



## Evaluation of Web Portals Developed and Hosted by Wordpress Content Management System

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### Abstract:

*Web portals have become a vital component of any serious corporate organizations globally. This is as a result of its importance in widening the reach of its services to clients all over the world. Therefore a choice of a platform to develop and host any organization's portal should be tackled with the seriousness it deserved to avoid failure and subsequent economic loss. This research paper evaluated five web portals developed and hosted by wordpress content management system using some key parameters. It was observed that portals developed and hosted by wordpress content management system usually score above average.*

**Keyword:** Web portal, content management system, evaluation

### Introduction

Wordpress is an online free and open-source content management system (CMS) based on PHP and MySQL. Open source software is designed to make creating, editing, and maintaining website easy. WordPress was originally created as a tool for blogging, but now allows you to develop functional website with ease. Wordpress is installed on a web server, which either is

part of an Internet hosting service or is a network host itself. Its features include a plugin architecture and a template system. WordPress was used by more than 23.3% of the top 10 million websites as of January 2015 [7]. WordPress is the most popular blogging system in use on the Web, at more than 60 million websites.

WordPress is completely customizable and can be used for almost anything. There is also a service called WordPress.com which lets you get started with a new and free WordPress-based blog in seconds, but varies in several ways and is less flexible than the WordPress you download and install yourself. WordPress started as just a blogging system, but has evolved to be used as full content management system and so much more through the thousands of plugins and widgets and themes, WordPress is limited only by your imagination.

WordPress first appeared in 2003 as a joint effort between Matt Mullenweg and Mike Little to create a fork of b2. Christine Selleck Tremoulet, a friend of Mullenweg, suggested the name *WordPress*. In 2004 the licensing terms for the competing Movable Type package were changed by Six Apart, resulting in many of its most influential users migrating to WordPress. By October 2009 the Open Source CMS MarketShare Report concluded that WordPress enjoyed



the greatest brand strength of any open-source content-management system [1].

Wordpress is easy to setup and use, and has an extensive community of users including librarians. It provides robust controls to setup multiple users who can create content for the page. It also has variety of templates, the mes, and plug-ins that make additional functionality like contact forms, statistics, and photo galleries simple.

### WEBSITE EVALUATION

Evaluation is a systematic determination of a subject's (that is item being evaluated) merit, worth and significance, using criteria governed by a set of standards. It can assist an organization, program, project or any other intervention or initiative to assess any aim, realizable concept/proposal, or any alternative, to help in decision-making; or to ascertain the degree of achievement or value in regard to the aim and objectives and results of any such action that has been completed. The primary purpose of evaluation, in addition to gaining insight into prior or existing initiatives, is to enable reflection and assist in the identification of future change [8].

Evaluation can also mean the structured interpretation and giving of meaning to predict or actual impacts of proposals or results. It looks at original objectives, and at what is either predicted or what was accomplished and how it was accomplished. So evaluation can be formative, that is taking place during the development of a concept or proposal, project or organization, with the intention of improving the value or

effectiveness of the proposal, project, or organisation. It can also be assumptive, drawing lessons from a completed action or project or an organisation at a later point in time or circumstance [9].

Evaluation is inherently a theoretically informed approach (whether explicitly or not), and consequently any particular definition of evaluation would have been tailored to its context – the theory, needs, purpose, and methodology of the evaluation process itself.

Therefore website evaluation is applying some standardized criteria to appraise a website with the view to know whether the set objectives before developing such site were met.

### Criteria used to evaluate the five web portals

The following criteria were used in the evaluation:

#### Authority

Authority reveals that the person, institution or agency responsible for a site has the qualifications and knowledge to do so. Evaluating a web site for authority:

- Authorship: It should be clear who developed the site.
- Contact information should be clearly provided: e-mail address, snail mail address, phone number, and fax number.
- Credentials: the author should state qualifications, credentials, or personal



background that gives them authority to present information.

- Check to see if the site supported by an organization or a commercial body

## Purpose

The purpose of the information presented in the site should be clear. Some sites are meant to inform, persuade, state an opinion, entertain, or parody something or someone.

