

The relationship between student achievement & teachers' self-motivation for professional development

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Abstract

The Sri Lankan education system has steadily improved in recent years due to several proposals and reforms, but there remain many significant issues that need to be addressed. Numerous studies in this field have shown that an important challenge is the low quality of output in comparison to the inputs provided by the educational system. Motivation for professional development benefits everyone involved and extends beyond the job function, duties, and obligations that a person performs. Therefore, there is a current requirement to

analyze how the experiences of the numerous professional development programs participated by teachers could be effectively utilized. Effective use of professional development experiences has been identified in the research literature under three main areas. In this study, five principals were chosen using the stratified random selection approach, while 200 teachers and 75 pupils from Type 2, 1AB, and 1C schools in Gampaha District, Minuwangoda Education Zone, Sri Lanka, were chosen using the multistage random sample method. Also, the researcher has been careful to maintain this research, research ethics to be safe. Pilot tests were conducted to validate the use of a structured questionnaire approach with 5-Likert and interview techniques as the primary sources of data gathering. Thematic analysis was used to examine the qualitative data, while descriptive statistical methods were used to study the quantitative data. Female teachers represented the majority of responders (84.9%), and 88 percent of them had either gained professional experience before or after entering the teaching field.

Information provided by teachers, principals, and students regarding teachers' effective use of professional development experiences did not identify any effective practice. However, it was revealed that there are various reasons for this. Thus, it is necessary to set up a system through which the government can intervene and offer ongoing professional development for teachers.

Keywords: student achievement, self-motivation, professional development, professional growth

Introduction

At present, both government and non-government organizations supporting teacher development in Sri Lanka offer a plethora of both long-term and short-term opportunities for growth. Among them are the government institutions that are renowned for their activities: government universities, the National Institute of Education, Ministry of Education development programs, teacher training center programs, the Open University, and foreign

universities that have started teacher development initiatives as non-governmental organizations. In addition, teachers can obtain the required professional development opportunities at the school level with the help of the school-based management system (Sethunga et al., 2016). However, Littel (2000) has noted that insufficient rules and inadequate training in the use of teacher manuals, textbooks, and workbooks have rendered instruction ineffective for teachers. It has also been emphasized that there are additional factors, including inadequate supervisory procedures, inadequate training for teachers and teacher training institutions, and inadequate evaluation of teacher preparation. Furthermore, the retrospective study on the need for professional development among Sri Lankan public school teachers conducted by Kasturi Arachchi (2014) reveals that most schools have not used the internal monitoring mechanism to identify the training needs of their teachers. It has also been noted that the training needs of teachers have not been adequately identified by even the institutions

that train teachers in the future. In addition, Wanasinghe (2001) declares that teacher training programs merely provide certificate-granting training rather than hands-on experience, and a number of criticisms suggest that teacher training programs serve as exam factories and have no bearing on the actual operations of schools. It is also made clear. The insufficient standards now in place, the inconsistent delivery of teacher education programs in Sri Lanka, the dearth of facilities, the inadequate training of teacher educators, the recruitment flaws, the traditional and non-practical curricula, teachers may have less access to these programs for many reasons, such as non-compliance with current regulations (Sethunga et al., 2016, 2016). Furthermore, supporting this view is the Asian Development Bank (2017), which states that there hasn't been any modification to the curricula for teacher education in Bangladesh, Nepal, or Sri Lanka over the previous five years. These research outcomes, however, demonstrate that there has been

no effective system to raise the merit growth of Sri Lankan teachers for a number of years.

