

## DEVELOPING 21<sup>ST</sup> CENTURY SKILLS THROUGH PROJECT-BASED LEARNING IN EFL CONTEXT: CHALLENGES AND OPPORTUNITIES

Shree Prasad Devkota

Dhundi Raj Giri

Shiba Bagale

(Sustainable Development and Empowerment Forum/Kathmandu University)

spdevkota@kusoed.edu.np

### ABSTRACT

Learners learn the best when they are engaged in learning by doing. In order to cope with the 21<sup>st</sup> century problems, learners need to be prepared with 21<sup>st</sup> century skills and project-based learning can be one of the best teaching approaches to develop the 21<sup>st</sup> century skills. This article focuses on the discussion on project-based learning (PBL), 21<sup>st</sup> century skills, and role of teacher, 21<sup>st</sup> century learners, and 21<sup>st</sup> century schools as workplace, challenges and opportunities in Nepal as EFL context on the basis of research with five research participants. Furthermore, this research article can give a lot of insight about PBL and its challenges and possible opportunities using in EFL context in Nepal.

**Keywords:** Project-Based Learning (PBL), 21<sup>st</sup> Century Skills, school as workplace, role of teacher and learners, global issues, etc.

### INTRODUCTION

*“Tell me and I forget. Show me and I remember. Involve me and I understand.”*

As a Chinese proverb goes, it is widely accepted idea that learners learn the better when they are engaged in real life learning situation or experiential learning. So the learners’ engagement in the teaching learning activities play vital role in their learning achievement. More engagement of the students results in the higher achievement. So the learners’ engagement is very important in teaching learning practices. However, our context is quite contrary where teachers sweat in the classroom teaching and students remain passive listeners following orders and instructions of the teacher. As Defelice (1996) says, “Teaching in monolingual / mono-cultural, and non-English speaking environment at a time can be frustrating” (p. 43). Everything gets changed over the certain span of time. Today’s children are not going to learn as their parents did. Even the teaching learning methods we practiced in the past may not fulfill the needs and demands of our learners at this 21<sup>st</sup> century. Highet (2008) states, “Methods in any country alter every generation or so, as the structure and ideals of society alter”. To meet the ever-changing needs of students in the modern world, for the forward thinking educators, are crossing the traditional borders of their own disciplines to work with colleagues of other fields to develop novel approaches in teaching (Horn, stroller, and Robinson (2008, p. 2). Karn (2007) also mentioned that language teaching in general and English Language Teaching (ELT) in particular has tremendously changed over the centuries. In this dynamic world, in order to tackle the challenges of the new era in learners, project-Based learning (PBL) can be an effective in enhancing the learners’ learning achievement in EFL context.

### Project-Based Learning (PBL)

Project based learning is a practical and research oriented method of teaching in which learners are engaged in creating, building and testing what they have created or designed in collaboration with other learners; both inside and outside the classroom. According to Stripling, Lovett and Macko (2009), “Project-based learning is the instructional strategy of empowering learners to pursue content knowledge on their own and demonstrate their new understandings through a variety of presentation modes”. Students are engaged in different stages of activities for the task completion in which they go through in-depth investigation of the topic involving in interview, observation, internet surfing, etc for the collection of the required information for the study. Blank (1997), Dickinson, et al. (1998) and Harwell (1997) project-based instruction is an authentic instructional model or strategy in which students plan, implement, and evaluate projects that have real-world applications beyond the classroom ( as cited in North West Regional Education Laboratory (NWREL, 2002, p. 4). As project-based learning is more focused on students’ activities, they are involved in the planning, designing and implementing the project in real life situation in collaboration with the other co-learners and the teacher who provides scaffolding in their learning. “Learning activities are interdisciplinary, long term, and student centered, rather than short and isolated lessons (Challenge 2000, Multimedia Project, 1999 as cited in NWREL, 2002, p. 4). Students are engaged in such collaborative learning

in real life learning situation, they construct knowledge on their own. In such way, students' engagement in real life issues and collaborative approach can be essential for developing 21<sup>st</sup> century skills; communication and presentation skills, critical thinking, creativity, collaboration, research and technical skills, and time management skills, etc similar to the Pearlman (2006) who emphasizes on the 21<sup>st</sup> skills to cope with 21<sup>st</sup> century problems and issues. Therefore, the learners need to be equipped with these 21<sup>st</sup> century knowledge and skills. Moreover, it is, as Grant (2002) says, "learner-centered strategy that affords learners the opportunity for in-depth investigations of worthy topics and the learners are more autonomous" (p. 1). Therefore, student-centered strategy and varieties of activities integrated with real life problems and issues play vital role in enhancing the learning achievements in the learners.

