

# The implementation of Web-Based Project-Based Learning System

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## ABSTRACT

The utilization of the Web (World Wide Web) has had numerous constructive outcomes on education. It conquers time and space constraints in conventional schools. Instructors and understudies are presently utilizing the Web to get to immense measures of data and resources in the internet. Too, learning by means of the Web empowers both synchronous and nonconcurrent communication. Regardless of numerous advantages of the Web, it might debilitate understudies' inspiration because of absence of eye to eye communication. In this paper, we give a learning model called Web Project Learning, which depends on the standards of constructivism, to give inspiration and cooperative figuring out how to understudies in the Web condition. The model depends on the Project-Based Learning model and is overhauled for use on the Web. The model can energize the support of guardians also as understudies, and be connected to any subject. We actualize our model and demonstrate that it can be connected for natural instruction as an occasion.

**Keywords:** Education System, Online Training, Learning Procedure

## I. INTRODUCTION

Recent advances in the Web have quickly changed our life in different ways. These advances give better approaches to individuals to impart on a worldwide scale and survey huge measures of data. The Web gives instructors chances to execute a scope of new educating and learning rehearses, which rethink classroom learning encounters. The Web empowers a purported WBI (Web-Based Instruction) framework as an educating help. The WBI framework, which incorporates a hypertext data coordinate with communication and community oriented apparatuses, presents two vital creative highlights: to begin with, it gives particular instruments to control the mixed media data substance of the Web pages; second, approved clients can alter the data arrange in the

framework. Regardless of numerous advantages of the Web in the learning procedure, it might debilitate understudies' inspiration in the internet in view of absence of up close and personal communication. The absence of understudy control is likewise viewed as one of the disadvantages of WBI unless an instructor keeps the understudies working towards its objective. As educators' impact diminishes, understudies may move toward becoming withdrawn. In this way, understudies can't focus their contemplations upon their work. It is accounted for that around 30%-half of understudies who have begun a separation instruction course dropped out before the finish of the course. To influence the figuring out how to process powerful, we should propel understudies to be occupied with the learning exercises. A learning background where

the student must add to an action is called dynamic engagement, while a learning knowledge where the student is predominantly a beneficiary of data is called latent engagement. At the point when a type of engagement is fascinated by a learning movement, the student is engaged and mindful, and moves toward becoming caught and focused on the job that needs to be done. Educators have discovered that chipping away at projects is a connecting with action with an expansive potential for encouraging learning. Project work gives a setting to stepping up and accepting accountability, settling on choices and decisions, and seeking after interests. The Project-Based Learning Model additionally can be utilized to advance the educational modules, fortify Internet abilities, and give coordinated and topical learning openings. In this paper, we introduce the Web-based Project-Based Learning Model for the Web condition. It depends on the current Project-Based Learning Model; however it likewise can persuade understudies and give genuine settings to fruitful community oriented learning in different routes on the Web. Our model likewise receives the standards of constructivism with the goal that both communitarian learning and self-learning are accentuated. We outline the model for the Web condition and execute for classroom utilize. The model can be connected to any subject. We demonstrate that the model can be connected for ecological instruction as an occurrence.

## II. BACKGROUND

Constructivism is a thought that has been grasped by instructive analysts and is characterized as takes after. Every individual must make anything he or she knows utilizing his or her own brain. There are two essential wellsprings of crude material from which new learning is made. One is as of now known idea, and the other is new data accessible from the faculties. New data joined with existing thoughts can make adjustments to current enhancements. On reflection, a thought that we should all make in our

