



**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... List of visitors waiting - Mi... VHL administration http://localhost/index.php ABCD

http://localhost/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

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	
							Data entry							Pick list								
1	Field	1	Identifier	<input type="checkbox"/>			Auto increment							browse				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2	Field	10	Resource	<input checked="" type="checkbox"/>			Text/Textarea							browse				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3	Field	20	Description	<input type="checkbox"/>			HTML Area							browse				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4	Field	30	Resource type	<input type="checkbox"/>			Simple select			Table	resourceType			browse				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5	Field	40	URL	<input checked="" type="checkbox"/>			Text/Textarea	1	80					browse				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
9				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
12				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13				<input type="checkbox"/>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14	Test			<input type="checkbox"/>													<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	List																	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Validate																		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Update																		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

ABCD 1.4 javascript:Update("fdt_new") 4:25 PM 12/12/2014

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

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

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

Language English

Module Cataloguing

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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
- Susensions and fines
- Experts
- Projects
- Discovery Tools

Administration

- new database
- mix test
- USIU Catalog
- USIU Central
- journals

Reset last inventory number
(copies database)

Users administration

Translate messages and help pages

ABCD 1.4 4:24 PM 12/12/2014

1.2 Indexing the Databases

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

ABCD 1.4

4:26 PM
12/12/2014

http://localhost...33b93131d23a ABCD

VHL administration

http://localhost/hp/index.php

Search

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

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Advanced Search form - catalogacion: discovery

Cancel

Add row before selected Remove Selected Row

	Field name	Fst Id	Prefix
Identifier		1	ID_
Resource		10	RE_
Text words		10	TW_
Resource types		30	RT_
Text words		10	TW_
URL		40	TW_
Twxt words		10	TW_

Script: fst_leer.php

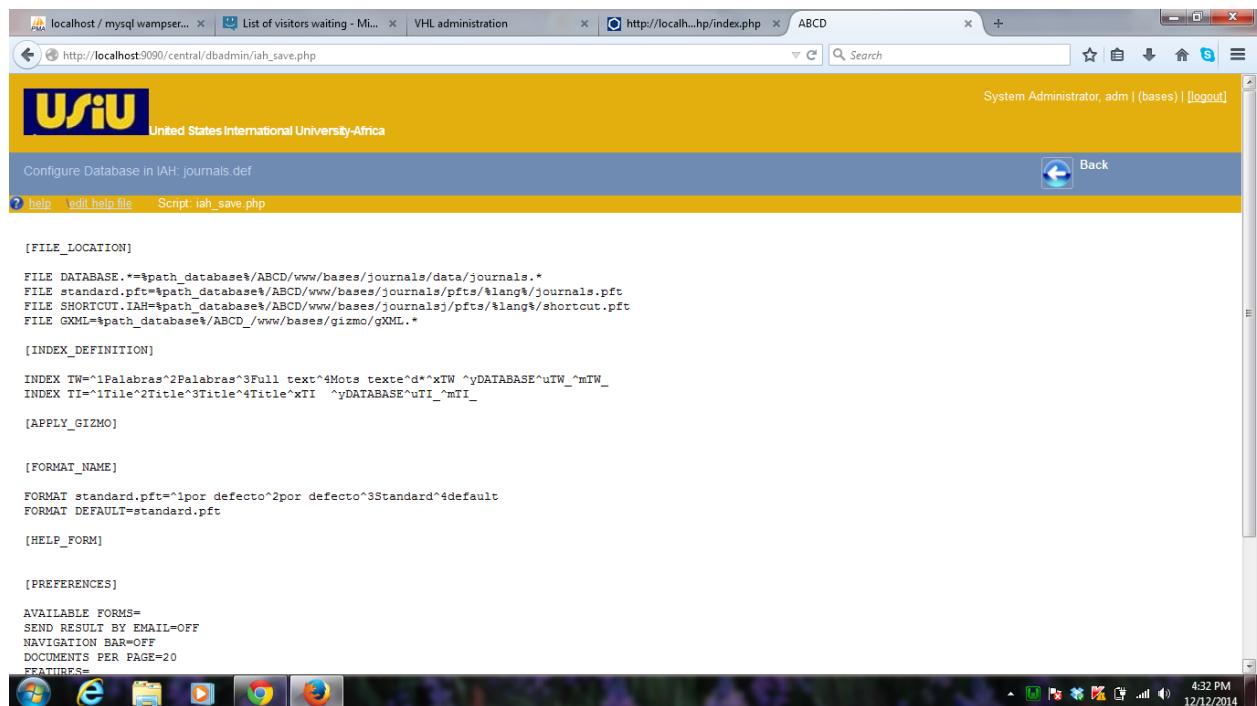
Field selection table (FST) (Display Field Definition Table (FDT))

