A Glimpse into the Brighton College Abu Dhabi Library's Virtual Learning Environment: how can this help school libraries?

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Abstract

The Virtual Learning Environment is becoming a popular learning platform among various educational institutions in delivering a vibrant and effective learning environment. It enables many school libraries to perform their role in improving services and supporting the school community.

The researcher examined the status of Brighton College Abu Dhabi Library's VLE based on users' preferences and usage. The researcher surveyed pupils, teachers, and administrators and used frequency distribution to show results.

The findings revealed how the library VLE could further be improved and marketed to strengthen its value to the community.

Along with this, the included sample of the library VLE content structure and each content's description can serve as a guide in designing a library VLE.

Keywords: Virtual Learning Environment, Digital library, e-learning, library management, VLE

Introduction

Brighton College Abu Dhabi: Overview

Opened in 2011, Brighton College Abu Dhabi (BCAD) campus was built through a joint venture between UK and Bloom, the property development arm of National Holding of Abu Dhabi.

Brighton College Abu Dhabi comprises of three schools: The Pre-Prep caters to children from the Foundation Stage 1 to Year 2, the Prep School from Years 3 to 8, and the Senior School from Years 9 to 12.

Brighton College Abu Dhabi Library is committed to serving the community by providing wide-range items covering Fiction, Non-fiction, General Subjects, References, Subject-based, Arabic materials and online resources which aim to support the college curriculum, develop reading skills, and enhance the information literacy of the community.

Related Literature

School Libraries in a Digital World

Transforming students to be proficient in the digital world appears to be one of the challenges of every educational institution today. This conformed to the statement of Kuhlthau (2010) that the "21st century demands for new skills, knowledge, ways of learning that prepare students with abilities and competencies to address challenges of an uncertain changing world" (p. 17). Schrum & Levin (2009) believed that knowledge should not occur in just one individual, text, object or tool. Thus, Asselin (2008) emphasized that it has become urgent that meeting the literacy and learning needs of the net generation must be addressed. What is fortunate, however, is that Kelleher (2013) believed that the digital age provides an opportunity that enables a school library to create a distinctive space where it can continue to inspire the love of learning, whether in the traditional world or online.

Former American Association of School Librarians (AASL) President David Loertscher (2008) coined the term 'School Learning Commons' that describes a flexible, student-centered space where students and teachers have access to mobile technologies, digital and print resources, and modular spaces that can be utilized for collaborative activities, content creation, presentation and even performances (Loertscher, as cited in Mclester, 2013). The Canadian Library Association (2014) defined it as the "physical and virtual collaborative learning hub of the school" (p. 5).

The information overload that learners can experience nowadays has caused the school libraries to contemplate how they can stay relevant in the digital world (Roscorla, 2013). This issue has been a concern back then but it still continues to bring an impact to the development of school libraries. Leunissen (2013) explained that digital resources are becoming more abundant to the point that learners cannot find or evaluate the right resources.

What is a Virtual Learning Environment (VLE)?

A virtual learning environment is defined as a collection of integrated tools enabling management of online learning, providing a delivery mechanism, student tracking, assessment and access to resources (JISC, 2004). JISC also noted that a VLE is designed to support and enhance the learning progress of the community. To sum up, it is a learning platform that allows users 24/7 access through the Internet.

Moreover, the VLE serves as a platform for collaboration where interaction can take place among its users (O'Driscoll, Cross, & Trondsen, 2007). Thus, tutors can monitor their students' progress and can provide immediate feedback, whilst pupils can access various resources and other academic requirements set by their tutors.

Notably, O'Leary and Ramsden (2002) enumerated the tools and features of VLE (p. 2) as detailed below:

- "Communication between tutors and students e.g. emails, discussion board and virtual chat facilities, which support various types of communication.
- Self-assessment and summative assessment e.g. multiple-choice assessment with automated marking and immediate feedback.
- Delivery of learning resources and materials e.g. through the provision of lecture notes and supporting materials, images and video clips, links to other Web resources, online discussion and assessment activities.
- Shared and work group areas allows designated groups of students to upload and share files as well as communicate with each other.
- Support for students could take the form of communication with tutors or other students, provision of supporting materials such as course information and Frequently Asked Questions (FAQs).
- Management and tracking of students usernames and passwords to ensure that
 only registered students can access the course; analysis of assessment undertaken
 by students or their use of materials within the VLE.
- Student tools e.g. individual student webpages, 'drop boxes' for the upload of coursework, electronic diaries and calendars.
- Navigation structure structured delivery of information supported by a standard navigation toolbar. Most VLE software assume that students will work their way through linear sequences of instructional material. Others are more flexible and will accommodate alternative information structures, e.g. multi-path case studies" (p. 2)