However, the present textbook driven teacher-centered traditional teaching learning practices can not guarantee these skills in the learners. In such scenario, it is necessary to foster these skills in the young generation. Otherwise, they will be left far behind. As a result, our young generation will have to struggle to be the part of the globalized world. As Pearlman (2006) further says, "Societies need citizens who are smarter, more creative, and more capable of leading, managing, collaborating and networking with productive people around the world". Such smarter, creative and capable work force can be prepared only through providing them abundance learning opportunities in real life situation, engaging them in varieties of projects, where they work together with other fellow learners as per their needs and demands of time. So PBL, in such situation, can serve as an authentic strategy for enriching these 21<sup>st</sup> century skills in the learners.

### **School as Workplace for 21<sup>st</sup> Century Learners**

As students spend at least thirteen years of time in school from pre-school to secondary level (in Nepalese context), they bear a big responsibility to prepare the learners in for their life, fostering the required life skills. However, the traditional schools have not been as much productive as they should be because they have not been able to produce the efficient workforce required to tackle the problems in the 21<sup>st</sup> century. If the schools cannot guarantee these skills, it is just the waste of time, money and energy. It has been realized that our majority of School Leaving Certificate (SLC) graduates are lacking various skills needed to cope with the day to day challenges such as; communication, creativity, innovation, research and technical skills and so on. It is because there is the defect in our present teaching learning system where learners get no opportunity for independent learning environment, engaging them in creativity, critical thinking working in collaboration with their team. Schools, at present, consist of unmanageable number of students in congested classrooms, and taught through one way lecture method where students have to listen to their teacher passively. So this kind of teaching learning practices cannot bring the expected result. Therefore, it is necessary to change our schools or classroom as work place where student learn independently working in collaboration using not only the paper, pens and textbooks but also using varieties of technological tools. Therefore, it is necessary to revolutionize the teaching learning practices with large size classroom with sufficient teaching learning materials and they can work in team. In such situation, PBL can be a milestone for preparing students as global citizen with knowledge and skills to tackle the problems and issues in 21<sup>st</sup> century global market. As Pearlman (2006) says students should be provided working environment involving computers, group work, planning, presentations, team teaching, etc. Therefore, they are engaged in creating building and testing what they have made under the guidance of their teacher through scaffolding. Creating the efficient learning environment in the classroom is necessary to change the classroom situation as a work place where as Grant M. M. (2002) expressed that the learners are more autonomous as they construct personally-meaningful artifacts that are representations of their learning. (Grant M.M (2002, p. 1). Therefore, it is necessary to create the collaborative and interactive learning environment where the learners can construct new knowledge and skills working in collaboration. The classroom should be (Broz, 1999) family like environment where the students try to support each other. He further says that the class should be like a new adventure full of all kinds of new experiences through they can be able to develop new kind of relationships (p. 161).

### **21<sup>st</sup> century Learners**

The 21<sup>st</sup> century learners are smarter, dynamic and more informed. The learners today are flooded with information and options. They have connection with the people around the globe and they have access to the better contents (Perlman, 2010). Along with this scenario, they also have greater challenges to face to adjust in this century of the globalization. Therefore, the traditional teaching learning practices on the one hand, can not satisfy their needs and interests, on the other hand, can not develop the required knowledge skills needed to overcome the challenges of the 21<sup>st</sup> century. Then what can be the solution? Likewise, it is necessary to question our own teaching learning practices what sort of human resources are we going to produce tomorrow? Are they capable to compete in the 21<sup>st</sup> globalized context? In order to meet these various challenges, we need to engage the learners in creating, building

and testing what they have produced in collaboration on their needs and interests. Therefore, the kids today, as Pearlman (2006) said that they can become the smarter and also better communicators, collaborators, and performers for the workplace and society of the future.

