Cultivating the Future: An Analysis of Guyana's Teacher Training Programme and Institutions

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Abstract

This article provides a comprehensive analysis of the current state of teacher training programs and institutions in Guyana. It assesses the roles of key stakeholders such as the Ministry of Education, the Cyril Potter College of Education (CPCE), and the University of Guyana (UG) in shaping the landscape of tertiary, secondary, primary and nursery teacher education. The study examines the historical evolution of teacher training in Guyana, the diverse programs currently offered, and recent initiatives aimed at enhancing teacher quality and addressing existing gaps. It further analyses the effectiveness of existing programs in preparing teachers to meet the evolving needs of the Guyanese Education system. Moreover, it identifies key challenges that are affecting the teacher training system, including access and equity, quality and effectiveness, coordination and collaboration, and the attraction and retention of qualified educators. The analysis concludes with a discussion of the implications for the education sector and offers recommendations for future improvements.

Keywords: Access and Equity, Co-ordination and Collaboration, Historical Evolution, Quality and Effectiveness.

Introduction

The quality of education in any country is fundamentally connected to the proficiency and commitment of its educators. In Guyana, achieving national development objectives is heavily dependent on the efficacy of its educators, rendering comprehensive teacher training programs fundamental to educational progress [19]. The education system in Guyana requires a cohort of adequately trained educators to promote students' learning and development. The Ministry of Education bears the primary responsibility for supervising and directing the national educational framework within the country. The official website of the Ministry of Education functions as a vital resource, providing information on the educational system, circulars, policy documents, professional standards for educators, and an array of additional resources. The ministry's structure has historically evolved, with the creation of a distinct Ministry of Higher Education in 1980 and a reorganisation in 1991 to clarify educational and administrative functions [19]. These changes highlight the transforming priorities and methodologies regarding education in Guyana.

A comprehensive analysis of the current teacher training programs and institutions in Guyana is imperative, given the crucial role played by educators. This analysis aims to examine the current state of teacher training programs and institutions in Guyana, as well as the principal challenges and opportunities for enhancement. This study's significance resides in its capacity to influence policy decisions, enhance teacher education practices, and

 improve the quality of education for students throughout Guyana. Effective teacher training is more than just an educational imperative; it is a crucial catalyst for economic development and social advancement, as demonstrated by the correlation between robust teaching systems and favourable economic results [16]. This article will provide an overview of the teacher's training landscape, followed by an inclusive analysis of current programs, recent initiatives, and ongoing challenges.

Background of Ministry of Education

The Vision, Mission, and Core Values guiding the Ministry's operations were examined during the research. A widespread agreement persisted that the Ministry should not only facilitate the material advancement of the nation through the cultivation of welleducated and trained human resources but also serve as a principal entity in fostering harmony and respect among citizens of diverse races, economic strata, and religions. There was overwhelming consensus that enhancing literacy and numeracy should remain the primary objective of the Ministry. As a result, the Vision, Mission, and Core Values of the Ministry have remained unchanged since 2003 [19].

Vision

The Vision of the Ministry of Education is that education should be the main and most effective, contributor to the development of a citizenry able to: modernise Guyana; to support the citizenry in becoming more productive and tolerant; and to live in mutual respect [19].

Mission Statement

The mission statement according to [19] is to provide an education system that delivers quality education and training at all levels and in particular:

- 1. Eliminate illiteracy.
- 2. Modernise education.
- 3. Strengthen tolerance.

Core Values and Mandate

The Ministry of Education is dedicated to ensuring that all citizens of Guyana, regardless of age, race or creed, physical or mental disability, or socio-economic status are given the best possible opportunity to achieve their full potential through equal access to quality education as defined by the standards and norms outlined by the Ministry. The commitment to quality and equity in education, with no barriers in access to anyone, is clear in this declaration. [19].

The Ministry defines education as more than the instrumental activity for supporting greater national development or reducing poverty, even though it can contribute significantly to both objectives. It has intrinsic value. It is the main way to help each human being achieve his/her highest potential. It should be able to give the nation's citizens the necessary knowledge, skills, and values to lead happy and productive lives. Based on the education they receive, they should love their country and respect the diversity of their country's ethnic, religious, and political traditions. They should adhere to the ideals and practice of democracy, justice, peace, diversity, and accountability [19]. In addition, although children are, and should be, the main target of educational efforts, rapidly changing economic circumstances and changes in technology require that the Ministry commits to a policy of providing continuing education and training opportunities to the adult population [19].

