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Impact of Professional Learning Community (PLC): Approach to improving teachers' effectiveness in raising students' learning achievement

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Abstract

Bhutanese schools have struggled to implement effective Professional Learning Communities (PLCs) to help teachers improve students' performance. PLCs have been established in certain schools as a mandate for addressing teacher professional development, while others are yet to do so. The purpose of this action research was to examine school teachers' experiences in Bhutanese schools as a result of their participation in a PLC, as well as the influence of PLC in boosting teachers' effectiveness in raising student achievement, based on Dufour's three big ideas of PLC. This research used an online survey and a learning assessment instrument after the intervention period. Respondents were all the teachers involved in PLC throughout the year and were asked to answer a survey questionnaire based on PLC's 6 Essential Characteristics devised to determine teachers' effectiveness in terms of the main elements that make up a professional learning community. A learning assessment tool (class test) to measure student performance was administered during the spring and autumn unit tests to measure the effectiveness of PLC in student achievement. The findings were aligned with Richard Dufour's conceptual framework for defining important elements of professional learning communities. These findings suggest that teachers' professional networks and collaboration among themselves have a positive impact on student progress.

KEYWORDS: Professional Learning Community, Professional Development, Teachers' effectiveness, Students' learning and Achievement

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Introduction

Schools in Bhutan have faced challenges in choosing an effective Professional Learning Community (PLC) that assists teachers in improving student achievement. Some schools have implemented PLC's a means of addressing teachers' professional development (PD) and some schools are yet to implement them due to a lack of direction and policy. The importance of PLCs as a means of improving a teacher's instructional practice and student learning is clearly mentioned in Bhutan Education Blueprint and Bhutan Professional Standard for Teachers. Ministry of Education (2014) in Bhutan Education Blueprint recommends turning schools into learning communities where teachers consistently research and improve student learning outcomes (p. 30) and similarly the Ministry of Education (2019) identified Personal Growth and Professional Development as one of the standards for Bhutan Professional Standard for Teachers (BPST). Further, the standard elaborates into five focus areas and it clearly states that to be a distinguished teacher, the teacher must lead and support colleagues' engagement in professional networks at the school and national level to advance knowledge and practice (p. 49). However, it was observed that these reforms were not warmly received, and the implementers were either confused or met with resistance. To this, Dufour (2004) warns that initial enthusiasm in any reform movement gives way to confusion, followed by inevitable implementation problems, and finally abandonment of the reform. To avoid the 'this too shall pass mentality, it is important that 'educators reflect critically on the concept's merits' (Dufour, 2004).

Hord (2008) in addition explains that teaching quality is improved through continuous professional learning and further reiterates that today, the most promising context for continuous professional learning is the PLC. Further, PLCs are also intended to provide a forum for teachers to consider how to respond when pupils do not learn. Although much has been written describing the implementation and sustainability of PLCs in the western world, there is limited research or no research on PLCs in Bhutan.

The purpose of this study was to examine the experiences of school teachers in their involvement in a PLC in Bhutanese schools and its impact on improving teachers' effectiveness in raising student achievement based on Dufour's 3 big ideas of PLC (2004). According to him, the 3 Big Ideas of Professional Learning Communities are: (1) Ensuring that students learn, (2) A culture of collaboration, and (3) A focus on results. This study used a survey and a learning assessment tool to answer the research question.

Aims and objective

This action research aimed to:

1. Examine the experiences of school teachers in their involvement in PLC

2. Explore the impact of PLC in improving teachers' effectiveness in raising student achievement.

Research Question

Can a professional learning community help teachers improve their effectiveness to raise student achievement?

Situational Analysis

In Bhutan, a paradigm change has been gaining traction in terms of teacher PD during the last few years. The Ministry of Education mandates every teacher to receive or acquire a minimum of 80 hours of need-based PD in a year according to the Teacher Human Resource Policy (THRP) 2014 and In-service Education of Teachers (INSET) Master Plan. Further, the Education Blueprint 2014-2024 (Ministry of Education, 2014) recommended the creation of a PD Division in accordance with the THRP 2014 and INSET Master Plan to conduct relevant and continuous PD programs. Although the present demand of 80 hours requirement for PD is challenging to meet. Many schools chose to implement it. Maxwell and Laird (2000) rightly state that everyone's attention should be drawn to teachers since it is on them that the pressure and support for change must be put. Thus, the formation of PLC in schools is the most straightforward approach to assist this paradigm shift.