The standard of student learning is a good indicator of how well teachers have continued their professional development to expand their knowledge and perspectives (Cambridge International Examination, 2014). Hence, it is hard to anticipate a notable improvement in the performance of the students without the teacher's development. The Department of Research and Development (2012) states that teachers are ultimately responsible for upholding the professionalism of their profession, and that in order to achieve the highest standards of success in their professional endeavors, educators must prioritize professional development. As an addition to the circular document 2012/37, section 5.6(d) of the teaching profession states that teachers should work toward completing their required credentials because failing to do so will reflect poorly on the profession. However, the outcomes of a study conducted by the National Education Commission (2014) indicate that by 2012, 20% of

Sri Lanka's government school teachers were still employed without the required professional credentials because there is no set policy for hiring new teachers in the country. It is also mentioned that the fact that a professional degree is not required to remain in the teaching profession is one reason why this situation has occurred. Students with varied degrees of learning difficulties are present in Sri Lankan classrooms. The national level is now experiencing difficulties with this (Jayawardena, 2013, p. 13). According to the current statistics of the examination department, the disparity in the education received by students is evident in almost all the examinations conducted at the national level. Exam pass and exam failure rates differ significantly from one another. The passing rate for candidates who took the scholarship exam in 2019 was 14.4%. 66.1% of the sample falls between 100 and 50 points (Abeysekara, 2019, p. 15). Additionally, the general exam has a 65.8% pass rate for all topics. As a result, 34.1% of students failed every course. The proportion of those failing even one topic is 2.29%.

It is 7007 numerically. It can be considered here how serious the situation is caused by the birth of such a number every year. From 2012 to 2019, this figure shows a slowdown in change. (Department of Education, 2019, p.3). The teacher is now the one with the most direct ability to affect the development of this issue at the national level. This is a sensitive endeavor that requires innovative educational preparation, particularly for students born after the year 2000. It is not uncommon to see that, in addition to what they learn in the classroom, students from this generation (Generation Z and Alpha born) occasionally get a plethora of knowledge through new technology. When a teacher fails to give a pupil a sufficient education in such a setting, doubts have been raised about the teacher's professionalism by the school's internal and external communities.

Literature review

Considering efficient use of opportunities for professional growth

Conducting oneself with regard to pupils

According to the Department of Research Development (2013), the teacher performs a crucial role in helping students improve their social and personal skills. Students are directly impacted by teacher development (Holly, 2005). However, professional development programs only started talking about students after the 1990s (Thompson, 2007). It is now feasible to determine this because of the acceptable degree of study conducted in this area and the extensive discussion about how to behave with pupils over time. Taylor (2010) points out that although teachers are given professional development experiences, there are still many areas that need to be developed regarding students. Data-driven action is necessary to identify student learning, encourage student change, foster cooperation, provide knowledge that aligns with student understanding, and interact with students. Gunasekara and Kappetigoda (2017) support this notion by pointing out that additional training opportunities should be made available in Sri Lanka to learn more about pupils. They also note that in the

Sri Lankan educational system, the ability of teachers to engage with students is diminishing. A study conducted in Bangladesh, Nepal, and Sri Lanka by the Asian Development Bank (2017) found that the lack of subject knowledge required of teachers in these countries has resulted in a decline in student achievement. It has been demonstrated that these factors have contributed to the drop in student achievement, particularly in the fields of mathematics, science, technology, and engineering.

The Teacher Performance Assessment (MET)-based teaching scores provided by teachers participating in professional development have been found to positively correlate with the tripod survey report results, which are used to obtain student recommendations regarding the teacher's instruction (Danielson, 2014). According to the MET project by Bill & Melinda Gates Foundation (2012), teachers handling students was the most frequently mentioned response from students in a survey for a seven-way tripod study in the United States. Measures taken to control kids received the least amount of feedback.

Additionally, Goe et al. (2012) found that teachers are less dedicated to how they connect with students, assess them, and document their development. It implies that it is necessary to discuss the various methods in which teachers might interact with their students. It should be noted that educators should strive to build high-quality students through problem-based learning, emphasizing learning activities free from intimidation or punishment, student motivation, soft skills, and character development.