Evaluating a web site for purpose:

- Does the content support the purpose of the site?
- Is the information geared to a specific audience (students, scholars, general reader)?
- Is the site organized and focused?
- Are the outside links appropriate for the site?
- Does the site evaluate the links?
- Check the domain of the site. The URL may indicate its purpose.

## Coverage

It is difficult to assess the extent of coverage since depth in a site, through the use of links, can be infinite. One author may claim comprehensive coverage of a topic while another may cover just one aspect of a topic.

Evaluating a web site for coverage:

- Does the site claim to be selective or comprehensive?
- Are the topics explored in depth?
- Compare the value of the site's information compared to other similar sites.
- Do the links go to outside sites rather than its own?

- Does the site provide information with no relevant outside links?

## Currency

Currency of the site refers to: 1) how current the information presented is, and 2) how often the site is updated or maintained. It is important to know when a site was created, when it was last updated, and if all of the links are current. Evaluating a web site for currency involves finding the date information was:

- first written
- placed on the web
- last revised

Then ask if:

- Links are up-to-date
- Links provided should be reliable. Dead links or references to sites that have moved are not useful.
- Information provided so trend related that its usefulness is limited to a certain time period?
- the site been under construction for some time?

## Objectivity

Objectivity of the site should be clear. Beware of sites that contain bias or do not admit its bias freely. Objective sites present information with a minimum of bias.

Evaluating a web site for objectivity:

- Is the information presented with a particular bias?
- Does the information try to sway the audience?
- Does site advertising conflict with the content?

- Is the site trying to explain, inform, persuade, or sell something?

## Accuracy

There are few standards to verify the accuracy of information on the web. It is the responsibility of the reader to assess the information presented. Evaluating a web site for accuracy:

- Reliability: Is the author affiliated with a known, respectable institution?
- References: do statistics and other factual information receive proper references as to their origin?

- Does the reading you have already done on the subject make the information seem accurate?
- Is the information comparable to other sites on the same topic?
- Does the text follow basic rules of grammar, spelling and composition?
- Is a bibliography or reference list included?

