

The Initiative of CALIS Interlibrary Loan and Document Delivery Service evaluation

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Abstract

It has become increasingly common for CALIS member libraries to provide services to each other since CALIS phase-3 period in 2010. In 2011, CALIS (China Academic Library and Information System) launched CALIS Model Member Library (MML) Plan covering its services of five aspects to promote CALIS services among member libraries. With this program, CALIS hopes to examine the validity of its services, improve its cloud service and mechanism, promote wide utilization of CALIS service, spread comprehensive benefits of CALIS project, and train librarians with the latest concepts and technologies. Interlibrary Loan and Document Delivery (ILL/DD) service is one of the most important parts. 71 libraries took part in MML plan on ILL/DD service.

The article introduces the initiative of CALIS ILL/DD service evaluation to its Model Member Libraries, which includes: the purpose of this evaluation; the assessment procedure; the evaluation framework; the evaluation system; data collection and analysis. It demonstrates how the evaluation is conducted and how it becomes an essential tool in measuring CALIS services.

1、 Purpose of the evaluation

In order to understand the performance of the plan, CALIS decided to evaluate these services. Firstly, the purpose of this evaluation is to have a comprehensive understanding of the Model Member Libraries' service on ILL/DD, to reward Model Member Libraries with good performances, and to motivate member libraries' interest on ILL/DD service. Secondly, the evaluation would provide guidance to member libraries to further use CALIS ILL/DD service, to improve members' development activities on resource sharing, service innovation and other aspects. Lastly, the evaluation would help member libraries identify their problems on ILL/DD service, so as to enable them to improve and standardize the service with better quality.

2、 Assessment procedure

The evaluation on CALIS Model Member Libraries has drawn attention to a number of issues which are relevant to library service performance measurement and has been extended to include the following steps.

1) As long as the evaluation objectives and contents are determined, the evaluation indicators, both first-level and second-level indicators, should be constructed. Definitions of each indicator should be given.

2) Then the evaluation framework should be established, including the weight, ratio and score of each indicator. It is crucial to seek professional advice at this point.

3) Based on the above two steps, data collecting results on each indicator should be summarized. There are two ways: directly obtaining data through CALIS ILL/DD system and indirectly obtaining data through member libraries and their users' survey.

4) At the same time, the evaluation system should be developed. It makes it possible to manage the evaluation process.

5) Lastly, the data should be analyzed, the evaluation results should be provided, the experiences and problems should be summarized. If necessary, the evaluation indicators should be revised according to the actual situation.

3、 Evaluation Framework of ILL/DD service

In order to indicate the construction of indicators which objectively reflect the current situation of CALIS ILL/DD service and guide the future improvement of CALIS services, the Evaluation Framework of ILL/DD service focuses on four selected issues, including definitions for four first level indicators, 12 second level indicators, scoring method, requirement and source of data. Besides a few qualitative indicators, most of them are quantitative indicators. This will help greatly in clarifying libraries' difference and will be especially useful for measurement. The total score of the evaluation framework is 100 points.

The 1st first-level indicator, "basic requirement" is to urge member libraries to submit their holdings data, books and periodicals, to CALIS and update them on time.

The 2nd first-level indicator "service ability", with its focus on technical equipment, human resource and literature resource used for ILL/DD service. It includes three second-level indicators, "technical equipment owned", "staff" and "search engines used". These indicators are given to examine member libraries' owned equipment (networks, computers, scanners, printers, fax machines, digital cameras, etc), full-time staffs with their professional qualification and basic databases (or information resources) provided to end users for ILL/DD service.

The 3rd first-level indicator "service quality" has multiple dimensions and is the core indicator on this evaluation. It includes three second-level indicators: 1) "total transactions" : the transactions finished via CALIS ILL/DD system from other libraries' end users during the statistic time; 2) "Fill Rate": the proportion of filled requests against total requests; 3) "Service Time": the average turnaround time.

The 4th first-level indicator "service effect" contains three second-level indicators, there are: 1)"the increase of registered users": the number of new registered users during statistic time; 2)"internal requirement": the number of ILL/DD requirements submitted by the end users from member libraries' own institution; 3) "training": user trainings hold by member libraries; 4)"user

satisfaction level”: users’ satisfaction to member libraries’ ILL/DD service. Since the “assisted searching and assisted retrieving service” is complicated and difficult to carry out, the “award” indicator is added to the evaluation framework. The libraries that provide this service get 2 more extra points.

Table 1: the evaluation framework of ILL/DD service

first level indicator	score	second level indicator	score	definition of indicator	source of data	counting method			
Basic Requirement	10	holdings	10	submit all the holdings data to CALIS and update them on time	provided by member libraries	Submitted amount VS total amount:			
						Percent age	Score	Percent age	Score
						90%	10	40%~50%	5
						80%~90%	9	30%~40%	4
						70%~80%	8	20%~30%	3
						60%~70%	7	10%~20%	2
50%~60%	6	5%~10%	1						
Service Ability	20	equipment owned	5	technical equipment for ILL/DD service(networks, computers, scanners, printers, fax machines, digital cameras, etc.)	provided by member libraries	One can get 1 point as long as one kind of machine is equipped and is running well. The total score of this indicator is 5 points.			
		staff	10	full-time ILL/DD service staffs and their professional qualification	provided by member libraries, audited by CALIS	One can get 2 points with each full-time staff on ILL/DD service; one who has CALIS ILL training certificate can plus 3 points; the total score does not exceed 10 points			

		search engine used	5	the basic databases used for ILL/DD service	counted by CALIS	One can get 2 points if CALIS literature retrieval systems (such as eDu, CCC, Union Catalogue) are used as the basic databases. One can get 5 points If the usage amount of CALIS literature retrieval systems is higher than the average level.			
Service Quality	40	total transactions	20	total transactions handled through CALIS ILL/DD system with central handling function	counted by CALIS	Amount	score	amount	score
						>2000	20	200-400	11
						1800-2000	19	100-200	10
						1600-1800	18	80-100	9
						1400-1700	17	60-80	8
						1200-1400	16	40-60	7
						1000-1200	15	20-40	6
						800-1000	14	1-20	5
						600-800	13	0	0
						400-600	12		
		The score maybe adjusted according to the real transactions amount of member libraries							
		fill-rate	15	the proportion of filled requests against total requests	counted by CALIS	percent age	score	percent age	Score
90%	15					50%~55%	7		
85%~90%	14					45%~50%	6		
80%~85%	13					40%~45%	5		
75%~80%	12					35%~40%	4		
70%~75%	11					30%~35%	3		
65%~70%	10					25%~30%	2		
60%~65%	9					<25%	1		
55%~60%	8								

		service time	5	the average turnaround time	counted by CALIS	If the service time is Less than 3 days (promised time deference), one can get 5 point. For each day delay, 0.5 point is deducted.
Service Effect	30	the increase of registered users	10	the number of new registered users	counted by CALIS	More than 200 new registered users, 10 point; From 150 to 200, 8 point; From 100 to 150, 6 point; Less than 100, 5 point.
		internal requirement	10	the number of requirement submitted by the end users from their own institutions	counted by CALIS	More than 2000 pieces of requirement, 10 point; From 1500 to 2000 pieces, 9 points; From 1000 to 1500 pieces, 7 points; From 500 to 1000 pieces, 5 points; Less than 500 pieces, 3 point. There are maybe some appropriate adjustments according to the real transaction amount.
		training	5	user trainings hold by member libraries	provided by member libraries	One can get 0.5 points with each time of training organized on ILL/DD service, the highest score is 3 point. The one who provide promotional materials to CALIS, add 1 point; the one who assist CALIS provincial centers to provide service and training, add 1 point.
		user satisfaction level	5	user satisfaction rate to ILL/DD service	counted by CALIS	Very satisfied, 5point; Satisfied, 4 point; Ordinary, 3 point; Dissatisfied, 2 point; Very dissatisfied, 1point;
Award	extra 2	special service	2	assisted searching and retrieving service	counted by CALIS	The library provides “assisted searching and retrieving service” gets 2 extra points.

4、 CALIS service evaluation system

In order to make the evaluation more effective and efficient, CALIS has

developed service evaluation system. With this system, CALIS service capability, quality and service effect can be scientifically measured and analyzed, so are its service centers and member libraries.

The service evaluation system has enabled CALIS to understand at which level the intended and unintended goals are reached, to maximize the impact of CALIS project' to Chinese higher education, to improve the project's current and future programs and policies. According to the evaluation method, eight columns are designed to administrate the evaluation, including: "notice and message", "evaluation framework", "data submission", "expert review", "parameter analysis", "indicator ranking", "evaluation reports" and "user management".

By now, eight evaluation frameworks and their indicators have been constructed in service evaluation system already, including three series of indicators on the evaluation of CALIS service centers, five series of indicators on MML cataloging outsourcing service, eDu(e-read) search engine service, CALIS current content(CCC) service, ILL/DD service, and reference service.

性质	指标体系	负责人	评估报表
评估	CALIS省中心评估方案	董涛	指标组
评估	CALIS e读服务评估方案(示范馆)	冯英	指标组
评估	CALIS外文期刊服务评估方案(示范馆)	张俊娥	指标组
评估	CALIS馆际互借与文献传递服务评估方案(示范馆)	曾丽军	指标组
评估	CALIS参考咨询服务评估方案(示范馆)	高冰洁	指标组
评估	CALIS编目外包服务评估方案(示范馆)	王静	指标组
评估	CALIS地区中心子项目指标评估方案	董涛	指标组
评估	CALIS全国中心子项目指标评估体系	董涛	指标组
调研	成员馆对CALIS工作的满意度调查	董涛	指标组

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Fig.1 Eight series of indicators in CALIS service evaluation system

The screenshot displays the '参数定义' (Parameter Definition) section for the 'CALIS馆际互借与文献传递服务评估方案(示范馆)'. On the left, a tree structure shows the hierarchy of indicators under 'B 服务能力' (Service Capability), including 'B.1 设备资源', 'B.2 人力资源', and 'B.3 检索平台'. The main area shows the configuration for '查看修改【B服务能力】', with fields for '参数编码: B', '参数名称: 服务能力', and '填报说明:'. Below these are dropdown menus for '数据类型: 分类特征', '数据来源: 成员馆填报', and '控件类型: 请选择', along with '保存' and '清除' buttons.

Fig.2 The construction of service evaluation indicators

5、 Data analysis

Although CALIS Administrative Center plays an important role in collecting

information to help guide the evaluation, it may not be successful if without the support from its member libraries. 71 libraries took part in the survey of CALIS MML Plan on ILL/DD service. All of them actively carry out the ILL/DD service, submit the data on time, and prepare for the evaluation carefully. To ensure that evaluation will be useful to CALIS as well as to their member libraries, this evaluation is strictly carried out in accordance with “the evaluation method and procedure”; the evaluation framework is reviewed by experts; the data is handled in CALIS evaluation system. The Top score is designed as 102 points, which includes 2 rewarding points.

The evaluation result showed Shaoxing University in Zhejiang province tops among the 71 participants, with its score 99 points. The score of the last participants is 62 points. That is to say, all participating libraries have passed the evaluation. Distribution of evaluation scores for each section is: 9 participants are between 90 and 100 points; 27 participants between 80 and 90 points; 23 participants between 70 and 80 points; 12 participants between 60 and 70 points. We think the evaluation results reflect the service of Model Member Libraries during the period of Oct. 1 2012 to May 1, 2013. In the following, each evaluation indicators is analyzed, the experience summed up and the lessons drawn.

1) “Basic requirement” analysis

Only one second level indicator “holdings” is used to investigate “basic requirement”. All 71 Model Member Libraries submitted holdings data to CALIS, the average holdings information each library submitted is more than 350,000 copies. All data are loaded in CALIS union catalogue database after being handled. Then, the ratio of one library’s holdings data submitted to CALIS and total holdings this library owned is counted. The higher the ratio, the higher the score. East Normal University submitted its holdings information with the highest volumes among all participants. Their holdings have reached over one million, 1,080,015 pieces, to be exact. 16 libraries get full credit in this indicator, the ratio of holdings data they provided and their total holdings reaches 100%.

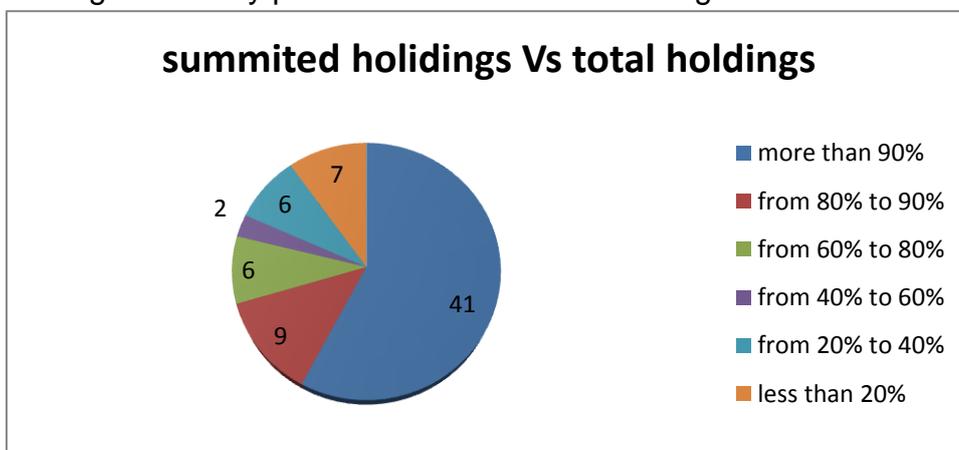


Fig.3 The statistic on the ratio of holdings data libraries provided VS their

total holdings

2) “Service ability” analysis

“Service ability” includes three second level indicators, “hardware configuration”, “staff” and “search engine used”. For the indicator “hardware configuration”, most libraries configured necessary equipment on ILL/DD service, these are not limited to network, computer, printer, fax machine, scanner and digital camera, etc.

Regarding “staff”, more than 82% libraries have sent their staff for CALIS training on ILL/DD service, and at least one of their staffs has obtained CALIS certification. 40 libraries have two or more staffs with CALIS certification (see fig.4).

The indicator “search engine used” is to investigate the application of Model Member Libraries on CALIS information retrieval systems. This is used to improve data accuracy, and to increase ILL/DD service fill-rate. Although the numbers submitted through CALIS literature retrieval systems are small, most Model Member Libraries have started to use “eDu(e-read), CCC, union catalogs” and other CALIS retrieval platform to submit ILL/DD requests. It is expected Model Members libraries will help promote wider use of these retrieval systems.

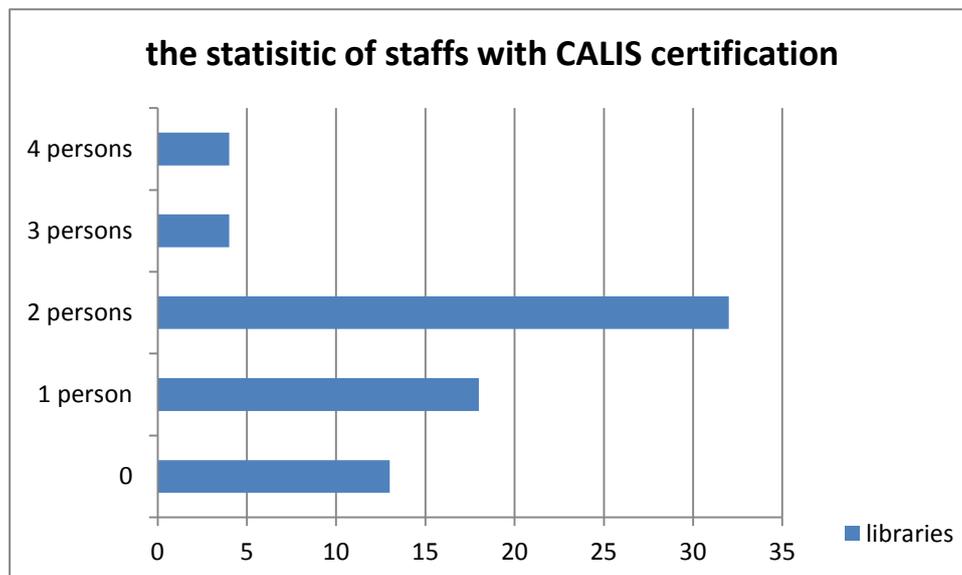


Fig.4 the statistic on Libraries’ full-time staffs with CALIS certification on ILL/DD service

3) “Service quality” analysis

“Service quality” has three second level indicators, “total transactions”, “satisfactory rate” and “service time”. These are core indicators of CALIS ILL/DD service evaluation framework. Only the requests submitted through CALIS ILL/DD system with handle functions are counted. The statistic time ran from October, 1 2011 to May, 15 2012.

WenZhou Medical University ranked the No. 1 in its “total transactions”, 3866, followed by ShaoXing University, 3694, in the seven months surveyed. However, only 4 libraries’ total transactions are more than 2000 pieces, about half of the libraries’ total transactions are 100 or even less (see fig.5). The big difference seems to relate to libraries’ operational capacity to carry out ILL/DD service, the degree of attention to it and the richness of the collections. Since the main purpose of this MML plan is to encourage more libraries to use CALIS ILL/DD system with handle functions, the result shows that all Model members begin to use these services. Although participant libraries’ total transactions are not very satisfactory, it is understandable.

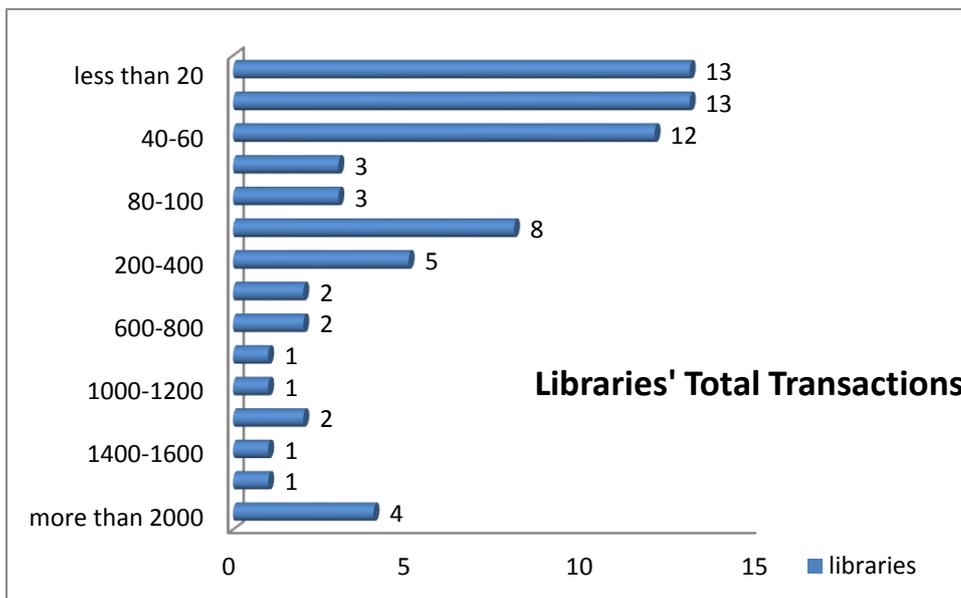


Fig.5 the statistic on “total transactions” of MML

Fill-rate is another important key to evaluate service quality. The average fill rate of MML is 86%. The four libraries with top total transactions are Wenzhou Medical College, Shaoxing University, Tianjin University and Fudan University. Their fill-rate is about 90%, not in front half of those of Model Member Libraries. However, the fill-rate of some libraries with small total translation is very high, nearly reach 100%. For “fill-rate” indicator, the advice is that as long as the transaction amount reaches a certain number, statistic evaluation on fill-rate is more useful.

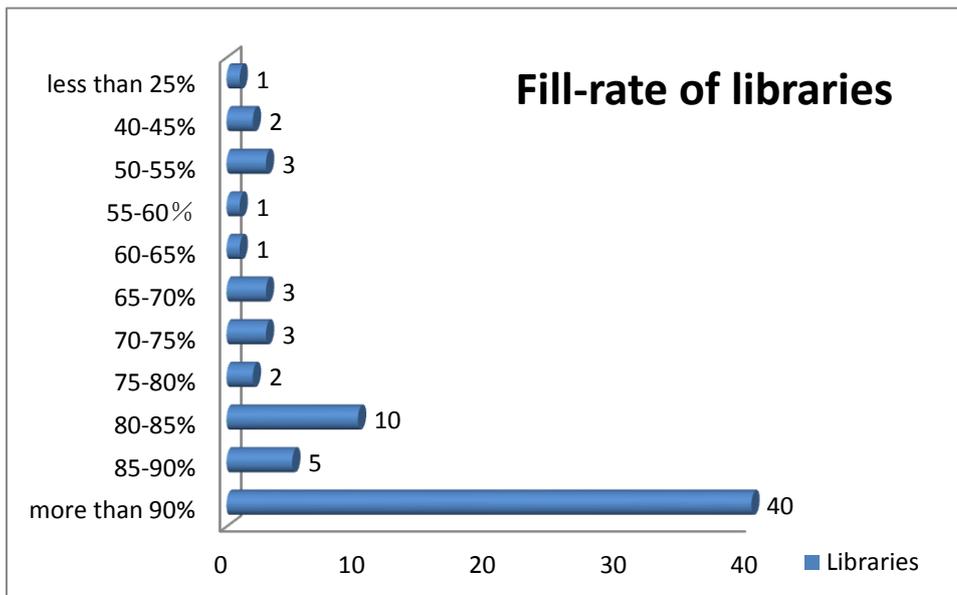


Fig.6 the statistic on transaction “fill-rate” of MML

For “service time,” if the average time between request received and request finished is within three days, the service time indicator meets the needs. The chart shows 76% of the libraries meet the standard. Other 24% libraries need to find the problems and improve their operation management.

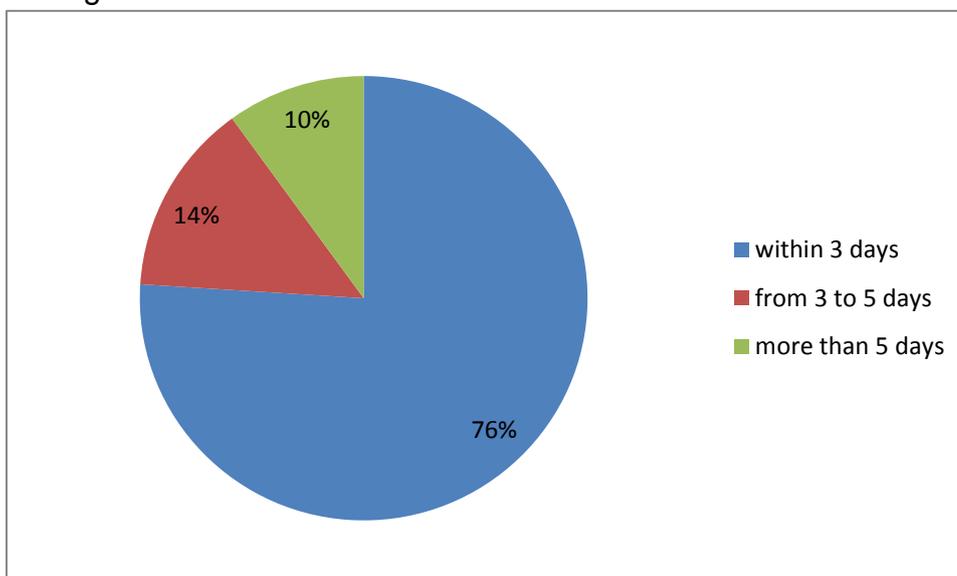


Fig.7 the statistic on “service time” of MML

4) “Service effect” analysis

This indicator focuses on evaluating libraries’ promotion and training on ILL/DD service, as well as users’ capability to use the service. The four second-level indicators are “the increase of registered users”, “internal requirement”, “trainings provided” and “user satisfaction rate”. The last one

is not counted this time because of the system development issues and the difficulty to carry out the investigation. On the whole, about half of the libraries get full credit for “service effect”, only one library failed to pass.

The evaluation shows 11% of the libraries have got over 500 newly registered users; 40% have newly registered users between 200 and 400; and the rest get fewer than 200.

“Internal requirement” refers to the number of requirements submitted by the end users from their own institutions. Complained to “total transactions” which reflects the ability of one library severing users from others, “internal requirements” reflects the dependence of libraries’ own end users to themselves. The internal requirements amount of Fudan University is 7801, it is No. 1 on this indicator, Wenzhou Medical College’s internal requirement is 5882, ranked No. 2. The total amount of all 71 Model members is 70,269, with an average of 990 each library during statistic time.

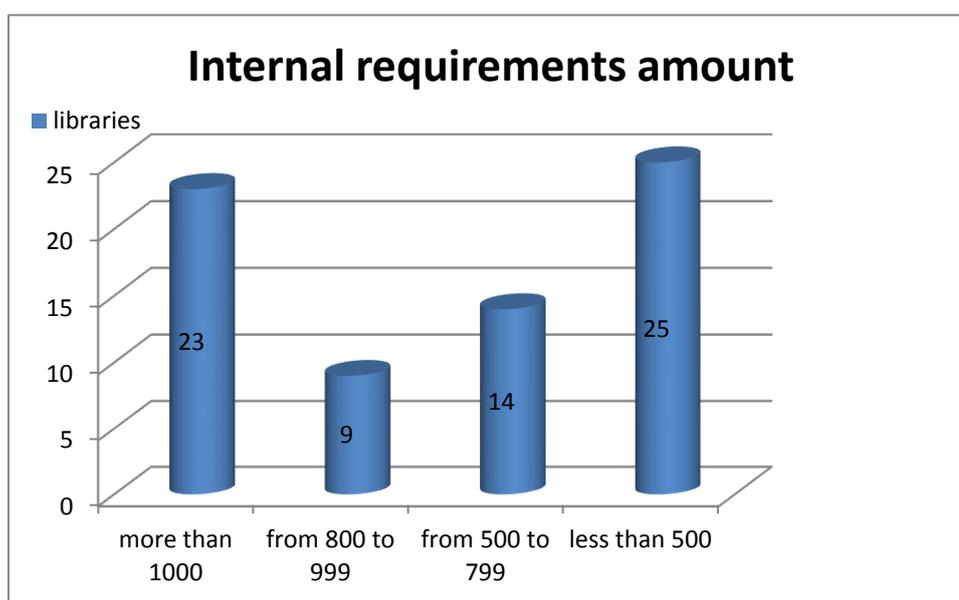


Fig.8 the statistic on internal requirement amount of MML

Training includes each library’s training workshops provided and trainees involved for ILL/DD service, the promotional materials provided to CALIS and library support to its provincial service centers. 73% of the libraries get full credit.

5) “Award” analysis

To promote the “Assisted searching and assisted retrieving service” this evaluation provides 2 additional points to these libraries that provide this service. This added-value service is relatively difficult to MML since they have to arrange staffs with rich experience to do this job. Only 18 members get the two additional points’ award.

6、 Conclusion

The major objectives, provided by the evaluation, a MML is expected to follow are:

- ✓ disclosing all its holdings information to public by submitting it to CALIS;
- ✓ continuous professional training for the staff;
- ✓ promoting the use of CALIS search engine to end users;
- ✓ strengthening its cooperation with CALIS other member libraries;
- ✓ increasing the variety of the services;
- ✓ providing special and unique materials to CALIS member libraries.

CALIS has implemented the evaluation with the purpose to better understand ILL/DD service among its member libraries. Its results were studied. The efforts from the member libraries have helped the success of CALIS MML Plan. The evaluation has achieved the expected targets and improved service performance as originally planned. The performance measurement provides a basic for one MML to compare its ILL/DD service performances with this of another similar institution. In addition, there have also been several other benefits, such as the standardization of CALIS ILL/DD service, the formulation of service working guidelines to member libraries, the development of CALIS cloud services and its mechanism. ILL/DD service staffs have become more professional, confident and cooperative with professional trainings. Such experience accumulated becomes the foundation for service development qualitatively and efficiently.

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