



AN ASSESSMENT OF THE IMPLEMENTATION OF PROJECT BASED LEARNING AND ITS IMPACT ON STUDENTS' ACADEMIC PERFORMANCE IN SELECTED SECONDARY SCHOOLS IN THE BAMENDA II MUNICIPALITY OF THE NORTH WEST REGION OF CAMEROON

# Anyi Mary Uhoman

Higher Technical Teacher Training College Bambili, The University of Bamenda, P.O. Box 39 Bamenda-Cameroon Email: maryuhoman1966@gmail.com

### Abstract

This research was conducted with the aim of assessing the implementation of Project Based Learning and its impact on students' academic performance in selected secondary schools in the Bamenda II municipality. Specifically, it sought to find out if collective teachers' efficacy can enhance project implementation; to examine if the employability skills of the learners can enhance project implementation and to investigate the role of policy makers in project implementation. This study was guided by four research questions and three hypotheses. The researcher used the survey research design where the quantitative simple random sampling study was used to gather again greater understanding of the ways in which project based learning was implemented in the selected secondary schools in the study area. The total population of the study was 9370 students and 288 teachers making a total population 9658 of participants. The study was conducted using 1575 students from selected secondary schools in the municipality between the ages of 10 to 21 years old. A total of 45 teachers were also administered questionnaire between the ages of 21 to 35 and above randomly chosen from the two schools in the municipality representing 25% of both the teachers and the students. The researcher used questionnaire for both the teachers and the students to collect data from the following variables: Collective teacher efficacy, students' employability, and the role of policy makers. The researcher equally used the Direct Delivery Technique (DDT) to avoid instrument mortality and ensure a 100% return rate of the instrument administered. For Data Analysis, ANOVA was used with the help of the Statistical Package for Social Sciences (SPSS). Findings from the study revealed that Project Based Learning (PBL) has led to among others, a remarkable improvement in students' academic performance and in the acquisition of the 21 century skills. The researcher strongly recommended the implementation of PBL in all the secondary schools in the municipality by the various stakeholders in the educational sector in the whole nation.

**Key words:** Project Based Learning (PBL), Collective teachers' efficacy, Project implementation, Employability skill and Policy makers

## **Background and Problem**

The 21st century education is about giving students the skills they need to succeed in this new world and helping them to grow with the confidence to practice those skills. In the preface to the 2011 revised education of his book "Out of Our Minds", Sir Ken Robinson observed that the more complex the world becomes, the more creative we need to be to meet its challenges and this is becoming increasingly clear in education and the workplace. Students need to be creative to be successful. But while the idea of success has changed, the education system has to embrace the reformations. Unfortunately, most students continue to be educated in the same way as they were in the past, being taught a standardised curriculum through rote learning and individualised testing at a one size- fits- all pace. Past methods make little sense to today's students, who learn and think differently, and make little sense in relation to the changing workplace, where making use of information is now far more valuable than simply knowing things, and schools are failing to teach students to handle new information because they are clinging to obsolete methods.

However, educators have looked for creative and meaningful ways to engage students in school based learning. At the forefront of the professional dialogue is Project Based Learning [PBL] which is designed to make learning meaningful and engaging. Project Based Learning is designed to deliver an active engaging student - centered approach to learning. This method or approach of learning encourages the students to work for an extended period thereby acquiring skills and knowledge which can be used to solve complex problems or challenges. This approach of learning has been claimed to be a vehicle for driving the skills that are needed for the 21st century. Supporters of the Project Based Learning contend that learning through a project based approach allows educators to work alongside students to support deeper, high quality and meaningful work. Project Based Learning [PBL] champions students following a piece of work from the beginning to the end within the lens of project. In Project Based Learning [PBL], students are engaged in common projects with

defined outcomes through elements of project design. Advocates of PBL have emphasised that projects have a long standing history within the world of education, and argue that Project Based Learning is a powerful catalyst that helps students become more engaged and master the skills needed to adapt to the ever changing times (Larmer & Mergendoller, 2015).

Every year more and more schools are adopting PBL as an approach of learning. Although thousands of teachers and schools are adopting the PBL model of instruction, there are a number of disagreements between proponents and opponents of PBL. Such arguments center on the pedagogy of whether or not PBL increases engagement in learning, or increases student achievement on standardised tests. More opponents of PBL question whether or not it is truly effective for enhancing students' motivation and engagement, building content, knowledge, and equipping students with the skills that are needed for the 21st century.