The Roles of Virtual Learning Environment in School Libraries

In Roche's blog post (2015) she discussed that ICT opportunities, like those offered by VLEs, can make the library accessible 24/7 to the school community "by means of school library websites, online catalogues and the use of Web2.0 services". Librarians and school administrators should make use of these opportunities because according to Koganuramath (2007), "virtual library appears to offer substantial benefits to lifelong learners over both formal study and conventional open learning" (p. 538). This enables students to utilize and explore various options in relation to their queries in an effective and economical manner.

In 1995, Marchionini and Maurer (Cited in Gunn, 2002) pointed out that virtual libraries tailored for specific needs could produce global communities of learners. Tutors or other educators should not be complacent on a traditional learning space and instead should explore various options that cater to the needs of the present generation. Riccio (2001) defined that a virtual a library is a technological way of bringing resources together so users can find what they need.

Lamb and Callison (2005) highlighted the following services provided for online users through a virtual school library media center:

- "Instructional resources such as online tutorials, WebQuest, practice/testing environment, instructional modules, virtual labs, and simulations;
- Informational materials such as pathfinders, electronic databases, reference resources, streaming video, and digitized primary resources;
- Virtual adventures such as Web-based tours and virtual field trips

- Live interactions using video conferencing such as special events and expert interactions;
- Collaborative online learning such as email, blogs, discussions, project sharing, collaborative science experiments, collaborative writing, online book discussions, online author visits and expert discussions;
- Online assistance such as technical support, reference questions, mentoring and peer tutoring;
- Sharing space such as virtual galleries of student work, online newspapers, and collaborative writing areas; and
- Online request such as interlibrary loans and multimedia ordering that can be sent through mail to students" (p. 32).

Subsequently, the idea of a virtual library, which can be supported by the VLE, serves the concept of "Just in time learning" and "Just enough learning", coined by Gunn (2002), wherein instead of looking around in the Internet where information overload is common, pupils can browse only the recommended and useful resources evaluated by librarians or teachers.

Roles of Virtual Libraries (through the VLE) in supporting Pupils' Learning Progress Gunn (2002) cited various examples that reinforce the idea that virtual libraries support student learning as they are designed to assist in meeting pupils' needs through credible and reliable resources. She also added that these are very valuable when searches for the right information elsewhere can be time-consuming and the results can be incomplete, or filled with biases or commercial advertising. Besides, according to Lamb and Callison (2005), virtual libraries "enhance the experience of online learners" by providing access to remote materials.

Furthermore, Neuman (Cited in Gunn, 2002) mentioned that two different types of learning that can result from using digital libraries: "Learning related to accessing, evaluating, and using the information resources available in this environment and learning related to mastering and building upon ideas embodied within these resources" (p. 1).

Aside from this, Northcote (2008) argued that online learning environments, like digital libraries in VLE, necessitate that students apply various skills (e.g., analyzing, filtering, and organizing online resources, interactive communication skills, etc.) that eventually leads to an environment that encourages their contribution and development.

Teachers nowadays are also encouraged to explore further possibilities that support their classroom instruction. For instance, teachers are now engaged in probing the potential of blogs, media-sharing services, and other social software which are specifically designed for e-learning that can empower students and can create exciting learning opportunities (O'Hear 2006). However, Markus (Cited in International Federation of Surveyors, 2010) argued that "e-learning does not save time for the teachers – but it improves the knowledge transfer" (p. 24).

Advantages and Disadvantages of a Virtual Learning Environment

As mentioned, VLE is becoming prevalent in the present academic setting, not only because of institutions making the most of information technologies for education, but also because of

the impact that it can bring to the students' learning. BBC Active (2015) provided some reasons in using the VLE:

- Collaboration with others
- Submitting prep/homework virtually
- Online storage for all shared resources
- Customizable and dynamic home page on each subject area
- Links to various online resources
- Embedding outside useful resources
- Integration of various format and multimedia in classroom's instruction

On the other hand, technology entails pitfalls that every user has to understand. Below are the disadvantages in handling the VLE (Posey, Burgess, Eason, & Jones 2010):

- Time consuming
- Long-term technical training
- Lack of face-to-face interaction
- Technical problems/connectivity
- Cost allocation

Given all of these, the success of VLE relies not on a short term effort but on a long term commitment that requires proper management, support, and guidance among the school community.

