

## **Project Based Learning (PBL) and Webquest: New Dimensions in achieving Learner Autonomy in a Class at Tertiary level**

**Mohd. Moniruzzaman Akhand**

*Eastern University*

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Now a day, the buzz word for a language classroom is 'learner autonomy' that is defined differently by different experts. The fundamental of learner autonomy, however, is to involve learner in the teaching and learning process. The term 'webquest' is also a new concept to the teachers in this part of the world. A webquest is an internet based module designed by an instructor that presents a task with predefined process, resources and a rubric for the learners to undertake the tasks step by step and at the end they self-assess their performance based on the rubric provided on the module. This paper explores the possibility of implementing such a task that makes use of technology (i.e. a webquest) where the learners need to explore the resources by themselves; write down a paper based on their reading and the piece of writing is assessed by the learner her/himself based on a rubric provided. The research shows that when the learners are given autonomy in the classroom, their learning boosts up and their performance curve also rises.

**Keywords:** learner autonomy, webquest, project based learning

### **1 Introduction**

Now-a-days, for a language classroom the concept of 'learner autonomy' has become very vital for the ELT practitioners and it is defined differently by different experts. The main essence of learner autonomy, however, is to engage learner in the teaching and learning process. The 'webquest' is also a new concept to the teachers in this part of the world. A webquest is an internet based module designed by an instructor that presents a task with predefined process, resources and a rubric for the learners to undertake the tasks step by step and at the end they self-assess their performance based on the rubric provided on the module. This paper studies the students' progress over the one month period of implementing such a task that makes use of technology (i.e. a webquest) where the learners need to explore the resources by themselves; write down a paper based on their reading and the piece of

writing is assessed by the learner her/himself based on a rubric provided. The learning is project based and the task has been designed for any classroom size and covers two aspects of teaching/learning process: i) in-class exercises and/or discussions and ii) out-of-class assignment. This can be a perfect example of a PBL and technology-based task that not only promotes learner autonomy but also administers the alternative assessment policy where not only a learner's knowledge about the language is assessed but also the learner's ability to use the language is evaluated. The research showcases that when the learners are given autonomy in carrying out the task they are able to perform more independently and that boosts their performance. This also proves that incorporation of PBL and technology-based task like webquest in a classroom promotes learner autonomy that in turn promotes teaching and learning procedure.

## **2 Literature Review**

### **2.1 Project-based learning**

Project-based learning (PBL) as defined by McGrath (2003) is "work in groups to solve challenging problems that are authentic, curriculum-based, and often interdisciplinary". Project-based learning employs an inquiry-based approach to learning. In this approach, students create environment that initiates the understanding and acquiring of knowledge through learning-activities that are built around intellectual inquiry and a high degree of engagement with meaningful tasks. Inquiry encompasses a broad range of activities that give reign to our natural curiosity about the world. Within the context of education, inquiry takes on a more specific meaning. Teachers who use inquiry as a strategy typically encourage learners to raise questions, plan and carry out investigations, make observations, and reflect on what they have discovered. However, this is not a fixed definition. Even within a single classroom, inquiry activities may be taking place along a continuum, from more structured and teacher-directed on one end to more open-ended and driven by learner interest on the other (Jarrett, 1997).

Within the context of this inquiry-based approach, projects take the role of learning process and traditional assessments such as tests and quizzes. rojects can also be designed keeping in mind the variety of different learning styles of the students. So, a well designed project-based learning activity is one that not only addresses different learning strategies of different learning styles but also assumes that not every student can demonstrate their knowledge in a single, standard and uniform way.