Utilizing classroom planning

According to a number of academics, classroom planning is crucial for fostering an engaging and enjoyable learning environment as well as building student self-discipline and mutual understanding between the teacher and the students regarding classroom engagement. According to research by Oliver & Reschly (2007), both new and seasoned American educators lack the professional abilities necessary to control student behavior and sustain

classroom discipline. They also note that teachers' professional development experiences in classroom planning, which were provided to them during the 2001–2002 period in compliance with the No Child Left Behind (NCLB) Act, are not being utilized effectively in classrooms. There are numerous ways that teachers can use it, even if they receive training, according to a study by Wilkinson et al. (2020). It has been noted that ongoing professional growth is necessary for that. However, according to Freeman et al. (2014), classroom planning can be covered by 50% of teachers' expertise, and they do not require separate training in this area. Based on the re-survey results of 40 studies pertaining to classroom planning and teacher performance, Wilkinson et al. (2020) present an alternative viewpoint to this one, stating that the professional development approach of roughly 20 research reports successfully improves teachers' performance. They also note that seven study papers demonstrate that professional development activities are not implemented in the classroom, and eight research reports demonstrate a

moderate level of success in teacher activities. They mention the teacher's acknowledged shortcomings and private circumstances as the causes, pointing out that improper classroom planning has resulted from these factors.

It has been demonstrated that teachers can use the Multi-Tiered System of Supports (MTSS) model to detect kids who exhibit violent conduct in the classroom and to stop negative behavior patterns in classroom planning (Grasley-Boy et al.,2019). The majority of teachers who have been guided toward professional development using the self-assessment recipe approach are self-assured in their capacity to manage student conduct. This finding was confirmed by Littel et al. (2008), who found that classroom planning training from professional development helped 84% of Melbourne teachers correctly identify children and manage their conduct. However, additional research revealed that, despite the teachers' focus on professional growth, classroom planning is successfully maintained in accordance with the teachers' current personalities, skills,

dedication, and activities. This makes it easy to determine that when designing teacher professional development programs, opportunities for classroom planning training should be offered to teachers. It is obvious that abilities like grouping, leadership, division of work, classroom planning, fostering creativity, and gaining support need to be developed.

Technology use and teaching methods

Every teaching and learning process is different in the ways that challenging and novel academic connections are formed and assimilated. The study literature indicates that the triad of a student's cognitive, affective, and psychomotor performance is influenced by both the teacher's teaching style and the technology they employ (Salifu & Agbenyega, 2013; OECD, 2010). It is also possible to determine if professional development has led to a change in the way teachers teach. Hismanoglua (2010) discovered that collaborative exchange teacher pedagogy, peer training group formation, and work-based research are less significant among the

pedagogies employed by English teachers in Cyprus. The primary cause of this is the lack of collaboration among teachers. Moreover, Oreck (2004) asserts that innovative teaching strategies, including the use of music, musical activities, visual art activities, dance activities, video cassettes, the highest usage of visual media, and the lowest usage of dance-related activities, can be employed successfully. is provided. Five years after completing a teacher development program about the use of technology in Alabaman schools, the successful use of technology has been examined, according to Wright & Wilson (2011), who claim that technology improves teacher teaching. As a result, it is noted that although the teachers who took part in the program are capable of using technology, issues with its use have arisen because of a general lack of physical factors (e.g., difficulty finding software, lack of laboratory facilities, inability to find equipment). As a result, it has been demonstrated that they are more likely to employ educational tools like lecture videos and assignment reviews. Using the study components

associated with Hooper and Reiber's five approaches (adaptation, usage, integration, renewal, and assessment), they have also carried out more research in this area. The results show that teachers are less worried about technology use, have preconceived notions about it, and only use it when they want to or don't want to. According to Guggemos (2013), who offers more details on this, both teachers and students should receive the required training if teaching is conducted using technology. Furthermore, his research on Switzerland indicates that there are variations in the way people use technology based on factors like age, gender, and the subject being taught. However, the Asian Development Bank (2017) noted that the absence of adequate supervision for Sri Lankan teachers, their workload, and the disregard for schools in distant locations are the causes of this. Because salary increases are contingent on timing rather than performance, teachers are not effectively utilizing professional development opportunities. As a result, it is evident that educators need to be more

tech-savvy and that making the most of technology during the teaching process, starting with lesson planning, is essential.