Research Problem

Users' preferences and usage were examined, along with their awareness of the library VLE features. The researcher intended to find out the level of success of the implementation of the virtual library through VLE in terms of helping the school library perform its roles in improving and managing library services. The findings also serve as a guide in further developing the library VLE in order to promote more the value of the school library to the community.

VLE in the Brighton College Abu Dhabi

The VLE was initiated last 2014 by the ICT department. Each school subject and department has its own VLE champion who is responsible in overseeing and maintaining its VLE contents and layout.

In conceptualizing the library VLE contents, the author decided to structure it based on current library services and activities. The library VLE is divided into three major areas: Senior, Prep, and Pre-prep School. Each school has its own customized features suitable to the pupils' needs and teachers' requirements.

Under each school section, the BCAD library VLE is further subdivided into five major sections: "about the library", "library announcements", "library system", "online resources" and "library services" as illustrated on Figure 17. The chart is the primary tool in planning the library VLE contents. The contents may vary depending on the school's needs and policies but it is also essential that each feature has to be in line with the current library practices.

Subsequently, the author came up with a supporting document that explains each feature's description and levels of user access. It also enumerates overall contents of each school's section library VLE (See Figure 18.). All of these were ultimately approved by senior management before it was implemented.

Research Methodology

A modified survey based on the study of Barker and Gossman (2013) was utilized to determine the students' and teachers' awareness of the college VLE, to identify its effective VLE features, to discover technical challenges in using VLE, and to gather ideas in further improving the library services in support to the community's learning progress.

Results and Discussions

Frequency of Pupils' VLE Usage

Figure 1 illustrates the VLE frequency usage of the respondents. The author found out that the majority of the respondents (56.66%) use the VLE once a month, followed by 36.67% of respondents who use it weekly and the rest of respondents (6.67%) visit it daily. It is assumed that if teachers use the VLE more often, the usage on VLE will increase and pupils will likely be more encouraged to use it.

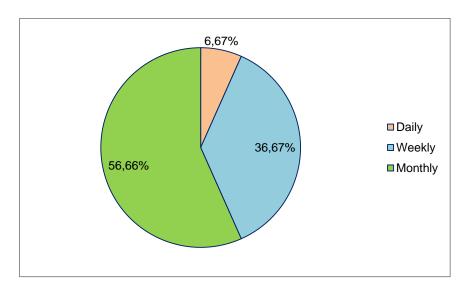


Figure 1: Frequency of Pupils' VLE Usage

Frequency of Pupils' Internet Usage

Respondents were asked whether they use Internet in a frequent basis (Figure 2). There was a huge difference in the percentage of daily use (89.48%) compared to weekly (7.89%) and monthly (2.63%) use. These responses signified that the Internet has become a daily experience of most of all the respondents which potentially enables them to access any resources they wish to have. Considering the frequency of their Internet use, the VLE can easily serve as an additional online platform for learning where they can get their educational resources.

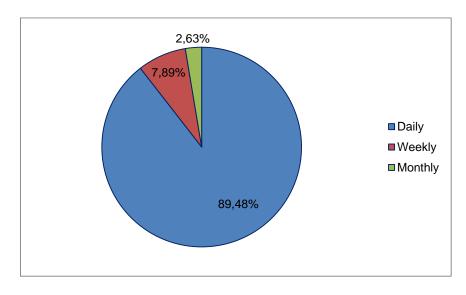


Figure 2: Frequency of Pupils' Internet Usage

Usage of Subject Areas in the VLE by Pupils

Another survey question determined which subject areas the pupils usually consulted with while using the VLE. Science (Physics/Chemistry/Biology) ranked the first having 70.00% followed by Maths at 66.67%. Fifty percent (50%) of the respondents answered they use VLE for Modern Foreign Languages (MFL) (i.e., French, Spanish, Italian, Mandarin). English ranked 4th on the list at 46.67%. However, Careers, Islamic Studies and Psychology were the least used subjects in VLE in support of their classroom instruction while the teachers teaching the three least used subjects do not use the VLE more often in their classroom. In a librarian's perspective, this data is a great indicator in deciding how the digital resources can be further developed; for instance, which databases to acquire and highlight in the virtual library, in line with the needs of teachers and pupils. The author believed that continuous collaboration appears to be an effective way of strengthening the contents of the library's offering in the VLE.