For learners, benefits of project-based learning include:

- Increased attendance, growth in self-reliance, and improved attitudes toward learning (Thomas, 2000)

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- Academic gains equal to or better than those generated by other models, with learners involved in projects taking greater responsibility for their own learning than during more traditional classroom activities (Boaler, 1997; SRI, 2000)
- Opportunities to develop complex skills, such as higher-order thinking, problem-solving, collaborating, and communicating (SRI, 2000)
- Access to a broader range of learning opportunities in the classroom, providing a strategy for engaging culturally diverse learners (Railsback, 2002)

For many learners, the appeal of this learning style comes from the authenticity of the experience and from the level of the involvement. Learners take on the role and behaviour that are needed to perform a certain task. Whether they are making a video about women empowerment, designing a pamphlet for their department, or writing a project report, learners are engaged in real-world activities that have significance and participation beyond the classroom.

PBL, as a matter of fact, is a comprehensive instructional approach to engage learners in cooperative investigation. Learners' skills to acquire new knowledge are enhanced when they are "connected to meaningful problem-solving activities, and when students are helped to understand why, when, and how those facts and skills are relevant" (Bransford, Brown, & Cocking, 2000, p.23). Thomas (2000) explains that Project-Based Learning requires "complex tasks, based on challenging questions or problems that involve students in design, problem-solving, decision-making, or investigative activities; give students the opportunity to work relatively autonomously over extended periods of time; and culminate in realistic products or presentations". And according to Buck Institute for Education (BIE), Project-Based Learning is "a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks".

Thus, a classic project-based learning activity usually involves four basic elements: **(1) an extended time frame; (2) collaboration; (3) inquiry, investigation, and research;** and finally, **(4) the construction of an artifact or performance of a consequential task** (Sun Associates, 2013). Using this basic framework, instructors can design different sorts of activities to showcase and assess understanding as well as measure the learning level of a student.

PBL also caters learning through experiences. In PBL, tasks should be based on standards that have very clear learning goals and contents. Learners have to take charge of their own learning process and need to design the project procedure and organize the presenting (or expected) results.

Collaboration is a key concept in achieving the target in PBL. The progress of a project, however, may not necessarily be linear but rather spiral where the learners need to revise their plan of action from time to time and the collaboration not only exists among the learners but also with the instructor. The essence of a PBL task is that along with the learners, an instructor also is involved in the learning procedure and learns from the task. A project in fact should be approached in a nontraditional way. Usually cramming and copying from various sources are popular means among the learners when they prepare an assignment for a course. In PBL, the learners are challenged to produce authentic papers and are required to put in their own opinion and/or experience and a good project should include formative and summative assessments for both what the learners have achieved and for their process of the achievements. This is where the learners “investigate open-ended questions and apply their knowledge to produce authentic products. Projects typically allow for student choice, setting the stage for active learning and teamwork” (Boss & Krauss, 2007, p.2).

Stix and Hrbek (2006) suggest the following model to the implementation of a PBL in a class:

1. The teacher-coach sets the stage for students with real-life samples of the projects they will be doing.
2. Students take on the role of project designers, possibly establishing a forum for display or competition.
3. Students discuss and accumulate the background information needed for their designs.
4. The teachers-coach and students negotiate the criteria for evaluating the projects.
5. Students accumulate the materials necessary for the project.
6. Students create their projects.
7. Students prepare to present their projects.
8. Students present their projects.
9. Students reflect on the process and evaluate the projects based on the criteria established in Step 4.

Another model is suggested by professional development organizers at the Buck Institute for Education (BIE) using the following five principles or stages:

1. Begin with the end in mind and plan for this end result.
2. Craft the driving question; select and refine a central question.
3. Plan the assessment and define outcomes and assessment criteria.
4. Map the project: Decide how to structure the project.
5. Manage the process: Find tools and strategies for successful projects.

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In this part of the world (South Asia and South East Asia) PBL can promote effective language learning because this is the context where learners have very little exposure to the target language. PBL allows students to reflect and explore their own ideas and opinions, and make decisions that affect project outcomes and the learning process in general. In this research the students undertake a task that requires systematic approach and they reflect on the process and evaluate their own venture on the basis of the rubric provided. In fact this project is devised to yield maximum output and is a combination of ‘teacher guidance, teacher feedback, student engagement, and elaborated tasks with some degree of challenge’ (Alan & Stoller, 2005). So this type of project based task should be incorporated in a curriculum and should be collaborated between the teachers and the learners.