## WEBSITES EVALUATED

### 1.) Chester library (CL):

url: <http://chesterlib.com/>

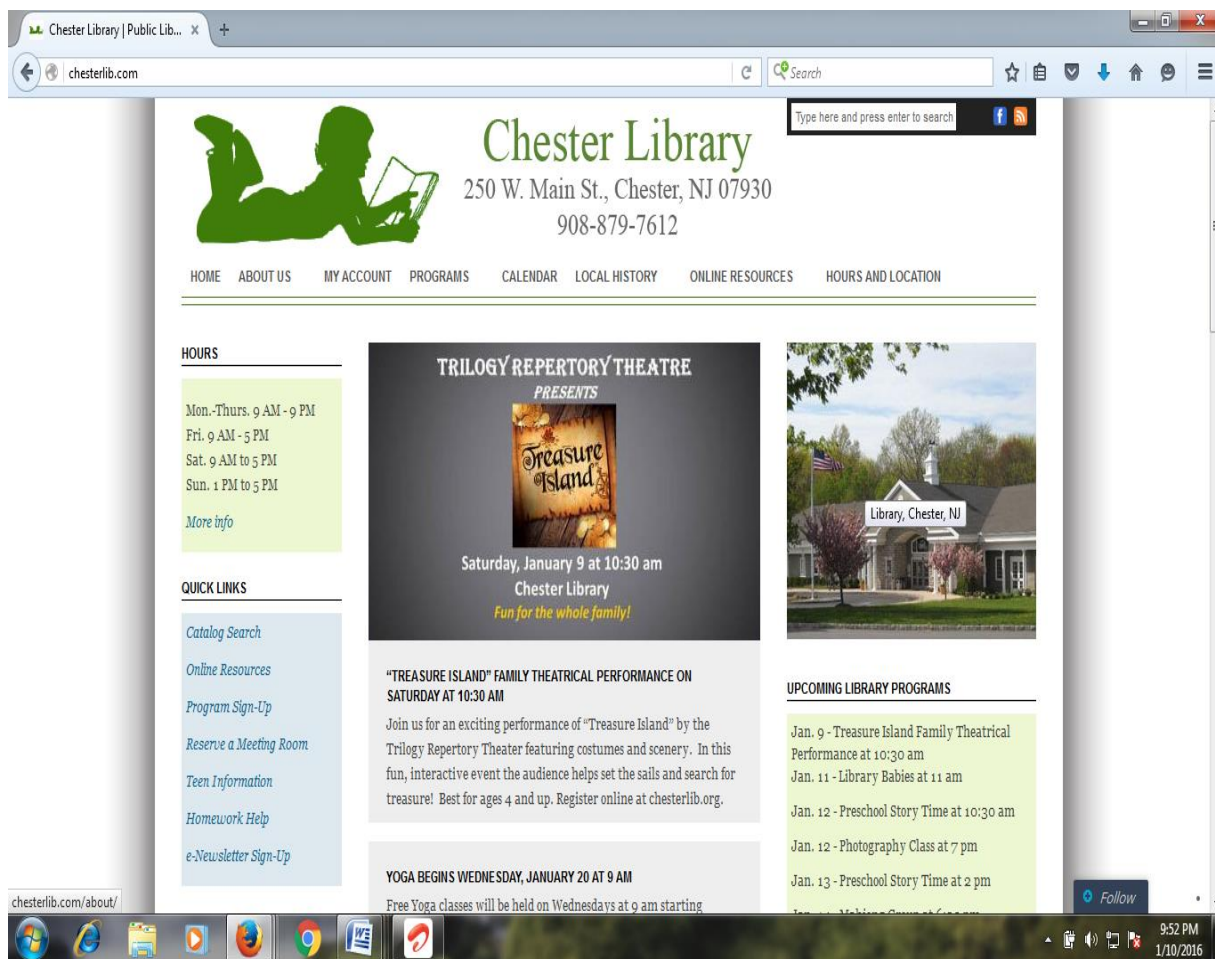


Fig 1: The portal of chester library



## 2. Englewood Public Library (EPL)

URL: <http://www.Englewoodlibrary.org/>

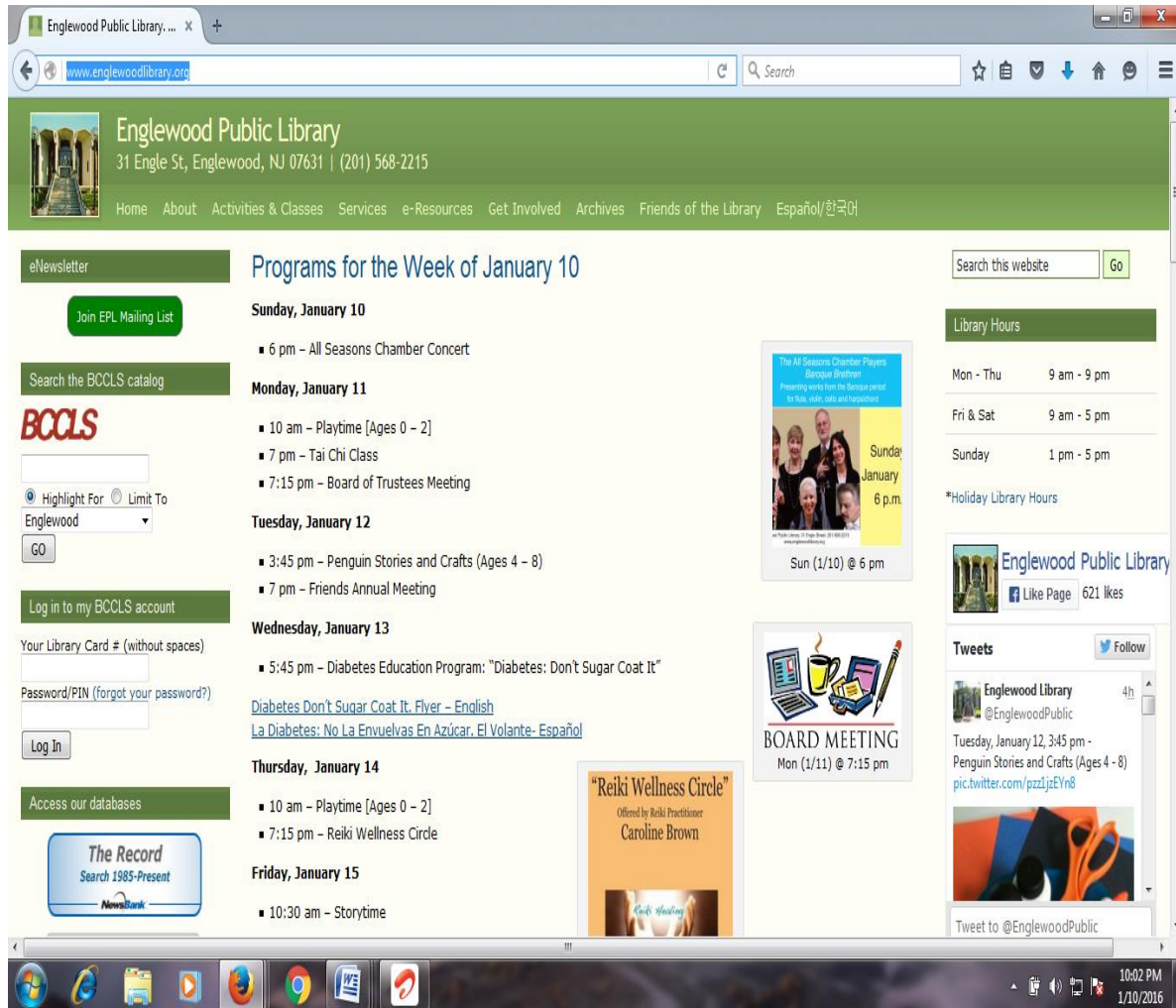


Fig 2: The portal of Englewood public library

### 3. Cranbury Public Library (CPL)

URL: <http://www.cranburypubliclibrary.org/>



Fig 3: The portal of Cranbury public library

#### 4. Dartmouth Public Libraries (DPL)

URL: <http://www.dartmouthpubliclibraries.org/>

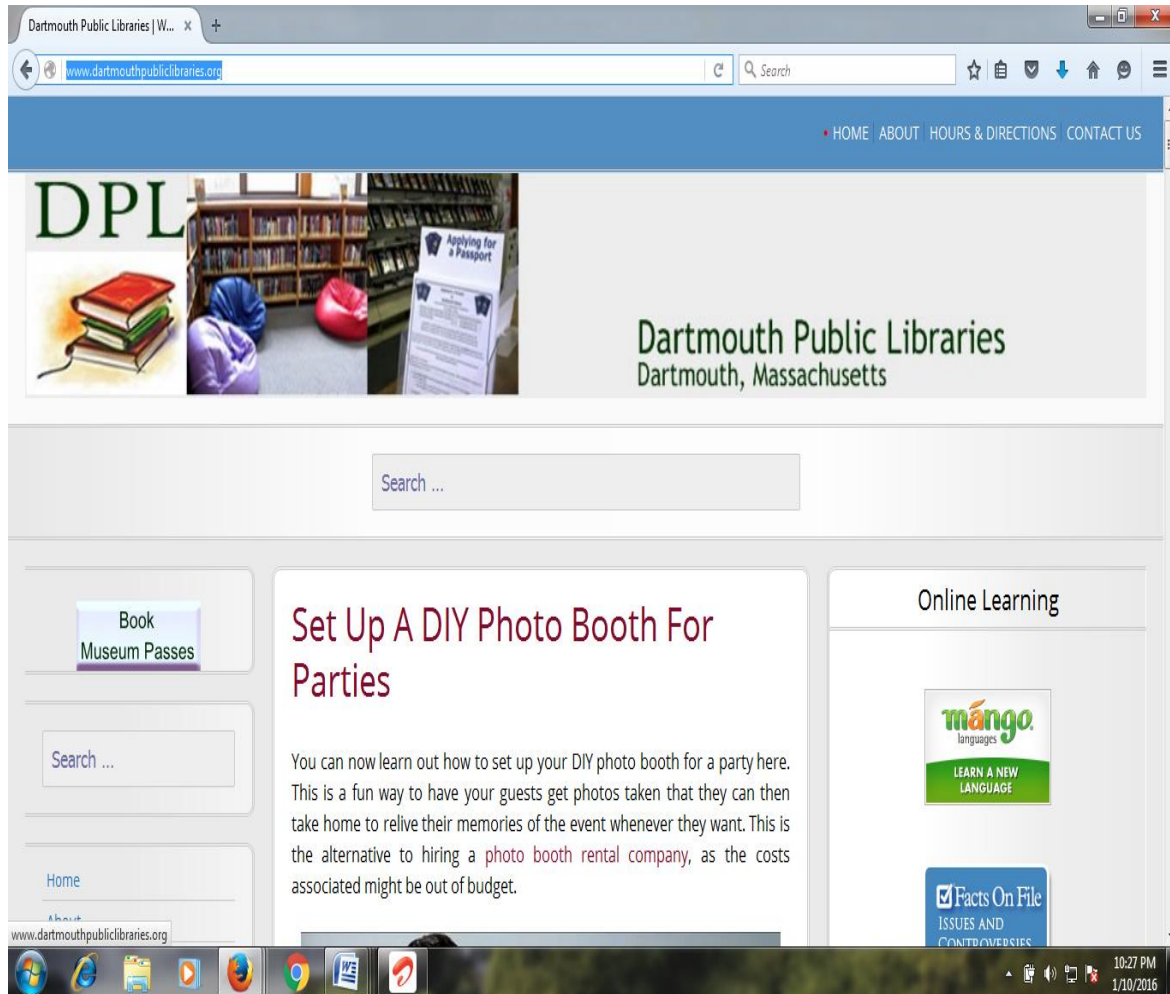


Fig 4: The portal of Dartmouth public library

## 5. North East Kansas Library (NEKL)

URL: <http://nekls.org/>

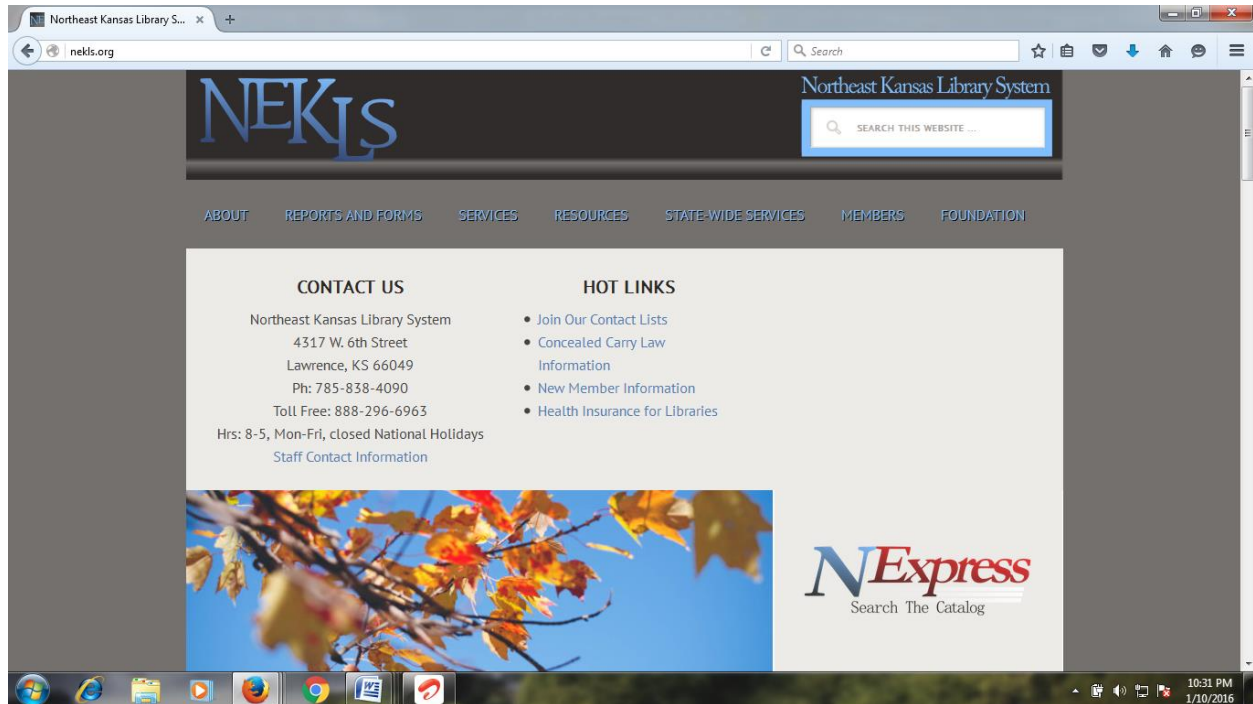


Fig 5: The portal of North East Kansas Library

## EVALUATION OF THE WEBSITES OF THE LIBRARIES USING EVALUATION CHECKLISTS

In doing this, the layered approach of website evaluation was adopted. This approach involved grouping related categories of website evaluation checklist and practical examination of the websites subjected to the evaluation thoroughly to observe the set standard. Each library portal was scored based on the category performance observed while conducting the