Particularly, PBL has historically encountered resistance and criticisms from studies which demonstrate that students in traditional classrooms did the same or outperformed those in PBL classrooms, especially in the subject areas where content knowledge was emphasised. Despite this ongoing debate of whether PBL is truly an effective curriculum design, its usefulness, which can vary from school to school, rest on the depth and quality of its implementation.

The challenge that Project Based learning face regarding implementation is the idea that it is difficult to plan and ultimately enact. Although there are a lot of factors that impede the effective implementation of the Project Based Learning, approaches comprehensively reviewed recommend that future research examine the implementation of Project Based Learning (PBL) in different contexts. Consequently, this research work seeks to examine the degree of implementation of this contemporary approach of learning with special impetus of unveiling the innate ideas and skills of selected secondary schools and colleges in the Bamenda II municipality. A greater chunk of this piece also assesses the aftermath of this approach in shaping the students life which depends on the degree of

implementation whether as a curricular or cocurricular activity by the school administration. Major emphasis was laid on feasible aspects and the degree of exhibitionism of projects in school.

Today's world is constantly changing which sometimes might leave a gap between what students learn in school and what actually they need to survive in real life. This puts schools under a lot of pressure to develop their educational instructional processes in an innovative manner that helps students to acquire and develop the needed life skills. Life skills are part of the 21st century education skills that have been advocated for and divided into three types of skills by the author. The first is interpersonal and collaborative skills, which focus on the ability to communicate, develop a positive social relationship, and collaborate with others to achieve common goals. The second type is selfdirected skills, addressing the learners'ability to identify learning goal, plan to achieve them, manage their time and efforts, evaluate their learning outcomes and outputs, and identify their strengths, and weaknesses. The third type is their skills of reliability and collective responsibility for their own earning and classroom learning where each individual plays a role and students' roles are integrated with each other in achieving the goals. These divisions seem convincing to most educators who found out that the development of these skills could be motivated by applying the learner centered strategies such as the Project Based Learning (PBL).

John Dewey (1938), with his works focusing on learning by doing is regarded by some researchers as the founder of Project Based Learning. Dewey's theories on learning advocate a long learning approach where students interact during real life tasks. His life skills are defined as the abilities for adaptive and supportive behaviours that enable individuals to deal effectively with the demands and the challenges of everyday life. These skills can help individuals in leading a meaningful life. Hence, it is of importance to consider the role schools play in equipping the students with these life skills. One of these strategies is Project Based Learning [PBL]. As such, learning by doing here involves experimenting, problem solving, teamwork, social skills, understanding, collaboration,

partnership and taking responsibilities. The previous argument confirmed that both Dewey and Kilpatrick played a major role in revolutionising education. However, this does not deny the role of Vygotsky the pioneer of social constructivist theory, in advancing project based learning in schools. Social constructivist theory suggest that when taking part in educational projects, learners are given the opportunity to interact with their peers, exchange ideas, and ask questions, which help them to develop skills and gain new knowledge. Project Based Learning is a vital teaching method that enables the satisfaction of different factors of social constructivist theory, especially collaborative and teachers scaffolding. In addition, it encourages outdoor activities.

Three factors that have been described in the literature as contributing to students' learning, especially their autonomy and freedom to learn to plan their learning and to explore the content. Thus, these three factors point at Project Based Learning as part of sustainable education that leads to the development of students' life skills. Project Based Learning and life skills could be related to transformative environmental and sustainability education. Bivens, Moriarty, and Taylor(2009) argue that access to transformative education has a key role in overcoming the poor opportunities of marginalised children. Project Based Learning constitutes an environment in which transformative education can occur as it provides a context for children to express their ideas, to plan, and to carry out their plans in addition to looking back and trying to improve upon their initial plans. This is especially true in a context such as in Bamenda II municipality where a proportion of students are of low and middle socio - economic statues. Walsh (2020) reports, that an interdisciplinary approach encourages environmental and sustainable education.