I have been teaching for the last thirteen years and throughout the process of teaching, it was observed that teachers at school work and plan separately and are often passive participants in PD activities and staff meetings. For example, during PD activities, teachers have observed grading papers, checking and responding to e-mails, and discussing students rather than actively participating in the PD activities. Further, teachers at Dechentsentsemo central school have expressed difficulty planning differentiated instruction to meet the various needs of their diverse learners due to the lack of common planning time. Therefore, it was necessary to explore different methods to engage them in collaborative planning. Professional development that is not connected to teachers' needs and not structured appropriately does not necessarily support excellent teaching practices (Caskey & Carpenter, 2012). Keeping in mind that PLC is a form of PD in which educators are committed to working in collaboration to improve student achievement (DuFour et al. 2008), I have realized that establishing vibrant PLCs in school will allow the teachers to come together to improve their practice for the benefit of their students. As a result, I began the establishment and writing of a school policy for PLC in Dechentsemo central school and volunteered to coordinate relevant PD programs.

Maxwell (2003) defines a critical friend as one who can ask awkward and/or difficult questions and yet do so in such a way as to maintain a close working

relationship. The action research process involves a reflection, discussion, reconstruction, and intervention, therefore a critical friend is selected not to suffer from 'short-sightedness derived from being too close to the action' (Maxwell, 2003). The critical friend for this AR is an immediate supervisor who has an experience in advanced research skills and technical application of the methodological process. These experiences helped the primary researcher in offering challenging questions and provided data to be examined through another lens.

Research Context

Dechentsemo Central School is located above the Thimphu-Wangdiphodrang national highway at Thinleygang under Punakha District. It is a 1 hour and 30 minutes drive from the capital city Thimphu. It conceived the name Dechentsemo Central School in the year 2015 after establishing it as a central School. However, due to the alteration of central school policy, the primary section is segregated as a separate independent school and relocated to its former location below the road. Presently Dechentsemo central school caters to education to students ranging from classes 7 to 12.

Literature review

Theoretical perspective and conceptual framework

Various conceptual frameworks of PLC have been created around the year 1990 until 2004. Various literature suggests that there are three PLC conceptual frameworks of PLC, which are created by Senge in 1990, Hord in 1997a and DuFour in 2004 (Hassan et al., 2018). It is acknowledged that there are differences in terms of the use of dimensions and elements but basically, they have the same goal which is to create a learning organization and to encourage its members to keep learning to enhance the students' learning.

The conceptual framework for the study is derived from the work of Richard Dufour in defining key characteristics of PLCs. DuFour (2004) offered three "big ideas" as a core principle necessary for the successful implementation of PLCs (p. 8-11). First, Dufour explained the 'shift from a focus on teaching to focus on learning has a profound implication on professional learning, this is not just exposing them to the teaching, but making sure they are mastering the lessons taught. He further recommended a need to create "a culture of collaboration." This does not just happen; structures must be in place and "educators must work together to achieve their collective purpose of learning for all". Finally, he stressed "focus on results", since, student achievement is the goal of instruction.

Professional Learning Community (PLC)

The idea of a professional learning community has received broad support from the Ministry of Education. It is stated in the Bhutan Education Blueprint and Bhutan

Professional Standard for Teachers (BPST) as an ascendant to educational policy and practice for Bhutanese teachers. According to DuFour (2016), PLC is a good continuous practice in an organization. Boyer (2010) states that PLC is a process of bringing good practices in the classroom to the community and also bringing the community to school to support teachers' teaching and students' learning activities.

A PLC consists of a group of professionals sharing common goals and purposes, constantly gaining new knowledge through interaction with one another, and aiming to improve practices (Leithwood et al, 2004). It is a cycle where learning is normally embedded into the daily work in which teachers gain new knowledge, try it out in practice, and from the experience, gain yet more knowledge. They do this in interaction with each other, by working collaboratively. Further, students' growth and accomplishment are not the only benefits of PLCs. PLCs can also aid in the development and maintenance of positive school culture (Admiraal et al., 2019).

