**Chapter II**

**Related Review of Literature**

This chapter discussed about the research of the system including the online classroom, advantage and disadvantage of an online classroom, school websites, website development and website design

**2.1 Online Classroom**

Nowadays, online classroom are being use in schools for easy access of class activities but not all schools has an online classroom. According to Ni *(2013)*, Web-based technology has noticeably transformed the learning and teaching environment. Proponents of online learning have seen that it can be effective in potentially eliminating barriers while providing increased convenience, flexibility, currency of material, customized learning, and feedback over a traditional face-to-face experience.

In addition according to YashchIn *(2014*), Web-based education technology has seen both promising and lackluster results in terms of adoption and course completion rates; however, online education proponents assure us that the traditional classroom is on the cusp of a dramatic change.

**2.1.1 Advantages of an Online Classroom**

According to Adderly *(2015),* while distance learning is nothing new, advancements in technology have made online degree programs increasingly more attractive and more feasible particularly for working professionals who want to advance their education without compromising their careers.

**Flexibility.** Online learning offers busy working professionals the opportunity to earn degree without putting their lives on hold.

**Convenience.** Online learning enables students to tend to their studies at any time and from anywhere they have a digital connection. This can be extremely beneficial for students who are balancing their education with work and family life. Many online programs allow students to earn their degree part time and adjust their class schedule to fit their lifestyle. As an added benefit, students in online programs do not have to spend time sitting in traffic and commuting to class. The convenience of online class is perfect for on-the-go students who prefer the flexibility of instant, online access.

**Social Engagement.** Online learning allows students to interact, share experience and discuss relevant around the clock. Many programs offer live, weekly classes taught in unique seminar style classroom environments that foster tightknit communities among faculty and students. Outside of class, students can access instructors as well as their fellow students through face-to-face video, email and discussion threads.

**Versatile Coursework.** Because of the innovative format, online degree programs are able to accommodate a wide range of learning styles. Many online programs provide immersive, dynamic content that introduces self-paced lectures, faculty-designed video content, interactive case studies, real-world learning experiences, collaborative group projects and more.

**Skill Development.** Perhaps one of the biggest advantages of online is the ability to continue working while earning a degree. This gives students the opportunity to literally put what they learn to work and immediately apply the lessons they learn to their jobs. Many online programs also offer real-world learning experiences such as field placements and global immersions.

**Network Opportunities.** Online campuses make it possible to network with like-minded professionals around the world.

**Innovation.** Online learning has the power not only to increase access to education but also to improve learning outcomes and make lasting impact on the lives of students across the globe. (What are the Benefits of Online Classrooms?)

**2.1.2 Disadvantages of an Online Classroom**

According to Smythe *(2014),* over 35% of students worldwide enroll themselves in either full-time or vocational online courses. For them, the entire learning experience is radically different to that of average school/college-goers. While there are certainly many advantages of such online courses and classes, there are disadvantages to be wary of as well.

**Interaction among peers is absent.** A healthy competition and interaction with classmates is what motivates many young learners across the world. Interacting with peers often involves exchange of notes, scheduling group discussions and organizing study circles too. In an online course, a student has to study on his/her own, and might end up feeling isolated, and even depressed.

**Sense of discipline can go out the window.** Regular tests, assignments and homework form a vital part of online education. There is, however, no one to monitor whether students are indeed completing such tasks in the manner they are meant to. Unless the sense of self-discipline is strong, the temptation of peeping into books and online resources during online tests can be overpowering. Such ‘cheating’ defeats the very purpose of education.

**Online courses can be more time-consuming.** Regardless of whether a student has enrolled in an educational websites, or is trying to learn something through apps created by leading iPhone application development companies – guidance isn’t always available. The entire process of getting clarifications and query-resolutions can take much more time than what is required in a traditional classroom. Learners have to ping instructors, post their doubts in forums, or send text messages to the teachers. Replies may not be immediately provided.

**Risks of information overload.** Although properly designed course curriculums do keep things organized, students might feel just a tad overwhelmed by the sheer volume of information on the World Wide Web. Since there are no teachers to filter the most relevant information and references for the learners - the maze of online data can leave a young kid well and truly confused. Trying to read too much can be a definite waste of time as well.

**Online learning often encourages procrastination.** Feel that your teachers/parents go a little overboard with their daily warnings about the semester exams coming up? Well, the publisher of online texts, or a professional from the field of academics-based [iPhone app development in India](http://www.teks.co.in/site/index.php) is not going to take such troubles - and that’s not necessarily a good thing. While following an online course, it is common to feel that there is ‘more time in hand’ - and the task of actually getting down to studying can be postponed. There won’t be anyone to keep warning you - if you do not follow a strict routine, your grades and learning will suffer.