Besides, Project Based Learning could provide context for interdisciplinary learning which point to it as encouraging sustainability education. Moreover, Ohman and Sund (2019) proposed a model that frames sustainability commitment. This model takes care of the intellectual, the emotional and the practical aspects. Furthermore, Fortune (2020) say that project based learning constitutes a context in which students experience transformative

learning as they navigate a cultural learning journey, which results in the emergence of new insights into their own and others' subjective world view. Lavrysh (2009) argues that transformative education learning is a factor that leads to the adoption of lifelong learning. Most educationists argue that lifelong learning interrelates with life competencies and skills. Anand and Anuradha (2000) describe life skills as enhancing efforts to positively develop or change behaviour related to healthy functioning in a society. They found that it could provide education for the sustainable future of adolescents, especially the girl child. All of the previous literature emphasis that project based learning and life skills could be an important part of transformative environmental and sustainable education. It is because of this indispensable aspect of this approach of learning that the researcher is highly motivated to establish laid down findings on its implementation around the area of study being the Bamenda II municipality.

The major concern of the researcher here is to seek alternative ways of self-reliance and independence for students after completion of secondary school given that the area of concern for this study happens to be in a low income economy and a depressive zone due to the sociopolitical upheavals in the country. The researcher after some brief interviews with some school authorities in the area of concern discovered that there are still a lot of administrative lapses in the implementation of this contemporary approach of learning in most schools in the municipality. The researcher therefore decries this administrative adamancy to the contemporary approach of learning which has been proven to meet up with the challenges of today's society and the area of concern in particular.

Practically, this study is also concerned with the role of the administration of the selected schools in implementing the PBL as either part of their curriculum or as an extra-curricular activity. Major concerns included the time allocation for the various projects in schools and the role of the administration in enforcing and ensuring an effective follow up of students for better involvement in this academic exercise. It therefore means that, the administration has to put in place the various administrative techniques and

theories to ensure full engagement of the students and the facilitators whose major role remains that of scaffolding. The various motivation theories have to become applicable for both the learners and the facilitators for better results, outcomes and exhibition.

Conceptually, PBL Continues to gain momentum as a powerful instructional methodology. Several factors set apart can influence the implementation of PBL in schools. Such factors include teacher collective efficacy, the employability skills, transfer of skills, and the influence of top - down implementation mandate. Teacher collective efficacy is one of the major concerns of this study. This is because teachers are too often trained to design a PBL unit. It is important to know how to design a PBL scheme and elements that make PBL a unit.

Implementing PBL involves a departure from the traditional modes of teaching (Bender, 2012). Thus, a teacher used to that style of teaching will undergo some degree of awareness of the difference between their past teaching practices and the new approach with the project based learning. The intent of this study is to explore some factors that will collaboratively lead to effective implementation of PBL in selected secondary schools in the Bamenda II municipality as well as those of 21st century skills that may also facilitate or impedes project implementation. Major concerns were laid on; collective teacher efficacy as an indispensable aspect of project implementation, students' employability was also considered as a motivator to the approach and the role of policy makers which can also be viewed as a top-down implementation mandate for sustainable Project Based Learning,

Project Based Learning (PBL) is long term investigations driven by real questions connected to the real world that results in authentic product that show students learning. This captures the essence of project based learning: longer and deeper inquiry, research student-made products and connections to the world and life outside of school. The interest of the researcher is finding out the activities of teachers in a school milieu in giving and adding values to learners such as skills acquisition and problem solving in selected secondary schools and colleges in the Bamenda II municipality.

The researcher strongly believes that if PBL is fully implemented at every level by every facilitator, the quest for dependence on the government to provide jobs for all its citizenry will switch to creating an enabling environment and not jobs for the youth because they would have been equipped already with the life sustaining skills.

# Objectives of the Study

The main aim of the study was to investigate the implementation of the PBL and its impact on students' academic performance in selected secondary schools in the Bamenda II municipality. Specifically, the study sought to;

- 1) Find out if collective teachers' efficacy can enhance project implementation in selected secondary schools in the Bamenda II municipality.
- 2) Examine if the employability skills of the learners can enhance the implementation of project Based Learning (PBL) in secondary schools in the Bamenda II municipality and the entire nation.
- 3) Investigate the role of policymakers in project implementation in secondary schools in the Bamenda II municipality and in the country as a whole.