ID Indexing Technique Extraction format

1 5	'/ID_/',v1
10 5	'/RE_/',v10
10 8	'/TW_/',v10
20 8	'/TW_/',v20
30 5	'/RT_ ', v30
30 8	'\$TW_S', v30/
40 5	'\$UR_ \$', (v40/)
40 8	'\$TW_ \$', (v40/)

1.3 Configuring on IAH

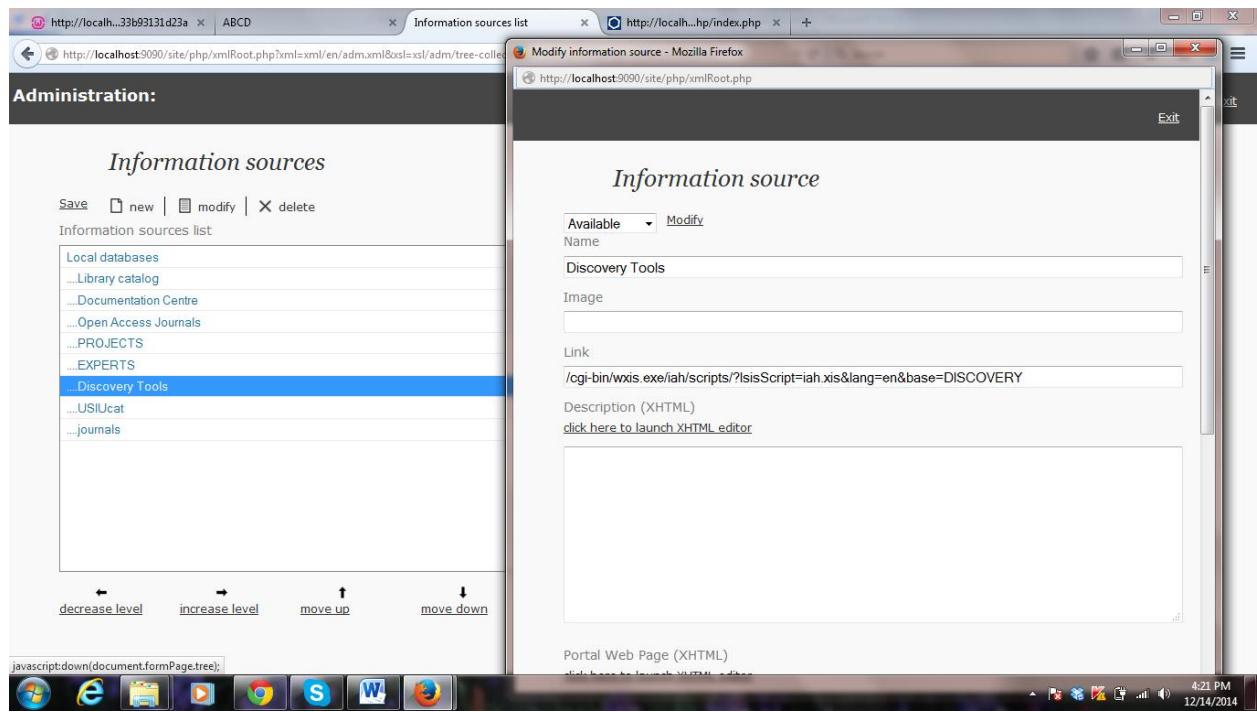
This step allows the created database of records to be configured searchable on the OPAC thus the expected output of information discovery. The process involves selecting the default index field and configuring the indexed fields. Below is a screenshot of a configured database