Research methodology

Design of the study

For the research to reveal the precise reality that was anticipated, an effective research design must be employed. The main reason of this is the interdependence of the three primary research tasks - sampling, data collection, and data processing (Craswell et al., 2004). For instance, a researcher should base his design choice on the environment and goals of his study (Hanson, 2005). In consideration of the mixed method's applicability as a technique that can be effectively employed for this research, the study has been initiated using the simultaneous mixed layout approach. Development, responses, responsibility levels, knowledge, and topic accomplishments are the subjects of several research, and it has been demonstrated that a

thorough examination of each person's internal circumstances and abilities may be carried out using a mixed methodology (Escarti, 2010). This has allowed for the maintenance of a robust research foundation and the compilation of the required data at both the macro and micro levels. Mashzai (2003) supports this further by pointing out that researchers use mixed methods as their research perspective and that doing so is very logical. Through this study, the simultaneous mixed method triangulation strategy has been applied most successfully. It is further supported by Almeida (2018), who states that the simultaneous triangle design makes it evident that both the quantitative (QUAN) and qualitative (QUAL) aspects are implemented concurrently in both steps of parallel data collection and analysis. As a result, it can be said that this is the best way to show teachers for who they are. The ability to successfully disclose the character of the teacher's functioning has then been made available by revealing the facts both statistically and qualitatively, with equal emphasis.

Sample

Gampaha District, a prominent district in Sri Lanka's Western Province, is the demographic area to which the research's findings are applied. Furthermore, the target population for the research was Minuwangoda, one of the heavily populated 13th divisional administrative divisions of the Gampaha district. The demographic used for the selection framework was chosen using data from the 2020 school census. In order to gather data for the study, a sample of Type 2 schools, 1AB, and 1C schools from the Minuwangoda and Mirigama divisions of the Minuwangoda education zone was selected. In the Minuwangoda and Mirigama division, there are a total of 44 1AB, 1C, and 2 type schools with 11 grades and 5 grades. Twenty schools were selected as two 1AB schools, four 1C schools, and fourteen Type 2 schools, respectively, using a multi-stage random sample technique. Additionally, 200 of the school's 200 teachers, 75 11th graders, 30 5th graders, and five principals from one unit at each level were

involved in this study. Additionally, 20 teachers and 20 students who had the same characteristics as the sample selected for the pilot test were selected using the stratified random selection approach.

Study Objective

- To examine how teachers effectively utilize professional development experiences gained through self-motivation.

Identifying effective ways for teachers to use the knowledge they have acquired via teacher development programs is the fourth purpose. Therefore, the study has been conducted in relation to how students are developed through professional development experiences, how classroom environments are tailored to the teaching and learning process, and how technology and modern teaching methods are used for effective learning. Here, information has been screened using four main measurement scales. It is anticipated that the frequency of teaching and learning strategies, the

frequency of experiences provided to students, the strategies employed to ensure the success of the teaching and learning process, and the application of classroom management techniques will all reveal the distinctions between teachers who prioritize professional development and those who do not. Holloway, 2006; Guskey, 2005; and the data made public by the MET Project, 2013 have served as the foundation for this.

Instruments of data collection and analysis

The researcher used the questionnaire technique to get direct information from the candidates. The selected sample was given the questionnaire via the online method. Every teacher in the group was given a unique email address to reply to. The questionnaire used a five-point Likert scale to measure respondents' level. The score ranges related to the scales from 1-5 were measured according to the model used by Limson (2016). Here, the use of teachers' experiences with skill development in the classroom has been mainly examined using four

measuring tools. To determine how frequently teaching and learning strategies based on Dale's cone of experience are used, a scale comprising eight relevant tests has been measured there. The 8-item measure for assessing how frequently learning experiences are offered and the 12-item measure for assessing the tactics employed to ensure the success of the teaching and learning process have both been utilized. The content employed here is a scale consisting of ten test items pertaining to classroom management in the teaching and learning process. Additionally, the study has recorded the pupils' answers about the teacher's concern for them and classroom management. Here, the tripod survey (2013), a reputable study, was used to identify the students' opinions regarding the teacher's instruction, and the appropriate research tool was modified for the Sri Lankan context. Scales used for research accuracy are used to assemble and reveal quantitative data related to acquiring reliable and valid data. Here, the reliability of the data from the teacher's pilot test and the main test was assessed using

