

Contribution to the Evaluation of University Libraries by the conspectus Methodology: Case study of the University Library of Bejaia

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1- Introduction:

The different activities of university libraries require measures up stream such as the acquisition policy and evaluation of the Existing collection strength or current level. Down stream, the activities deal with the development of acquisition and evaluation of the current development.

The evaluation is a necessary tool to measure the results of any action concerning the objectives. The specialists discern the evaluation ex ante, ex tempore and ex post. In fact, any evaluation must take into account the objectives of any policy (ex ante), the means to reach them (ex tempore) and the expected results (ex post) [KUPIECK, 1994]

The university libraries live within structural dysfunctions such as:

- Management Policy, which is not clear yet.
- Incoherence between objectives and means.

With regard to these lacks, assessment of university libraries is the efficient tool for the manager and the authority to judge the spread means and existing lacks.

The traditional evaluation methods are different and do not give much information about the weaknesses. In this context, the conspectus methodology based on the collection details is the pertinent one. It reveals strengths and weaknesses.

In the context of Algeria and with regard to the structural dysfunctions above mentioned, we ask the following questions:

- What is the value of applying conspectus in libraries evaluation?
- What are the lacks that it shows?
- What is the strength that it reveals?

2- Methodological and theoretical basis of conspectus methodology:

Methodological basis:

We have gone after some steps to reach the objectives of the study:

1. Documentary research: we have studied the method by the use of the French literature dealing with evaluation. Besides, we have used the English literature dealing with conspectus.
2. The use of the method: conspectus is defined as: « the general survey or synopsis of the collection » [GIAPPICONI, 2000]. It is based on the collection segmentation and breakdown into subject areas. The conspectus is based on 24 divisions, 400 categories and 4000 subjects [BUSHING, 2001]. The use of the method concerns the University library of Bejaia in order to extend its application to the university libraries in Algeria. The methodological instruments are divided into two categories:
 - instruments centred on collection
 - Instruments centred on users.

Evaluation is done in stages:

- the study of existing strength intensity
- the study of the current development
- the study of objectives.

Conspectus is studied by means of indicators:

- Indicators of the collection deepness: some codes are being used and that inform on the level of collection regarding the available teaching programs in the university.
 - Indicators of language coverage: some alphabetic codes indicate the language of documents.
 - Indicators of conservation: they inform about the documents preservation.
3. The Benchmarking method: it is based on the comparison with different libraries inside the country and furthermore with different continents in order to show the adaptations of the method.
 4. The case study: the case proposed below, is the university library of Bejaia. We have applied indicators such as the average age of the collection, the indicator of language and indicator of the collection deepness (or cognitive indicator).

Theoretical basis:

The concept of conspectus means «survey or study» [GIAPPICONI, 2000]. It is a synthetic representation of the collection and the current development of a segment of the documentary resources of a library or a group of libraries networked regarding the fixed objectives.

Conspectus is based on the collection segmentation by divisions, categories and subjects. Cognitive indicators are used to determine the collection deepness by means of alphanumeric codes. In addition, the collection is segmented by language and support. [GIAPPICONI, 2001].

Indicators of the collection:

They make possible the analysis by the use of three criteria:

1 / Indicator of the collection deepness or cognitive indicator:

It is based on alphanumerical codes analysing the collection in regard to teaching levels. At first, there were codes of RLG Group fixed (from 0 to 5). Later, they were amended by the WLN Group (10 levels by subdivisions). [GIAPPICONI, 2001]:

0	Out of scope, (the library does not collect in this area.
1a	Minimal level : uneven coverage
1b	Minimal level : even coverage
2a	Basic information level: introductory
2b	Basic information level : advanced
3a	Basic study or instructional support level (undergraduate courses...)
3b	Intermediate study or instructional support level (upper division ...)
3c	Advanced study or instructional support level (master's degree programs)
4	Research level (doctoral research)
5	Comprehensive Level.

2 / Indicator of the language coverage:

This indicator analyses the language coverage of the collection. They are alphabetic codes. [GIAPPICONI, 2001]. At first the codes were the RLG ones.

E: English language material predominates, little or no foreign language material is in the collection

F: selected foreign language material included in addition to the English language material

W: wide selection of material in all applicable languages

Y: material is primarily in one foreign language.

After that, the WLN amended these codes (codes of the RLG Group) in order to be adapted to the context of any country. The code (E) is replaced by the code (P). The aim is to adapt it to the context of all countries.

