

LAT 662 Centro de Información Científica y Humanística:
 a university information centre
 in the Third World

BIBLIOTECA



CENTRO UNIVERSITARIO
 DE INVESTIGACIONES
 BIBLIOTECOLÓGICAS

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Within the framework of the Autonomous National University of Mexico (UNAM), the Scientific and Humanistic Information Centre (CICH) carries out various documentation activities, chiefly of a bibliographical nature, and servicing the different scientific units of UNAM; among the services, ALERTA and CLASE are discussed in detail.

The Autonomous National University of Mexico (Universidad Nacional Autónoma de México) is a vast complex of schools, institutes, centres and administrative units, divided between a main central campus and various outlying units, for the achievement of its purposes of teaching (involving over a quarter of a million students, including upper secondary school pupils), research (its infrastructure is equivalent to one-third of the country's total [1]),¹ and the dissemination of culture. Its activities cover a very wide range of subjects, extending from philosophy and music to mathematics and astronomy, without of course overlooking 'information' in its professional aspects.

It is natural that in such a large university complex which, among other things, vies with the University of San Marcos, Peru, for the title of the oldest foundation in the continent, considerable bibliographical resources should have been available at every stage in its evolution and growth.

Since every need creates a function and this, in turn, creates its corresponding organ, it was to be expected that, with a research infrastructure of such proportions, UNAM would need and would establish a specialized information centre, particularly in view of the fact that, in 1962, when the Scientific and Technical Documentation Centre organized by Unesco in 1950 ceased to exist, 75 per cent of the users of that centre were from UNAM. This is not a chance occurrence; it shows that there was in UNAM a vast potential of information users who, despite the extensive bibliographical resources of their own university, required additional data to meet their needs in full.

In 1971, therefore, UNAM set up the Centro de Información Científica y Humanística (CICH), a subdivision of its Scientific Research Co-ordinating Services which co-ordinate the activities of ten institutes and seven centres.

As its title indicates, CICH also covers a wide range of the humanities, a fact to be borne in mind when solutions for the problems encountered are worked out.

UNAM, in 1971, was already an exceptionally large and complex institution with very extensive bibliographical resources; however, these were so dispersed that most of the university community was unaware of their existence or had no access to them. UNAM is a member of the Asociación Nacional de Universidades

1. The figures in brackets refer to the references at the end of this article.

e Institutos de Enseñanza Superior (ANUIES) and has established co-operation agreements with several of its members. It is also a member of the Union de Universidades de América Latina (UDUAL) and serves as the headquarters of that organization. This fact does not lack relevance, in that the numerous groups of institutions associated with or attached to ANUIES and UDUAL have very similar needs but highly differing resources as regards documentation and information.

We should mention again that the original idea in setting up CICH was to serve scientific researchers in UNAM. These research workers are distributed among its institutes of astronomy, biology, physics, geophysics, geography, geology, engineering, biomedical research, mathematics, and applied mathematics and systems research, and its centres for marine sciences and limnology, sciences of the atmosphere, computing services, nuclear studies, materials research, instruments and scientific and humanistic information, plus the research divisions in schools of architecture, science, medicine, veterinary medicine and zoology, chemistry and dentistry. The decision to include the humanities in the centre's services meant involving research workers in these disciplines in the institutes of anthropology, economics, aesthetics, philology, philosophy, history, law and sociology, and in the research divisions in the schools of philosophy and letters, political and social sciences, and psychology. All these university units have their own specialized libraries, and some have the distinction of being the finest, or of being unique, in their specialized subject in the country.

When CICH began its activities, it was faced with the paradox that the research workers whom it was to serve were already served by their own libraries and through exchanges with colleagues in their particular 'invisible colleges'. For this priority group of users, CICH could not aspire to represent more than a modest additional source of information, on the basis of the principle that no library is self-sufficient. Most if not all of these libraries receive indexes and abstracts in their specialized subject, and these collections are more or less complete although not always accessible to the general public.