Cronbach's alpha value. The validity of the research tools was further assessed using Bartlett's and the Kaiser-Meyer-Olkin (KMO) test. In light of this, it can be observed that the sample's homogeneity of variables is high, as indicated by the sample's .931 KMO test score and .000 Bartlett's test score on the relevant study tool used to gauge self-motivation (George & Mallery, 2016). Semi-structured interview schedules were utilized to gather data for this purpose from interviews with teachers, students, and principals. Two subject matter experts were consulted, and two teachers, a principal, and two students who matched the sample were employed in a pilot test to verify that the schedules were accurate. That has confirmed that the interview schedule is accurate. The quantitative data has been analyzed using statistical techniques. The two main methods of data analysis that have been used here are descriptive and parametric statistical techniques. Furthermore, thematic analysis was carried out using the recurring themes identified in the pertinent

sample's responses, whereas qualitative data analysis offered in-depth details on the sample's answers.

Analysis of data

The demographic profile

The teacher sample is shown in Table 1. As a result, 84.9% of the overall sample of teachers are Female and 15.1% are Male. Additionally, 50% of the teachers in the sample, or half of the group, have undergraduate or graduate degrees. Additionally, it is evident that there is a dearth of individuals with advanced degrees. On the other hand, it is evident that among those with degrees or higher education, 50% of those who have earned the General Certificate of Education and entered the teaching profession with additional credentials are equally represented. 88% of the teachers in the sample have some kind of professional qualification, according to the professional qualification. Additionally, 12% more people without professional qualifications are discovered in the field. Additionally, while all of the

sample's teachers have taken part in the mandatory professional training, only 22.9% of them voluntarily recognized their service requirements and accomplished it between 2017 and 2021. The fact that 77.1% of teachers do not refresh their professional training at least once every five years is thus reflected in this. Strategies used to make the teaching and learning process successful Nonetheless, according to the OECD (2010), teachers should be updated and regularly participate in teacher development programs.

Table 1. The demographic profile of the Teachers

Indicator	Response	Frequency	%
Gender	Female	163	84.9
	Male	29	15.1
	Total	192	100

Educational Qualification

ME. d/MA/Above	6	3.1
Bachelor of Education	12	6.3
Bachelor of Arts/ Having 1 st Degree	78	40.6
G.C.E.A/L or G.C.E.O/L	79	41.1
Other	17	8.9
Total	192	100

Professional Qualification

ME. d/MA/Above	6	3.1
Bachelor of Education	12	6.3
Post Graduate Dip.	49	25.5
Primary Trainee	23	12.0
Diploma in Education	79	41.1
untrained	23	12.0
Total	192	100

Participation in the modules is mandatory for teachers

Attended	192	100
Not attended	-	-
Total	192	100

Recognizing their service requirements and voluntarily pursuing professional growth between 2017 and 2021

Attended	44	22.9
Not attended	148	77.1
Attended more than one	0	0
Total	192	100

❖ Responses regarding the frequency with which teachers use teaching-learning methods and the experiences provided to students

Here, an analysis of the frequency of teachers using learning teaching methods and giving students experiences has been conducted based on the mean value of the difference between teachers who received and did not receive direction over five years (2017–2021) of professional development. An effective approach has been implemented if the media value is above 3.0 or around 2.8 (Giroux,

1960); if it is below 2.7, it is considered a level that needs further development.

Table 2. Teachers' use of teaching-learning methods and the experiences provided to students

<i>Strategies used to make the teaching and learning process successful</i>	<i>Attended</i>		<i>Not attended</i>	
	N	Mean	N	Mean
<i>Teaching everyone at once in general</i>	44	3.9318	148	4.2838
<i>Teaching tailored to each student</i>	44	3.4318	148	3.1622
<i>Educating via experimentation and inquiry</i>	44	3.9091	148	2.9122
<i>Teaching through questioning</i>	44	3.2045	148	2.7230
<i>Teaching through discussion</i>	44	3.3182	148	2.7905
<i>Teaching through group assignments</i>	44	3.3864	148	2.8378
<i>Teaching using worksheets and games</i>	44	3.2273	148	2.8446
<i>IQ or knowledge measure quiz</i>	44	3.9091	148	2.5473
<i>In relation to</i>	<i>Attended</i>		<i>Not attended</i>	