P: the original language predominates, little or no foreign language

S: selected foreign language material included in addition to the original language

W: wide selection material in all applicable language

X: material is primarily in one foreign language.

There are also codes available to countries having two official languages.

3 / Indicator of conservation:

It analyses the collection preservation. Alphabetical codes are used for the purpose illustrated in the following board. [IFLA]

0	Out of level, no processing of conservation. the deterioration of collection is accepted
1	Normal wear. Documents are conserved regarding their usefulness
2	Physical preservation. Some operations of cleanliness and reparation.
3	Content preservation. Planning reassortiment.
4	Research conservation
5	

Criteria of the evaluation of the collection:

Let us examine the criteria of the evaluation of collection, which are even quantitative and qualitative:

Quantitative Criteria to determine the Current Level:

They mean the quantitative methods and concern the collection size, document life and percentage of titles owned by library in comparison to a reference list.

1 / number of titles of monographs per division:

The WLN Standards are the following:

CL Rating	Monographic coverage in a division
1b or less	Fewer than 2500 titles
2a	2500-5000 titles
2b	5000-8000 titles
3a	8000-12000 titles

3b	More than 12000 titles representing a wide range than 3a
3c	More than 12000 titles representing a wider range than 3b
4	More than 12000 titles representing a wider range than 3c

These standards are modified and vary according to publishing output. We calculate the product (p):

$$\frac{\text{Number of monographs in a division}}{\text{total publishing output}} \times 24 = p$$

Then we multiply (p) by the standard of the WLN. Example: to find out the new standard of 2a we multiply (p) by the standard of the WLN numbers:

$$2a = p \times 2500$$

$$2a = p \times 5000$$

Besides, the association A.C.R.L. has adopted its standards for the libraries members of its association. These ones take into account certain parameters such as the collection basis, data of faculty, data of students etc.

2 / Percentage of books in the standard bibliography:

The reference list to which the holding of library is compared is elaborated by professional associations and experts in the field.

The following board illustrates these standards:

CL Rating	Percentage of holdings in major standard subject bibliography
1b or less	5% or below
2a	Less than 10%
2b	Less than 15%
3a	15 to 20%
3b	30 to 40%
3c	50-70%
4	75 to 80%

3 / Percentage of periodicals indexed in the standard sources:

Wilson index is an example of these sources:

CL rating	Periodical and periodical index coverage
1b or less	Some general periodicals+ reader's guide to periodical literature and/or other major general indexes
2a	Some general periodicals+ reader's guide to periodical literature and/or other major general indexes
2b	2a + wider selection of general periodicals + 30% or more of titles indexed in the

	appropriate Wilson subject index + access to the index
3a	50% of titles indexed in the appropriate Wilson subject index+ access to the index
3b	75% of titles indexed in the appropriate Wilson subject index and/or other appropriate major subject indexes + access to the index + a wide range of basic serials+ access to non bibliographic databases
3c	3b + 90% of titles indexed in the appropriate Wilson subject indexes + access to the major indexing and abstracting services in the field.

4 / other media:

All formats and supports are analysed even the paper and the electronic versions.

5 / languages in the collection by division:

These criteria determine the language coverage. For example, for the level of study the foreign language is required.

CL rating	Langage
1b or less	Collection almost exclusively in English (or primarily language)
2a	Collection almost exclusively in English (or primarily language)
2b	Collection almost exclusively in English (or primarily language)
3a	Collection almost exclusively in English (or primarily language)
3b	Selected foreign language materials are included
3c	Selected foreign language materials are included
4	Wide selection of foreign language materials

6 / average age of titles:

The formula is the following:

$$\text{Average Age} = \frac{\text{years frequency}}{\text{total number of titres}}$$

7 / readership level of books and periodicals:

There are no standards for the levels 1b and 2a.

CL rating	Readership level
2b	Selection appropriate for the general reader and general reference questions.
3a	2b + lower division undergraduate study level materials+ major subject specific reference and bibliographic sources
3b	3a + upper division undergraduate study level materials + wider selection of subject specific reference and bibliographic sources
3c	3b + materials to support master's level and/or independent research.