### **Role of Teacher in PBL**

The world today is increasingly complex and fast-changing. So the role of education is to prepare the citizens who are smarter, more creative, and more capable for leading, managing, collaborating and networking with productive people around the world (Pearlman, 2006) to cope with those multidimensional problems today. The generation of such global human resource demands dynamic the role of the teachers. Smith (1999) opines that knowledge is best produced through exposure to the diverse source and mind sets (p.123), the role of teacher should be changed from authoritative to a facilitator, collaborator, manager, role model and co-learner who can create the learning environment encouraging the learners to work independently so they can construct the knowledge on their own. Bass (2001) expresses that teacher should not be the like the sage on the stage rather guide on the side of the learners giving the choices to their voices, work even outside the world to explore the complex issues and real life problems. Moreover, s/he should be able to engage them in meaningful learning activities where student can create something working in collaboration to each other about the problems. Similarly, Broz (1999) focuses on the collaborative role of the teacher. To be the collaborative teacher, he says that the scholar (teacher) should get down off the dais and dive in and swim with the students. However, this dive can be futile and scary if the scholar does not know what to do in that aquatic environment. Therefore, the teacher must know what to do: view students as developing scholar and be scholar with them (p. 157).

### **Data Collection**

In order to understand the teachers' perceptions and practices of PBL in Nepalese context and its scope in EFL context, we used a purposive sampling method to select our research participants. We selected five English language teacher professionals who have high level of academic degree, and long working experience as English language teacher, textbook writer, as well as teacher trainer in Nepal in EFL context. We used interview as our research tool to collect the data required for our purposed study. After the selection of the research participants, we interviewed them dealing with the research questions we had prepared hand but it was a semi-structured interview because we had other several questions to our participants beside the major research questions which were based on their experience and the issues they had raised in the course of interview. So that we could collect the rich data based on their knowledge and experience related to our research study.

### **Rationale of the Study**

Since PBL is very new in our context, even though the concept of PBL is not so very new in the west, there are very few English language teachers who know about project-based learning (PBL) in Nepalese context. Similarly, those who know about it, rarely use it in their classroom situation. So it is very hard to find the English language teachers who are familiar about PBL and used it in their classroom teaching. Therefore, it was my rationale for using purposive sampling and selecting these English language professionals as my research participants for this purposed study.

### **Research Questions**

In order to assemble the data required for our purposed study, we formulated a few research questions that can fulfill our research purpose. Though there were some subsidiary questions, our major questions were mainly focused on challenges and opportunities of using PBL in Nepalese context for developing 21<sup>st</sup> first century skills in the learners.

### **Data Analysis**

Here we have analyzed the data that collected by interviewing our five research participants who have been directly or indirectly involved in the field of teaching learning practices for more than a decade and working as teacher trainer, textbook writer for English language curriculum.

### **1. Challenges of PBL in Nepalese Context**

There is no doubt PBL in developing the 21<sup>st</sup> century skills required for the learners to develop themselves as the global citizens. However, it is not without challenges. In the course of interview, as response to my query about the challenges, my participant – 1 opined, “No skilled manpower is available to implement PBL in the classroom in Nepalese context”. We think, he is right because the concept of PBL in Nepal is a new and a few schools and

colleges have used it, actually not as the part of main teaching method rather as extracurricular activities. Therefore, it is very hard to find the skilled manpower with sufficient knowledge and skills, who can efficiently use it in the classroom teaching. Further, he said that curriculum has been based on textbook system. Teachers are compelled to follow the curriculum so there is difficulty in using the PBL in their course. Adding to his statement, Participant - 2 said that our curriculum is old and traditional. Of course, this is the reality that even though various teaching learning strategies have been emerged and implemented in the field of education, nevertheless, our teaching learning is still based on old tradition. Teaching learning activities have been still limited on one way lecture method where teacher sweats teaching in the classroom and students do nothing except listening to the boring lectures of their teachers and a few bright students taking some notes and questioning to their teachers in case of confusion. Therefore the learning outcome is still low. Due to such monotonous classroom activities, the learning motivation is also low. Dealing with the same issue, participant – 3 also opined concerning the factor of time management. It is because our teaching curriculum is based on fixed textbooks which teachers must complete within the allocated time frame so while following those textbooks. They can't go beyond the classroom for such project-work even though they are very important for maximizing the learning outcomes of the learners.

Unlike idea of Bass (2001) about the role of teacher, participant – 2 quite contrarily said, “We teachers are the sage on the stage but not the guide on the side of the students which is the great hindrance to implement PBL”. It is the reality that even though they have got very long experience of teaching but they are not able to address the interests of the students providing them freedom in exploring the things outside the classrooms problems according to their interests, and need so that they can construct the knowledge on their own working with other students in collaboration which can be reason that students' drop out ration is very high in our country. Further, he added that there are various emerging trends and issues in ELT and even though we are master's or PhD degree holders, we are not very aware about such things. He is right from my experience, we are theoretically sound. We can have big talk about the different teaching theories, however practically we are still backward when the practical kinds of things come before us.