research. In this work, the evaluation was based on three layers. The score weighs from 1-10 with 1 being the least and 10 the highest.

- 1.) Surface Layer:** This layer describes the technical aspect of the websites. It has five categories by which the websites were accessed.



S/N	CATEGORY	LIBRARY WEBSITES/SCORES /10				
		CL	EPL	CPL	DPL	NEKL
1	Branding and Image	6	7	8	8	7
2	Speed	8	6	9	7	8
3	Navigation	8	8	8	8	8
4	Download rate	9	7	8	9	8
5	Layout and Design	8	8	7	8	9

Table 1: Surface layer category scores

**Branding and Image:** This category item describes the ownership label to the web portals of the five libraries under consideration. It was observed that Cranbury Public Library and Dartmouth Public Libraries scored the highest point in this category as they displayed rich branding image of their library.

**Speed:** This category item describe the time it takes the web portals of various libraries to load in a dialup network connection while checking the time. It was observed that Cranbury Public Library load at the fastest time of 2 seconds whereas Englewood Public Library took the highest time of 10 seconds to load.

**Navigation:** This describes the ease or otherwise to migrate to other web pages of the various library portals under review. It was observed that the five websites considered, the information posted had high

navigation quality. That accounted for the uniform score on the table above.

**Down Rate:** This is the time it will take one uploaded file to download. This was evaluated with the use of stopwatch and it observed that CL and DPL scored the number hence they had uniform and fastest download rate.

**Layout and Design:** This describes the design layout of the websites and it was observed that NEKL has a rich layout and design.

**2. Value Creation Layer:** This layer describes the purpose of the website. Its consistency with the objectives of creating the website. The table below examined this concept further.

S/N	CATEGORY	LIBRARY WEBSITES/SCORES /10				
		CL	EPL	CPL	DPL	NEKL
1	Content	8	7	8	5	9
2	Density of Information	6	6	7	5	8
3	Readability	7	6	7	9	7
4	Currency	8	9	9	7	6
5	Authorship	8	8	8	8	8

Table 2: Surface layer category scores

**Content:** This describes the quantity and quality of reading materials (books, serials, journals, e.t.c) uploaded on the various web portals under evaluation. It was observed that NEKL (North East Kensas Library) has the most content and DPL portal has the least hence the score of nine and five respectively.

**Density of information:** This describes the compactness of the web pages interface in relation with information they contain. This item was scored based on whether the information is balanced that is not too little and too much as too much can overwhelming to readers and scanty information on a webpage can be discouraging as well. Accordingly by observation NEKL scored the highest and DPL scored the least as this item is closely related with content item.

**Readability:** This describes the text regards to size, font, and color. It also considers whether graphics and animation are not overlapping with text. It was observed that DPL portal had adequate font size and appropriate font colour-to-background

contrast whereas EPL considered less of this.