### **2.2 Webquest – a technology based teaching/learning tool**

A webquest is an inquiry-based activity that uses links to essential resources on the internet and an authentic learning task to motivate students to investigate a series of central, open ended questions (March, 2000). A well designed webquest uses the power of the internet and a scaffolding learning process to turn research based theories into learning centered practices. In this process, the learners undertake a task that requires a formidable amount of reading and/or discussion, on the basis of which the learners prepare a paper as a part of their course assignment. There are two levels of webquest:

**Short Term:** The aim of this quest is ‘knowledge acquisition and integration’. Learners would gather information; analyze it and form an opinion of their own. This task may take 2 – 3 classes (Dodge, 2007).

**Long Term:** This involves the extension and refinement of knowledge. Learners would analyze a body of knowledge; work on them to find and/or prove something and present their findings in the form of a thesis paper. This might take from 1 week to 1 semester (or a year) according to the intensity and diversity of the work undertaken.

A well designed and well thought of webquest must contain a doable and interesting task that not only requires reading but should also incorporate ‘critical thinking’ and caters opinion formation on the part of the learners.

In a real webquest, newly acquired information undergoes an important transformation within learners themselves. The acquiring of information—the “learning input”—is the easy part. The webquest gets more interesting in the next part, in which transformative learning takes place. A webquest, in fact, is a scaffolded learning structure that uses links to essential resources on the World Wide Web and an authentic task to motivate students’ investigation of an open-ended question, development of individual expertise,

and participation in a group process that transforms newly acquired information into a more sophisticated understanding through a meaningful task. The best webquest inspires students to see and/or establish richer thematic relationships, to contribute to the real world of learning, and to reflect on their own metacognitive processes.

Research in cognitive psychology tells us that if we want learners to perform at more expert levels, we need to analyze and show the learners how experts attempt their work and then prompt the learners through a similar process. Teaching ‘writing’ is a classic example. We show and explain students what expert writers do—brainstorm, draw pictures, compile lists, or make free associations—and then help them think about an audience and descriptive details. Scaffolding positively affects student achievement (Bereiter & Scardamalia, 1984; March, 1993) by providing “temporary frameworks to support student performance beyond their capacities” (Cho & Jonassen, 2002, p.6). As students internalize more advanced intellectual skills through ongoing practice, the teacher can gradually remove the scaffolded levels of support. Scaffolding is used to implement such approaches as constructivist strategies, differentiated learning, situated learning, thematic instruction, and authentic assessment. Such scaffolding is at the heart of the webquest model. In this sense, webquests aren’t anything new except that they provide a way to integrate sound learning strategies with effective use of the internet resources (March, 2003).

Constructivists Savery and Duffy (1995) point out that “puzzlement” is “the stimulus and organizer for learning” (p.31). A teacher can challenge students by “posing contradictions, presenting new information, asking open ended questions, encouraging research, and engaging students in inquiries designed to challenge current concepts” (Brooks & Brooks, 1999, p.ix). When a webquest poses an open-ended question, students must do more than “know” facts. Open-ended questions activate students’ prior knowledge and create a personal curiosity that inspires investigation and brings about a more robust understanding of the material.

There are six essential elements (or parts) of a webquest: 1) Introduction; 2) Task; 3) Process; 4) Resources; 5) Evaluation and 6) Conclusion. The *introduction* section provides background information and motivations like giving students roles to play (e.g. "You are a taxonomist," or "You are an astronaut planning a trip to the moon" or “You are a literary critic” etc.). It also provides an overview of the learning goals to students. The goal of the introduction is to make the activity desirable and stimulating for students. When projects are related to students' interests, ideas, past experiences, or future goals (immediate or long-term), they get inherently more interested in completing the task. The goal of the motivational component is to engage and excite students at the beginning of each webquest. The *task* is a formal description of what students are required to accomplish by the end of a webquest. First of all, the teacher finds