Regarding this issue, participant – 3 who has got double degrees (Nepal and the U.K.) in English, also put his view that it is also difficult to use it in rural area because there is difficult to find out professionals to provide the relevant information. Further, he said, “There is also lack of the resources, professionalism in teachers who can create such learning environment”. Another burning challenge in implementation of PBL is the lack of resources, especially in rural areas where it is very hard to find out the resourceful person to make the in-depth study of subject matter under study. Similarly, it is another bitter reality that most of the teachers lack professionalism, research and technological skills and study habits. Rather they take this teaching profession as time pass so that they don't have to be jobless unless and until they do not get other opportunities. Likewise, participant– 4 regarding this issue, put his view that students have to go to the field and library to collect the data. In-depth study lies in the heart of PBL. Time and again, students have to visit the library, search on the internet, and field visit for data collection but the reality is that most of the schools do not have library. Even though, some of them have, they are not equipped with the sufficient resources so they are maintained just for show. PBL is useful in terms of as Pearlman (2006) says in generating smarter, more creative, and capable manpower by managing, collaborating and networking with productive people around the world. However, finding the teachers, as participant - 4 further expresses, is challenging in our context who can successfully handle the project in teaching learning activities.

Similarly, participant– 5 who is English teacher and teacher trainers pointed another genuine challenge in our context that students most of the students feel difficult while going through PBL because they are habituated in traditional kind of classroom teachings. Participant – 2 again in this issue expressed that there are several teaching training programs held from and various private organizations in the different intervals of time, they have not been able to address the current issues and trends in ELT.

## 2. Opportunities of PBL in Nepalese Context

As everything has both dark and bright side, so does PBL too. Even though there are lots of challenges in the successful implementation of the PBL in classroom teaching but it does not mean it is not possible in the context of Nepal in EFL situation. Participant- 1, in response to our question about the opportunities of PBL in our context, expressed that present pattern of curriculum needs to be changed in ord to use the PBL but initially we need to localize the project in our local context in order to develop creativity in the students. Similarly, participant - 2, for the successful implementation of the PBL, focused on the school leaders. He said that if the principal is strong and has clear vision in implementation of the project work, then PBL can be easily implemented. We think, the success

of any organization depends on its leader and his/her leadership quality. It is a very genuine issue that if the principal of the organization has good knowledge and skills and clear vision about using PBL in schools, providing all the requirements; resources, trained human resources, then PBL can be not only be successful but also can achieve higher level of benefits for students and teacher and the organization as well. Like Meganathan (2011) says when learners work together on a particular idea / topic, they collect information, ideas, observe language being used, use language in real life situations, exchange views and debate on ideas, write the ideas into a report, edit their writing and produce the report in a suitable form. As Project work is interdisciplinary in nature where students get opportunity to develop various skills while going through various project works so learners can be benefited by developing various skills like communication skills, management skills, critical thinking, and technical skills and so on.

In the same way, participant – 3 also expressed his view regarding the benefits of students. He said as group work is the very essential part of PBL, students get opportunity to work in team that helps them to develop the interactive, communicative and collaborative skills at the same time. Moreover, there is active learning which encourages the learners for the research based activities that develop their research and problem solving skill etc. Participant – 4, adding to it, said, “Project is an integration of everything because it deals with every aspects of the topic”. He further said that it develops students’ level of confidence, critical thinking and social skills working inside and outside the classroom situation. Actually his idea of project is really noteworthy since group collaboration lies in the heart of project work which provides the learners and ample opportunity to work both inside and outside the classroom situation. The learners are engaged in varieties of works according to the nature of varieties of projects which enable them to develop the most essential skills like collaborative skills, time management skill, critical thinking, technical skills, research and social skills and so on which are known as 21<sup>st</sup> century skills. In the same way, as they get opportunity to work outside the classroom in team according to their interests, they are more excited to undergo through the project work where they have to go for field visit in order to collect the data. It provides the learners with higher level of learning outcome. Adding to it, participant – 5 said that PBL can be very useful to get the real life experience outside the classroom. Working outside the classroom is another essential feature of PBL, especially in real life experience so that learners can develop their critical thinking and problem solving skills. Working in/outside the classroom, visiting the field, PBL provides an opportunity as chard (2014) shares her opinion that Project learning is in-depth learning in which children can take some ownership of their work and through which they have choices that they can make -- but choices that are designed together by the child and the teacher so they're not entirely whatever the child wants to do but choices from among alternatives.