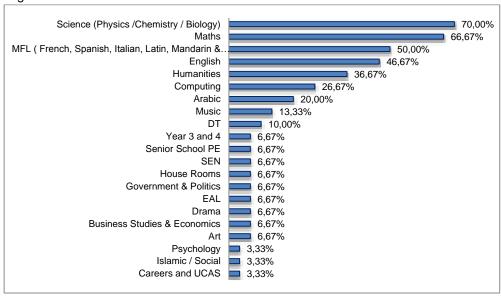


Figure 3: Usage of Subject Areas in the VLE by Pupils

Pupils' Awareness of the VLE Features

As the next figure showed, uploading of documents/revisions/presentations/video (88.46%) is the most popular VLE feature. Identifying their learning path (i.e getting immediate feedback from their teacher) was next in the list at 38.46%. And 34.62% of respondents said that they are also aware of the feature that enables teachers to communicate with pupils and to use school calendar. On the other hand, four features were identified as the least popular at 15.38%: communicating using a forum, administering assessment work, creating a question database, and enabling a parental log in. These findings might indicate that some features are less known as these may only be available to other authorized users like teachers and parents. As observed, some of the VLE features that pupils were least aware of only apply to those who administer the subject or parents who ensure and control their children's access of information. Yet, the most popular VLE feature allowed collaborations among pupils, teachers and parents and aimed to monitor users' learning development.

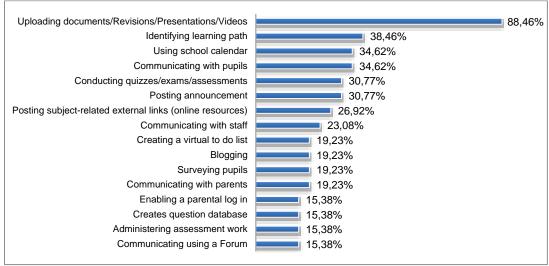


Figure 4: Pupils' Awareness of the VLE Features

VLE Features Used by Pupils

Pupils were questioned about the VLE features they have used (Figure 5). 86.36% of the pupils answered that they use VLE to upload documents/revisions/presentation/videos. Aside from this, they saw VLE as a way to communicate with staff by 22.73%. Posting announcements and creating virtual to-do lists have the same percentage of usage at 13.64%. Communicating with parents was the least used feature (4.55%) as indicated on the table. The author assumed that the teachers' initiative to integrate VLE in their lessons plays a vital role to maximize the pupils' VLE usage.

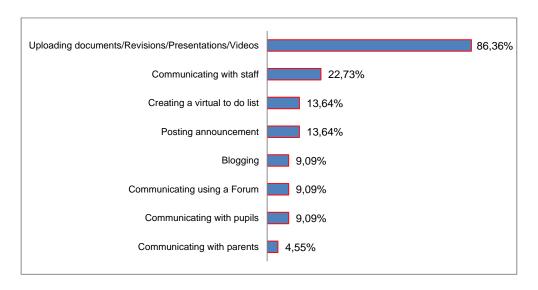


Figure 5: VLE Features Used by Pupils

Reasons in using the VLE by Pupils

The library wanted to find out what factors push the respondents to engage in the VLE. As figure 6 demonstrated, the highest percentage of respondent (51.72%) has answered that "finding online resources", "following teacher's requirements" and "checking homework/prep/projects" are the main reasons why they use VLE. This is followed by "finding answers to my assignment" at 24.14%. Yet, logging into VLE to ask a question and communicating to teachers seemed to be the least compelling reason at 6.90%. The responses only confirmed that the success of the VLE implementation hinged largely on the teachers' initiative in promoting it in their class, as they play a huge role in ensuring its usage.

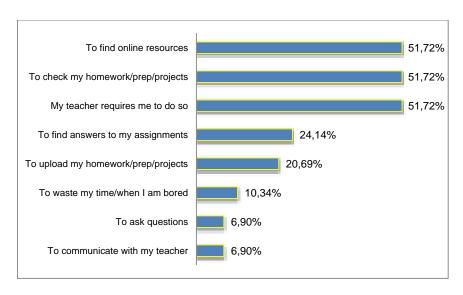


Figure 6: Reasons in Using the VLE

How the VLE Affects a Pupil's Learning Development

In order to measure the effectiveness of the VLE in the pupil's learning development, they were asked how the VLE helps them in their studies. Interestingly, 22.58% of the respondents strongly agreed and 35.48% of them agreed that VLE helps in identifying the right resources/material. Meanwhile, 15.63 of them strongly agreed that it helps them to identify what to accomplish or what they want to accomplish at 15.63% and 40.63% of the other respondents agreed with this.

