

**A Manual on use of ABCD central and VHL-Site modules for Developing Library
Information Discovery and Information Literacy Tools**

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Introduction

Information Discovery can be described as creating a platform that enables users to discover resources easily for instance by providing the possibility of searching multiple resources simultaneously. Information Literacy in the Library setting is training and providing user education on utility of the library resources.

The ABCD-Site is an integral tool of information sources which enables you to create, manage and publish your site.

The central module of ABCD can be used to create databases of different resources i.e. Books, Journals, IL video tutorials etc. thereby integrating them into an all in one meta-search platform through the ABCD site module.

This document provides an overall description of the components that can be utilized on both the ABCD central and the VHL-Site modules to provide Information Discovery and Information Literacy as Outputs. The Manual gives the steps and details while describing the operations that may be accomplished.

ABCD-Site organizes information in a structure that integrates and interconnects reference databases, specialist directories, events and institutions, a catalogue of the information resources available on the internet, collections of full texts. It further provides a Search feature which enables searching across all the databases.

Below are the steps and stages of developing IL and ID tools through ABCD central and ABCD (VHL-Site) Modules

1.1 Creating databases on ABCD Central

Create new databases from the central module of ABCD by creating fields relevant to Information Discovery. This is done on the Field Definition Tables and the Field Selection Tables. Below are screenshots of the database created and the subsequent outcome.

Databases can also be harvested from online databases such as DOAJ using the mx tool of Isis and then a database for the same created using the same procedure of database creation. When all this different database are configured to be searchable on the ABCD site, the Meta search is a good discovery tool.

localhost / mysql wampser... x List of visitors waiting - Mi... x VHL administration x http://localh...hp/index.php x ABCD

http://localhost:9090/central/dbadmin/fdt.php?Opcion=update&type=bd&modulo=&base=discovery&encabezado=s

System Administrator, adm | (bases) | [logout]

USIU United States International University-Africa

Field definition table (FDT): discovery.fdt

help edit help file Script: dbadmin/fdt.php

Add row before selected one Remove Selected Row double-click the cell to enter data

Row	Type	Tag	Title	I	R	Subfields	Input type	rows	cols	Type	Name	Prefix	browse	List as	Extract as	Default value	help	Help URL	Link FDT	Req?	Field validation
1	Field	1	Identifier				Auto increment						browse								
2	Field	10	Resource				Text/Textarea						browse								
3	Field	20	Description				HTML Area						browse								
4	Field	30	Resource type				Simple select			Table	resourcetype		browse								
5	Field	40	URL				Text/Textarea	1	80				browse								
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					

Test List Validate Update

javascript:Update("fdt_new")

4:25 PM 12/12/2014

localhost / mysql wampser... x List of visitors waiting - Mi... x VHL administration x http://localh...hp/index.php x ABCD

http://localhost:9090/central/common/inicio.php

System Administrator, adm | (bases) | [logout]

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Language: English Module: Cataloguing

Home - Cataloguing

help edit help file Script: homepage.php

Database

Select:

- MARC
- Cepal
- DOAJ
- Acquisitions, Copies
- Providers
- Suggestions (Acquisitions)
- Purchase Orders
- Patrons
- Loanobjects
- Transactions Loans
- Suspensions and fines
- Experts
- Projects
- Discovery Tools
- new database
- mx test
- USIU Catalog
- USIU Central
- journals
- Reset last inventory number (copies database)

Administration

new database

mx test

USIU Catalog

USIU Central

journals

Reset last inventory number (copies database)

Data entry

Reports

Utilities

Users administration

Translate messages and help pages

ABCD 1.4

4:24 PM 12/12/2014

For the records to be searchable and retrievable on the search platform they ought to be indexed. This is done in the Central module using delimiters and prefixes. Below is a prefix of the process

The screenshot displays the ABCD 1.4 web interface, which is a System Administrator interface for the United States International University-Africa. The interface is divided into several sections:

- Header:** Displays the university logo and name, the user role (System Administrator, adm), and the current database (bases). It also includes a [logout] link.
- Navigation Bar:** Contains links for help, edit, help file, and a script link (dbadmin/fst.php).
- Main Content Area:**
 - Field selection table (FST):** A table with columns for ID, Indexing Tech, and Extraction format. It lists various indexing techniques and their corresponding extraction formats.

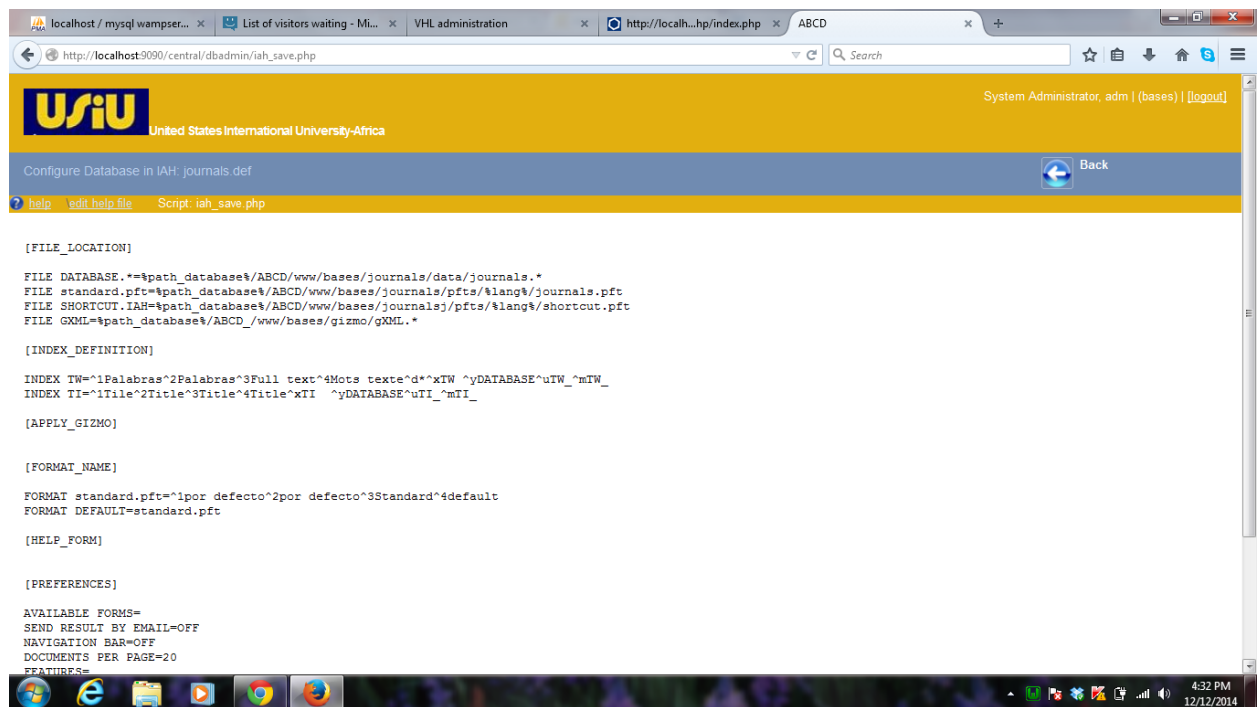
ID	Indexing Tech	Extraction format
103	8 by word with	'/TI_/', v3/, (v4/)
103	8 by word with	'/TW_/', v3/, (v4/)
106	8 by word with	'/LAN_/', (v6 + --)
110	8 by word with	'/RT_/', (v10 + --)
110	8 by word with	'/TW_/', (v10 + --)
8	0 by line	"MT_", v3
 - Field definition table (FDT):** A table with columns for Tag, Field name, and Subfields. It lists various field names and their corresponding subfields.