### **Implications of the Study:**

The concept of PBL is a new concept in the Nepalese context. This research study is made based on the findings and conclusions based on intensive interview of our five research participants who have been directly or indirectly involved with the PBL in their teaching learning pedagogy as an integral part of their classroom teaching. Based on the ideas they have expressed, finally we could draw the following implications. We are hopeful that these implications would be helpful for me as well as any EFL teachers as well as other subject teachers their for effective teaching learning practices, providing the opportunities for the learners to learn with real life experience outside the classroom engaging them in meaningful learning. Moreover, it can be also very useful for those teachers, educators, policy makers, teacher training experts who have been exploring the ways to bring out changes in the present teaching learning system. Similarly, it will also help to the learning in a different learning environment.

1. The study revealed that PBL is a new concept in educational practices which provides opportunities for the learners to work in/outside the classroom working in collaboration.
2. PBL is an interdisciplinary in nature which provides the opportunities for the learners to develop various 21<sup>st</sup> century skills.
3. The pattern of curriculum and classroom needs to be changed to create the learning environment for the 21<sup>st</sup> century learners.
4. The traditional classroom should be developed as a workplace equipped with necessary equipments for the 21<sup>st</sup> century learners.
5. The role of teacher must be transformed from authoritative to facilitator, coordinator, initiator, guide working with the students and student from passive listeners to co-workers, meaning makers, active learner, team builder, manager etc.
6. There are various challenges of using PBL in Nepalese context along with its opportunities.



## CONCLUSION

As this research article deals with PBL which is a very new concept in teaching learning system in the context of Nepal. PBL is a modern, research based and practical teaching learning approach which provides an ample opportunity for the learners to work along with the guidance of the teacher who provides them with necessary scaffolding. So the role of teacher and student is quite different in comparison of the traditional classroom. Teacher plays the role of facilitator, guide, co-learner, co-worker manager who creates the learning environment for the learners whereas the role of students is also to be active learner, meaning maker and so on. The traditional congested classroom needs to be transformed as a work place with sufficient space so that students can perform various activities working in collaboration. Even though there are various challenges in using the PBL in the classroom in Nepalese context, PBL can be successfully implemented in teaching learning practices managing the necessary pre-requisites; the sufficient learning resources and skilled human resources.

## REFERENCES

- Boss, S. (2014), Project-Based Learning: A Short History: *Edutopia*, 13<sup>th</sup> March, 2014. (Originally published in 9<sup>th</sup> Sept, 2011). *Trending: Teach Visual Literacy with Social Media*, <http://www.edutopia.org/sylvia-chard-project-learning>,
- Broz, B. (1999). A Pedagogy of Community and Collaboration: A Beginning: in *Teaching in the 21<sup>st</sup> century; adapting Writing Pedagogies to the College Curriculum*, Edit by Alice Robertson and Barbara Smith.
- Chard, S. (2014). Project Learning; <http://www.edutopia.org/sylvia-chard-project-learning> :March 13, 2014: originally written in 2001.
- Grant, M. M. (2002). Getting a Grip on Project-Based Learning: theory, Cases and Recommendations. *Meridian: A Middle School Computer Technologies Journal*, a service of NC State University, Raleigh, NC, Volume 5, Issue 1, Winter ( 2002), URL: <http://www.ncsu.edu/meridian/win2002/514>.
- Hight, G. (2008). *The Art of Teaching*. Surgeet Publications, New Delhi, India.
- Janet, G. (2006) *Constructivism: A Holistic Approach to Teaching and Learning: Faculty Development and Instructional Design Center*, Northern Illinois University.
- Lucas, G. (2003). Learning In Action! *The George Lucas Educational Foundation*: Power point slides
- Meganathan, R. (2011). Project Work to Promote English language Learning. Teach English, 17<sup>th</sup> March, New Delhi, India.
- Pearlman, B. (2010) *Teaching and Learning in the 21st Century School District*: PowerPoint Slides at <http://www.bobpearlman.org/Learning21/index.htm>
- Smith, B. (1999). Role Playing in the Interdisciplinary Classroom: in *Teaching in the 21<sup>st</sup> century; adapting Writing Pedagogies to the College Curriculum*, Ed. Alice Robertson and Barbara Smith.
- Stripling, B, Lovett N. and Macko F. L. (2000). *Project-Based Learning: Inspiring Middle School Students to Engage in Deep and Active Learning*: (Edit 2009) NYC, Department of Education, 52 Chambers Streets, New York.