At the other extreme of the range of potential users is the vast mass of students and their teachers, with the library of their own faculties plus the Central Library at their disposal. This group makes extensive use of textbooks and is almost entirely unacquainted with modern documentation and information services. But, in this large group of users only a very small minority feels and manifests the need for 'being informed' and is able to overcome the 'language barrier' inherent in the current and numerous information sources.

It should be pointed out that in the large Latin American university conglomerations—although not confined to these alone—a very important 'middle class' exists as regards specialized information needs. This group is fairly large and its steadily increasing number consists of a small proportion of teachers, students and research workers, as well as of university authorities; many of these users are acquainted with, and make regular use of, specialized documentation and information services, but most are dissatisfied with the bibliographical resources available to them.

Within UNAM, this 'middle class' represents the largest group. However, it is unfamiliar with the location and/or easy access to information resources in UNAM; here dispersion both of resources and of users is a serious drawback. Outside UNAM this 'middle class' is smaller, more dispersed and consequently much less well catered for, despite the fact that two-thirds of research work in Latin America is carried out in its universities [2].

Few Mexican university libraries have a sufficiently large budget to be able to subscribe to services such as *Chemical Abstracts*, *Biological Abstracts*, *Index Medicus*, *et al.*, let alone to the *Citation Indices* published by the ISI.¹ If mention of these

1. See *Unesco Bulletin for Libraries*, Vol. XXXI, No. 5, September-October 1977, item 266.

titles alone might seem biased, it should be explained that they cover the preferred research disciplines in Latin America [3, 4, 5].

Now that mention has been made of the fact that there are certain preferred disciplines in Latin American research and that most research is undertaken in the universities, it should be stated, in addition, that the bibliographical practices of Latin American researchers vary considerably, depending on the needs of humanists or scientists. Whereas the latter prefer to publish the results of their work in foreign (non-Mexican) journals with a world-wide circulation, humanists and sociologists prefer journals published mainly in Latin America.

Linked as it is to the 'service' information on the one hand, and to the universities as 'non-commercial producers and consumers' of information on the other hand, the bibliographical situation is extremely complex in Latin America; consequently, it has not been easy for CICH to tackle the bibliographical task assigned to it.

During its first five years, along with the training of its professional staff—the staff of two in 1971 currently consists of twenty-two full-time professional members in various disciplines—CICH had to take many variables into account in the planning of its services.

It became obvious that, although CICH was set up for research purposes, priority in its services had to be assigned to the aforementioned 'middle class' of users both inside and outside the university. It became clear also that external users could establish priorities that would bring their libraries up to a minimum acceptable level. Owing chiefly to UNAM's publishing capacity, this organization was the 'country's most extensively endowed documentation centre—a fact reflected in its heavy expenditure on subscriptions of more than 6,000 periodical titles, serial publications and some 3,500 titles of exchange. UNAM's users were largely unacquainted with these resources, dispersed among some hundred departmental libraries, not all of easy access. This rich heritage covered a wide range of subjects but in proportion to its volume, inevitably tended towards duplication; duplications also occurred because each departmental library arranged its subscriptions independently. Thus, a better co-ordination of these resources was required, and a system needed to be devised in order to benefit the greatest number of users, especially those outside UNAM and hence with low purchasing power.

It also became obvious that research work carried out in UNAM had the greatest potential in Mexico; still, despite the university's considerable publishing capacity, the disproportion between few existing scientific research journals and numerous but internationally lesser well-known humanities and social science journals had to be overcome.

Therefore, it seemed necessary, first, to acquaint the university community and the 'middle class' with UNAM's wealth of interdisciplinary documentary material and make the latter easily available to them, and, second, to make known beyond the bounds of UNAM, and of Mexico, the results of research work conducted by humanists and sociologists. Two bibliographical tools were accordingly devised: ALERTA and CLASE.