Although private schools will be encouraged to operate, the Ministry is committed to providing free and compulsory education from the pre-primary to secondary levels. The Ministry also remains committed to strengthening its partnerships with stakeholders, in particular teachers and their representative organisations, parents/guardians, and communities [19].

Overview of the Teacher Training Landscape in Guyana

The skill and commitment of a country's teaching staff are related to the quality of its educational system [2]. Effective learning is based on qualified teachers, who are essential to promoting not only academic success, but also the general advancement of Guyana's society and the holistic development of individuals. Given this essential link, it is crucial to critically assess the programs and organisations in Guyana that provide teacher training. A thorough grasp of the state of teacher preparation today, the difficulties facing the industry, and the prospects for improvement in the future are all made possible by this kind of analysis. With education spending accounting for 15% of the national budget on average, the Guyana government is adamant that it is committed to education. This significant investment demonstrates the established correlation between the quality of teachers, and the population's level of education. Competent teachers are critical to raising educational standards and promoting successful student outcomes. But even with this dedication, a sizable portion of Guyana's teachers have historically lacked training—up to 36% in 2008–2009 [19]. The high number of inexperienced educators points to a discrepancy between the government's educational spending and the ideal degree of teacher preparation, calling for a careful examination of the effectiveness and scope of teacher preparation programs [8].

The urgent need for qualified teachers is further highlighted by the global educational landscape. The importance of teachers in accomplishing Sustainable Development Goal 4, which calls for universal access to high-quality, inclusive education, is highlighted in UNESCO's Global Report on Teachers [31]. The report also emphasises the global teacher shortage, estimating that forty-four million more teachers will be needed by 2030 [31]. Given the global context, Guyana's teacher

training achievements and difficulties are not unique but rather reflect a larger global issue [20].

The responsibility for shaping supervising teacher education in Guyana therefore, rests primarily with the Ministry of Education. This governmental body formulates policies, structures curricula, and provides guidance for teacher training institutions. The Cyril Potter College of Education (CPCE) exists as the primary institution dedicated to teacher training within the country. Established in 1928 as the Teachers' Training Centre, it has undergone several transformations, including being renamed the Government Training College and eventually the Cyril Potter College of Education in 1976. CPCE's mission is to provide the formal education system with and professionally academically teachers at the nursery, primary, and secondary levels [16]. The college operates across multiple campuses and employs various modes of delivery, including face-to-face instruction at its Turkeyen pre-service campus and through fourteen in-service satellite centers, as well as online and blended learning options. The extensive history of Cyril Potter College of Education (CPCE) signifies a sustained commitment to teacher preparation induction in Guyana. The recent embrace of online and blended learning, known as the hybrid method, particularly highlighted in the context of reaching teachers in hinterland areas, indicates an adaptation to address geographical barriers to educational access.

The University of Guyana (UG) also plays a decisive role by offering more advanced teacher education programs. Through its Faculty of Education, the University of Guyana provides Bachelor's and Master's degrees in education, catering to educators seeking higher levels of specialization and academic rigor. There is an emphasis on fostering collaboration between the Cyril Potter College of Education and the University of Guyana to create a more integrated and efficient pathway for teacher

education. The University's involvement offers opportunities for teachers to pursue advanced studies and potentially take on leadership roles within the education system. The historical evolution of teacher training in Guyana reveals a consistent effort to build capacity and adapt to the changing needs of the education sector [13]. The establishment of the Ministry of Education as part of the Education Act of 1877, marked an early formal step in overseeing education. The subsequent development and renaming of Cyril Potter College of Education (CPCE), along with the introduction of diverse programs at the University of Guyana, exemplify a continuous process of strengthening and refining the teacher training infrastructure [4].

Purpose of Study

The purpose of this report is to present a thorough and critical analysis of Guyana's teacher training programs institutions. The main institutions in charge of teacher education will be examined, along with historical development of training programs, the current programs and curricula offered, the accessibility of the various delivery modalities, the pertinent government policies and strategic frameworks, and the contributions of international organisations to teacher development. The report will also examine previous assessments of teacher training programs, analyse the problems and difficulties facing Guyana's teacher training system, and assess how teacher training affects academic results. Conclusively, this analysis aims to give comprehensive understanding of advantages and disadvantages of Guyana's current teacher training system and to guide future initiatives meant to improve the calibre and efficacy of its teaching workforce.