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

ABCD

VHL administration

<http://localhost:9090/site/php/xmlRoot.php?xml=xml/en/adm.xml&xsl=xsl/adm/menu.xsl&lang=en>

Users

Search

ABC logo
Identification
Contact
Versions
Institutions
Metasearch
Components
Responsible institution
Meta information about the site
Texts
File manager

First column
About
Information Literacy Tutorials
Directions to Library

Second column
Information Sources
Journal Databases
New Collection
Tutorials and Videos
Service
Librarianship in the south
Librarianship - News
Ask A Librarian

Third column
Information Discovery Tools

Live Chat
About Us
News & Events
Virtual Reference Service
Highlights

ABCD

BVS-Site Admin

<http://localhost:9090/site/admin/htmlarea.php?lang=en&page=Information%20Discovery%20Tools&id=52>

Administration: Virtual Health Library

Information Discovery Tools | Available | Save | Exit

Source

Style Format Font Size

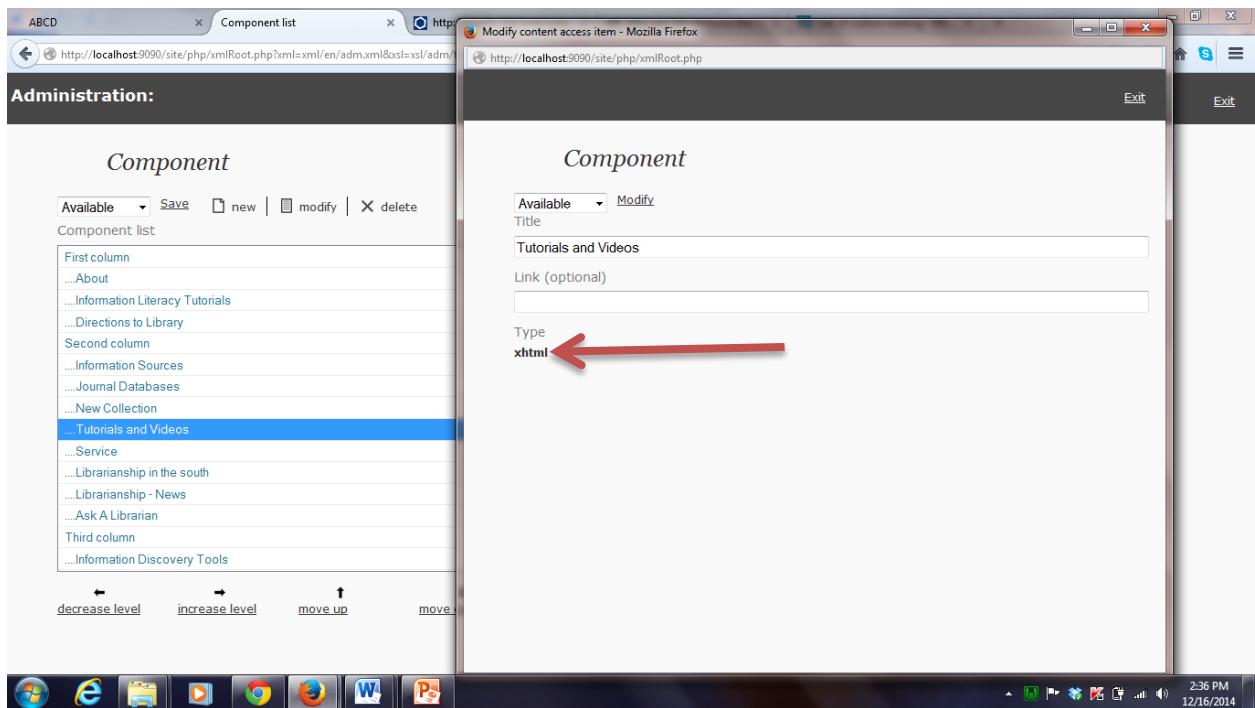
```
<p><b>Google Scholar</b> <!-- Google Scholar --></p>
<form action="http://scholar.google.com/scholar" method="get" target="_blank">
  <table border="1">
    <tr>
      <td><a href="http://scholar.google.com/"></a> <input type="hidden" name="hl" value="nl" /> <input type="text" maxlength="255" name="q" size="25" value="" /> <input type="submit" name="btnG" value="Search" /></td>
    </tr>
  </table>
</form>
<!-- Google Scholar -->
```