PLCs and teacher effectiveness

The importance of PLCs as a means of improving a teacher's instructional practice and student learning is well documented in the literature (DuFour et al., 2008). When teachers participate in PLCs, they accept the responsibility for students learning as well as their own professional growth. Although many teachers achieve success via their participation in PLCs, research suggests that PLCs must be effective in order to enhance the professional growth and student achievement (DuFour et al., 2008). PLCs have the potential to help teachers grow professionally and improve their teaching practices if teachers are actively engaged during PLCs (Johnson, 2016) and additionally these PLCs should be meaningfully and appropriately designed. The creation of a PLC means an end to teacher isolation, providing teachers autonomy over PD needs, and promoting shared PD learning environments (Hellner, 2008). Teachers learn when PD in the school is structured to help them learn from one another (DuFour, 2011) and can yield positive teaching practice (Linda et al., 2012). Johnson (2016) identified that the key to PLCs improving learning for students and teachers is the capacity of schools to implement learning communities with fidelity and the ability to continuously improve and grow. The central idea is that the concept of a professional learning community rests on the premise of improving student learning by improving teaching practice.

PLC and Student Achievement

Hord (2009) identified the areas where students did not perform successfully. Through the PLC she reiterates staff members prioritize these student learning needs, and define one area to which they give immediate attention. According to DuFour and Reeves (2016), the most effective interventions are those that use systematic, intensive, focused, and immediate individual or small-group training rather than repeating earlier ineffective instruction. These interventions not only boost student achievement but also boost teacher morale. Hattie (2010) concluded that the one effective way to

improve education was to organize teachers into collaborative teams that work cooperatively to track, gather evidence of learning on an ongoing basis, and then analyze those results to learn which instructional strategies would be most effective. Further, it is believed that when school begins to function as a PLC, teachers become aware of the incongruity between their commitment to ensuring learning for all students and their lack of a coordinated strategy to respond when students do not learn (Dufour, 2004, p. 8).

Research Design and Instruments

This action research was quantitative in nature. In order to identify teachers' effectiveness regarding the key dimensions which constitute a PLC, a **survey questionnaire** was designed based on PLC's 6 Essential Characteristics adapted from Learning by Doing (DuFour et al., 2006).

To measure the effectiveness of PLC in student achievement, an instructional tool was used. A learning assessment tool to measure student improvement was incorporated during the Spring unit test and Autumn unit test. The differences between the real outcomes of the Spring unit test (which was conducted in April) and the Autumn unit test (conducted in August) indicate the impact of PLC in improving student achievement. The action research question links the reconnaissance to the action research spiral of planning, action, observing, and reflecting (Kemmis & McTaggart 1988, as cited in Maxwell, 2003).

Participants

Respondents were selected using the purposive sampling method. In this method, the participants were chosen deliberately according to the pre-determined purpose (Maxwell, 2003). The sample was stratified based on their involvement in PLC. The sample for the choice was 22 teachers teaching at Dechentsemo Central School who taught grades from seven to 10. The research participants were teachers with diverse cultural backgrounds and individuals possessing mixed qualifications. It also included the Principal, who has a master's degree in leadership. The participants for the study were divided into five departments headed by Head of Department (HoD) which consisted of English, Dzongkha (National Language), Mathematics, Humanities, and Science teachers who met every week. The PLCs were from the same school and met once a week. The PLC teams participating in the study were required to have between three and four teachers providing instruction in the seventh to eleventh grade. The HoDs as a leader of PLCs were required to maintain meeting agendas or action records for each meeting.

To define the level of effectiveness, students' performance in the spring and autumn unit test was used to predict the schools' academic achievement. The sample population (students) of Dechentsemo school included 276 students representing all

four classes (n=59 in class VII, n=92 in class VIII, n=72 in class IX, and n=53 in class X) who completed the spring and autumn unit tests. The value of these test scores represents the level of effectiveness.

Intervention Strategy

The intervention strategy was designed based on Dufour's 3 Big ideas of PLC (as shown in Figure 1) in their respective PLCs (in the case of Dechentsemo central school, it's the five departments). These dimensions were important areas we had focused on as they collaboratively worked to increase teachers and student learning. Additionally, the 3 Big ideas were the area of focus while drafting the school PLC policy (this policy was used as a guidebook for HODs to conduct PLC in their respective groups).