Intellectual Criteria for the level C.L.:

Level	Intellectual content
Level 1a-1b	Reference books without periodicals
Level 2a-2b	Reference books- general periodicals- electronic resources but at the limited level
Level 3a-3b-3c	Monographs- reference books- general and specialised periodicals- document resources in foreign language- document of known authors- electronic resources
Level 4	Monographs- reference books general and specialised- general and specialised periodicals- selection of foreign language- known authors- electronic resources- retrospective resources
Level 5	Print books- manuscripts- pertinent documents- national and international level

Quantitative standards to determine the Acquisition Commitment (A.C.):

The acquisition rate: we use a formula:

At first, it is necessary to determine the number of acquired documents and divide the credit allowance by the average price of the document.

$$\frac{\textit{weighted total budget}}{\textit{average price of books in the discipline}} = \textit{number of books purchasable}$$

Then the acquisition rate is determined by dividing the number of acquired documents by the total number published in the country * 100.

$$\textit{acquisition rate} = \frac{\textit{number of documents purchasable}}{\textit{total annual publishing output in a discipline}} \times 100$$

Intermediate instruments:

The example is applied at the library of Michigan [STREBY]

Division	Weighted allocation	Estimation price per vol.	Estimation no.vol.buyable	Average annual publishing output	Estimation % of output acquired	A.C. level	Minimal allocation to acquisition (10% of publications)
Ex Chemistry	966\$	134,32	7	530	1%	2a	7119\$

Quantitative criteria to determine A.C. level:

AC rate	Acquisition commitment
1b or less	Less than 5% US hardback publishing output+ 10% to 20% best reference books published each year as identified in standard reviewing sources
2a	Less than 5% US hardback publishing output+ 10% to 20% best reference books published each year as identified in standard reviewing sources
2b	5-10% of US hardback publishing output as identified in Bowker annual + 20-30% best reference books
3a	10-15% of US hardback publishing output+ 40% to 60% of the best.
3b	20% of US hardback publishing output+ 40% to 60% of the best.
3c	25% of US hardback publishing output+ selected foreign publishing + 60% to 80% of the best.
4	30% of US hardback publishing output+ 95% of the best +wide selection of appropriate foreign publishing output.

Intellectual Criteria:

In addition to quantitative criteria there are also qualitative ones that are also important such as the necessity to acquire documents concerning the needs of the university (programs). Actually, the levels C.L., A.C. and G.L. are mixed.

3- The case study:

The environment of the study is the university library of Bejaia. Created in 1983, the library is organised within four sections in application of the interdepartmental (ministries) document of 26/05/87 and 31/03/90. The sections are: [UNIVERSITE DE BEJAIA]

1. the section of acquisitions
2. the section of treatment or analysis
3. the section of orientation
4. the section of bibliographic searching.

The application of conspectus in Algeria is characterised by the use of the following indicators:

1 / the indicator of average age of the collection and indicator of language coverage:

These indicators are applied to the totality of the collection by using divisions of conspectus [see annexe]

We take as examples the conspectus divisions applied to the disciplines taught at the university.

Biology:

The biology is taught at the university. The Goal Level, which is corresponding is 3c or 4 (D.E.S. or level of research).

The average age is situated at the year of 1983. The age is then of 21 years old, and the critical age is 10 years. We conclude that the collection is obsolescent. It is then necessary to renew it and acquire recent monographs.

Chemistry:

Chemistry is taught at the university. The level should be 3c or 4.

Average age is situated at the year of 1985. It is then of 19 years old and the critical age is 10 years. Therefore, we can say that the collection is even obsolescent.

The English language has a rate of 22%; it means that there is interest to this language and should be maintained and enriched.

Law:

The level is 3c (corresponding to licence).

The average age is 07 years. It is conform to standards.

And the Arabic collection is 05 years old. It is also conform to the standards and it is obvious that it is one of the strength of the collection.

Computer science :

It is a discipline, which is taught at the university. Then the required level is 3c or 4 because the assured programs are engineer degree and research level.

The average age of the discipline is 10 years. Besides, the critical age is not determined for this discipline (class 000 generalities). It is of 10 years concerning the class 600.

It is necessary to renew the collection because of the obsolescence.

The English language is of 18%. It is necessary to have acquisitions in foreign language especially in English.

Electronic :

The discipline is taught at the university. Then the level is 3c or 4.

Average age is 12 years.

English is of 17%.

It is necessary to renew the collection, acquire recent monographs, and enrich the collection in English.

Mathematics:

Mathematics is an important discipline in the university because it is taught in different disciplines such as computer science, electronics, and economic sciences.

Its level should be 3c or 4.