ALERTA (Información Multidisciplinaria en la Universidad)

This is a fortnightly 'package' with ten sections. The title was not improvised: first, the last word 'University' does not mean UNAM exclusively, but refers to Spanish- and Portuguese-language universities as well. For these universities the 'package' prepared by CICH twenty times a year offers unparalleled advantages, from technical, academic and economic standpoints. It should be borne in mind that UNAM, as a national and non-profit-making institution, is incurring this expenditure—on which returns will be made only in such intangible terms

as the fostering of innovatory ideas, and the advancement of knowledge—not simply for its own users but, through a simple and inexpensive extrapolation, for users covered by ANUIES and UDUAL, and, indeed, for anyone who requires the service.

ALERTA is a term which gave rise to considerable discussion because it lent itself to misinterpretation; here it is used in the sense of 'alerting' or 'current awareness' and, as such, was finally accepted. Since it is an instrument that, every fortnight (except holidays), brings to the attention of its users carefully selected titles (periodical articles and monographs) published throughout the world, in all disciplines, at the university level, it is frankly an 'alerting' service; in fact the centre regards it as 'throw-away' material, since months afterwards UNAM recipients can count on receiving specialized indexes and abstracts prepared by services outside of Mexico. But under more modest circumstances than in UNAM, this fortnightly 'package' of latest information may well serve as an instrument for retrospective bibliographical searches and should be kept for this purpose.

The term 'information' requires no explanation. However, the term in this 'package' deserves comment. First, the material analysed covers the latest published information in the best known journals of world-wide circulation. Second, all this material is available in one of the libraries in the UNAM central campus. Third, it covers all fields of interest at the university level. The first, and probably the most important, of the ten sections of the 'package', concerns a *Basic Bibliography with KWOC Indexing* (keyword-out-of-context index) with terms in Spanish, another specific feature of the 'package'.

The information that every university needs, above all, is 'multidisciplinary' and 'interdisciplinary'; in a kind of 'smorgasbord' way, *ALERTA* provides information retrieval in both the humanities and the sciences, at the cost of a few minutes' study every fortnight.

In explaining the words in the *ALERTA* title which define its content and purpose, we have, in fact, only described its first section, from which the 'package' originated.

Section 1. Bibliografía Básica en Forma de KWOC represents multidisciplinary indexing with terms in Spanish; as such, to our knowledge, the service may well be unique. In this section, every 'humanistic' term is preceded by an asterisk; for example, the word 'state' can relate to a work on physics or politics—in the latter instance it is marked by an asterisk. The terms, taken exclusively from the title of the article, are translated into Spanish and arranged alphabetically, thereupon follow the untranslated original, pagination and the serial or access number.

An important fact is that terms are not standardized or controlled, i.e. selection and arrangement are not based on a thesaurus, given the multidisciplinary character of these terms, and the fact of their being in Spanish. Begun in 1974, this section has since been computerized; a start has recently been made to ascertain the frequency of terms with a view to preparing a thesaurus in the future.

The access number refers: (a) to the 'list of journals analysed in a given issue', a feature intended for tracing the complete bibliographic reference and (b) to the UNAM library or libraries where the work is located. *ALERTA* accordingly serves as a link for inter-library loans within the university itself.

The content of the KWOC section is taken from the most important subscription material received in the university. It consists of 400 journal titles (including those of UNAM itself) which are carefully selected and constantly reviewed. Selection of these titles has proved more difficult than the devising of the programme for computerization of the section. It was carried out on the basis of various reports concerning the choice of journals, the extent to which they are quoted, the experience gained both in UNAM and outside it, and suggestions by research specialists.

Four hundred titles of journals represent a minute fraction of all those published

in the world. But since they are the most quoted and what are termed 'hard-core journals', to disregard their content would be to risk lagging behind in the pursuit of knowledge.

ALERTA is distributed at the time the journals analysed in KWOC arrive by air at the university campus.

