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

By Arnold M. Mwanza
From Kenya: United States International University-Africa

Supervisor: Prof Egbert De Smet

A project report/manual in partial fulfillment of the requirements for the Lib@Web 2014 International Training Program in Antwerpen, Belgium

December 2014
### Contents

1.1 Creating databases on ABCD Central

1.2 Indexing the Databases

1.3 Configuring on IAH

1.4 Integrating ID on ABCD-Site

1.5 Customizing ABCD-Site

1.6 Additional Components for IL and ID on ABCD-Site

1.7 Conclusion

---

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Creating databases on ABCD Central</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Indexing the Databases</td>
<td>5</td>
</tr>
<tr>
<td>1.3 Configuring on IAH</td>
<td>6</td>
</tr>
<tr>
<td>1.4 Integrating ID on ABCD-Site</td>
<td>6</td>
</tr>
<tr>
<td>Google Scholar on ABCD</td>
<td>7</td>
</tr>
<tr>
<td>1.5 Customizing ABCD-Site</td>
<td>8</td>
</tr>
<tr>
<td>1.6 Additional Components for IL and ID on ABCD-Site</td>
<td>11</td>
</tr>
<tr>
<td>Google Map</td>
<td>11</td>
</tr>
<tr>
<td>Library chat feature</td>
<td>12</td>
</tr>
<tr>
<td>Mibew Messenger</td>
<td>12</td>
</tr>
<tr>
<td>Installation of Mibew Messanger</td>
<td>12</td>
</tr>
<tr>
<td>Embedding chat on ABCD</td>
<td>14</td>
</tr>
<tr>
<td>Other Features of the IL and ID system</td>
<td>16</td>
</tr>
<tr>
<td>Book Widgets</td>
<td>16</td>
</tr>
<tr>
<td>1.7 Conclusion</td>
<td>17</td>
</tr>
</tbody>
</table>
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.
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.
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 Messanger**

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.

Upon installation you will have an administrator dashboard like this

![Administrator Dashboard](image)

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 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.
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.