appropriate resources for a particular topic on the Web. Then, the teacher devises an activity for the students in which the information from the various sites is incorporated. This task should be doable and interesting. Developing this task – or the main research question – is the most difficult and creative aspect of creating a webquest. Students can be asked to publish their findings on a blog, collaborate in a group work/discussion, or create a multimedia presentation on a particular aspect of their research. The task should be visually and aesthetically appealing, inherently important (soil erosion, Eliot's *Wasteland*, welfare policy, etc.), and fun for the students. The **process** is a description of the steps learners should go through in accomplishing the task, with links embedded in each step. The creator of a webquest can get a clear idea of this section from the existing webquests in the [www.zunal.com](http://www.zunal.com). The **resource** section of a webquest consists of a list of the resources (websites, online articles, print resources, books, chapter(s) of a book, etc.) that the learners will need to complete the task. In older webquests, the resources were usually listed in a section of their own. More recent webquests have the resources embedded within the process section, to be accessed at the appropriate time. It's important to remember that non-web resources can also be used. These might include videos, audios, posters, maps, models, etc. The **evaluation** is a very important section of a webquest. Each webquest needs a rubric for evaluating students' work. The standards should be fair, clear, consistent, and specific to the tasks set. Many of the theories of assessment, standards, and constructivism apply to webquests: Bloom's taxonomy, clear goals, matching assessments to specific tasks, and involving the learners in the process of evaluation are all concepts that apply in all webquests. The participation of the learners in the evaluation process not only completes the learning cycle but also promote the learner autonomy. The **conclusion** allows for reflection by the students and summation by the teacher. It also suggests possible extensions and dimensions for the applications of the lesson and upholds the constructivist principle: "We learn by doing – but we learn even better by talking about what we did." During the concluding section of a webquest, students are encouraged to suggest ways of doing things differently to improve the lesson. Research shows that when students are aware of their own thinking patterns, they can develop independent use of effective learning strategies (Blakey & Spence, 1990) and when they are engaged in active teaching/learning process they learn in an anxiety-free environment that invigorate the learning process.

### 2.3 Learner autonomy

The concept of individual autonomy has been central to European liberal-democratic and liberal-humanist thought since the 18th century (Lindley, 1986), and was identified by Kant as the foundation of human dignity (Hill, 1991, p.48). The discussion of autonomy as an educational goal can be

recognized in changes that occurred in the twentieth century in social sciences, psychology, philosophy, and political science. Pemberton (Pemberton et al.,1996, p.1) cites changes in educational philosophy, language-learning theory, political beliefs, the need to adapt to rapid changes in technology, communications and employment, the recognition that learning to learn is now more important than knowledge, and opportunities provided by technological developments to expand educational provision at the same time as cutting costs. Gremmo (1995) also identifies the following factors:

1. minority rights movements;
2. a reaction against behaviourism in medicine, politics, music, poetry, schooling, psychology, education, philosophy, and linguistics;
3. the emergence of “autonomy” as an educational ideal, with a direct influence on adult education in Europe;
4. developments in technology contributing to the spread of autonomy and self-access;
5. rising internationalism since the second World War;
6. adult learners and different learning needs, resulting in flexible learning programmes with varying degrees of learner-centredness and self-direction;
7. commercialization of much language provision, together with the movement to heighten consumer awareness, leading to learners as consumers, making informed choices in the market;
8. increase in school and university populations, encouraging the development of new educational structures for dealing with large numbers of learners. Some form of self-directed learning, with institutional support in the shape of counseling and resource centres, has been found helpful. (Gremmo 1995, p.152)

Whatever the factors involved regarding the heightened concern on the issue of the learner autonomy, it is undeniable that it has unearthed a new dimension for the teaching methodologies and has made the classrooms more student oriented.