Questions	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	Mean
The VLE helps me to become an effective pupil	3.13%	50%	28.13%	6.25%	12.5%	2.75
The VLE helps me to identify what/want to accomplish	15.63%	40.63%	15.63%	18.75%	9.38%	2.66
The VLE helps me to become motivated and inspired	0.00%	37.50%	25.00%	25.00%	12.50%	3.13
The VLE helps me to improve my learning habits	6.25%	46.88%	21.88%	12.50%	12.50%	2.78
The VLE helps me to do my independent reading and learning	3.13%	34.38%	34.38%	15.63%	12.50%	3
The VLE helps me to identify the right resources/material	22.58%	35.48%	25.81%	9.68%	6.45%	2.42
The VLE helps me to collaborate with other classmates	0.00%	6.45%	48.39%	19.35%	25.81%	3.65
The VLE helps me to become updated with my academic requirements	6.25%	46.88%	21.88%	15.63%	9.38%	2.75

Figure 7: How the VLE Affects Pupil's Learning Development

Problems and Challenges Encountered in the VLE

The next question inquired about the problems and challenges in using the VLE. Being at the top of the list at 45.45%, lack of interest was the major issue. Though, 40.91% of the respondents stated that technical skills also hinder them to use the VLE. While 9.09% of respondents had other various concerns including password not being provided to them, lack of information regarding VLE, and some never trying it at all. These responses gave the author some ideas on how to re-design the library VLE into a site not only tailored for academic purposes but a place where they can interact and play as well.

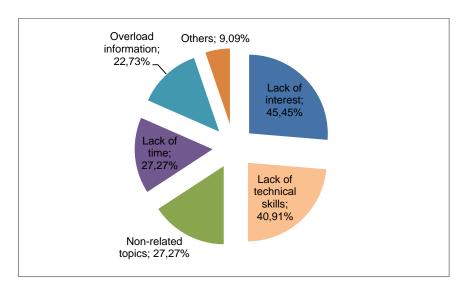


Figure 8: Problems and Challenges Encountered in the VLE

Teachers and Pupils' Awareness with the Library Services

The library had to determine the community's level of awareness of the current library services. The responses will support the librarian's initiative to identify effective features and services that encourage and promote the library VLE. The respondents' level of awareness to various library services was provided on Figure 9. Most of the pupils (42.86%) were aware that the library offers library lessons to classes and most of them were also aware that reserving a book (38.10%) for check-out are library services. Suggesting a book was the third most popular library services at 33.33%. On the other hand, providing library guides and uploading eBooks, and booking a library (room) are services which pupils are least aware of (4.76%).

For the teacher's part, recommended reading lists at 60.71% was the most well-known library service. This was followed by suggesting a book to the library which is at 53.57%. On the other hand, uploading eBooks (3.57%) seemed to be the library service they are least aware of as illustrated below.

The responses only reinforced the notion that collaboration with department heads and teachers should continue in strengthening the library services. The lack of awareness in some of the library services may signify that a more effective library management should be made top priority.

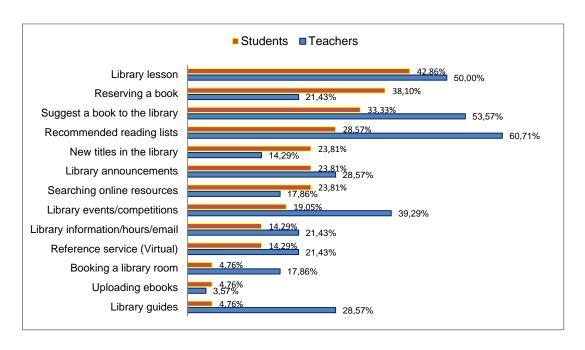


Figure 9: Teachers and Pupils' Awareness with the Library Services

Teacher's Encouragement to Use the VLE

The teachers were asked whether they encourage their pupils to use the VLE. Notably, the majority of the teachers said 'Yes' at 43.47%, followed by 'only when needed' at 34.78%. However 21.74% of the teachers answered that they do not actively recommend their students to use the VLE. With these responses, the majority was still in favor in using the VLE and believed that VLE can help them in supporting their classroom instruction.