Sections 2, 3. These sections of the 'package' are entitled '*Bibliografía Mexicana*' and '*Bibliografía Latinoamericana*'. Their purpose is to compile and provide an up-to-date analysis of the extremely dispersed and plentiful material published by Latin Americans in non-Latin American journals.

This material is compiled from some 6,000 titles of journals with a world-wide distribution. In preparing these sections CICH uses the six sections of the ISI 'Current Contents'. The material is set out by countries and, when extremely voluminous as in the case of Argentina and Brazil, by disciplines.

In this way it has been shown [5] that Latin American research specialists send over 2,300 manuscripts each year to foreign journals; that Brazilians have recently captured the first place from the Argentinians as regards output; that the preferred discipline is biomedicine; that almost all studies are published in English; that journals in the United States absorb the majority of these studies; and—a very important consideration—that two-thirds of these works originate in higher education institutions [2].

Separate mention should be made of the fact that among the disciplines covered, the humanities and sociology occupy a very modest penultimate place, the very last being occupied by the earth sciences.

Section 4. Actualizaciones, includes 'updating', 'revisions', 'bibliographical research', 'monographs', historical summaries, etc., or, ultimately, everything, at the university level that illustrates the expansion of the 'frontier of knowledge' in a given subject.

Section 5. The title of this section is *Materiales. Instrumentos. Métodos*. Similar in purpose to Section 4, Section 5 reflects the existence in UNAM of the co-ordinating Materials Research Centre and an Instruments Centre.

Section 6. The *Educación Superior e Investigación* section represents summaries concerning professional services to education and research. This section is divided into chapters such as History and Philosophy, Administration, Economics, Psychology and Health, Education and Society, Educational Research, Vocational Training, Vocational Guidance, Teaching Methods and Educational Technology, Research and Development, Lifelong Education, etc. In this and the following section, the titles of works are translated into Spanish.

Section 7. Works reviewed in the *Tercer Mundo* section refer to important Latin American social, economic and political areas with which the university research is concerned.

Section 8. Reseña de Libros is a scholarly review of books, by specialists on the subject, of works of interest to the university at large, regardless of the frequently very specialized contents of the works.

Section 9. Congresos Futuros. At the beginning of this article, mention was made of the paradox of providing information to members of 'invisible colleges', as are the researchers in a large university. CICH, in the case of these highly qualified and well informed users, can only have a complementary role to play and this section represents such complementary information. It provides the university's academic staff with the possibility of finding out sufficiently in advance about meetings—mainly international—where they may exchange ideas with their colleagues.

Section 10. Investigaciones Bibliográficas Retrospectivas appears twice a year and contains a list of titles of research studies carried out by CICH at the request of users. A copy of this material can be obtained on request from the centre's Documentation Service.

The format of the aforementioned 'information package' may change in the future especially as several of its sections will become computer-processed. (The first is already undergoing computerization.)

CICH also offers documentation services aimed at providing the material listed in the various sections of *ALERTA*. It should be borne in mind that the contents of Section 1 (*Basic Bibliography with KWOC Indexing*) only are derived from publications received in the university (though not by the centre's library) with the result that this material is relatively easily and quickly accessible. The material listed in *ALERTA*'s other sections is not necessarily available in UNAM and may have to be obtained from non-Mexican libraries.

The annual subscription rate to *ALERTA* (*Multidisciplinary Information in the University*) (twenty issues) is U.S.\$75, with a specially reduced rate of \$50 for higher education establishments in Latin America. With a view to obtaining a certain 'feedback' as regards its use, each issue of the 'information package' includes two KWOC coupons (forty per annum) for the acquisition, free of charge, of two copies of works listed in Section 1.

Still, it is regrettable to note that many university libraries lack funds for the subscription of *ALERTA* or, what seems worse, the service is not known and/or its use is limited.

CLASE (Citas Latinoamericanas en Sociología y Economía)

Research, and work in general, in the socio-economic field has reached a high professional level in Latin America. The social sciences are experiencing a remarkable surge of interest in the region and there are a number of highly qualified specialists of international repute.