Pasted Script allowing Google scholar embedding in site

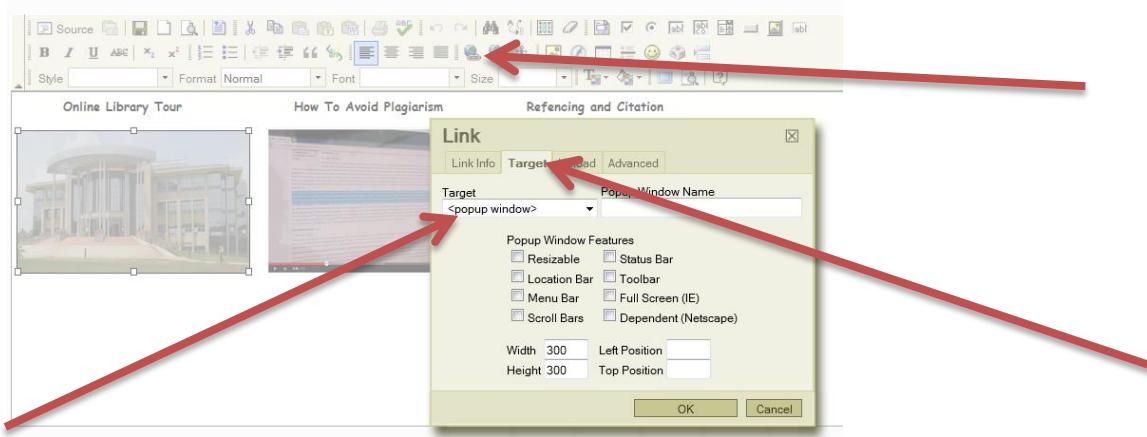