Research Methodology

This analysis employed a qualitative research approach, primarily relying on the review of existing literature, policy documents, and reports pertaining to teacher training in Guyana. Document analysis served as the primary method for data collection. The documents analyzed included government publications and reports from the Ministry of Education, information from the Cyril Potter College of Education, academic articles and research papers, reports from international organizations such as UNESCO and the World Bank, and news articles and commentaries offering insights into current issues and perspectives. The collected data was subjected to thematic analysis to identify key themes, patterns, and trends related to teacher training programs and institutions in Guyana. This process involved a systematic review and interpretation of the documents to synthesize a comprehensive overview of the current situation. A limitation of this study is its reliance on existing documents, which may have inherent biases or gaps in information. Furthermore, the analysis did not involve primary data collection through methods such as interviews or surveys.

Analysis of Current Teacher Training Programs

The University of Guyana (UG) and Cyril Potter College of Education (CPCE) are the two main organisations in Guyana that oversee teacher preparation [21]. The Cyril Potter College of Education (CPCE) is however, the institution for primary teacher trainee preparation in Guyana, with its Associate Degree in Education (ADE) program as a fundamental component. Its goal is to supply academically and professionally teachers for the Nursery, Primary, Secondary levels [15]. The Teachers' Training Centre was founded in 1928, but it changed names over the years. In 1942, it became the Government Training College for Teachers (GTC), and in 1976, it became the Cyril Potter College of Education (CPCE), named for the first Guyanese principal, Robert Cyril Gladstone Potter [4]. A long-standing national commitment to formal teacher preparation is

highlighted by this historical development. In addition to its main Turkeyen pre-service in Georgetown, **CPCE** campus professional teacher training through a network of eighteen in-service satellite centres that are positioned strategically throughout the nation. A conscious attempt to provide teacher training opportunities to educators in a variety of geographic locations, including those in more remote areas, is suggested by this decentralised model. Understanding the diverse needs and situations of its student body, CPCE provides its programs using a variety of flexible delivery methods, such as fully online courses, blended learning strategies that incorporate aspects of both, and traditional in-person instruction. A organisational structure formal management and administration of the college's operations is provided by this hierarchical framework. With over 2600 students enrolled and over 20,000 people certified by the organisation, CPCE boasts a sizable student body. With more than 1700 graduating in September 2023 and 1502 in October 2024, upto-date news demonstrates the significant output of qualified teachers [4]. These numbers highlight the critical role that CPCE plays in providing the Guyanese educational system with qualified teachers. In order to meet particular needs in the education sector, CPCE has also recently increased the range of programs it offers.

This two-year curriculum provides multiple courses to equip educators for various both Academic and Technical Vocational Education Training - TVET). The curriculum aims to equip teacher candidates with training in essential subjects child pertinent to development and instructional pedagogy. The ADE program encompasses specialisation areas including Literacy Education, Health and Family Life Education (HFLE), Physical Education and Sports, Social Studies, Science, Mathematics, English, Business Studies Home Economics, Information Technology Special Education Needs and Disabilities

(SEND). The ADE program necessitates a minimum of five subjects at the Caribbean Secondary Education Certificate (CSEC) level, including Mathematics and English. CPCE acknowledges the varied requirements of prospective educators by providing additional first-year program for applicants who do not initially satisfy the admission criteria, but who, nonetheless, exhibit a profound enthusiasm for teaching Additionally, one-year ADE programs are offered for individuals with degrees in accredited subjects or technical certificates, enabling them to concentrate on instructional delivery and accelerate their transition into the teaching profession. The Associate Degree in Education program's broad structure, featuring diverse specialisations, aims to furnish educators, specifically, tertiary educators, from the Technical Institutes, and GuySuCo Training Centre, with the requisite competencies for various educational environments [15].