<i>teachers imparting experiences to students</i>	N	Mean	N	Mean
<i>Assignment on Direct Effective (Field Study)</i>	44	3.1591	148	2.9122
<i>Delivered through drama/role acting</i>	44	3.1818	148	2.7635
<i>Deliver by demonstration</i>	44	2.9773	148	2.7500
<i>Delivery via educational tours</i>	44	2.6591	148	2.1554
<i>Reference to exhibit design</i>	44	3.2273	148	2.6622
<i>By creating and presenting television or computer programs</i>	44	2.9545	148	2.6622
<i>By motion pictures or still pictures</i>	44	3.2273	148	2.5541
<i>Audio recordings and discs via radio</i>	44	3.0682	148	2.6824

Teachers who did not prioritize professional development were frequently encouraged to use learning teaching techniques, teacher-centered learning teaching methods, and teaching all at once

in general, according to the mean values of the responses. Those who prioritize professional development place a lower value on using that approach. However, the group that prioritized professional development has a higher value than the group that did not prioritize professional development when it comes to the application of student-centered learning and teaching strategies. This shows that teachers are up to date on their professional development because the mean value of all other elements that fall under effective learning methods, aside from the lecture technique of teaching all at once, is more than 3.0. According to a study by Boru (2018), teachers have demonstrated the value of implementing project-based learning and teaching methods in this respect, which will help the learning and teaching process be effective. Based on replies to a scale developed in combination with Edgar Dale's cone of experience connected to teachers offering experiences to students, it is demonstrated here that a mean value near or beyond 3.0 is a favorable

characteristic of teacher reactions to professional development.

❖ *Strategies used by teachers to make the teaching and learning process successful and measures used for classroom management*

Based on the previously mentioned mean value, data analysis has also been conducted here with regard to the methods teachers employ to ensure the effectiveness of the teaching and learning process, as well as the classroom management measures.

Table 3. Information regarding the strategies used to make the learning teaching process successful and the measures used for classroom management

<i>Strategies used to make the teaching and learning process successful</i>	<i>Attended</i>		<i>Not attended</i>	
	N	Mean	N	Mean
<i>Preparation before entering the classroom for teaching activities</i>	44	4.7955	148	3.4527
<i>Preparation of additional programs for gifted students and</i>	44	3.5682	148	3.2568

<i>backward students</i>				
<i>Setting up after-school activities or additional classes</i>	44	3.5227	148	3.2297
<i>Preparation of student feedback projects</i>	44	3.5000	148	3.1216
<i>Carrying out action research</i>	44	3.0682	148	2.1486
<i>Consult additional books related to subject</i>	44	3.2500	148	2.8851
<i>Try out renowned teaching and learning strategies.</i>	44	2.6136	148	1.7162
<i>Following instructions given by external or internal supervisors</i>	44	3.4318	148	2.8581
<i>Following instructions given by external or internal supervisors</i>	44	3.2045	148	2.8108
<i>Organizing and teaching some lessons with the participation of guest lecturers and subject experts</i>	44	3.1136	148	2.6959
<i>Continuous assessment of the student through monthly tests / termly tests/skill development tests/evaluations, etc.</i>	44	3.1591	148	2.9865
<i>Setting up progress reviews based on student assessment scores/assessment reports</i>	44	3.2500	148	3.0811
Classroom management strategies		Attended	Not attended	
	N	Mean	N	Mean
<i>Prepare the classroom</i>	44	3.3864	148	3.3514

before teaching each lesson or theme

Demonstrate over a period of time the creative learning aids you have used before, or at the end of lessons/themes

44 3.5909 148 3.3041

Utilizing technology as a teaching tool

44 3.2500 148 3.1689

Always start lessons with a lesson approach

44 3.6364 148 3.4527

Allow students to pose questions throughout class.