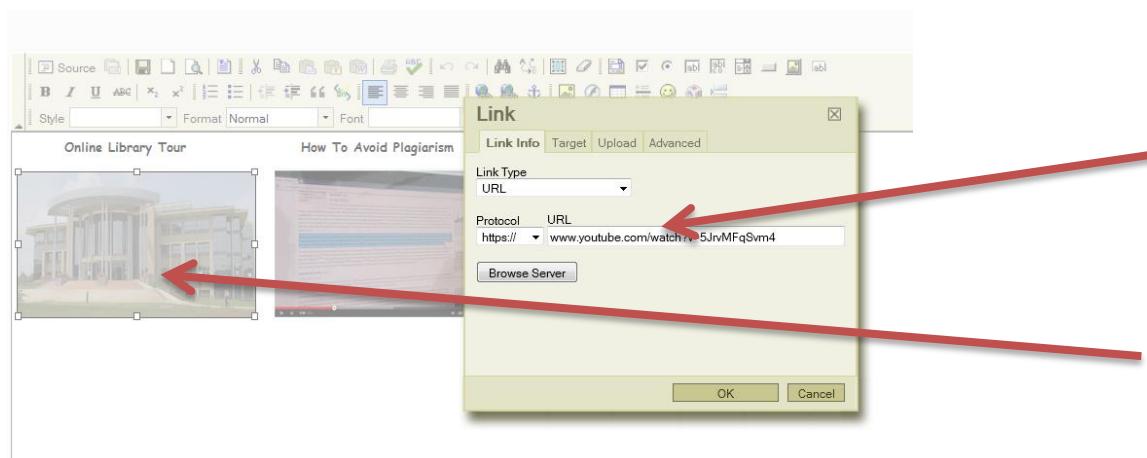
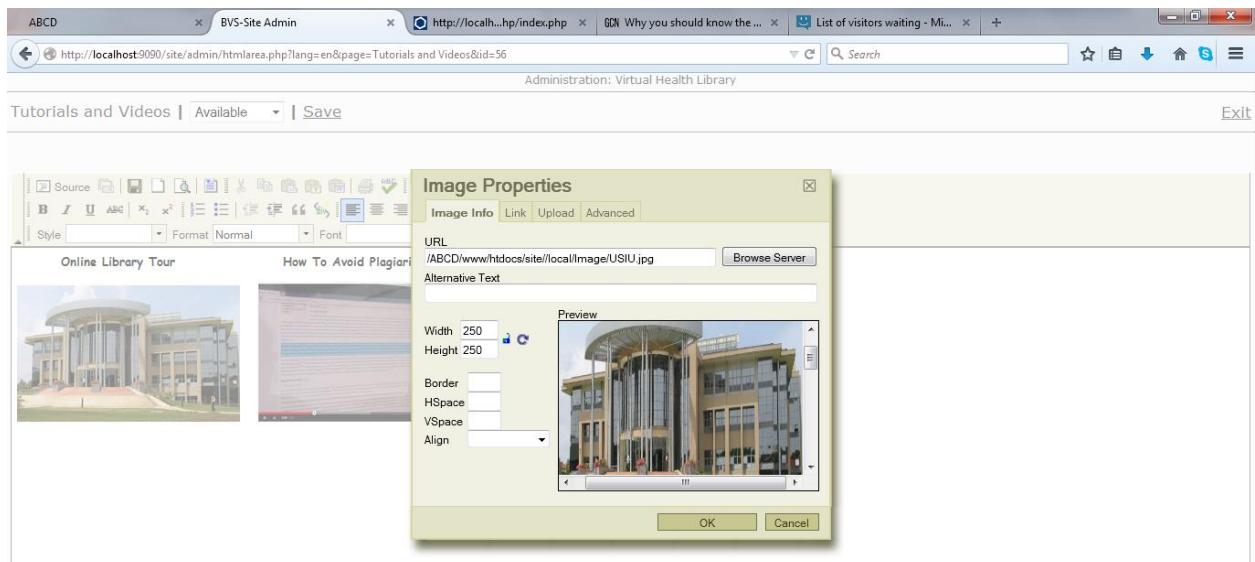
1.5 Customizing ABCD-Site