The whole idea of Project-based learning and webquest, in fact, best works for the learners who are self motivated and can take the responsibility of their learning process. This is the idea of ‘learner autonomy’. For a definition of autonomy, Holec (1981, p.3, cited in Benson & Voller, 1997, p.1) might be quoted who describes it as ‘the ability to take charge of one’s learning’. On a general note, the term autonomy has come to be used in at least five ways (Benson & Voller, 1997, p.2):

- for situations in which learners study entirely on their own
- for a set of skills which can be learned and applied in self-directed learning

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- for an inborn capacity which is suppressed by institutional education
- for the exercise of learners' responsibility for their own learning
- for the right of learners to determine the direction of their own learning

The idea of autonomy is a departure of students' teacher-dependence on their learning process, 'generating ideas and availing oneself of learning opportunities rather than simply reacting to various stimuli of the teacher' (Boud, 1988; Kohonen, 1992; Knowles, 1975 cited from Thanasoulas, 2000) and taking control of the assessment procedure. Though the idea of learner autonomy is quite an encouraging step to educational interventions, it should be accepted that it 'takes a long time to develop, and – simply removing the barriers to a person's ability to think and behave in certain ways may not allow him or her to break away from old habits or old ways of thinking' (Candy, 1991, p.124). And this is where the administering of the technology into the curriculum may play a vital role. Within the context of education, Omaggio (1978) (cited in Wenden, 1998) identified seven main attributes characterizing autonomous learners:

Autonomous learners –

- i) have insights into their learning styles and strategies;
- ii) take an active approach to the learning task at hand;
- iii) are willing to take risks, i.e., to communicate in the target language at all costs;
- iv) are good guessers;
- v) attend to form as well as to content, that is, place importance on accuracy as well as appropriacy;
- vi) develop the target language into a separate reference system and are willing to revise and reject hypotheses and rules that do not apply; and
- vii) have a tolerant and outgoing approach to the target language.

So in a class at the tertiary level where the learners are all adult, promoting the 'autonomy' of learner in the classroom can play a major part in enhancing the learning and teaching process.

In various ways the teachers have tried to establish and/or develop the idea of learner autonomy, or learners' ability to take control over their own learning (Holec, 1981) in order to link at the most individualized level of the learners to the teaching/learning process and to unite the in-class lesson to the out-of-class language use. What is more, the well-established teacher-student relationship went to a rigorous revision in the past couple of years to redefine the 'capacity for detachment, critical reflection, decision-making, and independent action' (Little, 1991, p.1) on the part of both the teachers and the learners. The necessity for an autonomous learner in fact springs from the philosophy that the individual learners differ in their learning habits, interests,

needs, and motivation, and develop varying degrees of independence throughout their lives (Tumposky, 1982). PBL and webquest in fact help in motivating and developing a learner's independence and promote autonomy in the learning process. The purpose of learning is also crucial. If the task bears meaningful objective(s) that the learners can relate to their future benefit (short-term [like exam grades, presentation score, assignment, etc.] or long-term [professional development, career building, thesis, etc.]), then the learners are motivated to get engaged in the teaching/learning process. The selected assignment used in the study applies learner autonomy both in the learning and teaching scenario. The participants are the master and the decider of their learning plan. They also play a crucial role in evaluating their own products. Thus in the total teaching/learning process students collaborate directly with the teacher in order to accomplish the task objective. They could relate the task to their end goal and as a result they could focus on the form and other aspects of language. So in order to achieve autonomy in the learning, a project needs to address the need of the majority of the learners; the time-frame should be feasible (at least not ambitious) and there should be a value attached to the project.

### 3 Methodology

The research is a quantitative research. It focuses on a group of 20 students all of whom are in the Masters (first semester). They have studied four years B. A. (Honours) in English Literature. Their average age is 22-23. Their first language is Bangla and their second language (English) proficiency level is intermediate/upper intermediate. It is a heterogeneous group in terms of their social and academic (result) background. The total in-class contact is three hour per week. And the students are expected to spend three hour (at least) a week outside the class on this task. The total score for this task is 15 (Table 5).