44 3.4773 148 3.1486

Be concerned about student reactions when teaching lessons

44 3.4545 148 3.2973

*Reprimanding/punishing/scolding students to control misbehavior during lessons**

44 2.3545 148 2.4527

Ask students questions frequently to keep students' attention

44 3.4545 148 3.2162

To inform the students about the learning materials to be brought in advance

44 3.3864 148 3.1622

At the end of each lesson, keep an assessment of how much each student has learned about the lesson

44 3.4318 148 3.1554

Through this chart, it is possible to identify a certain decline in the strategies used by teachers who have not been involved in professional development to succeed in the learning and teaching process compared to teachers who have recently been involved in professional development. In particular, it can be recognized here that conducting research related to the learning and teaching process and experimenting with world-renowned learning and teaching methods are successful strategies, but the motivation of teachers who are not focused on professional development is low. By planning some sessions with the help of guest speakers and subject matter experts to address the issues that come up throughout the teaching and learning process, it is also seen that teachers who are not focused on professional development of teaching are paying less attention. There was no difference in classroom management between teachers who were focused on professional development and those who weren't, although the teachers who were focused on

professional development did show some improvement.

Regarding this, it was discovered through the interviews with the instructors who recently took part in teacher development programs that, even after completing the programs, they encountered certain implementation challenges when they returned to the field.

‘It has been a very difficult task for us to build a new learning and teaching environment due to the problems arising in the provision of resources in the school as well as the lack of support from the school principal.’

Grade 11 Teacher (1C,7) - 21.11.2021

‘It is challenging to manage the classroom as we believe because of the growing number of pupils as well as the noise in the nearby classes. We are also quite disappointed with the teaching because some of the kids are not prepared.’

Grade 10 Teacher (Type 2,3) – 13.10.2021

As a consequence, teachers can identify challenges in establishing a structured learning and teaching environment in schools and capturing students' interest.

❖ *Student perceptions of whether teachers use professional development experiences effectively*

The student's opinion regarding the teacher's teaching has been identified here. Here, students who were instructed by teachers in the chosen sample are used. And the analysis has been done based on the mean value of the student responses. According to Martins and Proença (2014), a score of 5.00 to 4.50 indicates great satisfaction, 4.49 to 3.50 indicates average satisfaction, 3.49 to 2.50 indicates moderate satisfaction, and 2.49 to 1.50 indicates poor satisfaction. Between 1.49 and 1.00 was seen as unsatisfied, whereas 1.49 was regarded as content.

Table 4. Students' perception of their teachers

<i>Regarding teachers' explanations in the learning teaching process</i>	<i>N</i>	<i>Mean</i>
<i>The lessons are clearly laid out and explained.</i>	75	2.3333
<i>Teachers to correct mistakes</i>	75	2.3467
<i>Difficult areas to learn are taught simply</i>	75	2.3200
<i>uses engaging techniques to teach in a number of ways.</i>	75	2.2000
<i>The teaching is very clear</i>	75	2.1867
<i>Understanding focuses on whether or not the lessons were understood</i>	75	2.2800
<i>Uses various new learning methods (computer/TV programs)</i>	75	2.2667
<i>When asked about something unknown, it is re-explained in various ways</i>	75	2.3067
<i>Student perception regarding teachers holding students' attention in the learning teaching process</i>		
<i>The exercises given are interesting</i>	75	2.2800
<i>The additional exercises provided are also practical</i>	75	2.3867
<i>Teaches delightfully</i>	75	2.2267
<i>Keen to hold students' attention while teaching</i>	75	2.2267
<i>Implementation of classroom management in learning teaching process</i>		
<i>All students obey the teacher's instructions</i>	75	2.1600
<i>There is no waste of time in learning activities</i>	75	2.2667
<i>Disruption to learning due to misbehaving students during teaching*</i>	75	3.3067
<i>All students have a good understanding of what they are doing and what they are learning</i>	75	2.3200
<i>Very organized and easy to find learning materials</i>	75	2.3200

When considering the teacher's explanation of the lessons, the student's feelings have oscillated between the mean value of 2.3 - 2.1. Accordingly, the student has poor satisfaction in this regard. 2.1 A prerequisite for consideration is a thorough comprehension of the material being taught. On the other hand, students also have poor satisfaction with teachers keeping students' attention and maintaining classroom management in the learning and teaching process. It appears here that it is a significant situation that there are students who behave disruptively while teaching, and that there are situations that hinder learning. However, the following thematic analysis allows for a more thorough consideration of the data found in the student interviews.