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:

The screenshot shows the 'Information sources' list on the left and the 'Information source' details on the right. The 'Available' dropdown is set to 'Available'. The 'Name' field contains '-- Requesting for ILL'. The 'Link' field contains a YouTube URL: https://www.youtube.com/watch?feature=player_embedded&v=3g7rssINpU. Red arrows point from the list items on the left to the 'Name' field and the 'Link' field on the right.

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

The screenshot shows a Google Map component on the page. A red arrow points to the map area. A 'Link' dialog box is open on the right, showing the 'Link Info' tab selected. The 'Link Type' is set to 'URL' and the 'Protocol' is set to 'https://'. The 'URL' field contains the Google Maps URL: <https://www.google.be/maps/dir/United+States+International+University/>. Another red arrow points to the 'OK' button at the bottom of the dialog box.

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>

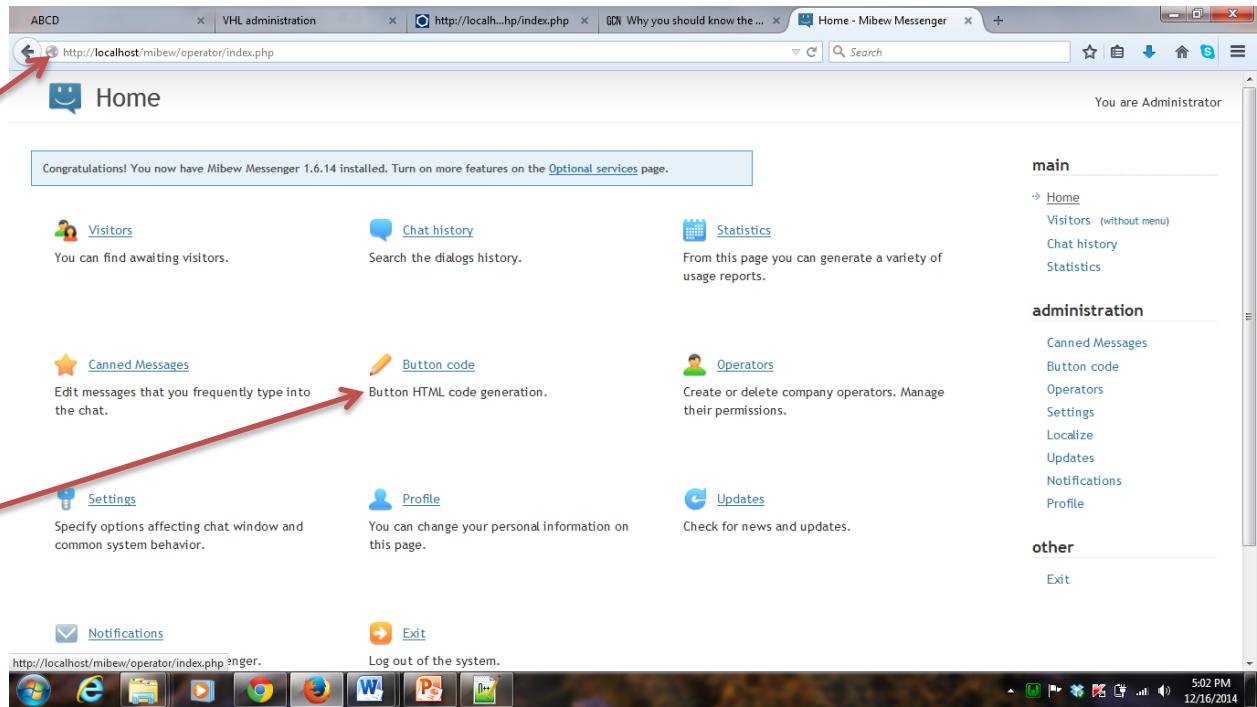
10. Get button code and set it up on your site.
11. Change your password and name.
12. Wait for your visitors on the 'Pending users' page.