Tag	Field name	Subfields
1	Title	
2	Title Alternative	
3	URL	
4	Publisher	
5	Language	
6	ISSN	
7	EISSN	
8	Keywords	
9	StartYear	
10	EndYear	
11	Year added	
12	Subjects	
13	Country	
14	Publ.Fee	
15	Add. Info	

The interface also includes a search bar and a [Cancel] button. The bottom of the screen shows the Windows taskbar with various application icons and the system clock (4:26 PM, 12/12/2014).

1.3 Configuring on IAH

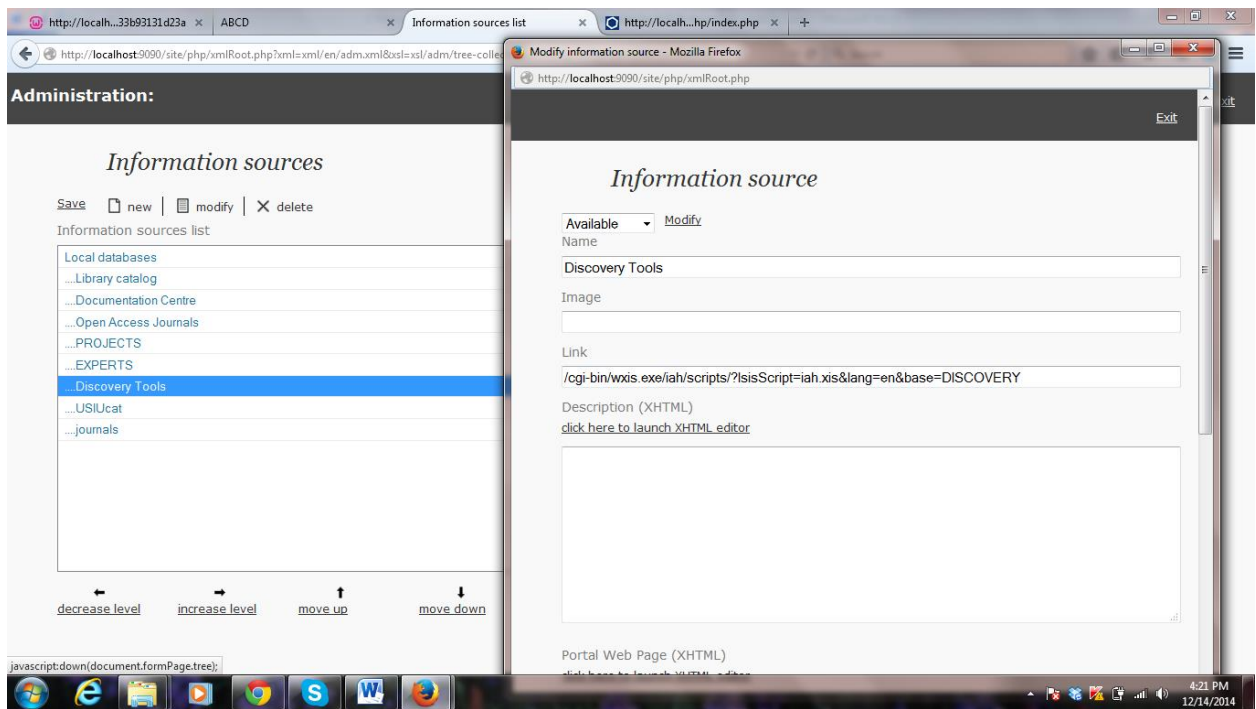
This step allows the created database of records to be configured searchable on the OPAC thus the expected output of information discovery. The process involves selecting the default index field and configuring the indexed fields. Below is a screenshot of a configured database



1.4 Integrating ID on ABCD-Site

Databases that have been created on the central module are made available on the site interface by adding new identities on the information source component. All items in this component are databases that are available in the ABCD central module and need to be searchable in the meta-search feature.