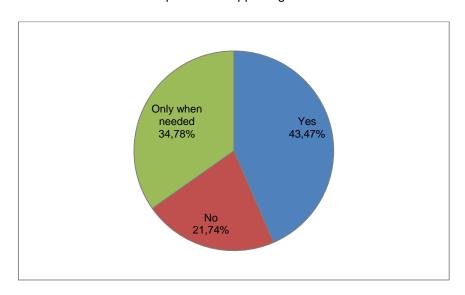


Figure 10: Teacher's Encouragement to Use the VLE

Common VLE features used by Teachers

Understandably, "uploading documents/revisions/presentations/video" obtained (82.05%) with respect to teachers' usage of all VLE features. "Posting subject related-external links (online resources)" at 48.72% was ranked at second place. Many teachers also confirmed that they use VLE as one way to communicate with parents (28.21%). In contrast, communicating with staff and creating virtual to-do lists (2.56%) were the least used feature. These responses showed that VLE functions not only to support the community's learning progress but also as an alternate for collaboration with pupils and parents.

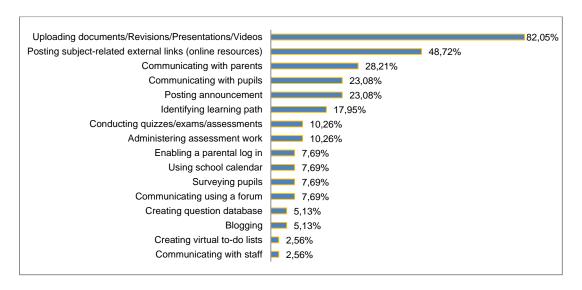


Figure 11: Commonly VLE features used by Teachers

Teachers' Motivation in Using the VLE

As the next chart (Figure 12) revealed, 60.47% of the teachers are motivated to use the VLE because the college requires it while 51.16% of them believed that this can increase communication with staff/parents/pupils. However, "to save time" was the least motivator in usage (11.63%). These responses suggested that the school's initiative to require every teacher to utilize the VLE can maximize its use. Not only this, it can also create a unified learning platform where everyone from the community can collaborate.

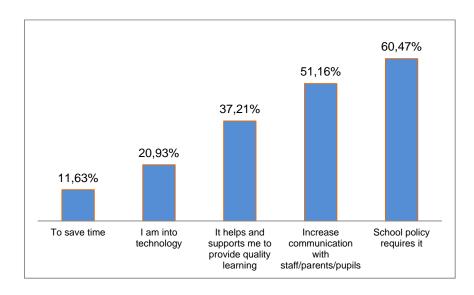


Figure 12: Teachers Motivation in Using the VLE

Expertise and Skills needed for VLE

Of all the faculty respondents, almost 61.54% of the teachers thought that basic HTML programming is the most important skill needed for VLE. Followed by this was the basic web browsing skill (41.03%) that teachers should be competent with. 30.77% of the respondents recommended that the skill of teaching technology is a requirement in using VLE as faculty, while only 12.82% of them believed blogging is essential. It is believed that expertise and skills should also be put into priority. Not everyone has experienced this platform before, so it is important to align the training development of faculty based on the perceived technical expertise and skills needed for VLE.

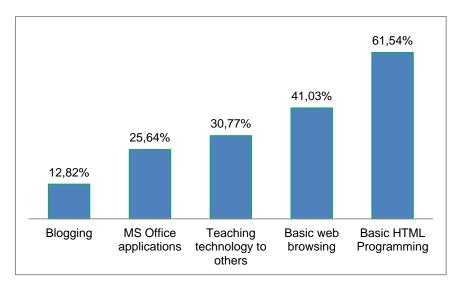


Figure 13: Expertise and Skills needed for VLE

How the VLE Library Supports Teacher's Classroom Instruction

In the responses to the question on how the VLE library supports academic classes, Figure 15 revealed that 56.76% of the faculty respondents agreed and 10.81% strongly agreed that the VLE library helps pupils to become effective users of technology. And teachers strongly agreed by 13.89% that it introduces the pupils to a wide-range of resources. The result of this part the survey shall help the librarian to structure the VLE library contents based on users' needs. For instance, 54.05% of the respondents said they are uncertain whether the VLE library helps their pupils to identify what is only needed. With this information, the librarian will in the future create an advanced list of online resources and recommended titles based on the scheduled weekly lesson. Also, having reading lists for class lessons in advance placed in the library prior to the lessons will also be put into consideration.