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

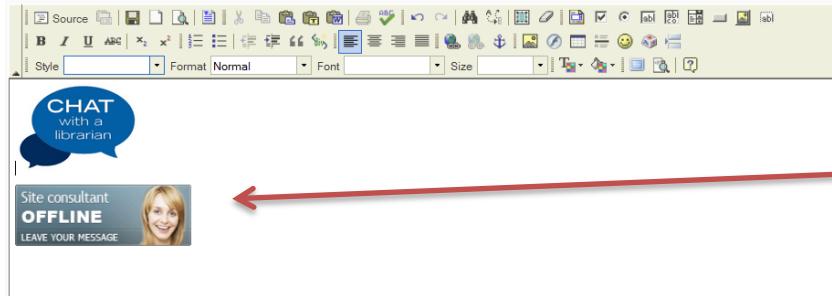


```

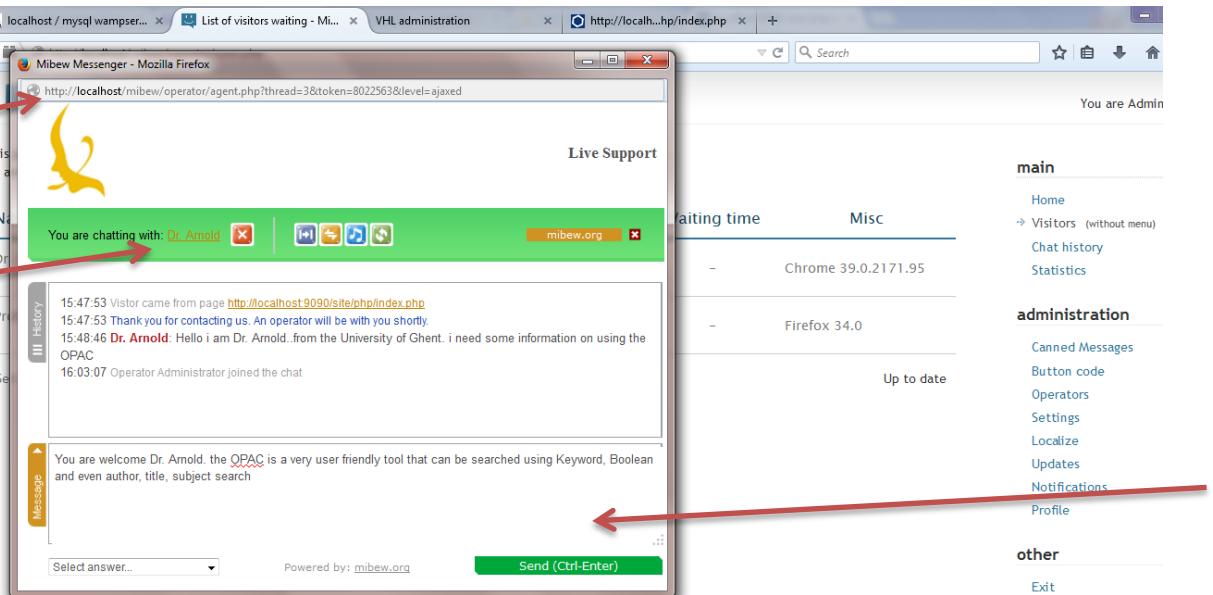
<p></p>
<p><!-- mibew button --> <a href="http://localhost/mibew/client.php?locale=en" target="_blank" onclick="if(navigator.userAgent.toLowerCase().indexOf('opera') != -1 && window.event.preventDefault) window.event.preventDefault();this.newWindow = window.open('http://localhost/mibew/client.php?locale=en'+escape(document.location.href)+'&referrer='+escape(document.referrer), 'mibew', 'toolbar=0,scrollbars=0,location=0,status=1,menubar=0,width=640,height=480,resizable=1');this.newWindow.focus();this.newWindow.opener=window;return false;">
 <!-- / mibew button --></a>

```

The output on the graphical user interface 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



Mibew Messenger - Mozilla Firefox
 http://localhost/mibew/operator/agent.php?thread=3&token=8022563&level=ajaxed

You are Admin

Live Support

You are chatting with: Dr. Arnold

15:47:53 Visitor came from page <http://localhost:9090/site/php/index.php>
 15:47:53 Thank you for contacting us. An operator will be with you shortly.
 15:48:46 Dr. Arnold: Hello i am Dr. Arnold, from the University of Ghent. i need some information on using the OPAC
 16:03:07 Operator Administrator joined the chat

You are welcome Dr. Arnold. the OPAC is a very user friendly tool that can be searched using Keyword, Boolean and even author, title, subject search

Select answer... Powered by: mibew.org Send (Ctrl-Enter)

Waiting time Misc

- Chrome 39.0.2171.95
- Firefox 34.0

Up to date

main

- Home
- Visitors (without menu)
- Chat history
- Statistics

administration

- Canned Messages
- Button code
- Operators
- Settings
- Localize
- Updates
- Notifications
- Profile

other

- Exit

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
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

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.