Other than the ADE, CPCE provides the Trained Teacher's Certificate (TTC) program, which is especially pertinent for educating teachers in remote areas. The ADE is typically a two-year program, while the TTC has traditionally functioned as qualification, allowing teachers to subsequently seek advanced qualifications such as the Associate Degree in Education and the Bachelors of Education. Teacher The Upgrading Programme (TUP) is another significant initiative, offering a route for teachers currently employed without formal qualifications to obtain the requisite training and certification [18]. This initiative recognises the existence of unqualified educators and seeks to enhance the professional standards of the teaching field.

The University of Guyana (UG) enhances the initiatives of Cyril Potter College of Education, by providing more advanced educational programs through its Faculty of Education and Humanities. Teachers at the nursery, primary, and secondary education levels can enrol in programs offered by the Faculty that culminate in a Bachelor of Education (B.Ed.) degree. Specialisations in both traditional school subjects and more general fields like educational administration, teaching strategies, reading instruction, allied arts, business education, and measurement and evaluation are all included in the curriculum. The Faculty's teacher education program is structured with a number of important objectives in mind, such as introducing teachers to more complex material related to their area of expertise, offering experiences that further professional development, their and strengthening their ability to assess their own teaching methods critically [28]. In addition to curriculum planning and evaluation within their respective subject areas, a great deal of emphasis is placed on the development of research skills.

The Bachelor of Education (B.Ed.) degree at the University of Guyana has a typical duration between lasts for three to four years, offering an in-depth exploration of academic matter, and educational theory. The Bachelors of Education degree offers specialisation options that enable educators to concentrate on a particular academic areas or domains such administration and pedagogy. Apart from its general teacher education programs, University of Guyana also provides a specialised **Bachelor** of Education (Administration) program for qualified educators who have worked in administrative positions in educational establishments [30]. The goal of this program is to help students acquire the particular abilities and knowledge needed for management efficient leadership in education.

Furthermore, the University of Guyana provides a two-year Postgraduate Diploma in Education for those with bachelor's degrees in various fields, emphasizing professional courses, and incorporating a teaching practice component. The Masters of Education level offers specialisation in curriculum

development, language teaching, administration and leadership, and educational catering to management, the advanced requirements of the education system, and equipping individuals for senior leadership positions [21]. The varying lengths and academic prominences of the programs provided by the Cyril Potter College of Education, and University of Guyana, address diverse needs and career objectives within the in Guyana. teaching profession The professional development needs of seasoned educators and those hoping to hold leadership positions in the educational system are met by these advanced programs. The Ministry of Education has made it a top priority to promote cooperation between CPCE and the University of Guyana in order to reform the way teacher education is delivered in Guyana and establish a clear, competitive system. This is because the Ministry recognises the significance of a cohesive teacher education pathway.

Other programs support the professional development of teachers in Guyana, even though the University of Guyana and CPCE are the main providers of formal teacher education. For example, training in basic IT skills like computer fundamentals, operating systems, office applications, and internet usage is provided by the ICT Skills Guyana initiative. Although not specifically aimed at educators, these abilities are becoming increasingly necessary for teachers in the technologically advanced classroom of today [16]. This implies that there are more options for teachers to improve their abilities and expertise outside of conventional the teacher training establishments.

Guyana's teacher training programs' content and curriculum structure are constantly evolving. Over the years, CPCE's curriculum has undergone several changes. To support a hybrid approach to digital learning, the college currently incorporates interactive media and software like Zoom, Google Suite, Moodle, and Microsoft Team into the way it delivers its

curriculum [15]. Furthermore, CPCE gives users access to resources like Information Technology Laboratories, a Writing Centre, and an online library (EBSCO/Notes Master). Similarly, assessment procedures in teacher preparation programs at the University of Guyana have changed to a semester-based system with a stronger focus on ongoing evaluation techniques, such as quizzes, book reports, projects, interviews, in-class tests, research papers, and presentations [26]. The inclusion of the UNESCO ICT Competency Framework for Teachers (CFT) in the curriculum is a noteworthy advancement for both CPCE and UG. To bring the teacher training curriculum into compliance with international standards for the use of technology in the classroom, this framework has played a key role in its redesign [29]. At the associate's and bachelor's degree levels, teacher education is currently being shaped by a thorough four-year ICT in Education curriculum [19]. A combination of professional courses concentrating on pedagogical theories and teaching methodologies and content courses pertinent to the teacher's chosen specialisation usually make up the UG Bachelor of Education program.