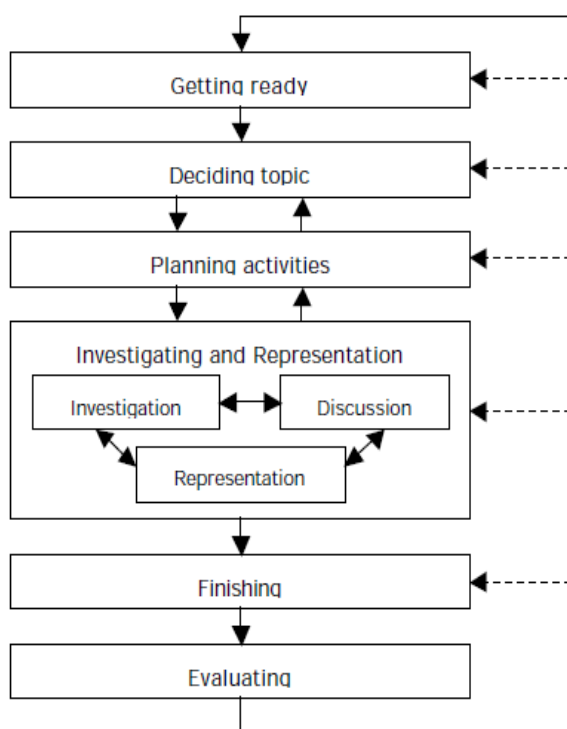
own particular learning appears glaringly evident. The estimation of this thought is in its end products. The first of these is that the more one comprehends, the all the more promptly one can learn new thoughts. Or on the other hand then again, the less one knows, the harder one can learn new things. The second is that a decent learning circumstance empowers us to experiment with thoughts more than once, making alterations, seeing what works and what does not, and utilizing this experience to refine our originations. The third is that the student must be a dynamic member, who is blending, coordinating, and attempting thoughts together. It isn't sufficient to simply enable plans to enter our psyche; they should be coordinated into existing structures and thought designs. Also, this implies for figuring out how to happen, we should be propelled to wind up occupied with the learning exercises.

## III. DESIGN OF A WEB-BASED PROJECT-BASED LEARNING MODEL

**Web-based Project-Based Learning:** One of the most encouraging ways the Internet is being used in school is to have understudies take an interest in worldwide synergistic Internet projects. In this area, we propose a learning model called the Web-Based Project-Based Learning (hereinafter called 'Web Project Learning') for the Web condition. The Web Project Learning is characterized as issue arranged learning inside the structure of a little gathering, an entire class, or an individual task and utilizing web bolster for the project exercises. It additionally gives genuine settings to fruitful community oriented learning. In educating, the Web fits extremely well with the Project-Based Learning Model. The Web can be a coordinator, an examination apparatus, a prepared wellspring of information, and methods for individuals to speak with each other, and a store for ancient rarities. Since the Web is a piece of this present reality, and curios on the Web can promptly be put on the planet past school, projects have a degree for realness not typically found in the school

condition. The Web Project Learning can persuade the two understudies and educators as it gives an engaging method to understudies to pick up Internet abilities while being occupied with customary classroom exercises. Through the projects, understudies are urged to build up a scope of aptitudes identifying with perusing, composing and exploring and also building up their capacities in choosing, introducing and conveying data. At the point when understudies chip away at their project, they fortify research and association aptitudes while being mindful and self-spurred all abilities they will require in the data age. Understudies feel a feeling of engagement since they work with points that they have decided for themselves.

### 3.2. Web-Based Project-Based Learning Model



**Figure 1.** Web Project Learning Model

The Web Project Learning Model is partitioned into the accompanying six stages rather than just three stages, which are Getting Started, Field Work and Culminating and Debriefing Events, as in the current Project-Based Learning models.

**Preparing:** Above all else, an instructor plans a project plot. The diagram's motivation is to give the data important to understudies to imagine their own project inside the extent of the framework, and give resources to enable them to do it. It must give objectives of the entire task for understudies, and adequate direction for understudies to pick proper inquiries, exercises, and items. The diagram will be predominantly perused and utilized by understudies. An educator dissects and incorporates educational programs, records questions, looks into Web locales or resources that can be useful for understudies to examine over the span of the project, and post on the Web.

**Choosing Topic:** Understudies read the Web Project layout and scan for resources. References to resources comprise of URLs to applicable Web materials so understudies can be coordinated promptly to fantastic materials that match the task needs. Understudies review their own past encounters identified with the project, influence theme to guide and trade their thoughts. Amid preparatory taking in, the understudies choose subtopics of the project for themselves.

**Planning Activities:** Understudies chip away at singular understudy projects, in-class synergistic tasks, or class-to-class projects. They decide the exercises and occasions that will happen at each phase of their subtopics, design suitable timetables for all their subtopics, and post on the Web. On the off chance that they take a shot at a cooperative learning project, each colleague must have particular parts and duties. Educators impart substance of project wanting to guardians so they can help and bolster their youngsters take a shot at the activities.

**Investigating and Representation:** Examination incorporates exercises, for example, talking with specialists through email, exploring Web locales, and sharing trade new understanding and information and completing an overview through the Web.