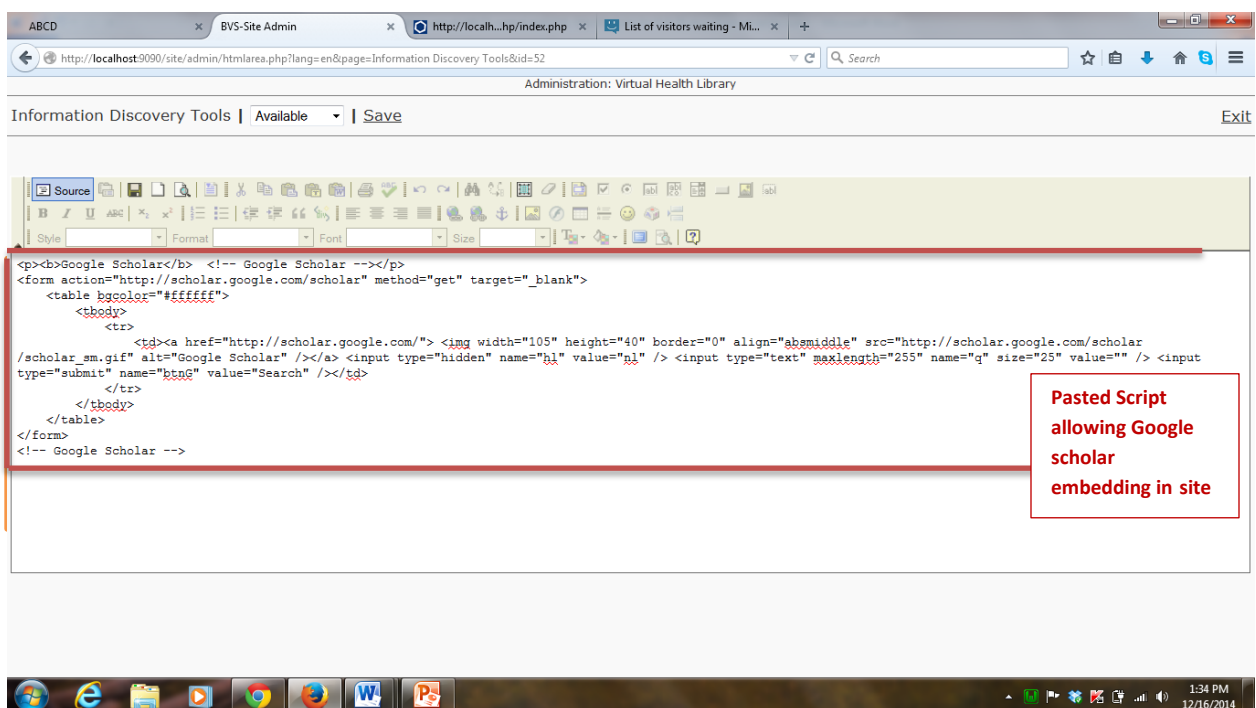
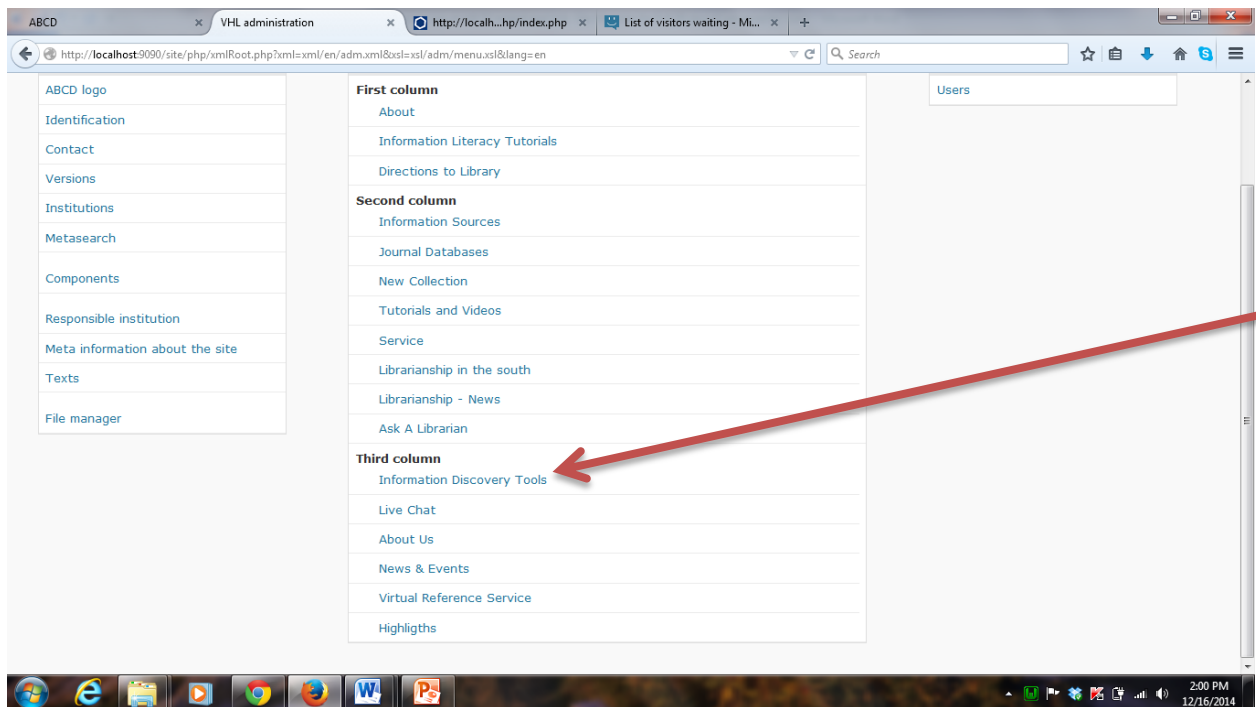
On the VHL-Site administration page, create components on the information sources section and configure parameters such as defining the name of the database, the path to the file where the data of the database is stored, the search link, the free search parameters and the result link. Below is a screenshot of the configuration linking the database (such as Discovery, journals, OPAC, DOAJ etc.)



Google Scholar on ABCD

Another Discovery tool that can be availed through ABCD is Google Scholar widget. This is whereby Google scholar is embedded on ABCD so as to enable searching to other articles incase users wish to do so. A script is provided by Google scholar and it can be embedded by pasting the html code on the source page of a component in the ABCD administrator panel. See below the screen shots

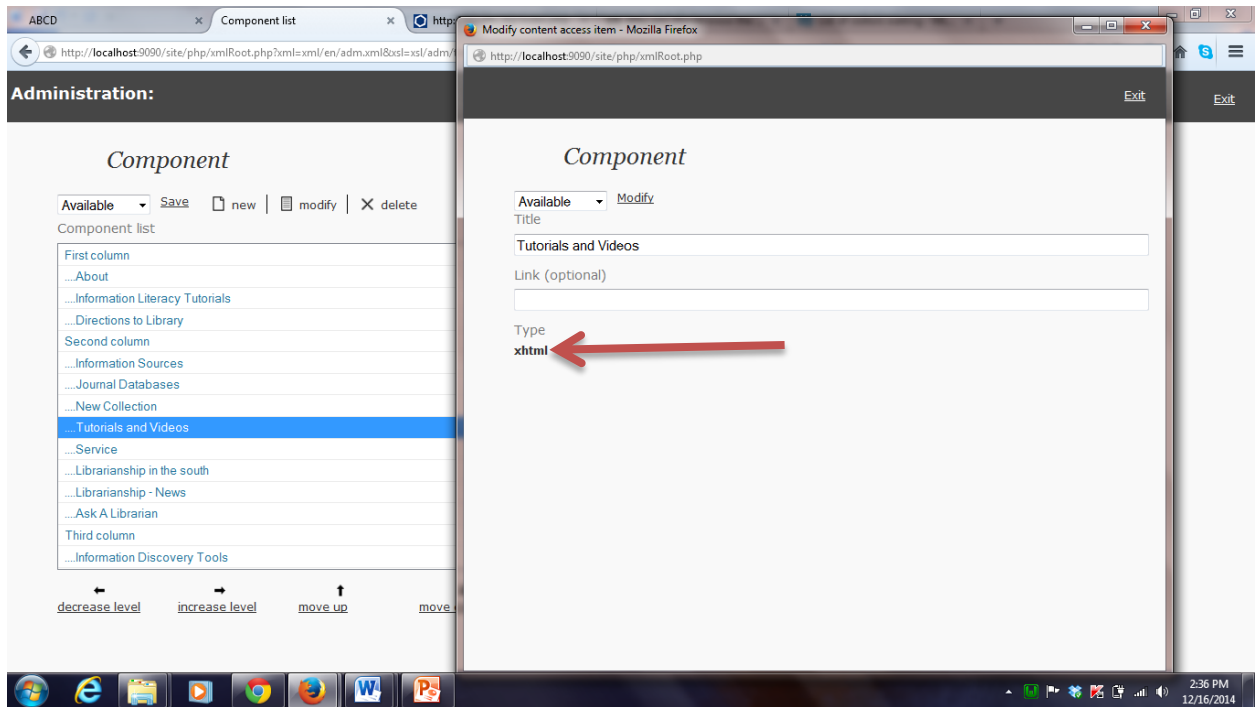
When creating the component one is required to choose the xhtml option