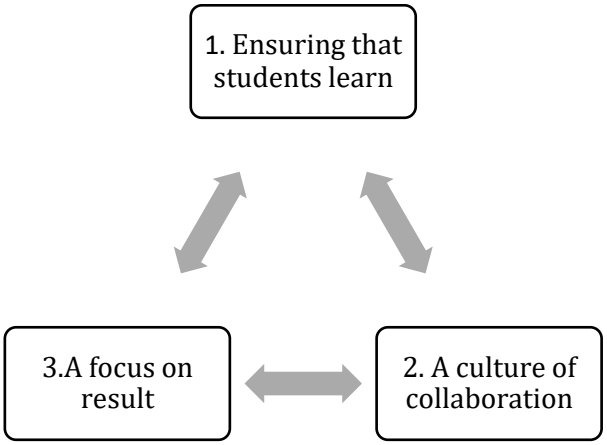

Figure 1. Big ideas of PLC according to Dufour (2004)

As the PLC progressed, the following three questions (DuFour, 2004) guided the drive, direction, and next steps of intervention in the learning community:

1. What is it that we want each student to learn?
2. How will we know when each student has accomplished learning?
3. What is the response when students encounter difficulty learning?

These guiding questions encouraged to focus on the PLC's goal, continuous reflection, and dedication to the success of student learning.

The researcher led the following activities during the intervention period of 5 months.

1. School-based in-service program (SBIP) on PLC
2. Formation of PLC at the beginning of the year
3. Weekly meetings within their departments lead by Head of Departments (HODs)- the minutes of the meeting were recorded and the HODs planned the agenda in consultation with the principal and PD coordinator (some of the planned agendas included learning a variety of teaching pedagogies, how to construct competency-based questions, and how to establish effective communications, etc.)

4. Student results analysis to 'judge the effectiveness' (Dufour, 2004)

Teachers identified students who were struggling and required intervention until they could demonstrate competency during the intervention phase. The teachers in their department have devised a strategy to provide students with extra time and support for learning outside of class hours. A teacher with a certain skill, on the other hand, shared lesson plans, had colleagues observe their teaching, and discuss it with a colleague.

Data collection tools and Procedures

Two quantitative methodologies were used to collect the data. The first method was used to evaluate teachers' ability to improve student achievement. Teachers were asked to complete an online survey questionnaire using a four-point Likert scale. A Likert scale, according to Cohen et al., (2007), provides a range of responses to a given question or statement, and the categories must be discrete. This method's data revealed the teachers' effectiveness and how it related to increased student accomplishment. The pre-test/post-test design was the second. During the Spring unit test and the Autumn unit exam, a learning assessment tool was used to evaluate students' performance.

Results and Discussions

Collaboration was crucial to the success of this research, as well as the intervention procedure. Teachers and HODs were specifically sought out for their experience in both the formulation of this Action Research and the data gathering procedure. The survey questionnaires were administered using Google Forms after the intervention period of 5 months. Teachers were briefed on the purpose of conducting this research and were given the choice of not participating if they chose to do so.

To address teachers' effectiveness in raising student achievement, An online survey questionnaire using a 4-point Likert scale was administered to 22 teacher respondents who taught grades from seven to 10 with diverse cultural backgrounds and individuals possessing mixed qualifications. The data were analyzed using descriptive statistics to summarize the data collected in simple numerical form using a frequency table. For the second method of pre-test/post-test design, a learning assessment tool was administered to student respondents (n=276) of Dechentsemo central school. The pretest/posttest data was analyzed to measure their performance before and after the intervention by application of PLCs. Students' academic data (test results) was analyzed using mean and analysis to determine whether the PLC of teachers has any impact on students and whether it can be recommended for further improving academic achievement and transforming school culture. The details of the findings on the experiences of school teachers in their involvement in a PLC and its impact on improving teachers' effectiveness in raising student achievement are discussed below.

1. Experiential learning of teachers involved in PLC

Table 1 presents the data directly related to the shared mission, vision, values, and goals. The development of a school vision, mission, and goals which is an important part of the transition process takes time. The process is founded on the shared values and beliefs of everybody. From Table 1, it is clear that PLC team initiatives tied to the year's professional development emphasize improving student achievement by increasing critical thinking, has a SMART goal to mark their progress, and the 45% of the teachers in 'strongly agreed' and 55% of the teachers in 'agreed'. Participants are encouraged to participate in the process of building a clear vision that serves as a guidepost (DuFour et al.,, 2006) in making decisions regarding issues they confront in schools and how their collaboration must contribute to their student's learning in order to achieve this common purpose.

