the international thesaurus where necessary. An equivalent term might be exchanged, but more commonly local specific terms would be switched to broader terms, e.g. 'Ibadan' would become 'Nigeria'.

It is usual to have a committee of indexers and educationists to cooperate and advise on the terminology for a national thesaurus.

Conclusions
This paper is only an outline of the existing services for information to educational researchers. It touches only briefly on the needs of the users in this field, and makes a few general suggestions as to the setting up of an educational information service in Nigeria.

One of the basic needs is for specialist librarians to be appointed at every major institution involved in educational research. These people would then investigate further what is required, what is possible, and what should be done.

It appears that not enough is known about the library of the Nigerian Council for Educational Research in Lagos and the Regional Office for Education in African in Dakar. Both these institutions should be key institutions in disseminating information in Nigeria and much more publicity is needed to acquire the attention of the researchers themselves.

Nigeria is committed to a policy of educational development. Information is necessary for research and research is necessary for innovation. The first step is the organisation of information services in the fields of education.

REFERENCES


6. Educational Resources Information Center. Current Index to Journals in Education New York: Macmillan Information. 1969-


10. The work for this tape service is being carried out by the National Foundation for Educational Research and sponsored by the Department of Education and science and the Social Science Research Council. The project began in September 1973.


12. Unesco. International Educational Reporting Service 1974 - Materials received by this service are microfilmed. References stored on computer tape. Output (in English, French
and Spanish) in form of indexes and bibliographies.

13. International institute for Educational Planning, 7-9 Rue Eugene Delacroix, Paris. Founded by a resolution of Unesco in 1962 to be a world centre for research and advanced training.


17. At the time of writing the author is still in process of collecting information.


Sample cards selected from a Uniterm system for a query on what is available on 'school buildings'

Items numbered 110, 51, 142, 293, 204, 275, 88, 179 are relevant.

---

**BUILDINGS**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>21</td>
<td>142</td>
<td>53</td>
<td>64</td>
<td>75</td>
<td>66</td>
<td>17</td>
<td>88</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>41</td>
<td>272</td>
<td>123</td>
<td>74</td>
<td>115</td>
<td>76</td>
<td>107</td>
<td>128</td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>51</td>
<td>302</td>
<td>243</td>
<td>204</td>
<td>205</td>
<td>106</td>
<td>157</td>
<td>158</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td></td>
<td>91</td>
<td>312</td>
<td>293</td>
<td>264</td>
<td>275</td>
<td>146</td>
<td>207</td>
<td>208</td>
<td>229</td>
<td></td>
</tr>
<tr>
<td></td>
<td>291</td>
<td>303</td>
<td>226</td>
<td>317</td>
<td>298</td>
<td>309</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCHOOLS**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>11</td>
<td>142</td>
<td>73</td>
<td>194</td>
<td>95</td>
<td>86</td>
<td>7</td>
<td>88</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>31</td>
<td>262</td>
<td>113</td>
<td>204</td>
<td>105</td>
<td>116</td>
<td>97</td>
<td>118</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>282</td>
<td>223</td>
<td>314</td>
<td>215</td>
<td>126</td>
<td>117</td>
<td>268</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td></td>
<td>121</td>
<td>293</td>
<td>275</td>
<td>236</td>
<td>237</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>201</td>
<td>316</td>
<td>257</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>211</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>301</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>