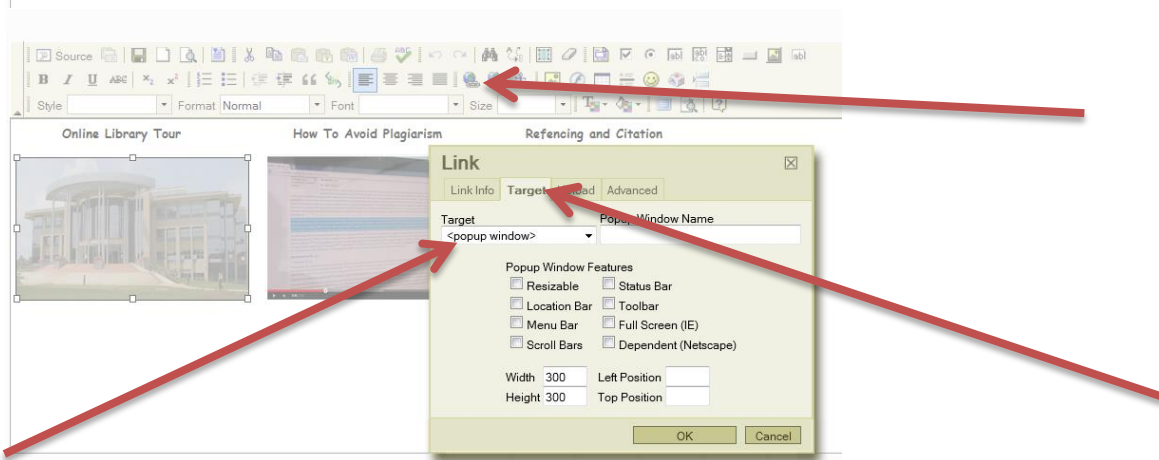
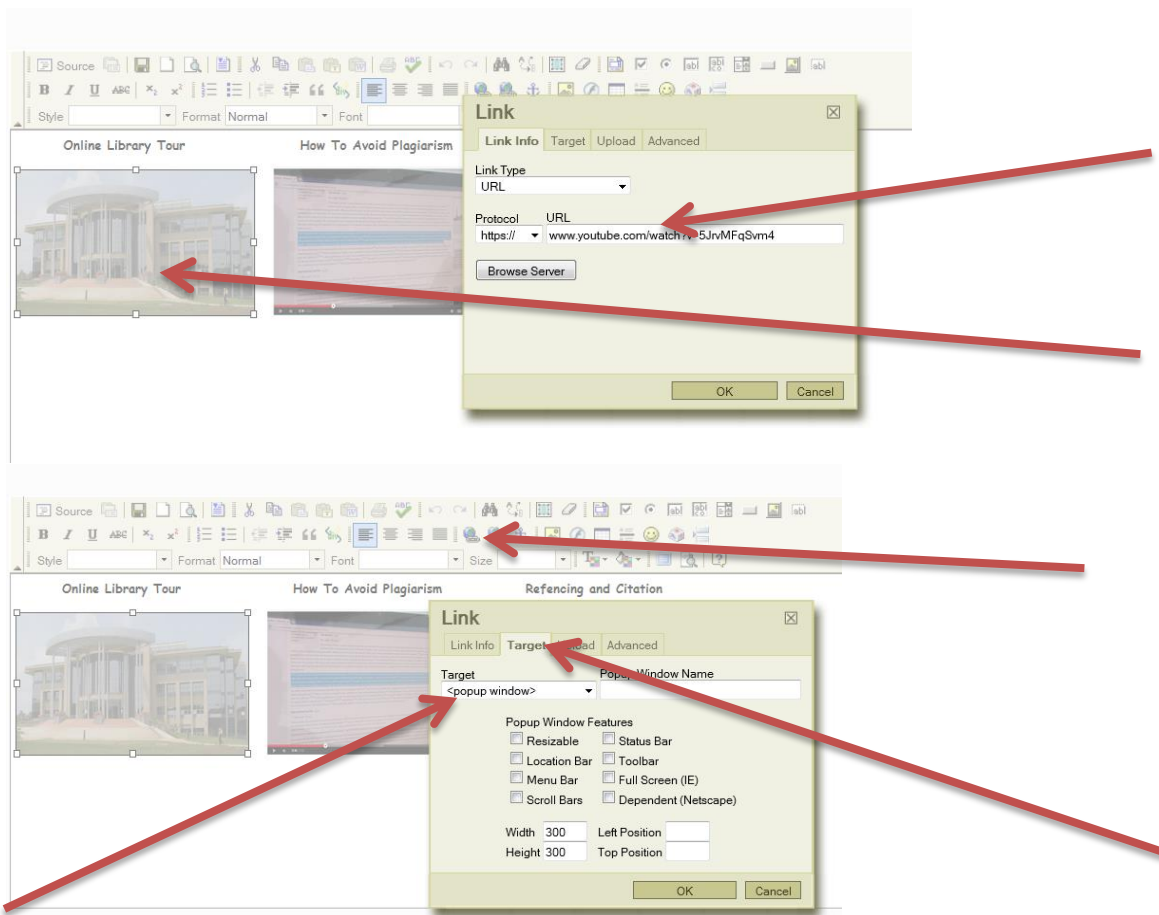
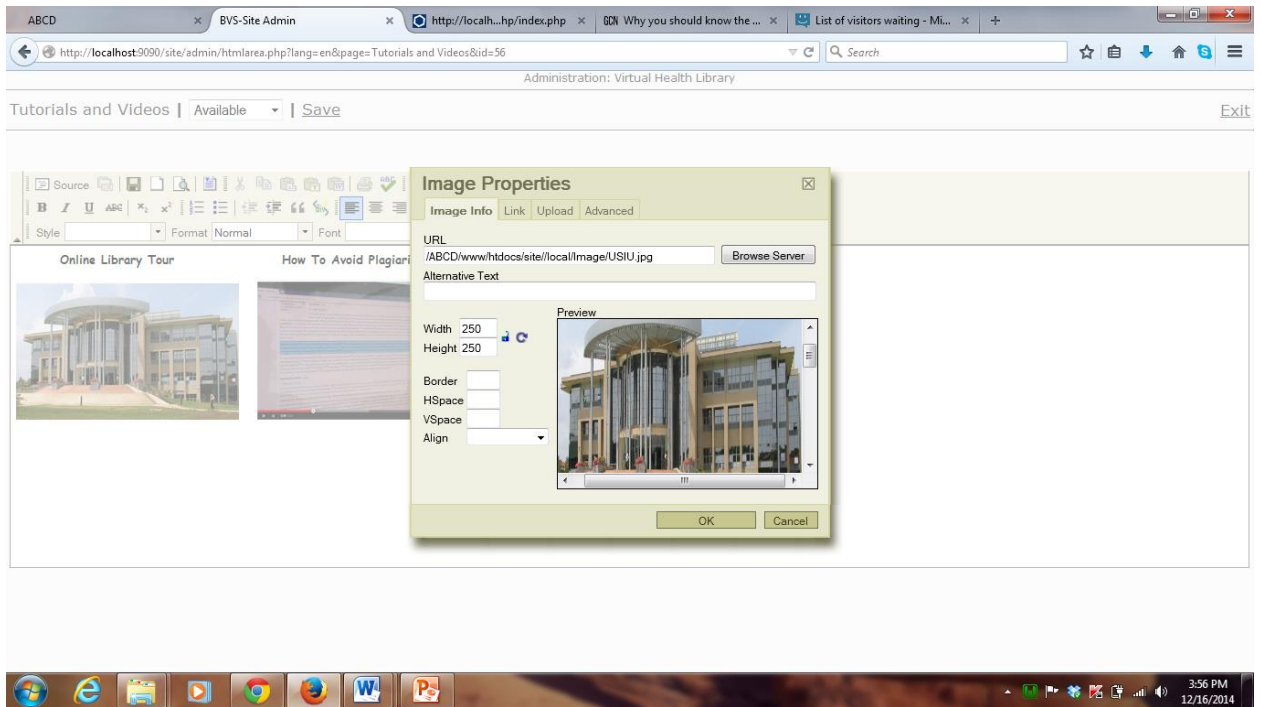
1.5 Customizing ABCD-Site