Table 1: Characteristics of effective PLC (Shared mission, vision, values, goals)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Teachers in a PLC work together interdependently in collaborative teams	45%	55%	0%	0%
2. PLC team initiatives tied to the year's professional development emphasize improving student achievement by increasing critical thinking.	55%	45%	0%	0%
3. PLC team has specific, measurable, attainable, results-oriented, and time-bound (SMART) goals to mark their progress.	23%	77%	0%	0%

The underlying rationale for building a vision, according to the findings, is to study how the school PLC teams focused on student learning. Although 23% of the teachers disagreed with colleagues visiting each other's classroom to observe quality teaching and to learn a new instructional strategy (refer to Table 2), 100% (41% strongly agreed and 59% agreed) are optimistic to share their skills. Nine percent (5% disagreed and 4% strongly disagreed) of the teachers indicated meeting every week in teams for collaborative learning and problem solving doesn't happen in their PLC team. Hence, Pedder argued in 2011 (as cited in Admiraal et al., 2019) that if schools want to provide the conditions that optimize and sustain teacher learning, they must build the processes and practices of learning organizations. Therefore, PLC teams must build conditions that optimize and sustain teacher learning and visit colleague's classroom, and provide feedback (Dufour, 2014).

Table 2: *Characteristics of effective PLC (Collaborative teams focused on learning)*

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Teachers meet every week in teams for collaborative learning and problem solving	64%	27%	5%	4%
2. A teacher visits a colleague's classroom to observe quality teaching in order to learn a new instructional strategy.	18%	59%	23%	0%
3. Teachers are proud to share their skills and are open to learning from one another.	41%	59%	0%	0%

DuFour and Reeves (2016) state that collaboration teams of teachers in a true PLC use evidence of student learning as the foundation for collective inquiry into instructional practice. The data from Table 3 suggest that all the teachers in a PLC team believed that collective inquiry was an essential part of each team's decision-making process and also to relentlessly question the status quo, seek new methods of teaching and learning, and test the new methods and reflect on the results.

Table 3 *Characteristics of effective PLC (Collective inquiry)*

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Teams in a PLC relentlessly question the status quo, seek new methods of teaching and learning, test the new methods and reflect on the results.	23%	73%	5%	0%
2. Building shared knowledge of both current reality and best practices is an essential part of each team's decision-making process.	41%	59%	0%	0%
3. Teachers share repertoire, experiences, or solutions to identified challenges/problems.	27%	73%	0%	0%

The following questionnaire focused on the characteristics of PLC Action-orientation and experimentation in the following strands (refer to Table 4). Table 4 indicated that almost all the teachers understand the value of participation and experience in learning and testing new concepts. They gain knowledge through doing. Fullan precisely said that the individual provides the most effective way for achieving systemic change, and also in 1994, he reiterated that individuals transform systems, working independently and collaboratively (as cited in Hord, 1997). These individual teachers in a PLC team can make a positive impact on the working modalities of the PLC.

Table 4: *Characteristics of effective PLC (Action-orientation and experimentation)*

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Members of a PLC constantly turn their learning and insights into action	36%	64%	0%	0%
2. Each member recognizes the importance of engagement and experience in learning and in testing new ideas.	41%	59%	0%	0%
3. Members of a PLC understand that the most powerful learning always occurs in the context of taking action. They learn by doing.	32%	68%	0%	0%

School improvement is ingrained in the ethos of every school on the planet. The need of gathering data as a foundation for decision-making, problem-solving, and inquiry is emphasized in school reform. Providing time and other resources to facilitate learning (Admiraal et al., 2019) means that schools create and encourage chances for continual learning (improvement) for all staff. During the intervention process, I scheduled a particular time for each PLC team to facilitate learning. Almost 100% agreed on a commitment to continuous improvement (refer to Table 5).

Table 5: *Characteristics of effective PLC (Commitment to Continuous improvement)*

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Members of a PLC constantly seek better ways to achieve mutual goals and accomplish their fundamental purpose of learning for all.	23%	77%	0%	0%
2. All teams engage in a continuous improvement cycle of Plan, Implementing, Collect Information and Analyzing.	32%	64%	5%	0%
3. Inherent to a PLC is a persistent disquiet with the status quo and a constant search for a better way to achieve goals and accomplish the purpose of the school.	23%	77%	0%	0%

A PLC strategy is being adopted in Dechentsemo CS as a core PD program. The practice focuses on student data and fosters a collaborative atmosphere (Dufour, 2016) to improve student learning. The findings in Table 6 summarize result orientation (one of the characteristics of effective PLC). Assessments were designed to aid in the tracking of

the competency achievement of the students. PLC teams constructed expected learning outcomes based on the standards, which they then communicated with students. At the start and end of each PLC session, these statements were examined. The data shows that 96% of the teachers were keen on evidence and this evidence is the standard tests and data that have been administered to inform and improve their practice. However, 18% of the teachers found that the programs, policies, and practices need to be assessed on the basis of their impact on student learning (refer to Table 6).