Table 5. Information from interviews conducted with students on teaching and learning

Theme description	Theme	Theme analysis
• There were instances where re-	1. Weaknesses in identifying and	Weaknesses in classroom management,

explanation was required on certain subject matters • Some of the questions asked are difficult to answer because they are not understood • Oftentimes, misunderstandings are not re-explained	explaining each student's level of understanding	assessment, feedback-giving, and learning experiences
• On some days, the lesson is aligned, and teaching is done	2. Lack of recognition of lesson organization and the interest of students	
• Studying is difficult because friends make noise in class	3. Weaknesses in classroom management and student engagement	

It is evident from the student interview data that teachers require additional development in the learning teaching process. It was observed that there is a need for improvement, particularly in the areas of tailoring the teaching and learning process to each

student, implementing innovative teaching strategies, and accurately completing student feedback and evaluations. However, even though teachers participate in professional development, there are problems in providing those experiences to students due to various obstacles and challenges. Thus, it is possible to acknowledge that there are challenges in making good use of professional development experiences. In particular, difficulties in obtaining technical equipment, difficulties in obtaining learning equipment, and the excessive number of students in one classroom have the ability to recognize the difficulties of implementation in the practical level. Additionally, the principals' answers are listed below based on the interviews that were done with them.

Table 6. Principals' perspectives on how to best utilize teachers' professional development activities

Theme description	Theme	Theme analysis
• Even if teachers	1. Teachers'	

turn to professional development, they are not satisfied with its use • Even when early professional development efforts are successful, subsequent phases do not show this.	laziness and lack of ongoing professional development	➤ Professional development experiences not being used effectively
• Effective use is difficult due to limited resources within the school • Number of students in the classroom, responsibilities assigned to the teacher	2. Internal and external school problems	

Through the responses of the principals, it can be further identified that the problems of teachers not tending to use professional development experiences in an effective manner are seen. However, there is a need for continuous professional development for

teachers and the need to create opportunities in the school to use those experiences effectively.

Suggestions

Through teacher development programs, teachers are required to use teaching strategies, learning and teaching methods that suit student abilities, provide students with learning experiences, and provide proper classroom training in the learning and teaching process. According to Guskei (2005), the most effective strategy in this case is to adhere to fundamental scientific research methodologies. Additionally, by developing school-based programs to gain a deeper understanding of student motivation, learning, and talents, teachers can increase their awareness of student interactions. However, there is a need to prepare a legal framework for the continuous training of teachers. It is a task centered around the school. However, there should be a method for giving the schools the resources they need for the teaching and learning process. The government should also get involved in order to

lessen the inequality in resource distribution and ensure that all schools receive the same amount of resources. It is also essential to provide teachers with some leeway for their professional growth and to methodically promote them after they have developed. Shang et al. (2021) have shown that it is essential to train teachers to use digital resources in teaching to monitor student teaching, use student information management systems and student assessments through the use of digital resources as much as possible. Furthermore, training pertaining to the development, administration, and regulation of an appropriate learning environment at the school is very important.

Conclusion

Teachers have ongoing opportunities to improve their knowledge and skills through professional development, which helps them better support students in reaching their objectives. The main objective of this research was to examine the connection between achievement among pupils and

teacher self-motivation for professional growth. However, what is presented in this section is to examine how teachers effectively utilize professional development experiences gained through self-motivation. The Minuwangoda and Mirigama divisions within the Minuwangoda education zone of the Gampaha district were the focus of this study, which included 200 teachers, 75 pupils, and five principals as the study sample. Data were gathered by questionnaires and interviews. It was revealed that there is some slowness in the practical use of teachers due to the difficulty of teachers to effectively use the skills development experience for the learning and teaching process, as well as the lack of a continuous teacher development program. Therefore, in addition to providing resources, the government must continue to support professional development for teachers and establish the proper conditions for it. Additionally, this is where the equal allocation of resources to each institution should be prioritized.

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