What's more, it incorporates perceptions, examinations and field trips. Exchange incorporates both synchronous and offbeat communication through the visiting or notice board framework. Portrayal incorporates drawing, painting, composing, math outlines, and maps, and so on to speak to new learning. Consistently, guardians report the kids' condition to educators.

**Finishing:** Understudies create reports, introductions, Web pages, pictures, pictures, development, and so forth because of the action, share their final results, and praise them on the Web. Instructors have understudies record their appearance on the task and things to recall for next time.

Evaluating Educators assess the entire procedure of the project and touch base at grades in view of cooperation and items.

### Implementation of the Web-Based Project-Based Learning Supporting System

The framework is to influence instructors and understudies to complete activities wherever and at whatever point they may work. It enables educators and understudies to start building up a general arrangement for dealing with their task. For Project-Based Learning to be guaranteed as studentcentered taking in, the framework must give understudies involvement in making arrangements for the task and in working in group or class, and have understudies make their assignments as type of HTML records or reports. Typically the ecological instruction of primary schools must be genuine in that it is worried about a true circumstance or issue due to subjective improvement procedure of understudies. Our model will be an option of natural training in classroom. Thus, we expect that understudies will perceive the significance of natural assurance and have inspiration to hone ecological protection. In this paper, the framework is actualized on a Windows NT 4.0 Server and ensuing IIS 4.0. We utilize database administration in light of SQL Server

7.0 and the HTML and ASP dialect for overseeing data.

Table 1. Development environment and tool

	Elements	Options
Hardware	CPU	Pentium II 333MHz
	RAM	64MB
	Secondary storage	10GB
Software	Operating System	Windows NT 4.0
	Web Server	IIS 4.0
	Database Server	MS SQL Server 7.0
	Brower	Internet Explorer 5.0
	Programming Language	Active Server Page

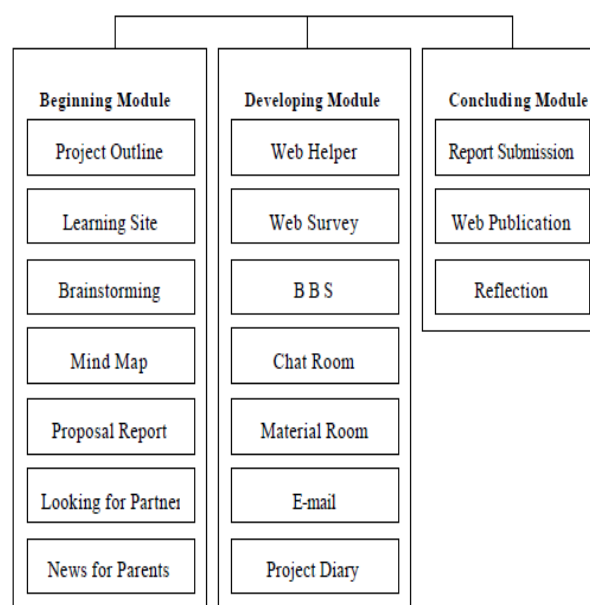


Figure 2. The structure map of the system

**Beginning:** The "Project diagram" clarifies the project while at the same time "Learning webpage" is associated with helpful Web resources inside the task. Understudies investigate the Web website ahead of time, propose what they wish to examine through conceptualizing, and influence a brain to outline. Once a subtopic has been chosen, understudies or little gatherings of understudies design a suitable course of events and exercises for their project and show them to instructors and every one of their companions on the Web. On the off chance that essential, instructors or understudies can publicize to search for accomplices on the announcement board framework. Through news for guardians, guardians

can comprehend the project arranging their kids will take a shot at. Fig. 3 introduces a case of a project plot shape. An educator finishes the area of the task layout frame and submits it. Data showing up on this shape will show up on the Web. So understudies can read it and comprehend the focal inquiries of their project, what they will do and what items they will create.