### **Research Questions**

The following research questions guided the researcher:

- 1. How can collective teacher efficacy enhance Project Based Learning in the secondary schools in the Bamenda II municipality?
- 2. In what ways does Project Based Learning enhance employability in secondary schools in the Bamenda II municipality?
- 3. How can policy makers enhance Project Based Learning in the secondary schools in Bamenda II municipality?

### RESEARCH HYPOTHESES

The following hypotheses were formulated to guide the researcher and were tested at 0.05 level of significance.

Ho<sub>1</sub>: There exists no significant relationship between Collective Teacher Efficacy and Project Based Learning in secondary schools in the Bamenda II municipality

Ho<sub>2</sub>: There is no significant relationship between Student employability and Project Based Learning in secondary schools in the Bamenda II municipality

Ho<sub>3</sub>: There is no significant relationship between Policy makers and the implementation of Project Based Learning in the secondary schools in the Bamenda II municipality

## Methodology

This study was carried out in selected secondary schools in the Bamenda II Municipality, NW Region of Cameroon. The study adopted the survey research design in order to gain a greater understanding of the topic and easy access to the respondents. The total population of study was 9370 students and 288 teachers making a total of 9658 for the total population. The simple random sampling technique was used for this research work in order to get the desired results from schools that were randomly selected in the municipality from different classes. The sample size of 1575 students from selected secondary school in the municipality between the ages of 10 to 21 years old and 45 teachers were also administered questionnaire between the ages of 21 to 35 and above randomly chosen from the two schools in the municipality representing 25% of both the teachers and the students. The researcher used questionnaire for both the teachers and the students based on the following variables; collective teacher efficacy, students' employability, and the role of policy makers. The researcher used the Direct Delivery Technique (DDT) to avoid instrument mortality and ensure a 100% return rate. For Data Analysis, ANOVA was used with the help of the Statistical Package for Social Science (SPSS). Both descriptive and inferential statistics were used in analysing the data obtained from the field. Descriptive statistics made use of frequency counts and percentages. Inferentially, multiple regression analysis was used to analyse the hypotheses of the study.

2. Government should provide well equipped ICT centers with active internet access in all tertiary institution in Nigeria.

#### **FINDINGS**

The findings gotten from the respondents were presented accordance to the three research questions:

**Question one:** How can collective teacher efficacy enhance Project Based Learning in the secondary schools in the Bamenda II municipality?

Responses obtained from the respondents are presented on table 1 below

**Table1.** Responses on Collective Teacher Efficacy

Collective teacher efficacy	SA		A		D		SD	
	F	%	F	%	F	%	F	0/0
I am blank about PBL	44	24.0	124	62%	16	8%	12	6%
PBL is a new pedagogic	50	25.0	140	70%	8	4%	1	1%
PBL should be introduced as a co-curricular activity	60	30%	134	67%	6	3%	0	0.00%
I have executed some projects	26	13%	68	38%	82	41%	8	4%
I have attended seminars and workshops on PBL	46	23%	144	72%	8	5%	0	0.00%
Administration encourages PBL	40	20%	144	72%	6	3%	4	2%
There are Periods a llocated for PBL	44	22%	136	68%	12	6%	8	4%

Research work (2023)

From table 1 above, we can observe that 24% of the respondents strongly agree that they are completely blank about PBL, 62% agreed to the fact, 8% disagreed and 6% strongly disagreed. On the other hand, 25% strongly agreed that PBL is the newest pedagogic approach, 1% undecided, 4% disagreed and no one strongly disagreed. 30% of the sample size strongly agreed that they should introduce PBL as co-curricular, 67% agreed, 3% disagreed and 0% strongly disagreed. 13% of workers strongly that they have executed some project with my students this academic year, 34%

agreed, 8% undecided, 41% disagreed, 4% strongly disagreed, 23% of the sample population strongly agreed that they have attended seminars on PBL, 72% agreed, 1% undecided, 4% disagreed and nobody strongly disagreed. 20% strongly agreed that Administration encourages PBL 72% agreed, 4% undecided, 2% disagree and 2% strongly disagreed. 22% strongly agreed that they are periods allocated for PBL, 68% agreed, 0% undecided, 6% disagreed, 4% strongly disagreed

**Question two:** In what ways does Project Based Learning enhance students' employability in the secondary schools in the Bamenda II municipality?