Information literacy tools such as video tutorials can be input in the ABCD site by creating components and defining parameters for video file outputs embedding.

The components can be created from the ABCD-site administrator panel and set on either column. When creating the component one is required to choose the xhtml option

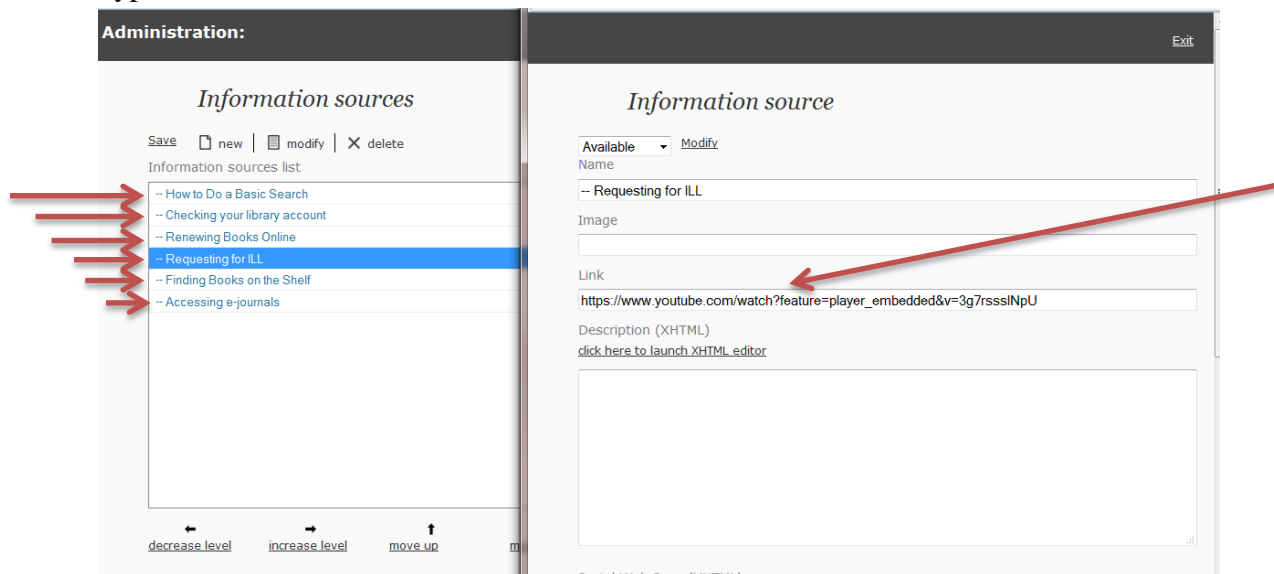


Upon creating the tutorials component, you need to upload the particular videos in mp4, Mpeg format or linking a YouTube video. However since there still does not exist the video upload feature on the XHTML editor, you can upload an image and create a hyperlink on it with a video tutorial such that when clicked by a user, the link redirects and opens the video opens. You also can set the configuration that allows the videos to pop out on a small textbox or open in a new window/tab. The size the video needs to open in can also be set. This is shown in the screen shots below.