The PBL and webquest has been piloted in the course titled **E 605: Shakespeare**. It is a course on Shakespeare where the students learn two plays (*King Lear* and *The Tempest*). For the background lesson in the first month,

I have used PBL with webquest (URL: <http://zunal.com/webquest.php?w=182355>) to assess my students' writings on the features of the Elizabethan drama and theatre and its relation to Shakespeare's technique to present Shakespearian plays from a different angle.

The students were supposed to study some articles on different aspects of Elizabethan theatre and would write an opinion based paper titled "Shakespeare and the Elizabethan Drama and Theatre". The students were free to consult any materials (including the articles whose links are given in the webquest or any other papers or videos from any sources provided that they acknowledged the sources). The primary objective of the assignment is to

assess the linguistic capability as well as how well the students can present and defend their opinion. A model of rubric has been included within the webquest. And a full formed rubric (Table 5) for evaluating writing has been distributed among the students.

#### **4 Procedure**

The aim of the study is to track the learning progress of the students based on the score they get according to the rubric while they use PBL and webquest in their in-class and out of class learning. Usually for the assessment of a lesson's background knowledge we collect assignments from the students. In this case I have just changed the format of their assignment. They were required to access the webquest that has been specifically prepared for this task. This might be an ideal precedence of incorporating a PBL in the form of webquest into an existing curriculum. The students were to follow each step prescribed in the webquest, access the links of resources, and arrange a discussion. Students were already acquainted with the socio-political background of the Elizabethan period and how it influences the literature of the period. This lesson was planned to teach them the features of Elizabethan drama and theatre through learning by doing. So, after reading the resources on the characteristics of Elizabethan drama and theatre, the students were expected to be able to produce a write-up to gain an insight to the features of the age's drama and theatre.

The first week was introductory class and in this class the students wrote their first paper without any prior preparation. This was scored and the score was noted for tracking the learning progress of the students. The second week class covered lecture and post lecture discussion on the key features of the literature of the Elizabethan era and some of the prominent aspects of Shakespeare's play followed by the write-ups by the students that were again scored and the scores were documented. During this week, the students formed groups of five and studied the webquest. They discussed among themselves and I scaffolded their webquest. I kept an eye to ensure that the conversation remain horizontal (Salas et al., 2013). When it came to access the resources I was just alert to prevent the students from straying down the web-alley. After the students went through some of the required readings, they participated in a principled discussion about the topic 'in an informed manner' (Adler, 2004; Hess, 2009) where the feedback their second write-ups was also shared in the class.

During the third week before they came to the class they were to access

the required reading materials and to prepare themselves for more organized writing with proper reference in their paper. The students in this week wrote their third write-up keeping in mind the feedback that they discussed in the previous week and their out of class readings. This again was scored and this

time peer review was implemented in the class. The fourth week class discussion and the writings of the students presented a noticeable change in both the form and content of the papers and the score also went up steadily. And in the final week the papers were edited based on the last week's feedbacks and findings and the students went through the webquest for the last time to check the requirements of the paper and finally submitted their papers.

## **5 Results and Discussion**

The scores at the end of each week of each of the students showed a consistent rise. The more the students got involved in the learning process the more their performance curve rose. The discussion in the class and reading outside the class are also reflected in the achievement curve. The writings at the end of each week display the gradual development in their writing both in the form and the content. And with the incorporation of the rubric the learner autonomy is completely achieved. For this particular task an analytic and task specific rubric has been used. For this rubric the scoring becomes consistent and the feedback could be provided in detail. The learners could also self-assess and peer assessment could also be implemented in the class.

The following are the mean scores by the students at the end of each week that shows the gradual development in their performance. The achievement curve for the first month is given below:

Week 1 = 33.33% (5/15)

Week 2 = 43.33 % (6.5/15)