Average age in the division is 20 years, And the critical age is 10 years (class 500 of CDD). So, we conclude that the collection is obsolescent.

English is of 29%. That is an important point and the interest to this language should be maintained and enriched.

Physics:

The required level is 3c or 4 because the discipline is taught at the university.

The average age of the collection is 20 years old and the standard is 10 years. So, the collection should be renewed.

The language in English is 20%. It is necessary to enrich it.

2 / Indicator of collection deepness applied to mathematics:

We choose this discipline for the following:

- The collection is well done.
- The discipline is taught in several fields.
- The access via internet to catalogues of specialised libraries and French universities such as the university library of Bordeaux and Grenoble. [CATALOGUE FUSIONNE DES OUVRAGES DE BIBLIOTHEQUES FRANCAISES].

We have analysed the division of mathematics by exploring the levels of titles. We use bibliographic database “Electre”, the analysis of the document (we use for that the preface, the table of contents) and asked specialists in the field who are teachers and students in research level.

Analysis of the C.L. level :

Category	level 3b (1st cycle)	level 3c (2nd cycle)	level 4 (3rd cycle)
8130 Geometry	16	18	07
8131 Differential Geometry	0	09	01
8133 higher geometry	0	02	0
8140 trigonometry	02	0	0
8150 algebra (general books)	82	30	04
8151 Algebraic structures	03	12	04
8152 Algebraic numbers	05	02	0
8153 polynomes	0	01	01
8155 Algebraic equations	0	01	0
8156 linear algebra	62	26	01
8157 vectors	03	0	0
8158 matrices	10	04	0
8159 tensors	0	02	0
8170 numerical analysis	18	15	0
8171 numerical methods	20	20	0
8172 numerical calculus	05	01	0
8174 algorithms	03	03	01
8181 probabilities	10	38	05
8182 mathematics of signal	0	04	02
8183 statistics, data analysis	41	67	28
8184 operational research	01	20	14
8186 stochastic	0	13	09
8188 simulation, modelling	02	15	09
8189 Reliability	0	09	01
Total	283	312	87

Over the 24 categories of mathematics described above there are 42% monographs of the 1st cycle, 45% of monographs are of the 2nd cycle.

We conclude that the collection assure and rely on the level of 1st and 2nd cycle. The research level should be enriched.

Analysis of the A.C. level:

Category	level 3a (undergrad. or terminals)	level 3b (1st cycle)	level 3c (2nd cycle)	level 4 (3rd cycle)
8101 guides	0	01	0	0
8105 mathematical history	0	02	01	0
8107 general books	05	01	01	0
8108 collections	0	25	10	0
8109 general books	0	12	04	0
811 mathematical logic	0	0	02	0
8130 general books (geometry)	01	02	02	0
8131 differential geometry	0	0	02	0
8140 trigonometry	0	01	0	0
8150 algebra (general books)	0	10	06	01
8151 algebraic structures	0	01	01	0
8153 polynomes	0	02	02	0
8154 rational tractrix	0	01	01	0
8156 linear algebra	0	0	01	01
8158 simulation, modelling	0	0	0	0
8160 analysis (general books)	0	21	10	0
8161 differential calculus	0	01	02	0
8162 differential equations	0	0	02	0
8164 infinitesimal calculus	0	0	0	0
8165 function theory	0	04	0	0
8167 functional analysis	0	09	07	01
8170 numerical analysis (gener.books)	0	0	0	01
8171 numerical methods	0	01	01	0
8174 algorithms	0	0	01	02
8180 probabilities. Statistics. (general books)	0	05	03	01
8181 probabilities	0	04	05	0
8183 statistics, data analysis	0	01	01	0
8184 operational research	0	03	03	0

8186 stochastics	0	01	01	01
8187 optimisation	0	01	0	01
8188 simulation, modelling	0	0	0	02
8190 maths applied to computer science	01	02	01	0
8191 maths applied to physics	0	01	02	04
8192 maths applied to electricity	0	0	0	01
Total	07	112	72	17

The board above shows that the acquisition for the level 3a (terminals) is of 4%.

The level 3b (1st cycle) is 52%, the level 3c (2nd cycle) is 34% and the level 4 (research) is 9%.

The university assured and rely on the level of 1st cycle and in 2nd position the 2nd cycle.