The teaching practicum is an essential part of both CPCE and UG teacher preparation programs. The Bachelors of Education program at the University of Guyana requires supervised teaching practice experiences, known as practicum, carries a ten-credit weight [31]. Additionally, CPCE has revamped its student teaching practicum to include guided teaching practice, in which student teachers work in pairs to prepare and present lessons while being supervised by a practicum tutor, usually a CPCE lecturer, or a senior teacher from the school the trainee is attached to. Furthermore, an assessment tool has been created to evaluate student teaching performance in important domains like communication skills, pedagogy, planning, and classroom management [4].

Table 1 summarises the programs offered by CPCE such as the Associate Degree in Education (ADE), the historical Trained Teacher's Certificate (TTC), and the Teacher Upgrading Programme (TUP), targeting preservice and untrained teachers with specializations in areas like Early Childhood, Primary, Secondary (Academic, TVET), Literacy, HFLE, and SEND. The University of Guyana, on the other hand, offers higher education pathways, including the Bachelor of Education (B.Ed.), Postgraduate Diploma in Education, and Master of Education (M.Ed.), which focus on a broader range of academic subjects, administration, and specialized educational research for graduates experienced educators [31]. Both institutions employ a mix of face-to-face, online, and blended modes of delivery to accommodate diverse learning needs and geographical locations.

Table 1. Overview of Key Teacher Training Programs in Guyana

| Institution | Program | Target | Duration | Key | Entry | Mode of |
|-------------|-----------|-----------------|--------------|------------------|----------------|---------------|
| | Name | Audience | | Specialization | Requirements | Delivery |
| | | | | Areas | (Brief) | |
| CPCE | Associate | Pre-service | 2 years | Early Childhood, | 5 CSEC | Face-to-face, |
| | Degree in | teachers (Early | | Primary, | subjects incl. | Online, |
| | Education | Childhood, | | Secondary | Math & English | Blended |
| | (ADE) | Primary, | | (Academic, | | |
| | | Secondary) | | TVET), Literacy, | | |
| | | | | HFLE, SEND | | |
| CPCE | Trained | Pre-service | 3 years | General | Varies | Face-to-face, |
| | Teacher's | teachers | (historical) | | | Online |

| CPCE | Certificate (TTC) Teacher Upgrading Programme (TUP) | (Nursery, Primary), Hinterland teachers Untrained teachers in the system | Varies | General | Must be a teacher in the Public School System | Varies |
|------|--|--|-----------|--|--|-----------|
| UG | Bachelor of Education (B.Ed.) | Aspiring teachers with university entrance requirements | 4-5 years | Traditional school subjects, Administration & Teaching, Reading, Allied Arts, Business Ed. | Normal university entrance requirements | Part-time |
| UG | Postgraduate Diploma in Education | Graduates in other disciplines, existing teachers | 2 years | General, Teaching Practice | Bachelor's degree | Part-time |
| UG | Master of Education (M.Ed.) | Teachers seeking advanced qualifications | 2 years | Curriculum Development, Language Education, Management & Supervision, Measurement & Evaluation | Bachelor's degree, often with teaching experience | Part-time |

Source: Ministry Of Education, Guyana.,2022

Teacher Education: Improving the Number and Quality of Trained Teachers from 2008 to 2018

The percentage of qualified instructors in the system rose from 58% at the commencement of the 2008 ESP period to the 70% target established for the conclusion of the planned period [1]. The Ministry of Education executed the Guyana Improving Teacher Education Project (GITEP) which seeks to enhance teacher quality by concentrating on the qualifications and competencies of teacher-educators, refining the quality and framework of programs at the Cyril Potter College of Education (CPCE), and ensuring the new Associate Degree in Education (ADE) program

is effectively aligned with the Bachelor of Education program provided by the University of Guyana [13] further postulates that all graduates of the pre-service Associate Degree Program must undergo an induction year during which they are assigned to a school, supervised, assessed, and assisted by Ministry officials, school Principals, Heads of Departments, or level supervisors, and are engaged in continuous peer teaching.

Guyana Improving Teacher Education Project (GITEP) supplied laptops and notebooks at a subsidised rate to lecturers and teacher trainees to facilitate the integration of technology into the program [8]. Graduates of the program are anticipated to possess fundamental computer skills and proficiency in using technology to enhance their educational offering and competencies.