**Currency:** This describes how up to date the information on the site were. The last time the information was revised and updated. It was carefully observed that the portals under evaluation scored highly under this category except for NEKL that their portal is under construction.

**Authorship:** This describes the authenticity of the authors of the articles posted on the website portals. It points to the correctness of information uploaded on the portal. It also considers the spellings and the grammatical expression of the write posted on the website. The ability to edit and scrutinize every material before uploading them to the website portal. The web portals under evaluation scored the same score since their authorship is verifiable.

**3. Persuasion Layer:** This layer describes those item carefully incorporated on the web portals that convince the visitors to the site to come back visiting next time. The categories in this layer are key factor to determine the number of visitors to the

websites which may attract fund in terms of advertisement placement to the sites. The

layer is further examined thus:

S/N	CATEGORY	LIBRARY WEBSITES/SCORES /10				
		CL	EPL	CPL	DPL	NEKL
1	Freebies	4	4	4	3	4
2	Real time Feedback	9	7	8	5	6
3	Links	8	9	7	6	8
4	Language Choice	3	9	3	3	3
5	Content format	7	9	5	4	5

Table 3: Persuasion layer category scores

**Freebies:** This describes services that can be rendered free of charge or materials that can be downloaded free of charge. Many visitors to websites usually come back if the service they received from such portals are free of charge. The library web portal under evaluation scored low as there is almost non-existent of free services and free materials to download by the visitors of their web portal.

**Real time feedback:** This describes prompt response to visitors' concerned observed on the course of using the web portal. I observed that Chester Library portal has instant messaging embedded on their portal coupled with links to social media, phone numbers and e-mails and that accounted for the high score of 9 while DPL only has e-mail as a means of contacting them and that accounted for their low score of 5.

**Links:** This describes the hyper-linking of the web portals under evaluation to other important internet portals. It was observed that EPL web portal that scored the highest

point had connections to such useful sites as openculture, googlebook, librivox, feedbooks, etc. Most of other web portals had link with EBSCOHOST apart from DPL has connection with facebook and other not too important sites.

**Language Choice:** This describes the liberty to select language of one's choice to render the content of the web portal. This is important if the web portal must attract global audience. It was observed that only EPL web portal had at least two languages (English and Spanish) to display their titles the rest is only in English language.

**Content format:** This describes the various modes that the content materials are presented such as audio books, text-based books and video books. It was observed that EPL web portal has provisions for audio books and other formats hence the score of 9. CL web portal has provision for graphic archives whereas the other web portals under evaluation have only text-based digital materials only hence the low scores.

## CONCLUSION

S/No	CL	EPL	CPL	DPL	NEKL
1	6	7	8	8	7
2	8	6	9	7	8
3	8	8	8	8	8
4	9	7	8	9	8
5	8	8	7	8	9
6	8	7	8	5	9
7	6	6	7	5	8
8	7	6	7	9	7
9	8	9	9	7	6
10	8	8	8	8	8
11	4	4	4	3	4
12	9	7	8	5	6
13	8	9	7	6	8
14	3	9	3	3	3
15	7	9	5	4	5
<b>AVER.</b>	<b>7.13</b>	<b>7.33</b>	<b>7.06</b>	<b>6.33</b>	<b>6.93</b>