Questions	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree	Mean
It helps me to create a list of resources I needed for my class	5.13%	33.33%	48.72%	7.69%	5.13%	2.74
It helps me to create reading list for independent reading	5.26%	50.00%	31.58%	7.89%	5.26%	2.58
It provides additional references to my pupils' homework/projects	11.43%	48.57%	31.43%	8.57%	0.00%	2.37
It helps me to know the existing library collections	10.81%	45.95%	37.84%	5.41%	0.00%	2.38
It introduces my pupils to a wide-range of resources	13.89%	44.44%	30.56%	11.11%	0.00%	2.39
The VLE helps my pupils to identify the right resources they 'only' needed	5.41%	29.73%	54.05%	5.41%	5.41%	2.76
The VLE helps me to inform my class about the library updates/activities/programs	5.41%	43.24%	37.84%	10.81%	2.70%	2.62
It supports my pupils to read different wide range of books	5.26%	50.00%	36.84%	5.26%	2.63%	2.5
It helps my pupils to develop their reading habit	5.26%	44.74%	44.74%	2.63%	2.63%	2.53
It helps my pupils to become effective users of technology	10.81%	56.76%	27.03%	2.70%	2.70%	2.3

Figure 14: How the VLE Library Supports Teacher's Classroom Instruction

Teachers' Attitudes in Using Technology

With regards to the usage of technology, more than half of the faculty respondents (56.62%) stated that they are confident in using technology while some (41.30%) are still open to receive assistance with regards to using it. It is remarkable to say that all respondents had

shown an interest in exploring technology. The author believes that the users' positive attitudes towards using technology may exactly reflect their attitudes towards the well-managed and structured VLE.

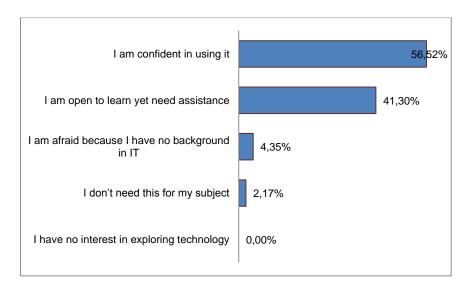


Figure 15: Teachers' Attitudes in Using the Technology

Summary, Recommendations, and Conclusions

The succeeding data summarizes the principal findings of Users' preferences and usages survey administered to the respondents:

For the pupils

- a. Majority of the respondents said that they use VLE on a monthly basis at 56.66%.
- b. Most of the pupils (89.48%) mentioned that they use Internet on a daily basis.
- c. Science (Physics/Chemistry/Biology is the most preferred subject used by pupils at 70%.
- d. 88.46% of the pupil respondents told that uploading
- e. Documents/revisions/presentation/videos considered to be the most popular VLE feature.
- f. Finding online requirements, checking of homework/prep/projects and teacher's requirement are the main reasons why most pupils (51.72%) use the VLE.
- g. By having average mean of 2.42, pupils believed that VLE help them to identify the right resources/material.
- h. Lack of interest seems to be the major problem in using the VLE at 45.45%.
- i. Library lesson is the most known library service as per pupils (42.86%).

For teachers and administrators:

- j. Teachers and administrators indicated that the recommended reading list is the most popular library service at 60.71%.
- 43.47% of the teachers answered that they encourage their pupils to use the VLE when needed.
- I. Likewise, uploading documents/revisions/presentation/videos is the most aware VLE feature at 82.05%.

- m. Teachers (60.47%) are motivated to use the VLE because the college requires them.
- n. Majority of the teachers (61.54%) said that basic HTML programming is the most important skill needed for VLE.
- Having 2.3 average mean, teachers believed that using library VLE helps their pupils to become effective users of technology.
- Most of the teachers (56.52%) described that they are confident in using technology.