Since its establishment, the National Centre for Education Resource Department (NCERD) has served as the primary agency for the continuous professional development (CPD) of active teachers and school administrators. It altered its strategy on CPD over the 2008-2018 implementation period. NCERD has previously developed the training programs and selected the participants. Between 2008 and 2013, NCERD provided around 30 CPD courses that were informed by the perspectives of surveyed educators [8]. Educators could select from these courses. They acquired credits that could augment their promotional prospects. The EFA-FTI initiative originally financed the creation and execution of these CPD courses, which have since been integrated into NCERD's annual work calendar [3]. Annually, an average of five hundred educators has utilised these courses. A persistent issue is the deficiency of qualified educators in disciplines such as Mathematics and Science. considerable proportion of secondary-level teachers instructing these subjects, particularly Mathematics, specialised disciplines. The Ministry will launch a program over the next five years aimed at enhancing the knowledge and skills of teachers [19].

Improving the Quality of New Entrants into Teaching

Comprehensive studies demonstrate that educators who possess superior subject matter expertise, as assessed through subject matter examinations, yield greater learning advancements their students in [8]. Consequently, if pre-service programs enhance trainees' mastery of their subjects, regardless of the subject: History, Science, or Mathematics, or TVET based, there should be beneficial impacts on their students' learning upon entering the teaching profession [26].

In recent years, the academic prerequisites for admission to teacher training have aligned with those for entry into the University of Guyana. It is, therefore, tantamount for ministries of education, or in the case of Guyana, the Teaching Service Commission, to use their authority as the employer of preservice graduates to enhance the quality of the outputs of these programs. Consequently, the model depicted in Figure 1 positions the employment arm of Ministry of Education namely Guyana's Teaching Commission, at the core of enhancing the quality of recruits into the teaching workforce.

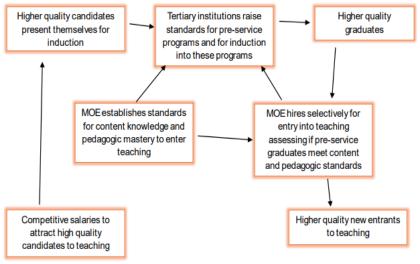


Figure 1. Interventions to Produce Higher Quality Entrants to Teaching. Data sourced from Ministry of Education, Strategic Plan, 2018

Improving the Quality of Teaching

The model for improving the quality of the active teaching force in figure 2 makes three big assumptions.

- 1. Competitive salaries are needed to retain good performers.
- 2. The head teacher is a crucial player in monitoring and raising the quality of the performance of the school's teachers. The selection of candidates for this role must be competitive, and their training for the position must be serious through mechanisms such as a post graduate programme.
- 3. A continuous professional development programme must be in place. This programme should use centrally prepared television programmes, DVDs videos, and other materials. Facilitators should be in place to work with groups of teachers-preferably organized by subject matter or, for the early grades, by grade. Teachers should participate in training frequently and regularly and on paid time. During training they should observe and critique good and bad examples of teaching a particular topic, analyze the implications of

learning assessments and examination results for altering teaching strategies, and so forth.

Moreover, Professional development for head teachers in Guyana is a critical component for enhancing the overall quality of the teaching force. As illustrated in Figure 1, the Ministry of Education (MOE) plays a pivotal role in establishing rigorous selection criteria for entry into head teacher postgraduate programs, aiming to attract high-quality candidates. Competitive selection ensures that only the most promising individuals are inducted into these programs, which are designed to train head teachers as instructional leaders capable of driving school improvement. This continuous professional development, coupled with competitive salaries, is crucial for retaining strong performers within the education system. Furthermore, head teachers are expected to link teacher assessments with professional development needs, fostering an environment of continuous growth [19]. The MOE's selective hiring of postgraduate program graduates as head teachers, combined with their exercise of quality oversight, ultimately contributes to the development of a higher quality, active teaching force in Guyana.