Responses obtained from the respondents are presented on table 2 below:

**Table 2:** Responses on Students' Employability

Students' employability	SA		A		D		SD	
	F	%	F	%	F	%	F	%
We always have project meetings with colleagues	38	14.0	80	40.0	82	36.0	0	0.0
We carryout PBL with colleagues	34	17.0	82	41.0	42	21.0	4	2.0
Teachers follow up students' projects	16	8.0	154	77.0	20	10.0	4	2.0
We organize seminars for PBL	32	16.0	108	54.0	28	14.0	24	12.0
There are workshops for PBL	38	18.0	118	59.0	10	5.0	0	0.0

Research work (2023)

From table 2 on the analysis, the relationship between Students' employability and project based Learning. 14% strongly agreed that they always have project meetings with colleagues, 40% disagreed, 10% undecided, 36% disagreed and nobody strongly disagreed. 17% strongly agreed that they carry out PBL with colleagues, 41% agreed, 21% disagreed, and 29% strongly disagreed. Still on the analysis of the relationship between collective teaching efficacy and project

Bases Learning, 8% strongly agreed that teachers follow up student's project, 77% agree, 3% undecided, 10% disagree and 2% strongly disagree. When it comes to organize seminars for PBL, 16% strongly agreed that they organize seminars, 54% agreed, 14% disagreed and lastly 12% strongly disagreed. And lastly, 18% of the sample population agreed they are workshop for PBL, 59% agreed and 5% disagreed.

**Question Three:** How can policy makers enhance Project Based Learning in the secondary schools in Bamenda II municipality?

Responses obtained from the respondents are presented on table 3 below:

**Table 3.** Responses on the Role of policy makers on the Implementation of PBL in Secondary Schools

The role of Policy makers on the implementation of PBL	SA		A		D		SD	
	F	%	F	%	F	%	F	%
Students do jobs for a living after graduating from secondary school	46	23.0	46	48.0	24	12.0	16	8.0
Students take responsibility of their studies while in school	46	23.0	134	67.0	10	5.0	2	1.0
Some students acquire special skills while undergoing their studies	30	15.0	130	65.0	8	4.0	4	2.0
Some of my students show some level of independence during their studies	20	10.0	134	67.0	18	9.0	6	3.0
Students work during holidays	20	10.0	68	34.0	20	10.0	14	7.0
Some students sponsor themselves in school	54	27.0	112	56.0	12	6.0	8	4.0

Research work (2023)

From the figure above, we can also observe that 23% of the respondents strongly agree that Students do jobs for a living, 48% agreed to the fact, 12% disagreed, and 8% strongly disagreed. On the other hand, 23% strongly agreed that Students take responsibilities of their studies, 67%% agreed, 5% disagreed, 1% disagreed. 15% of the respondents strongly agreed they have students with special skills, 65% agreed, 4% disagreed, and 2% strongly disagreed. 10% of the

respondents strongly agree that some students are independent. 67% agreed, 9% disagreed, 3% strongly disagreed. 10% of the sample population strongly agreed that Students work during holidays 34% agreed, 10% undecided, 39% disagreed and 7% disagreed. And lastly 27% strongly agreed that they work with students during holidays that are able to sponsor their fees 56% agreed, 6% disagree, 7% and 4% strongly disagreed

# **Regression Analysis of Hypothesis**

**Table 4:** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.597 <sup>a</sup>	0.356	0.336	0.58662	

Research work, 2023

a. Predictors: (Constant), Collective teacher efficacy, Students' employability, and the role of Policy makers on the implementation of PBL. The regression analysis among dependent and the independent variables was carried out whereby Teacher efficacy, Student employability and role of policy makers were the independent variables whereas sex and age of the respondents were the control variables. Students' academic performance based on PBL as measured by four

main constructs was the dependent variable. The table above indicates that the R-squared for the study model was 0.356, which shows that the independent study variables can be applied in explaining just 35.6% of the total variations in the corporates social responsibility when measured. R-value shows the correlation between the dependent and independent variable. A value lower than 0.4 is taken for further analysis, in this case, the value is 0.597, which is good.