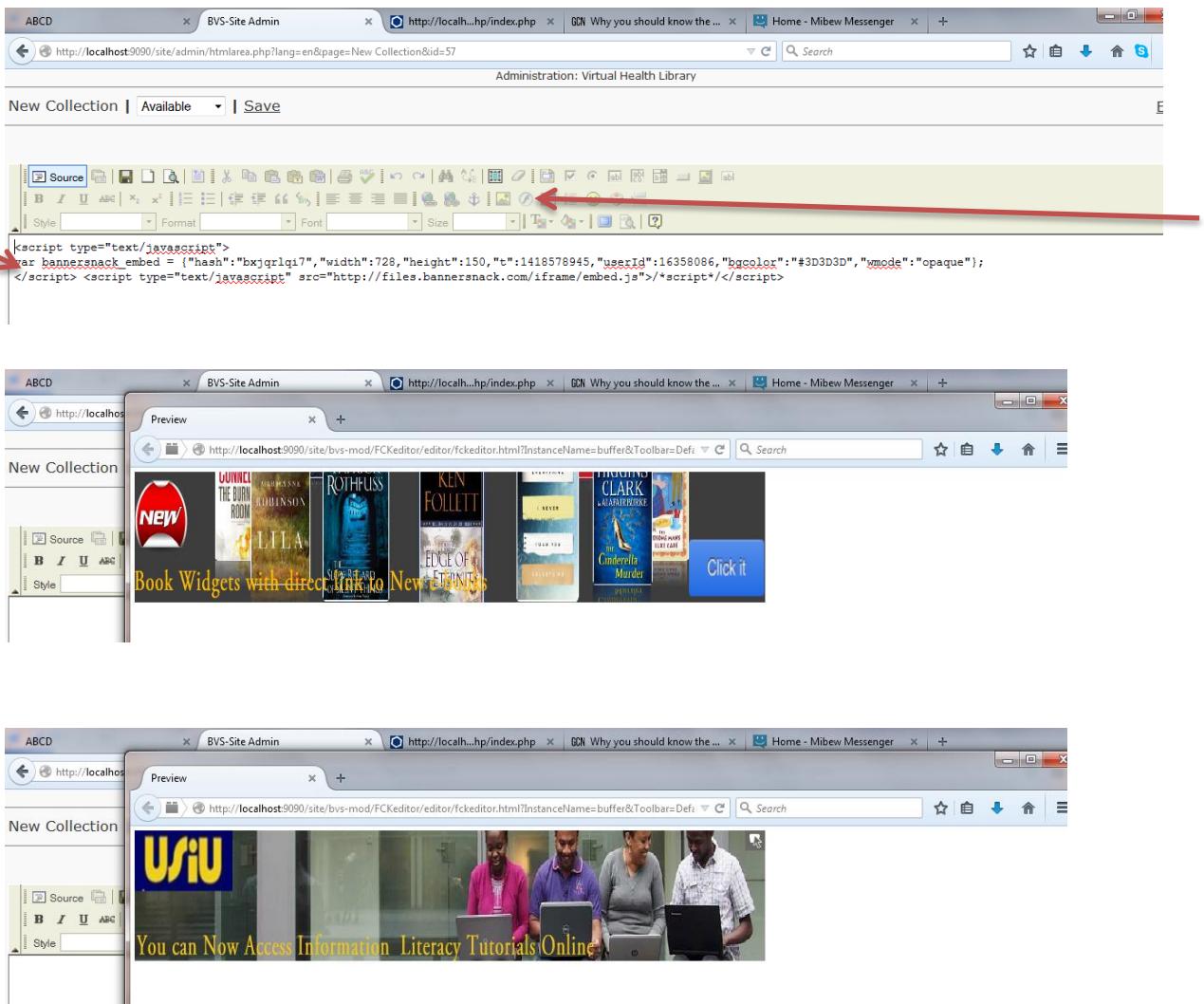
The outcome is that when users click on the image they will directly be redirected to the pages of the library on Facebook, twitter or Instagram.

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 VHL administration http://localhost:9090/site/php/index.php GDN Why you should know the ... Home - Mibew Messenger +

Search português | español | français | Contact

USIU

United States International University

About

- USIU-Africa
- About the Library
- Library Staff
- Library Services
- FAQs

Information Discovery

Enter one or more words
a
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

New Collection

Information Discovery Tools

Google Scholar



Search

News & Events

Find us on facebook.

Follow us on Twitter

Virtual Reference Service

CHAT with a librarian

6:47 PM 12/16/2014

ABCD VHL administration http://localhost:9090/site/php/index.php GDN Why you should know the ... Home - Mibew Messenger +

Search

-- Finding Books on the Shelf -- Accessing e-journals

Directions to Library

SciELO, EBSCO Host, HINARI, AGORA

New Collection

Tutorials and Videos

Online Library Tour How To Avoid Plagiarism Refencing and Citation

Sample References

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

Virtual Reference Service

CHAT with a librarian

Site consultant ONLINE ASK YOUR QUESTION

6:48 PM 12/16/2014