Other tutorials can be created as lists with hyperlinks by the same process

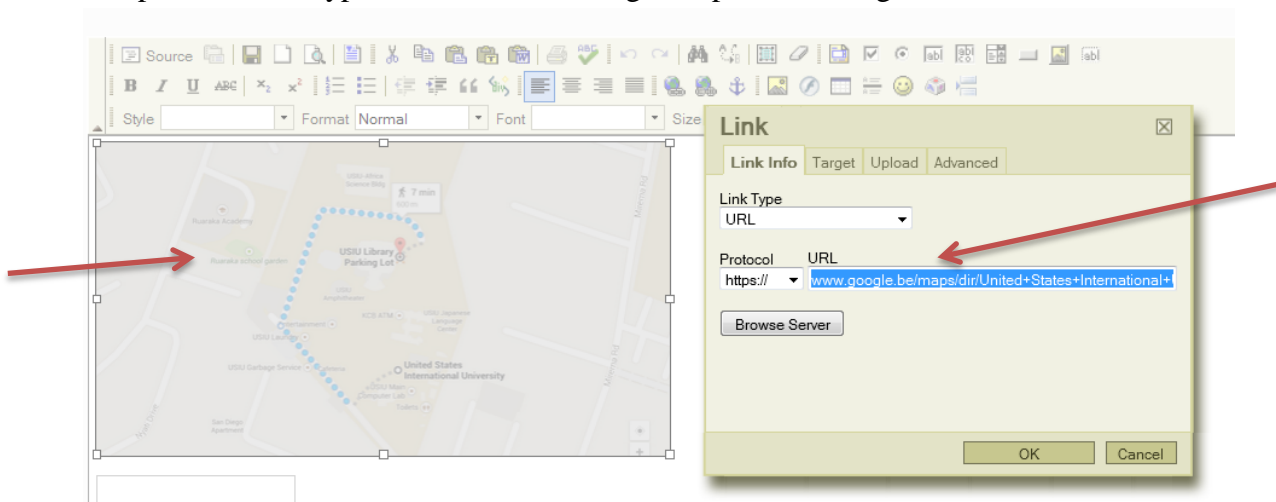
This is by creating components under information sources and linking the sections with hyperlinks. See below:



1.6 Additional Components for IL and ID on ABCD-Site

Google Map

This can be used as an information discovery tool and can be embedded on the website. It can also be used by students to know directions of different library campuses in a town setting. With predetermined/set Google map locations one can embed the map on the site as a component and a hyperlink set on the Google map title or image. See below



Library chat feature

Information literacy can also be administered through a virtual interactive platform such as an online chat. This can be embedded on the ABCD site. A choice for a chat platform among the available free open source software needs to be done carefully. The chat needs to be fully free and independent and with an own defined webserver. In this case I found the Mibew Messenger to be very ideal

Mibew Messenger

This software can be embedded on the ABCD system by copying a chat script and inputting in a component through xhtml editor. First you need to download the application from github and install its pre requisites. Below are the steps for its installation

Requirements

- * Apache web server 1.3.34 or above
- * MySQL database 5.0 or above
- * PHP 4.x or above with MySQL support

The best option is to install a WAMP or a XAMP server. In My case I installed WAMP server which has all the above pre requisites for Mibew

Installation of Mibew Messenger

1. Create folder with name 'mibew' in the root of your website.
2. Upload all files contained in this archive (retaining the directory structure) into the created folder.
3. Make sure that the user, under which the web server is running (for instance, www), is able to access and read all files in mibew folder and all of its subfolders.

On *nix systems the simplest way is to use this pair of commands:

```
find -type f | xargs chmod 0644  
find -type d | xargs chmod 0755
```

4. Add a MySQL database to be used with Mibew Messenger (for instance, with the name 'mibew').
5. Edit mibew/libs/config.php to specify the information needed to connect to the database.

6. Using your web browser visit <http://<yourdomain>/mibew/install/> and hit 'Create tables'.

7. Remove mibew/install/ directory from your server.

8. On *nix platforms change the owner of mibew/images/avatar folder to the user, under which the web server is running (for instance, www):

```
chown www mibew/images/avatar
```

The owner should have all rights on the folder mibew/images/avatar:

```
chmod u+rwx mibew/images/avatar
```

9. Log in as

user: admin

password: <empty>

10. Get button code and set it up on your site.

11. Change your password and name.

12. Wait for your visitors on the 'Pending users' page.

UPDATE

1. Backup your mibew/libs/config.php

2. Backup your mibew/images/avatar folder.

3. Delete all items in mibew folder on the server.

4. Upload all files contained in the downloaded archive (retaining the directory structure) into mibew folder.

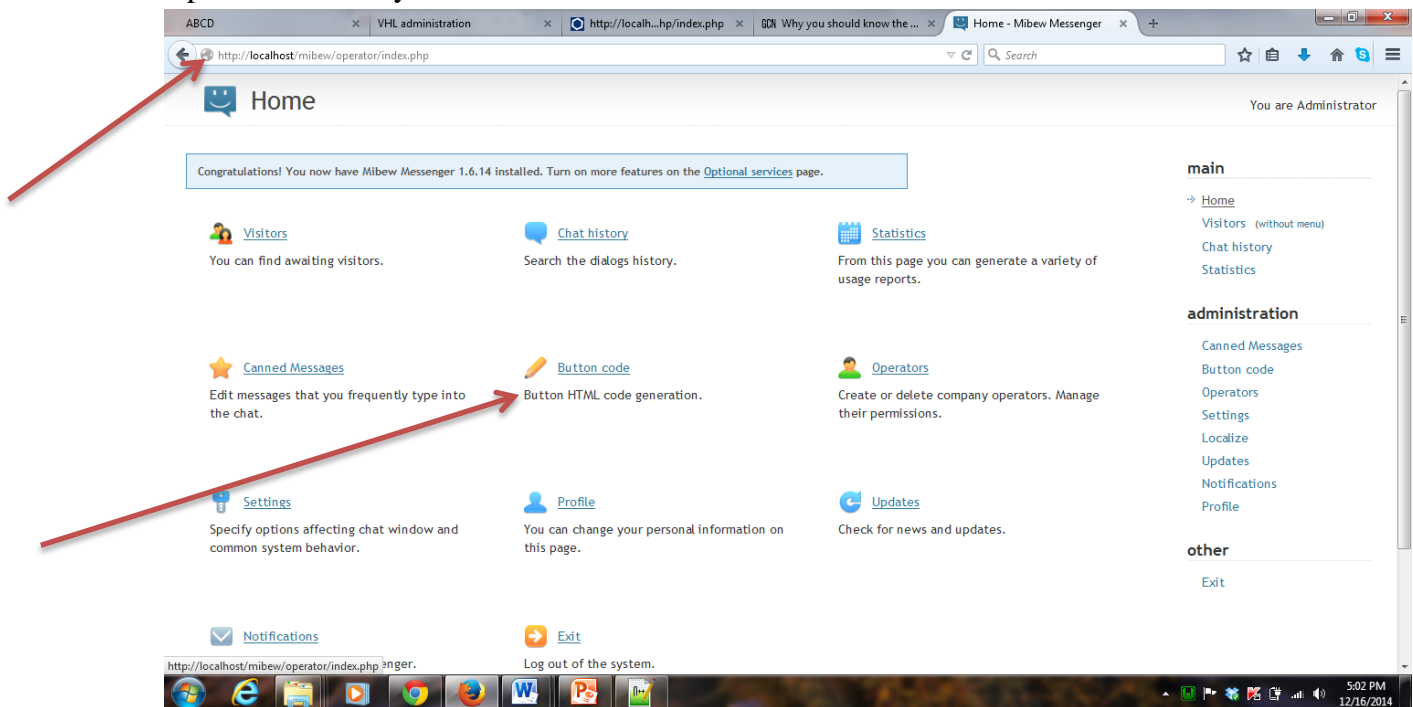
5. Restore the MySQL database settings in mibew/libs/config.php