Making comparisons between the C.L. and A.C. is necessary:

- The rubric 8150 (algebra) the 1st cycle is assured for either the C.L. or the A.C. level.
- The rubric 8156 (linear algebra) there is a dichotomy between the A.C. level and the C.L. level
 - For the C.L. the 1st cycle is furthered.
 - For the A.C. the 2nd cycle is furthered.
- the rubrics 8181, 8183, 8186 et 8188 (probabilities, statistics, stochastics and modelling)
- For the C.L. level, the 2nd cycle is furthered and for the A.C., the 2nd cycle is furthered.

3 / Comparison to university libraries of Bordeaux and Grenoble (France) :

The method concerns the comparison between the university library of Bejaia and the university libraries of Bordeaux and Grenoble, which serve as a reference. [CATALOGUE FUSIONNE...]

The following Board illustrates:

Category	Univ.Bejaia	Bordeaux	Grenoble
810 Generalities	411	518	805
811 mathematical logic	16	58	61
812 arithmetic, number theory	04	107	143
813 geometry	47	292	472
814 trigonometry	02	04	04
815 algebra	158	102	168
816 analysis	287	191	229
817 numerical Analysis	65	37	21
818 probabilities, statistics	300	399	324

810 generalities:

The percentage of possessions of university library of Bejaia is 79% of the possessions of library of Bordeaux and 51% of the University of Grenoble.

811 mathematical logic:

The university library of Bejaia owns 27% compared to the library of Bordeaux and 26% compared to the University of Grenoble.

812 arithmetic and theory of numbers:

The university library of Bejaia has 4% compared to the library of Bordeaux and 3% compared to the library of Grenoble.

813 geometry:

The library of Bejaia has 16% compared to the library of Bordeaux and 10% compared to the library of Grenoble.

814 trigonometry:

The library of Bejaia has 50% compared to the library of Bordeaux and Grenoble.

815 algebra:

The library of Bejaia owns 155% compared to the library of Bordeaux and 94% compared to the library of Grenoble.

816 analysis:

The library of Bejaia has 150% compared to the library of Bordeaux and 125% compared to the library of Grenoble.

817 numerical analysis:

The library of Bejaia has 176% compared to the library of Bordeaux and 309% compared to the library of Grenoble.

818 probabilities, statistics, operational research:

The library of Bejaia possesses 75% in comparison with the library of Bordeaux and 92% in comparison with the library of Grenoble.

The Board illustrates the strengths and weaknesses of the collection:

- Strengths: algebra, analysis, numerical analysis, probabilities and statistics.
- Weaknesses: mathematical logic, arithmetic and theory of numbers, geometry and trigonometry.

Conclusion :

The conspectus brings new elements to the evaluation:

It is based on techniques of evaluation that are still used. It uses the statistic methods to determine standards to apply to the analysis of collection such as the C.L. level, the A.C. level and even G.L. level. It also uses the methods based on comparison (benchmarking), which allows comparison between one library and another library considered as a reference regarding some criteria.

Moreover, conspectus brings something new, because of the details of the collection (strength and weakness).

The analysis is done by steps: we determine the C.L. level then the A.C. level which are compared to G.L. level.

It is based on the collection segmentation by division (24 divisions), by language, format and support.

The segmentation by division allows analysis by means of indicators:

- The indicators of the collection deepness that are numerical values used to describe levels and objectives of the collection.
- Indicators of the coverage language that are alphabetic codes which analyses the coverage language of the collection
- Indicators of the conservation: codes are given to analyse the level and scope of the collection preservation.

The potential of application in Algeria is fundamental. The focalisation on the collection is important because it reveals forces and weaknesses. The application will bring instruments to use and will allow the appropriation of indicators.

Recommendations:

1 / elaborate instruments such as standards available to evaluate the collection within university to analyse the existing strength collection (C.L.), the current collecting intensity (A.C.) and the objectives which take into account the teaching programs (G.L.).

2 / elaborate guides that describe the steps to the application of the method in Algeria.

3 / elaborate the catalogue of all publications at the national level, in the Arab world, in France etc

4 / installation of college experts at the ministry level to elaborate list available to university libraries.

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Annexe :

Divisions of conspectus:

Division
Agriculture
Anthropology
Art and Architecture
Biological Sciences
Business and Economics
Chemistry
Computer science
Education
Engineering and Technology
Geography and earth science
History and auxiliary sciences
Language, linguistics and literature
Law
Library science generalities and reference
Mathematics
Medicine
Music
Performing Arts
Philosophy and Religion
Physical Education and Recreation
Physical Sciences
Political Science
Psychology
Sociology