**Basic technological expertise is an absolute must.** It’s all very well to have a video learning website, complete with online chatting and materials to download. But what about the students who are not particularly web-savvy and/or are not familiar with all the features available on the site? These students would not be able to derive optimal benefits from the course - which, in turn, would make the monetary investment involved a bit of a waste. It always makes sense to get a grasp of what a course is all about, and the website/mobile app on which it would be available. Online classes are not always particularly cheap - you need to be able to get maximum value out of them.

**Chances of more distractions.** Be it for little children or grad students, there is no way of glossing over the importance of brick-and-mortar classrooms. The environment in a proper physical class is almost always more conducive for learning - thanks to the emphasis on classroom discipline, and the general quietness and attention of fellow-students. While reading an online text, the chances of getting distracted are much higher. If you are trying to study while your family-members/roommates are happily chattering away - concentrating can be nearly impossible!

**Too much flexibility.** A classic case of the ‘grass is greener on the other side’ phenomenon. Regular college-attendees keep complaining about the set routines they have to follow - while full-time online courses can offer excessive freedom. As such, academics advise that students who are not particularly good at time-management should stay away from holistic web-based learning. Successfully pursuing an online/distance learning course is all about prioritizing the various lessons, assignments and other study modules. A flexible learning schedule need not always be a good thing.

**Chance for fraudulent practices.** There are tricksters in every professional field - and the idea of luring young students into paying hefty upfront enrolment fees for online classes can be a lucrative one. A snazzy website appearance and unverified promises about round-the-clock support and placement assistance should never be enough for a student to select any particular course. There are discussion forums online - where you can find out the names of the best online courses for the subject(s) you are interested in. Otherwise, you might find that you’re learning website has disappeared after a few months!

**Probable problems in bagging a job.** In many countries (including India), web learning courses are still considered to be of much lower value than mainstream classroom courses. Prospective employers might be sceptical about the credibility of even well-known online learning facilities and [mobile educational apps for kids](http://www.storytimeforkids.info/app/get-information-best-iphone-app-for-kids) - and prefer recruiting candidates with more ‘traditional’ qualifications. Students have to be prepared to face a few initial hiccups, if they are planning to invest time and money on online coaching.

**2.2 School Websites**

**2.2.1 University of Perpetual Help**

The University of Perpetual Help website has calendar of activities, online payment, academic stuffs such as requirements of enrolment, list of teachers, courses they offer, university library, list of their facilities, contact numbers, scholarships they offer, online classroom, university news etc.

**2.2.2 Ateneo de Manila University**

The Ateneo de Manila University site has posts about the happenings in their school or events that involves the student or the school, online classroom, the educational services they offer, academic calendar, list of campuses, cafeterias, dormitories, map, their facilities and on other sister schools, student news, list of student organizations, the teachers and students research or literary works, gallery, a global portal, alumni page for their alumni’s accomplishment and a page for donations.

**2.2.3 University of Batangas**

The advent of the 21st century saw the University of Batangas as a fully-realized educational leader in the Southern Tagalog region. A small college founded in 1946 by a pioneering group of Batanguenos committed to serve the community, by 1996, has metamorphosed into a vibrant university. The wooden building at the M.H. Del Pilar campus has grown into five campuses. The M.H. del Pilar campus is now the Elementary Department; the main campus was moved to Hilltop and is now home to the High School and College Departments; the Pallocan East campus is where you can find the UB Special Children Foundation and the UB Waldorf School International; the Pallocan West campus is the future site of the High School Department; and, Lipa City campus is the latest satellite of the growing UB system.

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They have calendar of activities, job postings/vacancies in their school, board of regents, news, courses they offer, requirement for enrolment by admission type, scholarships, online admission, downloadable school documents, school files like audios and even freeware soft wares, faculty consultation schedule, tutors and mentors volunteer schedule, alumni information sheet/online, online classroom, groups and contact lists

**2.2.4 Massachusetts Institute of Technology Open Courseware**

MIT OpenCourseWare (OCW) OCW is a free and open publication of material from thousands of MIT courses, covering the entire MIT curriculum. That's every MIT department and degree program, and ranging from the introductory to the most advanced graduate level. Each OCW course includes a syllabus, some instructional material (such as lecture notes or a reading list), and some learning activities (such as assignments or exams). Many courses also have complete video lectures, free online textbooks, and faculty teaching insights. While some OCW content is custom-created for online use, most of it comes straight from the MIT classroom.“The idea is simple: to publish all of our course materials online and make them widely available to everyone.” Dick K.P. Yue, Professor, MIT School of Engineering (N.D.). OCW is a free and open publication of material from thousands of MIT courses, covering the entire MIT curriculum.