Table 6: *Characteristics of effective PLC (Results orientation)*

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1. PLCs in our school measure their effectiveness based on results rather than intentions.	18%	68%	14%	0%
2. All programs, policies, and practices are continually assessed based on their impact on student learning.	14%	68%	18%	0%
3. They are keen for evidence of student learning and use that evidence to inform and improve their practice.	14%	82%	4%	0%

Impact of PLC in raising student achievement through administering learning assessment tool

The participants were from classes VII to X and were directly or indirectly impacted by PLC in the academic year 2021 when it was implemented among teachers in their respective departments. Therefore, students (who had exposure to at least a minimum of 5 months of PLC which was introduced to their teachers) data were used in this study. Thus, the learning assessment tool was related to the exposure of their teachers to the intervention strategies and learning experiences in the PLC. The data collected would allow me to learn more about the effects of PLC on teachers' ability to raise student achievement. The assessment was conducted before and after the formation of PLC in Dechentsemo CS. The spring unit test was held in April 2021 as a pretest, and the Autumn unit test in September 2021 as post-test, leaving a 5-month interval during which their subject teachers were exposed to various PLC strategies aimed at student learning.

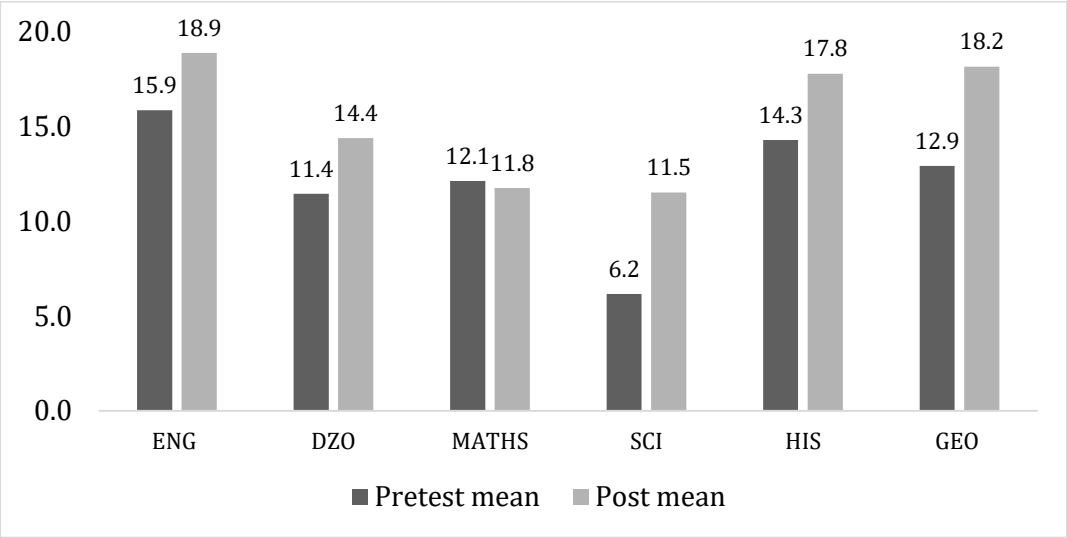

Figure 2. Performance of class VII students during spring unit test and autumn unit test

Figure 2 summarizes the pre-test and post-test mean marks for each subject assessed during the spring unit test and autumn unit test. The spring unit test and the autumn unit test were both attended by fifty-nine students of class VII. Figure 2 depicts the results of both tests, and there was a substantial difference between the two scores in all other subjects except for mathematics.