6. Visit <http://<yourdomain>/mibew/install/> and follow the instructions to update the database tables (if needed).

7. Remove mibew/install/ directory from your server.

8. Restore contents of mibew/images/avatar folder.

Upon installation you will have an administrator dashboard like this



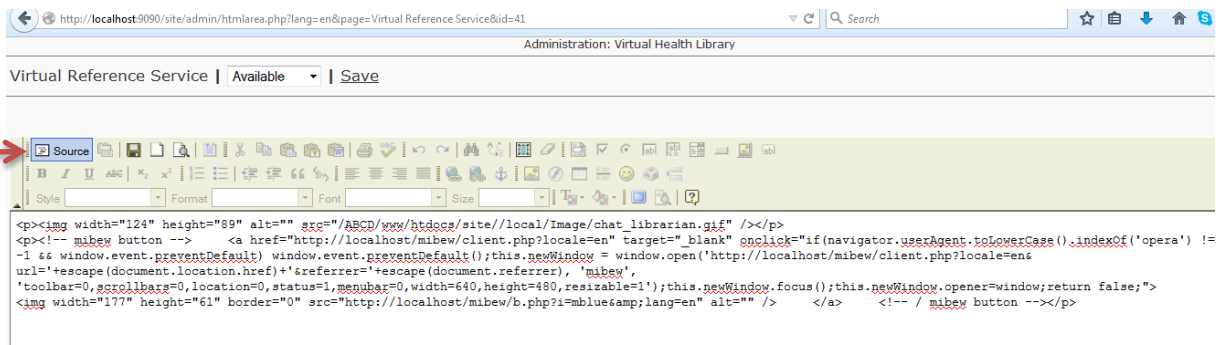
As you can see the platform is on my web server so one can have all the control they want, unlike other chat applications that require you to be logged in to their server and have their log in accounts

Embedding chat on ABCD

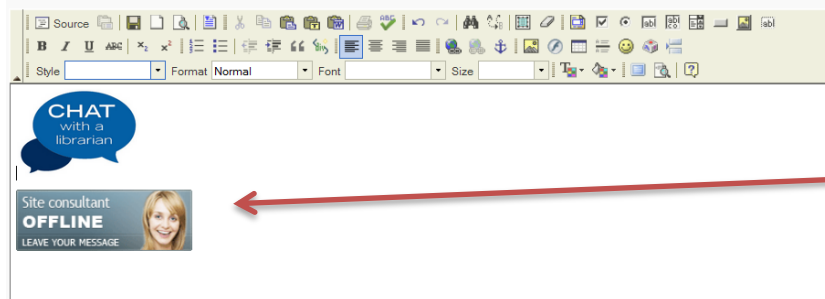
Once installed the chat application can be embedded on ABCD by copying the HTML chat script and creating an XHTML component. This code will then be pasted on the source editor of the component.

The chat script can be retrieved from the button code in the control panel of Mibew as highlighted above

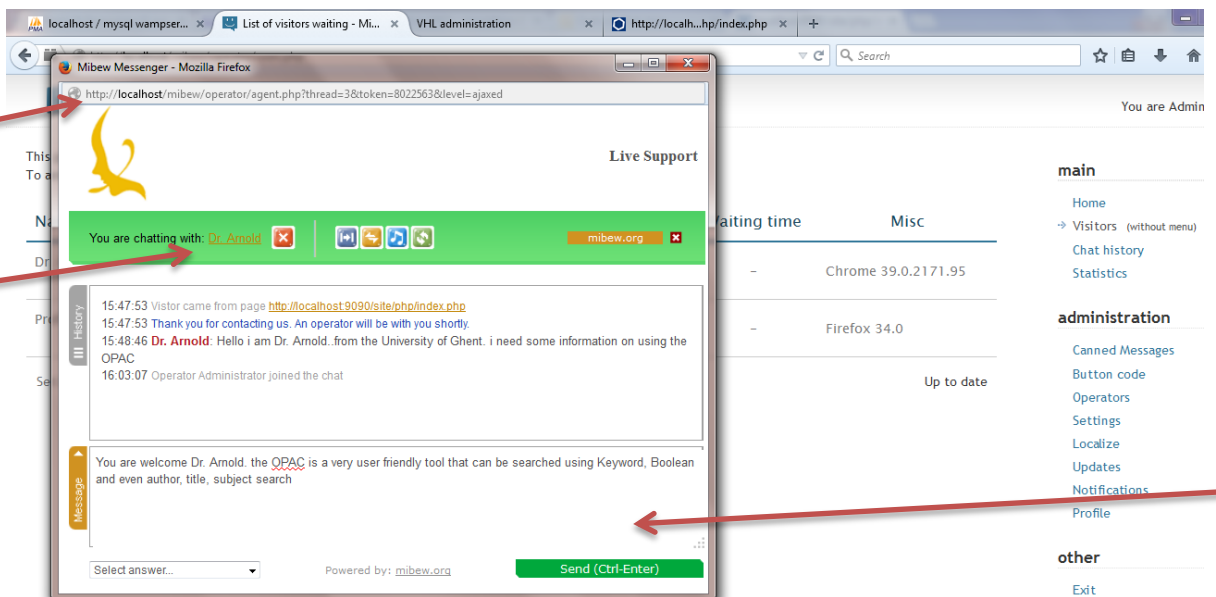
See below the screen shot on how to embed on ABCD



The output on the graphical user interphase should be like in the preview below:



When chatting with users a window/tab will automatically be opened i.e. the administrator chat window. See below samples of ongoing chats between the administrator and three different users. However from the control panel, different administrators/library consultants can be added



List of visitors waiting							You are Admin
This page displays a list of visitors who are waiting. To answer the visitor click their name in the list.							
Name	Visitor's address	State	Operator	Total time	Waiting time	Misc	
Patricia Wangui Hi i am not able to access my ...	127.0.0.1	In chat	Administrator	3:07	-	Chrome 39.0.2171.95	main Home Visitors (without me) Chat history Statistics administration Canned Messages Button code Operators Settings Feedback
Dr. Arnold Hello i am Dr. Arnold..from th...	127.0.0.1	In chat	Administrator	27:53	-	Chrome 39.0.2171.95	
Prof. Mwanzu Hello	127.0.0.1	In chat	Administrator	53:38	-	Firefox 34.0	
Set status as "Away" 1 min to date							

Above is the admin dashboard that shows the different users chatting at the same time. The application can also generate statistics which can be used to make informed decisions.

Other Features of the IL and ID system

Link to Social interactive pages of the library e.g. Facebook, Twitter, Instagram, linked-in
 The pages can be linked to the ABCD Site module by creating a component just like we have severally done in the above initial steps, selecting the xhtml editor and inputting icons for the various social platforms; these are then hyperlinked with the URL of the social site pages e.g. the library Facebook page. Twitter page etc.

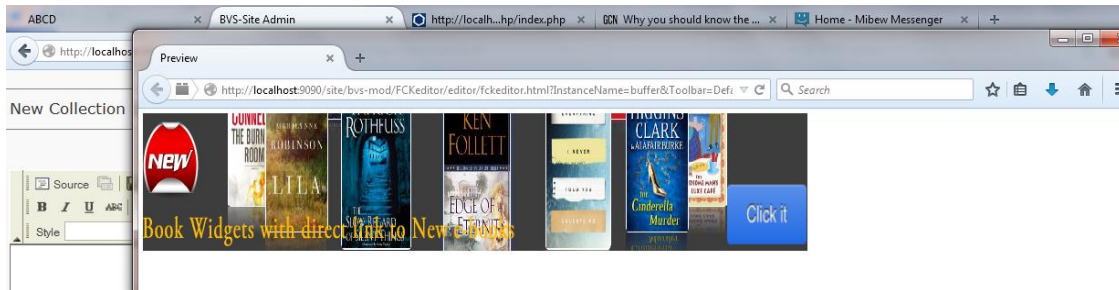
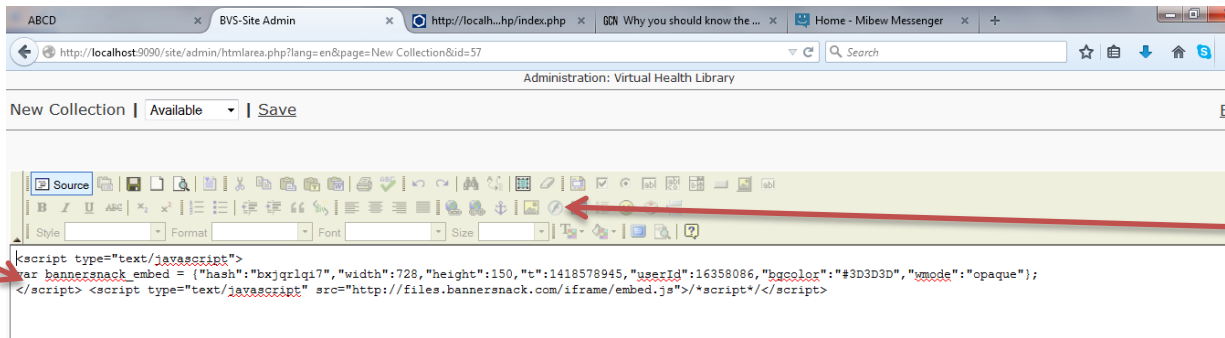
The outcome is that when users click on the image they will directly be redirected to the pages of the library on Facebook, twitter or Instagram.

Book Widgets

This can be used as current awareness on users on the newly acquired print and electronic books. It is therefore a discovery tool.

For the discovery tool function the widgets can be acquired with ready configured platform that can allow inputting link resolvers to redirect users to the full text e-book. These features are in flash and ABCD has the capability of inputting flash elements and uploading on the site in animated/flash outputs.

See below the screenshot in which I have designed a banner in flash output and embedded it on ABCD site. It can be uploaded as an SWF file or by copying the script in the source editor of the component.



1.7 Conclusion

ABCD is a powerful system with its very many capabilities among them creating information discovery tools and information literacy tools. As we have seen it is also capable of creating webpages with strong output features such as flash elements, chat embedding, Meta search etc.

With good manipulation of the features and configuration of the ABCD site module one can come up with a powerful library website almost comparable to other CMS platforms.

Below is a screenshot of the final output which is considered a compliant library website with information discovery tools and information literacy tools.

ABCD x VHL administration x http://localh...hp/index.php x GDN Why you should know the ... x Home - Mibew Messenger x

http://localhost:9090/site/php/index.php

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- Library Staff
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- FAQs

Information Discovery

Enter one or more words

Search all Collections (Books, Journals etc.)

Information Sources

Local databases
Library catalog, Documentation Centre, Open Access Journals, PROJECTS, EXPERTS, Discovery Tools, USIUcat, journals

Journal Databases

Open Access Scientific Journals Database
SciELO, EBSCO Host, HINARI, AGORA

Information Discovery Tools

Google Scholar

Google Scholar 2014

Library Information Literacy

- How to Do a Basic Search
- Checking your library account
- Renewing Books Online
- Requesting for ILL
- Finding Books on the Shelf
- Accessing e-journals

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Directions to Library

New Collection

Virtual Reference Service

CHAT with a librarian

6:47 PM 12/16/2014

ABCD x VHL administration x http://localh...hp/index.php x GDN Why you should know the ... x Home - Mibew Messenger x

http://localhost:9090/site/php/index.php

Directions to Library

Virtual Reference Service

CHAT with a librarian

Site consultant **ONLINE** ASK YOUR QUESTION

Information Discovery

SciELO, EBSCO Host, HINARI, AGORA

New Collection

Book Widgets with direct link to New Books

Tutorials and Videos

Online Library Tour

How To Avoid Plagiarism

Refencing and Citation

Sample References

Hendey, P. & Blanchard, K. (1972). *Management of organizational behavior*. Upper Saddle River, NJ: Prentice Hall.

6:48 PM 12/16/2014