The MIT OCW follows instructional method such as Active learning, Assessment, Teaching Communication, Design process, Problem solving, Digital tools, and Real-world contexts. And uses the following materials; Assignments, Lecture notes, Exams, Projects, Simulations, Online Textbooks, Image Galleries and videos.

**2.3 Website Development**

Website is one of the useful thing in the internet. You can do anything and etc. according to Vernnix, *(2000*) Web applications have three main purposes to sell a product, to share general information about a specific subject, and to share information about yourself.

Website have many different uses of languages, according to Prechelt *(2010),* in the context of web-based application development, a technological platform is a programming language plus the set of reusable technological pieces used in conjunction with that language, such as components, frameworks, libraries, tools, and auxiliary languages. Web development platforms share a number of auxiliary languages, in particular (X) HTML, CSS, and JavaScript.

In developing a website there are different language to use:

**2.4.1 HTML**

* According to Hemmendinger *(2009),* **HTML,**in full **hypertext markup language**, a formatting system for displaying text, graphics, and audio retrieved over the [Internet](https://www.britannica.com/technology/Internet) on a [computer](https://www.britannica.com/technology/computer) monitor. HTML is the [markup language](https://www.britannica.com/technology/markup-language) for encoding Web pages.

**2.4.2 PHP**

* According to Bouwkamp (2016) PHP (Hypertext Pre-Processor) is a scripting language, running on the server, which can be used to create web pages written in HTML. PHP tends to be a popular languages since its easy-to use by new programmers, but also offers tons of advanced features for more experienced programmers. According to Martin (2015) “This is a widely used language that was created in the year 2004 and now powers over 200 million websites worldwide. Some popular examples of websites powered by this platform include Facebook, WordPress, and Digg.com.”

**2.4.3 CSS**

* According to Loban *(2001,)* the purpose of CSS is to provide Web developers with a standard way to define, apply, and manage sets of style characteristics. CSS provides these capabilities through a technical model based on a hierarchical scope of effect, the separation of style from content, and a well-defined set of published standards. This section touches on each of these three topics in turn, focusing on how CSS can help the Web developer create maintainable, reusable code.

**2.4.3 Angular JS**

* According to Arun *(2013),* AngularJS is picking up the pace in the arena of web application development, especially the development of the Single Page Applications (SPA). AngularJS is more of a client framework than a simple library due to the fact that it takes care of building or manipulating the DOM elements based on the user declarations. AngularJS is an open source project created and maintained by Google.

**2.4.4 Laravel Framework**

* According to Verma *(2016),* Laravel is one of the highly used, open-source modern web application framework that designs customized web applications quickly and easily.

Developers prefer Laravel over to other frameworks because of the performance, features, scalability it offer. It follows Model View Controller (MVC) which makes it more useful than PHP.

It attempts to take the pain out of development by easing common tasks used in the majority of web projects, such as authentication, routing, sessions and caching. It has a unique architecture, where it is possible for developers to create their own infrastructure that is specifically designed for their application.

**2.5 Website Design**

In developing a website, one factor is that the design must be good and eye catching. There are many different types of web design. According to Fitzgerald *(2008),* the Web has become an increasingly large part of our culture as its availability has increased in the past decade. Its user base has expanded from the original tech savvy core to a group of people with a wide range of technical skills. People with fewer technical skills are beginning to create their own web pages and share their own content.

Web Design is important when it comes to business, according to Charlie *(2015),* if your website is outdated or finds it hard to stand out from the rest of the competition, an update is highly recommended. Web design can determine whether or not your business will be able to generate lucrative opportunities. Well-designed websites have the ability to increase traffic along with the input of an enhanced user interface that will help to generate new business.

**2.6 Summary**

Based on the review in this chapter school websites are clearly existing and that common features and functionalities include; Calendar of activities, online classroom, posting of news/activities/announcements, list of teachers, list of courses and others. It is also found out that the commonly used tools to be used for the web development are HTML, PHP, AngularJS and CSS.

According to Rossi (N.D.) HTML is the basic format for the scripting language that is used to construct the Web. PHP on the other hand is so popular that some of the big websites today used it like, Facebook. According to Martin (2015) PHP is an open source language and fast prototyping language. It is compatible with UNIX and Windows OS. It is mostly used include start-up businesses, advertising apps, and small software organizations as well as media agencies. The language can be embedded in HTML directly. According to Mowfort (2016) “AngularJS lets you extend your application’s HTML syntax, resulting in a more expressive, readable, and quick to develop environment that could otherwise not have been built with HTML alone.” According to Martin (2015) “For most websites across the world, CSS is the platform to opt for if they need help to create visually attractive webpages and finds use not just in the creation of web applications but also mobile apps.”

That is why the researchers used it to develop the website.