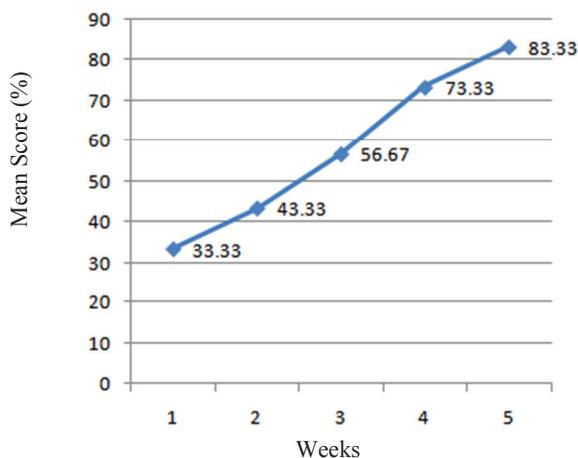
Week 3 = 56.67% (8.5/15)

Week 4 = 73.33% (11/15)

Week 5 = 83.33% (12.5/15)

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Figure 1. Progress Curve of the Students by Mean Score



After they worked with the project and the webquest they were given a questionnaire (Table 3) to document their experience and their opinion about the task. The following is the result of the questionnaire:

Table 1. Result of the Questionnaire completed by the Students after the Task Completion

	Disagree	Not Sure	Partly Agree	Agree	Strongly Agree
The content was clear	0	0	0	0	20
The content was interesting	0	0	0	0	20
Instruction was clear	0	0	0	0	20
Task was interesting	0	2	0	3	15
Task was effective	0	0	3	5	12
Mode of providing feedback was effective	0	0	0	3	17
Learning process was collaborative	0	0	0	3	17
Learning process was interesting and effective	1	1	2	4	12
Total (N)= 20					

From the data it is evident that all the students unanimously agree that the task is interesting and almost all the participants agree that the learning process is interesting and effective. The inclusion of the new mode of task i.e. the *webquest* has also been well taken by the students. In this mode the learners have to take the responsibility of their learning and the concentration

on the ‘strongly agree’ on all the fields prove that the procedure is an effective one. They have also recognized the ‘mode of providing feedback’ and the role of ‘collaboration’ in the task that again highlights the autonomous criterion of the learners.

Table 2. Statistical Presentation of the Students’ Score during the weeks

	Mean Score	Std. Deviation	Population Std. Deviation
Week 1	5	0.90	0.82
Week 2	6.5	0.93	0.91
Week 3	8.5	1.21	1.18
Week 4	11	1.82	1.78
Week 5	12.5	1.88	1.84

The steady increase of the mean scores and also the standard deviation in the first three weeks shows the learners’ development. However, the standard deviation of the mean score towards the last two weeks reveals that not all the students were able to cope with the learning method. In fact four out of the twenty participants (Table 4) of the study failed to reach the expected level of achievement. As the week progressed, the learner differences became apparent and the individual score tended to diverge from the mean score. From the above chart we find that the score {Mean (s)  $\pm$ 1SD} for the fourth and fifth week represents a dispersed value which showcases the learner difference in the classroom. Four of the students (Table 4: Std. 5, Std. 7, Std. 12 and Std. 18) who took part in the project were not very much keen about picking up the learning process. When enquired later, they confessed that they were not yet comfortable in the idea of ‘learning by doing’. Thus when they faced a task that required discussion, reading, writing and self-assessment, they were totally off balance. And in the end they fell behind the other students of the class. They are the ones who are not yet ready to undertake the responsibility of their learning. And they were not at ease with the webquest and PBL. They shied away and stopped progress in the current method.

## 6 Conclusion

The incorporation of the Project-Based Learning with the Webquest proves to be quite interesting and effective in both the in and out of class assignments. However, the study does not take into consideration of the individual learning style and the overlapping style preferences in one single learner and so a few students have failed to extract the optimum result from this new methodology of teaching and learning. If the study recognizes the individual learner differences and addresses the learning strategy and the webquest is designed

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accordingly so that it addresses the learner differences, the teaching/learning procedure would be full-proof and can be used even in a large classroom in any discipline.