Table 5: Levels of variability.

Mod	del	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	18.275	3	17.702	95.085	.000 <sup>b</sup>
1	Residual	33.035	96	.020		
	Total	51.310	99			

Research work 2023

- a. Dependent Variable: students' Performance
- Predictors: (Constant), Collective teacher efficacy. Students' employability, and the role of Policy makers on the Implementation of PBL

The Analysis of Variance (ANOVA) illustrates the idea that provides information about levels of variability within a regression model and forms a basis for tests of significance. It goes a long way to provide a statistic for testing the hypothesis that

(there is a significant relationship between the response and predictor variables), against the null hypothesis that (there is no significant relationship between the response and predictor variables). Correlation exists between the dependent and independent variables if P-value is lower than 0.05. As shown in table above, P-Value-0.000<0.05 indicated that there is enough evidence to support the alternative hypothesis, that there is a significant linear relationship PBL

and its impact on the students' performance.

**Table 6:** Standardised Coefficients of variables

Model			Standardised Coefficients	Т	Sig.	95.0% Co Interva	
	В	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.428	.222		1.932	.056	012	.869
Collective Teacher efficacy	.289.	.047	.227	2.735	.017	.036	.224
Students' employability,	.369	.103	.243	2.817	.016	.085	.493
And the role of policy makers in implementing PBL.	130	.073	.435	5.057	.027	.224	.514

Research work, 2023

a. Dependent Variable: Students academic performance independent variable: Collective Teacher efficacy, Student employability and the part Policy makers take, enhances the implementation of projects.

If Sig. is < 0.05, the null hypothesis is accepted. If Sig. is > 0.05, then the null hypothesis is rejected. If a null hypothesis is rejected, it means there is an effect. However, if a null hypothesis is not accepted, it means there is no effect. In this case, the interpretation will be as follows.

There is a significant change in students' academic performance as a result of collective Teacher efficacy, Students' employability and Policy makers' decision enhances the implementation of projects because the Sig. values are less than the acceptable value of 0.05. The first objective of the study was to find out if collective teachers' efficacy can enhance project implementation in selected secondary schools in the Bamenda II municipality. The coefficient indicated that holding all the other independent variables constant, a unit increase in collective Teacher efficacy would lead to an increase in corporate social responsibility by 28.9%

The second objective of the study was to examine if the employability skills of the learners can enhance project implementation in selected secondary schools in the Bamenda II municipality. The coefficient indicated that holding all the other independent variables constant, a unit increase in Students' employability would lead to an increase in Students' academic performance by 36.9%

The third objective of the study was to investigate the role of policy makers in implementation of the PBL in selected secondary schools in the Bamenda II municipality. The coefficient indicated that holding all the other independent variables constant, a unit increase in Policy makers enhancing projects would lead to an increase in Students academic performance by a 13.0%

#### Discussion

The main objective of this research was to investigate the implementation of project based learning (PBL) in selected secondary schools in the Bamenda II municipality. From the above objective, major findings revealed that project based learning has not been fully implemented in secondary schools in the municipality under review. This is evident from the data above showing just 24% rate of project based knowledge. It has also been revealed that there are no specific periods set for projects in most schools in the municipality. This goes a long way to confirm that project based learning is under implemented. Another major insight is the role of

the administration in project based learning which is still below average. If the school administration does not give the students the opportunity to carryout PBL, it therefore means the execution rate will automatically drop thereby limiting the students in the acquisition of the 21st century skills acquisition.