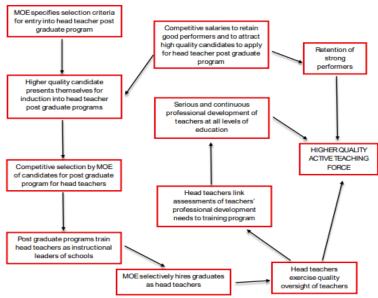


Figure 2. Interventions to Raise Quality of Teaching Force. Data sourced from Ministry of Education, Strategic Plan., 2018

Recent Developments and Initiatives

Guyana's teacher training landscape has witnessed significant developments in recent years, reflecting a initiatives commitment to enhancing the quality of its educators. In January 2025, the Ministry of Education and CPCE launched four new teacher training programs aimed at bridging specific gaps within the education sector. These programs target critical areas: Health and Family Life Education (HFLE), Literacy Education, Special Education Needs and Disabilities (SEND), and a Graduate Teacher Programme [4]. The HFLE and Literacy acknowledge Education programs specialized skills required to effectively teach these subjects, aiming to develop expertise in every teacher graduating from CPCE. The SEND program focuses on equipping teachers to better support students with learning and other disabilities, ensuring more equitable educational opportunities [23]. The Graduate Teacher Programme is designed to fast-track individuals with relevant degrees who have been teaching without formal training into the profession, providing them with essential pedagogical methodologies in an accelerated one-year format. These innovative programs demonstrate an initiative-taking approach to address identified needs within the education system.

A significant initiative has been the launch of online teacher training program collaboration with the Organization American States (OAS) and the ProFuturo Foundation [13]. This 100-hour program aims to prepare teachers of every category to effectively information use communications technology (ICT) in education delivery. The program is structured into two tracks - Innovation and ICT in Education - with each track progressing through four levels:

basic, medium, advanced, and professional [26]. Coaches have been appointed to support teachers participating in the program, and efforts have been made to ensure accessibility for educators in hinterland and riverine communities through printed modules and zero-rated website access [13]. The success of this online program has even garnered regional discussions interest, with underway potentially expand it to other Caribbean countries [19]. This initiative marks a significant step towards leveraging technology to enhance teacher professional development and reach a wider audience.

The Ministry of Education has set an ambitious goal to have 100% of teachers trained or in training by the year 2025, with reported progress reaching 99% [25]. This target underscores the high priority placed on teacher professionalization in Guyana. Furthermore, the Ministry has specifically prioritized training for secondary school teachers to enhance the quality of education at this level. Initiatives include basing teacher promotions increasingly on merit rather than tenure, aiming to reward performance and commitment to professional development. A flexible approach has also been adopted for experienced untrained teachers nearing retirement in hinterland regions, recognizing their contributions [19]. The "Retooling Teachers" online learning program is another key initiative designed to equip teachers with the necessary ICT skills for online. hybrid, and blended teaching modalities, focusing on ICT competence and innovation in education delivery [19]. These recent developments collectively indicate a strong emphasis on expanding access to and enhancing the quality of teacher training in Guyana. Table 2 explicated the initiatives postulated by the Ministry of Education for the period 2020 to 2025.

Table 2. Recent Initiatives in Teacher Training (2020-2025)

| Initiative | Implementing | Year | Key Objectives | Target |
|--------------|-----------------|----------|-------------------------|--------------------|
| Name | Organization(s) | Launched | | Beneficiaries |
| New Teacher | Ministry of | 2025 | Bridge education gaps | Teachers across |
| Training | Education, | | in HFLE, Literacy, | Guyana, |
| Programs | CPCE | | Special Education; | individuals with |
| | | | Fast-track graduate | degrees teaching |
| | | | entry into teaching. | without formal |
| | | | | training |
| Online | Ministry of | 2020 | Equip teachers with | All educators in |
| Teacher | Education, OAS, | | ICT skills for online | public and private |
| Training | ProFuturo | | and blended learning; | schools, CPCE |
| Programme | | | Enhance innovation in | trainee teachers, |
| | | | education delivery. | UG lecturers |
| Ministry's | Ministry of | Ongoing | Achieve 100% trained | All teachers in |
| Goal of 100% | Education | | or in-training teachers | Guyana |
| Trained | | | across the country. | |
| Teachers | | | | |
| Focus on | Ministry of | Ongoing | Address staffing | Secondary school |
| Secondary | Education | | needs, reward merit- | teachers |
| School | | | based promotions, | |
| Teacher | | | provide flexible | |
| Training | | | arrangements for | |
| | | | retiring teachers in | |
| | | | hinterland. | |
| