COBIMET Library Consortium: the experiences of a collaborative project of four Hispanic Higher Education Institutions in Puerto Rico

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Abstract

This paper describes the experiences of the only registered library consortium under the State Department of Puerto Rico, mostly composed by private higher education institutions. The author explains how the *Consorcio de Bibliotecas Metropolitanas* (COBIMET) was founded and what were the challenges, needs and goals of this collaborative group. To achieve cooperation the members of the consortium considered the common needs of each one of the participating libraries. The areas to work on were technology, library services, information resources, budget constraints and professional development. Among the benefits derived from all activities the participating institutions were able to reduce costs, share knowledge, and explore diverse learning experiences.

Keywords: consortium, collaborative projects, COBIMET, virtual library, virtual media resources

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Resumen

Este artículo describe las experiencias del único consorcio de bibliotecas inscrito bajo los

criterios del Departamento de Estado de Puerto Rico. Está compuesto en su mayoría por

instituciones privadas de educación superior. El autor explica como el *Consorcio de*

Bibliotecas Metropolitanas (COBIMET) fue fundado y cuales fueron su retos, necesidades

y objetivos de este grupo colaborativo.

Para alcanzar la cooperación se identificaron las necesidades comunes entre los miembros

del consorcio. Las áreas con necesidades comunes fueron las de tecnología, servicios

bibliotecarios, recursos informativos, presupuesto y desarrollo profesional. Algunos de los

beneficios obtenidos de las actividades que participaron las instituciones fueron reducción

en gastos, compartir de conocimientos y explorar diversas formas de aprendizaje.

Palabras claves: consorcios, proyectos colaborativos, COBIMET, biblioteca virtual,

recursos informativos electrónico

Introduction

The Knowledge society uses communication and information technologies to

restructure the production of goods and services, and to support the development of new

services. Having reliable information is essential to develop new technologies, services and

therefore wealth. According to Brindley (2009), Thomas Stewart was one of the first to

discuss the emerging knowledge based economy. Stewart saw "intellectual capital as

intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth" (p.4).

The involvement of libraries in the 21 century for the development of the intellectual capital is crucial to the economical and social development of a society. Libraries must provide user centered services that empower patrons to get information from the library at any time, independently from their geographical location, and encourage a flexible response to their unique and diverse needs (Atlas, Wallace and Van Fleet, 2005). Furthermore, libraries must provide high quality peer reviewed information to the users to help them create new knowledge and take well informed decisions.

COBIMET, acronym for *Consorcio de Bibliotecas Metropolitanas,* was designed considering these needs. Making quality information available to users through a virtual library and providing the necessary tools to critically evaluate that information. The following paper will present how COBIMET has addressed the common informational needs of four higher education institutions in Puerto Rico through a cooperative model of consortium.

Library Consortium and the Success of COBIMET

According to Johnstone (2007) institutions that are prepared to collaborate and work cooperatively are the ones who are taking in their hands accountability and efficiency. There are many ways to improve programs and services throughout collaboration. Johnstone (2007) presents some examples about how higher education institutions can benefit from collaborative activities. Some of this benefits are: "1) Saving money with consortium agreements, 2) Allowing faculty to work on site and at other institutions to create course materials, 3) Sharing courses among institutions, 4) Developing electronic services for

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students and faculty, and 4) Creating resources in open formats that aid in institutional

recognition and mission fulfillment" (p.147).

When organizations explore partnerships with other institutions is generally because

they have identified a need that cannot be fulfilled using their own human or economical

resources (McClure, 2003; Johnstone, 2006). That was inspiration to create COBIMET.

According to Fernós (n. d.) higher education in Puerto Rico has presented a sustained

and diversified growth in enrollments, institutions and programs. Cámara (n. d.) presents that

by the first semester of 2001- 2002 the enrolment was of 191,552. By the first semester of

2006-2007 the enrolment was 223,974 that reflects a 17 % increase from 2001-2002. The

Directory from the Puerto Rico Council of Higher Education (2010) states that there are 6

public higher education institutions and 42 private institutions accredited by them.

COBIMET consortium is currently a nonprofit organization offering virtual library

services, information literacy skills website and a library professional development program

to private institutions of higher education and schools. The COBIMET consortium is the

only non profit organization of its kind registered in the Puerto Rico's Department of State.

COBIMET Background

COBIMET started seven years ago as a United States (U.S.) Title V cooperative

grant, with the University of the Sacred Heart acting as the host institution.   The four higher

education institutions that participated in the cooperative grant were the University of the

Sacred Heart (U.S.C), American University of Puerto Rico (A.U.P.R.), Polytechnic

University of Puerto Rico (U.P.P.R.), Colegio Tecnológico de San Juan (S.J.T.C.). The

participating institutions began by identifying the common needs, after an analysis they coincided in the following:

1. They were unable to keep pace with the Information Technology demands to adequately provide library resources to students and faculty.

2. They were unable to individually provide reliable and accessible Virtual Library Services to meet the information needs and the flexibility required by students and faculty.

3. IT staff and Librarians needed comprehensive, continuous training in networks management, strategic planning and security vulnerability issues.

COBIMET's Project Information Resources Acquisitions

The first identified need was partially addressed through the acquisition of a common multidisciplinary virtual library collection. As shown in **Table 1**, over the course of the project the collection grew significantly so that the universities had collective access to an enviable amount of data and information.

Table 1
Increase in databases (number and percentage) from baseline to Year 05 (2006-07)

HSI's	Baseline 2001-02	Year 01 2002-03		Year 02 2003-04		Year 03 2004-05		Year 04 2005-06		Year 05 2006-07		% of Change
USH	9	25	64%	41	39%	42	2%	95	56%	158	66%	**955%**
UPPR	10	20	50%	36	44%	41	12%	98	58%	169	72%	**880%**
AU	4	18	78%	34	47%	36	5%	87	59%	150	72%	**2075%**
SJTC	0	14	100%	30	53%	32	6%	84	62%	146	74%	**100%**
TOTAL	**23**	**77**	**70%**	**141**	**45%**	**151**	**7%**	**364**	**59%**	**623***	**71%**	**1482%**

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Note. The data in the table does not mean that there are 623 separate databases but is shown merely to demonstrate the progress and increase in and the number of databases now accessible at each institution.

As shown in Table 2, from 2003 to 2004 there was a percentage increase on most of

the type of resources when compared with the baseline of 2003.

Table 2
Acquisition of Collection from Baseline (Year 02)

Type of Resource	Year 02 2003-04	Year 03 2004-05	Year 04 2005-06	Year 05 2006-07	% change from 2006	% of change from Baseline
Journals	40,422	39,673	36,673	46,458	20%	13%
Full text journals	19,473	16,086	15,614	14,782	(1%)	(3%)
E-books	13,507	15,584	15,934	17,534	10%	18%
Dissertations, documents & images	913,200	919,799	1,551,916	2,299,974	35%	70%
Websites	0	0	69	80	14%	100%

COBIMET's Project Collection and Budget Management

According to Grogg (2009) during this financial turmoil it is essential for librarians

to demonstrate to higher education administrators that "the library is conducting business in

such a way as to save the institution money while concurrently negotiating for the best

possible content as the best possible price" (p.129). Furthermore Perry (2009) presented the

results of a survey conducted in the spring of 2009 in which the two major issues for

consortium were budget management and license renegotiations. Out of necessity, library

consortium will be focusing a great deal of attention on managing their budgets, especially in times of economic uncertainty.

COBIMET Title V project grant produced substantial financial savings to each of the partner institutions during its operations; a minimum of $1,000,000 has been saved on acquisition of information resources since the project inception. By acquiring acquisitions as a group ,the negotiating power of the consortium with the data base vendors has resulted not only in savings for each institution but has enabled COBIMET to acquire more information volumes from each vendor with a minimal investment. Furthermore, value added exercises carried out by COBIMET, such as a review and elimination of more than 30% of duplicate titles, resulted in financial savings to date of approximately $60,000. Another example of strengthening the collection and generating even more savings for the institutions was the evaluation of over 100 open access resources resulting in 80 free titles being incorporated into the collection; 90% of them were databases.

Reliable and Accessible Virtual Library Services

The second identified need was addressed through the creation of a COBIMET Portal were the institutions accessed the virtual library. According to Vijayakumar, Kannappanavar and Mestri (2008) the main benefits of a portal resides in acting as a single access point for library information resources like catalogues, subscriptions databases, subject gateways and electronic journals. Furthermore, they state that the main benefits to a portal are easier access, simplified authentication, personalization and the resources presentation in a single place.

Since its inception, COBIMET's portal has registered an increase of 36% in the number of visits while a decrease of 37% in the number of hits due in part to the WebMaster working on improvements to the portal, the introduction of the MetaSearch function, and the

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integration of the Private Virtual Library which sporadically slowed service during the 2007

year. Vijayakumar et al. (2008) indicate that changes in a portal can affect the use of patrons

until they adjust to the new modifications.   As **Table 3** demonstrates, activity in the Portal

increased gradually while students and faculty became more familiar with the tool and also

as a result of the promotion of services by each of the participating institutions.

Table 3

Use of VLS from baseline (January 2006 to September 2007)

2006	Visits	Hits	Mega Bytes	2007	Visits	Hits	Mega Bytes	% of change visits
Jan	1,120	24,035	343	Jan	**2,327**	145,779	1,628	52%
Feb	2,088	82,032	1,124	Feb	**2,964**	133,703	7,101	30%
Mar	2,569	113,779	1,290	Mar	**2,225**	26,493	339	(15%)
Apr	1,736	53,438	630	Apr	**3,074**	39,235	523	46%
May	2,443	78,355	957	May	**3,815**	42,536	3,248	36%
June	2,071	88,898	1,100	June	**5,818**	56,985	1,411	64%
July	1,387	43,487	545	July	**4,048**	23,567	361	66%
Aug	3,005	117,099	1,260	Aug	**3,970**	40,296	583	24%
Sept	3,563	166,494	1,751	Sept	**4,067**	48,380	807	12%
Total	**20,753**	**813,609**	**9.531**	**Total**	**32,308**	**514,521**	**9,531**	**36%**

Training and Professional Activities

The training and professional activities to institutions' personnel was addressed through a formal professional development program that was based on the latest trends of virtual library services, network management and security for IT. By planning professional development activities in which all partner institutions participated, COBIMET was able to take into service top level resources to train staff and to develop a consistent and sustained training program to assure that staff received quality professional development at a fraction of the cost if obtained separately. Over the course of the 5 years project a total of 133 hours was offered in 20 training activities for the IT personnel. The objective established a minimum of 45 hours of training; however the project exceeded this by offering 88 more contact hours, thus exceeding the goal by 67%. The training activities included workshops in areas such as Security and Certification, Intrusion Detection, Servers Installation and Configuration, Routers Configuration, Policies and Procedures, and Strategic Planning.

As demonstrated in Table 4 below, over the course of the 5 years, the project provided a total of 39 professional development activities with a participation of 481 library staff (437 from the partner institutions). In addition, during Year 05 a total of 44 professors, administrative staff and students also participated in training activities.

Table 4

No. of Participants in Librarian Training Activities (Year 01-05)

Year	# of Activities	Participants
01	3	35
02	7	89

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03	11	98
04	7	120
05	11	139
Total	**39**	**481**

COBIMET Technology Component

Technology is an essential component of COBIMET's mission, because it ensures the smooth operation of the Virtual Library. The four institutions concurred that there was a need for a reliable and secure network that provides an efficient virtual library services platform. Hossain (2009) explains that without a "proper access management mechanism, confidentiality and integrity of information cannot be guaranteed" (p.21).

COBIMET's technological goal was to implement a secure local network model for the participant institutions. The requirements for a local network followed the guidelines of the AN-MSI model from EDUCAUSE. The goal of AN-MSI (which stands for Advanced Networking with Minority-Serving Institutions) was to assist Minority-Serving Institutions as they developed the campus infrastructure and national connections to become and remain full participants in the emerging "Information Age."
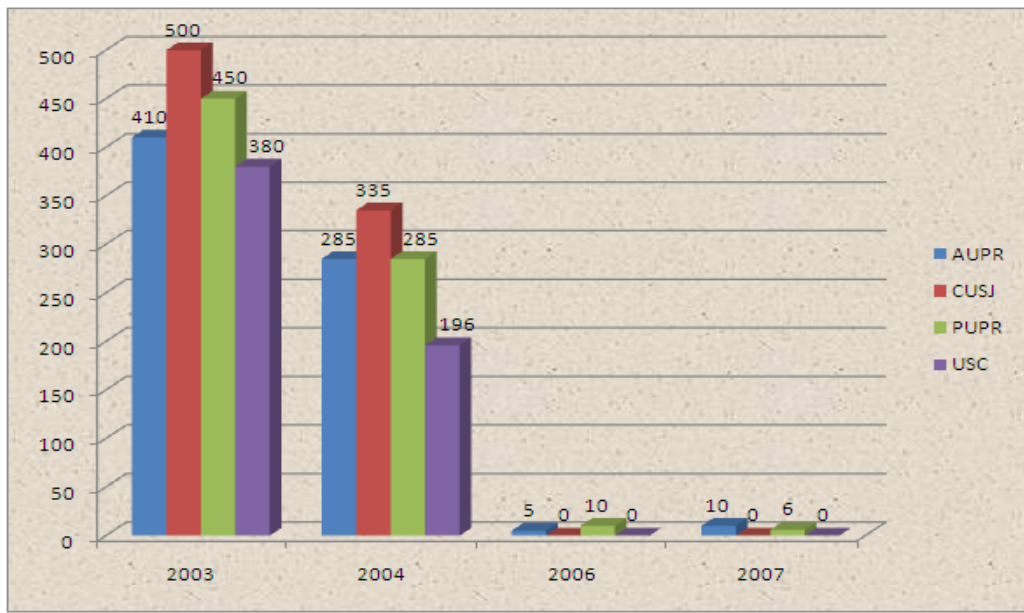
Improving security and vulnerability was one of the principal needs presented in developing the local network. All of the partner institutions had serious security risks at the onset of the project. Furthermore, there was limited knowledge and resources at their institutions on how to correct the situation. COBIMET made significant strides in the issues of security by providing:

- Network assessments to member institutions conducted by a network security expert.

- Acquisitions of state of the art network equipment

- Providing the IT Professionals training on network security.

- The implementation of security measures and tools such as corporate anti-virus servers with automatic updates, windows updates and policies has occurred in the institutions.

- Training in the development of the institution strategic plan for IT and security policies and procedures.

The principal outcome of all these activities was an improved, more secure and reliable campus network. Figure 1 show the number downtime hours and how they were reduced to zero in 50% of the member institutions and to almost zero in the other 50% per year during the last 2 years of the project.

Figure 1

Network Downtime by Institutions / Years

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Conclusions

The COBIMET cooperative project developed collections of available electronic information resources and services for education, using virtual and physical networks.   It identified common needs in the areas of information technology and Libraries. The common goals of the project members were achieved by:

- Developing and implementing a virtual library service information model

- Designing and Developing Information Technology Networks to support the Virtual Library Services.

- Developing a learning environment in virtual library services, IT and security vulnerabilities

- Adopting standards, policies and procedures in IT and virtual library services.

Other benefits obtained from this project were the reduction of costs, shared knowledge, and diverse learning experiences from all participating institutions. Best practices regarding budget, facilities, security and technology can also be learned from this collaborative project.

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