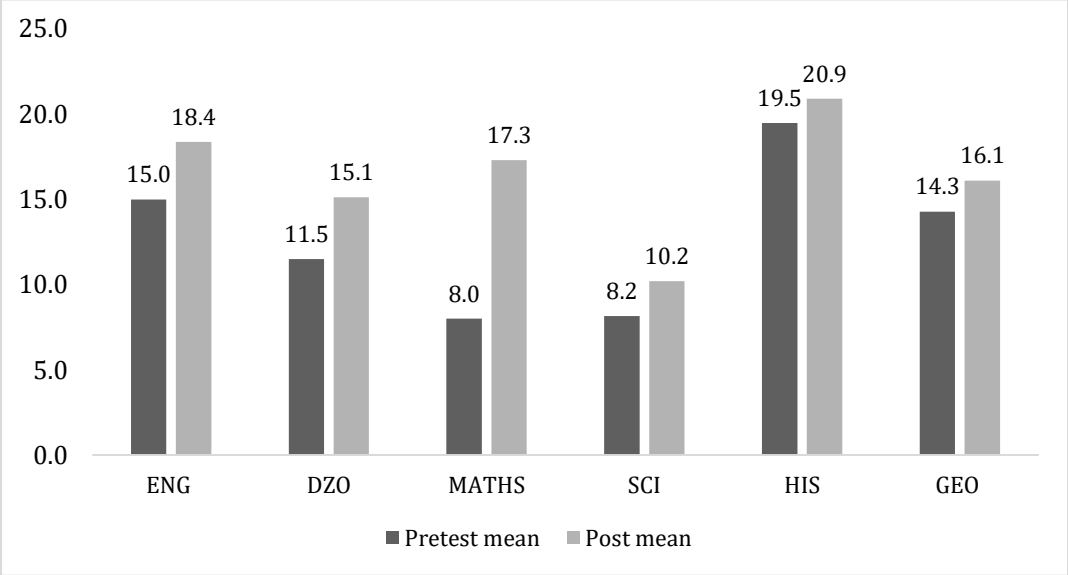

Figure 3. Performance of class VIII students during spring unit test and autumn unit test

Ninety-two students from class VIII were assessed using the instrument. This grade level's findings are similar to those of students in class VII. Figure 3 illustrates that student performance at the post-test is better than student performance at the pre-

test in most subjects, demonstrating that they performed better with the knowledge received from their teachers after being exposed to PLC.

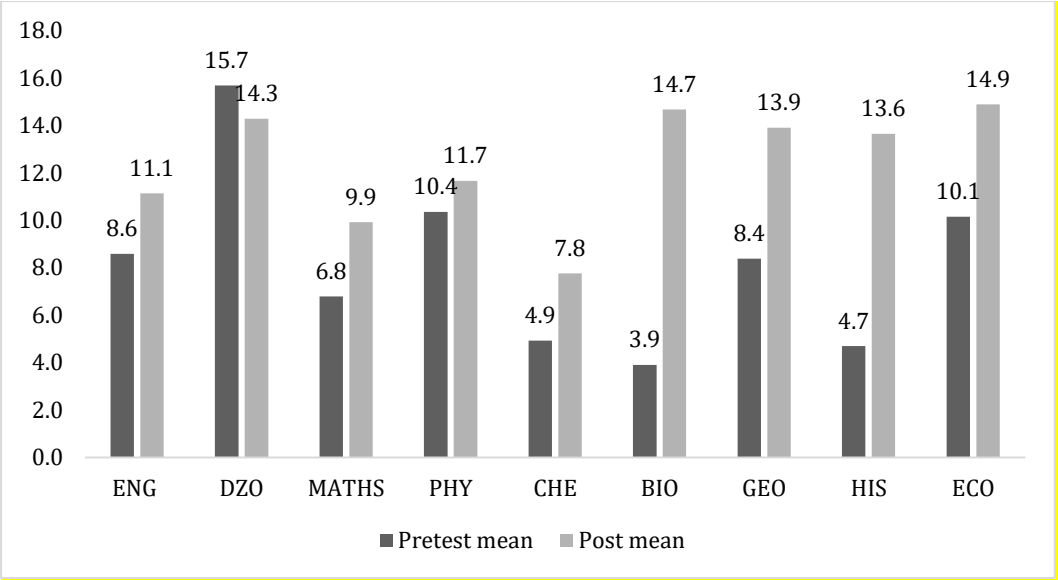

Figure 4. Performance of class IX students during spring unit test and autumn unit test

Figure 4 shows that students' pre-test performance is better than their post-test performance in the Dzongkha (National Language) subject. Although the pre-test means was 15.7 and the post-test mean was 14.3, a difference of -1.4 was attributes to students who answered questions correctly on the pre-test but incorrectly on the post-test. Several subjects, on the other hand, have the opposite and desired impact.