Table 4: Overall Evaluation parameters Score table



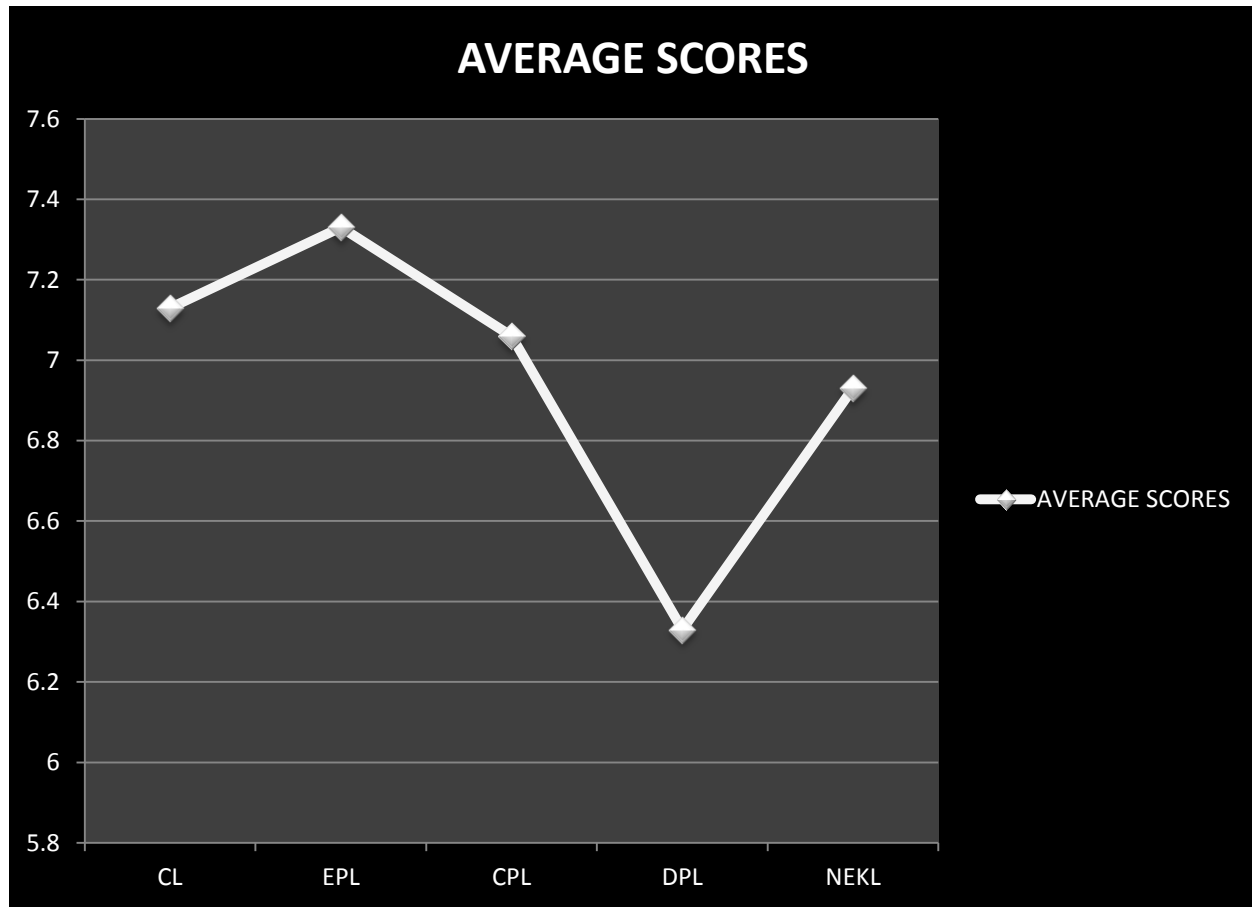


Fig 6: Graph of average Scores against the Library portals

### Conclusion

From the analysis above, it can be seen that Dartmouth Public Libraries (DPL) is the weakest web portal and Englewood Public Library (EPL) has the strongest web portal. Generally, it was observed that web portal prepared and hosted with wordpress content management system usually score above average. Therefore wordpress is a robust platform for web portal design and hosting.

### REFERENCES

- [1] <http://www.wordpress.com>
- [2] <http://chesterlib.com/>
- [3] <http://www.englewoodlibrary.org/>
- [4] <http://www.cranburypubliclibrary.org/>
- [5] <http://www.dartmouthpubliclibraries.org/>
- [6] <http://nekls.org/>
- [7] <http://wikipedia.org/>
- [8] Potter, C. (2006). "Psychology and the art of program evaluation". South African journal of psychology 36 (1): 82HGGFGYR-102.



[9] Reeve, J; Paperboy, D. (2007).  
"Evaluating the evaluation: Understanding  
the utility and limitations of evaluation as a  
tool for organizational learning".

Health Education Journal 66 (2):  
120–131.

DOI:10.1177/0017896907076750