However, the Latin American socio-economic output that achieves world-wide dissemination is modest in size, and does not reflect the size of the actual contributions. We have already mentioned that contributions by Latin American specialists to foreign humanities and sociology journals occupied the penultimate place in the list of disciplines dealt with. These specialists appear to prefer Latin American journals of which there is a fair number.

But here we encounter an interesting phenomenon. The Latin American scientist, who submits his research to an outstanding foreign scientific journal, will also benefit from the dissemination of his contribution by way of highly reputed indexing and abstracting services. No such by-product is assured to Latin American journals in the domain of the humanities and the social sciences do not receive the same attention [6].

Convinced of the utility of a citation index, CICH included in its projects the development of a system intended to index this hitherto neglected material. To the best of our knowledge, the *ISI Social Sciences Citation Index* analyses only ten Latin American journals, out of a total of 1,280 titles.

Accordingly, in 1976, the quarterly publication of *CLASE*¹ began; *CLASE* seeks in-depth coverage of the contents, at first, of some 300 Latin American journals, gradually extending its scope until the whole range of Latin American publications

1. *CLASE* is a CICH project, exclusively under the auspices of UNAM and in no way connected with either the Consejo Latinoamericano de Ciencias Sociales (CLACSO) in Buenos Aires or with the Centro Latinoamericano de Documentación Económica y Social (CLADES) de la Comisión Económica para América Latina in Santiago de Chile.

in the humanities is embraced; a start has already been made with anthropology. The material is set out in five sections: table of contents, subject index, citation index, author index and index of institutions.

1. The first section serves as a reference for all the others, identifying those dealt with in other sections by way of the serial (or access) number of each article.
2. The subject index is set out in natural language made up of keywords taken from the titles and text of articles. Each key word is accompanied by one or several numbers referring to the articles which deal with the concept.
3. The citation index is generated through computer retrieval of all works quoted by each of the authors listed in the table of contents. The basic principle of the citation index is that every work which refers in its bibliography to a work previously published probably has thematic affinity with the earlier work: as a result proceeding from the knowledge of a single important work, references to many others on the same theme may be obtained, since the access numbers alongside the name of an author also refer to related works by other authors. This section is the least conventional and most useful part of CLASE.
4. The author index helps trace the works of a given author as these are cited in CLASE.
5. The index of institutions with which authors are affiliated makes it possible to keep up to date with the Latin American socio-economic research; this index also provides a survey by countries.

A special programme is being developed for the computerized processing, including on-line storage, of all CLASE sections; this represents an updating instrument and is one of the products of a data bank for information retrieval.

This data bank is developed by first coding the material analysed. By means of special symbols which identify variables required to trace a particular journal article are encoded; this 'marking' in turn saves the analyst's time and allows for a 'separation' in the machine printing stage of the terms as they refer to each CLASE section. In addition, this process permits interrelated information to be recorded on magnetic tapes for subsequent use in other computers. CICH stores the journals analysed by CLASE for later use by the documentation service. The annual subscription rate to CLASE is U.S.\$100 for Latin American universities and U.S.\$200 for others.

In order to serve high level research specialists, CICH has made exclusive contract arrangements for Mexico with the ISI data banks; as a result ISI's Automatic Subject Citation Alert (ASCA) services are offered by CICH under the title of AL DIA (ALERTA—Difusión de Información Automatizada), at greatly reduced rates for university subscribers. This is a further investment by the National University in support of education and research.

In providing the various aforementioned services CICH relies principally on the considerable documentation resources of UNAM, supplemented by those of libraries in Mexico City. Even so, 40 per cent of documents needed have to be obtained from foreign sources. In conclusion, we would point out that the priority which over the past six years UNAM, through CICH, accorded to the development of scientific and humanistic information and documentation activities is largely unparalleled in other Third World universities.

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Znanosti in Umetnosti.
Biblioteka

Postni predal 323-VI
Ljubljana

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