Based on collective teacher efficacy, it is evident that the few schools that implemented the project based learning were associated with high academic performance and the acquisition in the 21st century skills. Given the fact that, the level of implementation is still below average due to the lapses on the part of the administration, as the respondents indicated still falls below the average. From this statistical figure, it can be concluded that project based learning has not been efficiently implemented in the municipality. The first objective of the study was to find out if collective teachers' efficacy can enhance project implementation in secondary schools in the Bamenda II municipality. From the study findings, it was revealed that at 5% conventional probability, there was a significant relationship between Collective teacher efficacy and Academic Performance. The p-value was less than the standard conventional probability of 5%. The study therefore rejects the null hypothesis. This is in line with the work of Thom Markham. Larner, and Ravistz (2003) who identified PBL as "central rather than peripheral to the curriculum" (Markham et al, 2003 p.4). The intense focus on standards and the idea that project is the driving force of the learning rather than add - on after some other learning, promotes the college and career readiness standards of the common core state standards. The findings agree with the work of Goddard, Hoy and Hoy (2000). In their studies, they could demonstrate that between-school differences of collective teacher efficacy were more important in explaining students' achievement than socio-economic status. In the same light, Hoy, Sweetland and Smith (2000) also found out that, the strength of Computer Technology in Education (CTE) helps the positive effects of individual teacher efficacy and vice versa. A stronger collective teacher efficacy seems to encourage individual teachers to make a more effective use of the skills they already have. According to Hattie's presentation at the collaborative impact conference 2017, collective teacher efficacy is not about making teachers feel good about themselves; It is more complicated than just believing that teachers can make a difference collectively.

On the part of students employability skills, and more still a study exploring and the statistics from the data above revealed that PBL also inculcates employable skills in the students if properly implemented. This research work also demonstrated that if project are properly implemented in a school milieu. It may lessen economic burden on most parents since the students can take responsibility of their studies. Student employability which is the ability to gain expertise in a chosen field by acquiring the chosen skills, capabilities and personal attributes that they need to excel as graduates (Adekola, 2022). The study found that, there was a statistically significant effect of political experience on corporate social responsibility (P-value of 0.027<0.05). The study therefore rejected the null hypothesis. This reveals that adoption of changes in Student employability enhances academic performance; the findings are in line with the works of summers and Dickinson (2012) who conducted a longitudinal study to examine achievement towards college and career readiness as defined by the Common Core State Standards through social studies classes in two rural high schools in the same school district. Specially, they wanted to examine if PBL promoted higher rates of promotion, higher social studies achievement on standardised assessments and facilitated a greater realisation of the college and career readiness standards and generally enhance students learning in social studies.

The last objective was to investigate on the role of policy makers with regards to the enforcement on the issue of the implementation of project based learning (PBL) in the Bamenda II municipality and in all secondary schools in the country in general. This is revealed in just about 32% of their activities to encourage PBL such as in seminars and workshops, following up of students projects, and finally including PBL in the school curriculum. A study that fits the criteria for this review and is a summative look at the effects of PBL on achievement comes from (Geier et al., 2008). The study examined the three-year (ending

in the 2000-2001 school year) implementation of a project- based inquiry science curriculum developed in connection with Centre for Learning Technology in Urban Schools (LeTUS). The LeTUS curriculum carried many of the same element associated with PBL including an inquiry investigation, a driving question, embedded technology, student-created artifacts, discussion and feedback. The study examined how well the study group of students did on the Michigan Educational Assessment Program (MEAP) tests compared to students who did not experience the curriculum. Thirty-seven teachers in 18 schools and approximately 5000 students participated in two 7th grade and one 8th grade LeTUS unit (Geier et al., 2008) of the two cohort group studied, both performed better than their non-LeTUS taught counterparts on the MEAP tests in all science areas.

### Conclusion

The main aim of this study was to assess the implementation of Project Based Learning (PBL) and its impact on students' academic achievement in selected secondary schools in the Bamenda II municipality. Through this study, the various stakeholders in the educational sector will understand that unemployment and poor academic performance of students in the secondary schools is not linked to lack of intelligence, absenteeism, peer pressure, and assiduity of facilitators, but due to inadequate policy objective to constantly harmonise the pedagogic approach to guide the learners towards the acquisition of skills that match with the contemporary requirements of the labour market.

# Recommendations

- Schools administration should motivate and encourage students with project that connect with real world issues.
- Schools should provide clear programmes, guidelines and expectations about project goals, timeline and assessment criteria.
- School authorities should incorporate technology and integrate technological tools such as online research, interactive presentations, or project management software's to enhance the project experience and facilitate collaborative work.

- The school administration, NGOs and other stake holders should provide scaffolding and support to students during different stages of a project.
- Also, celebrating, showcasing, or exhibition of students' projects is a positive contribution to PBL approaches.