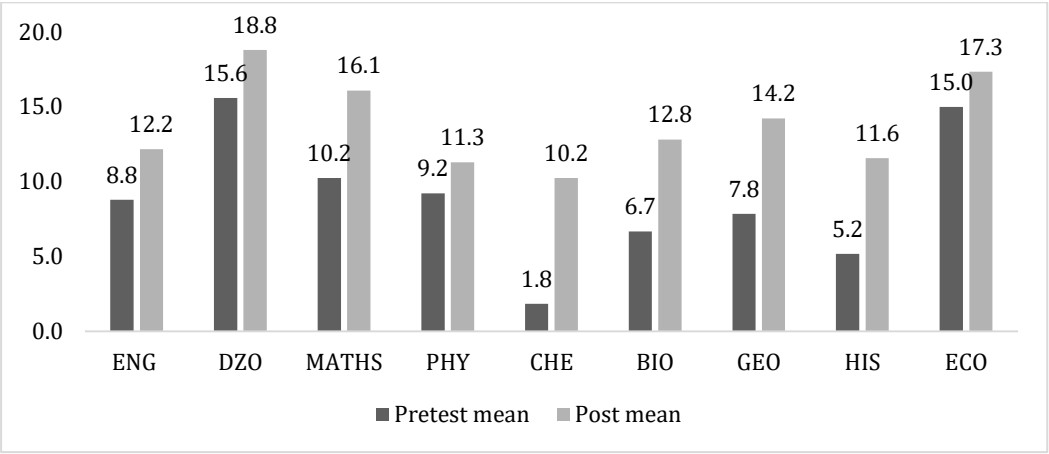

Figure 5. Performance of class X students during spring unit test and autumn unit test

After being given intervention in respective PLC every week to the teachers, students were given a posttest. In class X, fifty-three students participated in the posttest. When examining the indirect impacts of PLC on student results, the majority of students' marks had improved since the pretest (refer to Figure 5). There is a drastic increase in student performance as indicated by the mean differences in test scores.

According to Figure 2,3,4,5, the sample assessment record of the research included students from classes VII, VIII, IX, and X. I have coordinated and scheduled the test before and after the interventions were implemented in each teacher's PLC. The findings from this study confirm the earlier findings of Széll (2013) that student achievement is positively influenced by teachers' professional networks and collaboration among teachers.

Recommendations

Despite recent attempts in the literature to frame PLCs, a more concise and exploratory approach to PLC formation in schools is still needed. Many people still think of PLC and PD programs are meant only for teachers and HODs. PLCs should involve school leaders and should be of a collective inquiry, according to key themes in this study. Furthermore, to shape expectations, and build a shared vision and mission, a PLC policy must be created at the school level to improve learning outcomes. The findings also motivate policymakers and school administrators to foster a more collaborative environment to improve school effectiveness. Additionally, school leaders and teachers should strive for collaborative PLC.

Conclusion

Professional learning communities, according to DuFour et al. (2006), are the most effective technique for bringing enduring and significant change to schools today. The findings of the study were consistent with Richard Dufour's conceptual framework for defining key characteristics of professional learning communities. The three "big ideas" should be the core principle for successful PLC implementation according to DuFour (2004), and student achievement is the goal of instruction. To 'ensure students learn' teachers also attended professional development at the school level to learn a variety of teaching pedagogies, how to construct competency-based questions, and how to establish effective communications in addition to performing PLC at the department level. Thus, students' cognitive and reasoning abilities are developed significantly more successfully when teachers take a constructivist approach rather than a knowledge-transfer approach (Kim, 2005, as cited in Széll, 2013), a paradigm shift from a focus on teaching to a focus on learning. Despite the fact that PLC originated in the western world, the goal of this Action Research was to construct professional learning communities, promote teachers' professionalism and well-being, and have a beneficial

impact on student learning. We report in this research on the long-term impact of PLC on improving academic achievement and transforming school culture.

Furthermore, in order to invigorate "a culture of collaboration" and "a focus on results," a weekly meeting of the PLC has been found to be useful. It is crucial that the PLC team identify students based on their scores and refer the failing students to the school's remedial session until they can demonstrate competency. DuFour (2015) reiterates that this intervention should be prompt, directive, and diagnostic, and it should follow immediately after the assessment.

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