Recommendations

These are the following recommendations to effectively promote the usage of library VLE and strengthen its purpose in providing library services to the community:

- Continuous collaboration with teachers on how the library can support their classroom instruction.
- Promote the newly-acquired subject-based online resources in the Library by creating a Current Service Awareness program.
- Coordinate with teachers on what resources can be acquired for each subject area.
- Collate all online resource links from the subjects' areas in VLE and organise them in the library VLE for school community reference.
- Maximise the function of VLE by encouraging and motivating pupils to use it as part of the academic requirement or homework.
- Conduct training and support to the school community regarding VLE and its developments and changes.
- Establish interactive yet subject-based learning activities as one motivator in using the VLE.
- Recommend VLE as part of the school and learning policy.
- Boost various lesser known library services mentioned by respondents and teachers by conducting marketing and promotional programs.
- Re-assess library programs based on users' needs and satisfaction.

Conclusion

The movement of school libraries towards establishing a virtual library through a VLE is a trend which shows that librarians have realized their important roles in assisting learning in the digital world. The virtual library's benefits and roles empower school libraries to perform its function in supporting the school community. It is also believed that, by providing well-structured and constantly managed library VLE contents, school libraries can further strengthen its importance by successfully meeting current and hopefully even future demands.

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Biographical Note

Virgilio G Medina Jr is currently working as Librarian at Brighton College Abu Dhabi. He graduated cum laude with the course of Library and Information Science in University of the Philippines-Diliman. He is responsible in managing the library and has successfully organized various library programs and events that promote the importance of the library and reading in the school community. His areas of interest include library planning and management, library technology, marketing programs, collection development, information and references, and information literacy.

Appendix I

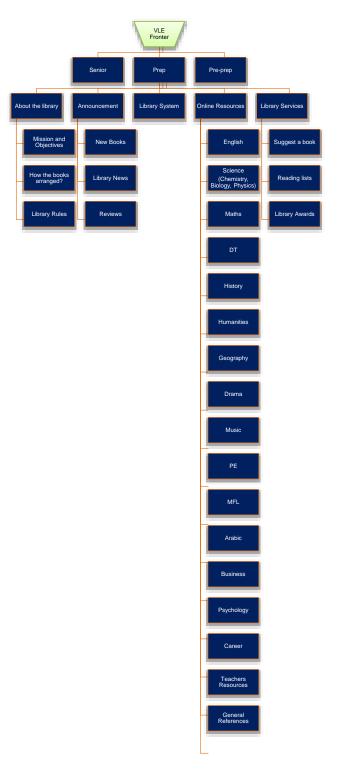


Figure 47: BCAD's Library VLE Contents

Appendix II

VLE Contents	Senior	Prep	Pre-prep	Access	Description
I. About the library	✓	✓	✓	Everyone	Brief information about the library.
a. Mission & Objectives	✓	✓	✓	Everyone	Library Mission and Objectives
b. How the books arranged?	✓	✓	✓	Everyone	book
d. Library Rules	✓	✓	✓	Everyone	Library Rules.
II. Announcements	✓	✓	✓	Everyone	Upcoming library events/activities such as book fair, author visit, etc.
a. New books	~	~	✓	Everyone	
b. Library News	✓	✓	✓	Everyone	
d. Reviews	✓	✓		Everyone	Reviews on particulary title (pupils' review)
III. Library Catalogue: Oliver Library System			/	Personal log-in details	Liberton Control on the Control
,, -,	✓ ✓	✓ ✓			Library Cataloguing System
V. Online Resources			√	Everyone	
c. Other online resources		✓ ✓	✓	Everyone	1
a. English		✓ ✓		Everyone	1
b. Science (Chemistry, Biology, Physics) c. Maths				Everyone	<u> </u>
		· /		Everyone	1
d. Design Technology (DT)		· /		Everyone	1
e. History f. Humanities		· /		Everyone	1
g. Geography	· /	· /		Everyone Everyone	List of recommended and
f. Drama		· /		Everyone	evaluated online resources of all
g. Music		· /		-	subjects areas in the collage. This
h. PE		· /		Everyone Everyone	has been accomplished in
i. MFL		· /		Everyone	collaboration with subject experts.
i. Arabic	-			•	+
k. Business		· /		Everyone Everyone	+
I. Psychology	· ·	·		Everyone	†
m. Career		· /		Everyone	†
n. Teachers resources	· ·	· /		Everyone	†
o. General References		· /		Everyone	†
V. Library Services	-	· /	_	Everyone	
a. Suggest a book				Everyone	program
b. Reading list	-	· /	· ·	Everyone	Reading lists per vear level
b. Library Awards			· ·	Lveryone	recording note per year revel

Figure 18: Library VLE Contents Description