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## Appendix

Give a tick [√] in the appropriate box:

	Disagree	Not Sure	Partly Agree	Agree	Strongly Agree	Strongly Disagree
The content was clear						
The content was interesting						
Instruction was clear						
Task was interesting						
Task was effective						
Mode of providing feedback was effective						
Learning process was collaborative						
Leaming process was interesting and effective						

Table 3. Questionnaire form for the Students

	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5	Std. 6	Std. 7	Std. 8	Std. 9	Std. 10
Week 1	4.0	4.0	5.0	5.0	6.0	4.5	3.5	5.0	4.0	4.0
Week 2	6.0	5.5	6.5	7.0	6.5	6.5	4.0	7.5	6.5	6.5
Week 3	7.5	8.5	9.0	9.5	6.5	8.5	5.5	8.5	8.5	8.0
Week 4	11	11	11.5	11	7.5	12.5	7.0	13	12.5	11
Week 5	12.5	12.5	12.5	12	9.0	14	8.5	14	14	14

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Table 4. Score Chart by Weeks of Each Students (Std.)

	Std. 11	Std. 12	Std. 13	Std. 14	Std. 15	Std. 16	Std. 17	Std. 18	Std. 19	Std. 20
Week 1	6.0	6.0	5.0	5.5	5.0	5.5	6.5	6.5	5.0	4.0
Week 2	7.5	6.0	6.5	6.5	7.5	7.0	8.5	7.0	6.5	5.5
Week 3	9.0	7.0	9.5	8.5	9.5	10	10.5	9.5	9.0	8.0
Week 4	12.5	8.0	12	11.5	11	12	12.5	10	13.5	13
Week 5	14	9.0	14	13	12	13.5	13.5	10	14	14

Table 5. Rubric for Writing Task

	3	2	1
<b>Content</b>	Content is relevant to the topic and well developed; thesis statement/topic sentence(s) is convincing; focus is maintained throughout the writing.	Content is relevant but needs a bit more development; clear thesis/topic sentence(s); focus is established but not maintained.	Content is somewhat relevant but limited in development; thesis/topic sentence(s) is not clear; focus is missing/confusing
<b>Organization</b>	Well-structured with distinct introduction (with a thesis statement), body and conclusion; effective structure of the paragraphs (12-15 sentences); smooth transition of paragraphs and ideas (use of cohesive devices); logical and appropriate sequencing	Well-structured with distinct introduction (with a thesis statement), body and conclusion; effective structure of the paragraphs (12-15 sentences); transition of paragraphs and ideas (use of cohesive devices) is somewhat smooth but needs revision; few lapses in sequencing	Organization of introduction, body and conclusion lacks precision; structure of the paragraphs poorly constructed; transition of paragraphs and ideas (use of cohesive devices) is attempted but needs serious improvement; lapses in sequencing affecting the unity of the writing
<b>Details</b>	Skillful support of thesis statement with substantial/logical examples/evidence; well detailed ideas and information; interesting and captivating approach towards	Adequate support of thesis statement with substantial/logical examples/evidence; sufficient ideas and information; interesting approach towards the topic	Weak support of thesis statement with little/minimal substantial/logical examples/evidence; ideas and information poorly developed

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the topic

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<b>Vocabulary, Grammar/Mechanics (spelling, punctuation, capitalization)</b>	Word choice and vocabulary appropriate to the task and varied, demonstrates a superior understanding of English; superior understanding of grammar; few/no mechanical errors	Word choice and vocabulary appropriate to the task but not varied, demonstrate a satisfactory level of understanding of English and grammar; few mechanical errors but does not have an impact on the clarity of the paper	Word choice and vocabulary fairly appropriate but needs improvement, demonstrates an average understanding of English; weak understanding of grammar; mechanical errors affects the clarity of the paper
<b>Peer feedback</b>	Well guided, clear and succinct feedback; at least refer to four-five points on the writing	Clear and succinct feedback; at least refer to three-four points on the writing	Flawless feedback but lacks precision; refer to two-three points on the writing

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Total Score: \_\_\_\_/15

Mohd. Moniruzzaman Akhand  
Eastern University  
House# 26, Road# 5, Dhanmondi, Dhaka, Bangladesh  
Phone: +8801819272383  
E-mail: makhand@gmail.com

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