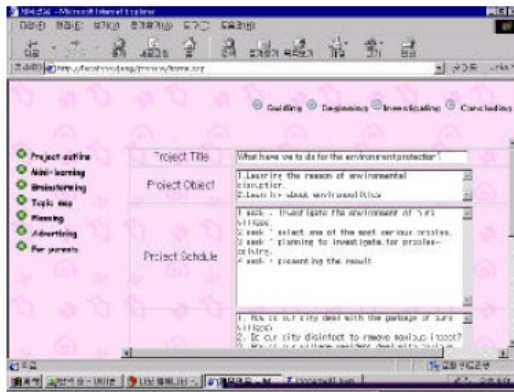


Figure 3. An example of a project outline form

**Developing Module:** Understudies can utilize the Web keeping in mind the end goal to speak with field specialists about experience and information of the theme and utilize email, talk room, or BBS (Bulletin Board System) to speak with other individuals both exclusively and as a gathering. Likewise, they look for data on the Web, complete a review and speak to the outcomes, share resource and data on the material room. Project journal is guardians' remarks on youngsters' work. Guardians can value the work in which their youngsters are locked in. They might have the capacity to contribute thoughts for field encounters which the instructors might not have thought of, particularly when guardians can offer commonsense help in accessing a field site or important master. Fig. 4. demonstrates a fundamental photo of the creating module. Two photographs indicate understudies project learning exercises as cooperation.

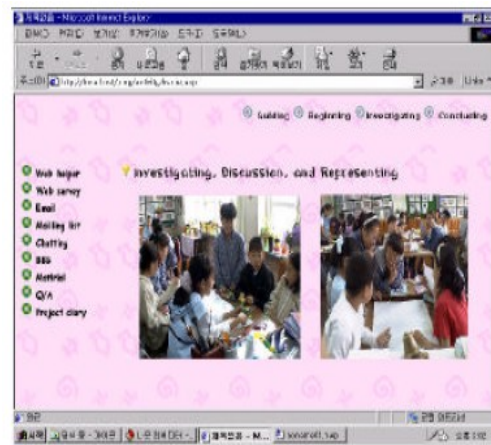


Figure 4. Main picture of the developing module

**Concluding Module:** Understudies introduce reports of results as Web pages, introductions, development, record documents, and so on to the whole class and examine or expound on recommended future changes. Fig. 5 introduces a case of a task report shape. Understudies utilize this frame to report the consequences of a project.

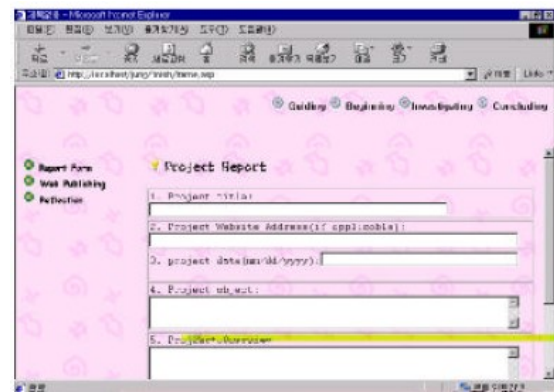


Figure 5. An example of a project report form

#### IV. CONCLUSIONS

In this paper, we proposed a learning model called Web Project Learning to give inspiration and community oriented figuring out how to understudies in the Web condition. We expect that understudies are worried about the issues of their local surroundings also, examine them when our learning model is connected to natural training.

Our model additionally urges understudies to trade their own particular unconventional natural qualities. Utilizing the proposed demonstrate, understudies can

reinforce examine and association abilities while being capable and self-propelled. As they pick up learning encounter for the unadulterated delight of taking in, their passionate intrigue, natural inspiration, what's more, crave learning can likewise be expanded. The understudies are submerged in a legitimate learning condition while project the project. Their exercises urge them to practice fundamental abilities, for example, critical thinking, communication and joint effort, deciding, and utilizing data innovation. Additionally, guardians are worried about their youngsters' improvement and accordingly will take an interest in and add to the project. As instructors inspect the understudies' work and set up the project, their own particular comprehension of understudies' advancement is extended. Additionally inquire about issues as per the following. At to start with, we have to create assessment criteria that we can post it on the Web to tell understudies how their projects will be assessed. We will likewise need to direct an investigation looking at the execution of understudies utilizing our proposed demonstrate and that of understudies following customary classroom educating. As of now, different plans to give inspiration on digital instruction are to some degree subjective and rely upon mental impacts. Therefore, we need to build up the different approaches to give inspiration to understudies. In our prior work, giving inspiration on the Web was considered regarding three classes, Student-to-Course Content relationship, Student-to-Teacher relationship, and Student-to-Student relationship. As of now we are refining the prior work.

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