#### References

- Aldabbus, Shaban. (2018). Project-Based learning: Implementation & challenges. *International Journal of Education, Learning and Development* 6(3), 71-79.
- Bender, W,N.(2012) "Project Based learning": General books publisher New York
- Bell. S (2011) Project-Based Learning for the 21st Century: Skills for the Future. Chiazzese. G et al. (2010) .Educational robotics in primary school: Measuring the, development of computational thinking skills with the bebras tasks.
- Bivens,F. Okitsu,T Moriarty,V and Taylor, P (2009) "transformative Education" vol 40 pg 97-108 chicago fifteeth edition
- Chiu, C.F. (2019) Facilitating K-12 teachers in creating apps by visual. programming and project-based learning
- Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, E. (2017)*Project-Based learning* A literature review working paper.
- Culclasure, B. T., Longest, K.C., & Terry, T. M. (2019). Project-Based learning. three southeastern public schools: Academic, behavioral, and social-emotional outcomes. Interdisciplinary Journal of Problem-Based Learning,
- Dewey,J (1938) "Experiences and education": Macmillian New York
- Dian, M. (2020). Student's computational thinking skill in solving a problem of convergences divergences of series..

- Ertmer, P. A., & Simons, K. D. (2018). Scaffolding teachers' efforts to implement to implement project based learning <a href="https://www.mcwexperiential.org/uploads/2/4/0/6/24069734/pblprocess.pdf">https://www.mcwexperiential.org/uploads/2/4/0/6/24069734/pblprocess.pdf</a>
- Finzer et al. (2019) Data-driven inquiry in the PBL classroom: Linking maps, graphs, and tables in biology
- Fortune,T (2020) "Project based learning": Meredith cooporation New York city San Fransco
- Freina, L., Bottino, R., Ferlino, L. (2018).Fried-Booth, Diana L. (2002). Project Work. (2nd ed.). New York: Oxfor. University Press. Game programming in primary schools: Guidelines for a project-based Learning.
- Harmer, N., & Stokes, A. (2014). The benefits and challenges of project-based learning. Pedagogic Research Institute and Observatory.
- Holm, Maggie. (2018). *Project-Based Instruction:* A Review of the literature on effectiveness in prekindergarten through 12th grade classrooms.
- Ichsan, M. H. (2016) media.neliti.com Retrieved Aug 28, 2021 from. James, M. A. 2006. Teaching for Transfer in ELT. ELT Journal, Vol. 6
- Jones, B. F., Rasmussen, C. M., & Moffitt, M. C. (1997). Real-Ilife problem.
- Ken, R(2011)" Out of our minds": University of West Floriada; New York
- Kim, S, et al. (2020). Improving 21st-century teaching skills: The key to effective 21st-century learners
- Kızkapan. Vet al. (2017) The effect of project based learning on seventh grade students' academic achievement
- Lavrysh,K (2009) "transformative education"; Springer international publisher

- Larmer, J. Mergendoller, J. and Boss, S (2015) "Gold Standard PHL: Essential Project Element" vol 11 n° 10
- Markham, T., Larmer, J., & Ravitz, J. (2009). Project based learning handbook: A guide to standards-focused project based learning. Novato, CA: Buck Institute for Education. Page.
- Maxine, G.(2010) "Influences on the life and work dynamic"; Cambridge university Berg
- Ohman and Sund (2019) "sustainability education" sandberg, Reed P
- Ryan, M.(2003). Problem-Based learning meets case-based reasoning in the middle-school science classroom: Putting learning by design into practice. The Journal of the Learning Sciences, 12(4), 495-547.
- Simpson, J (2011) Integrating PBL in an English Language Tourism Classroom in a Thai University. Australian Catholic University: Unpublished Dissertation
- Stoller, F. (2006). Establishing a theoretical foundation for project-based learning in second and foreign-language contexts. In G.H. Beckett & P.C. Miller (Eds.), Project based second and foreign language education: past, present, and future (Pp.19-40). Greenwich, Connecticut: Information Age Publishing.
- Thomas, J. W. (2000). A review of research on project-based learning. Retrieved from http://www.bic.org/images/uploads/genera
- Thomas, John. (2000). A Review of research on project-based learning.
- Vega, V. (2015). Project-Based learning research Boud, D, and Feletti, G. I. 1997.
- Walsh, J (2020) "Interdisciplinary training and education": University of Toronto scarborough campus 3v.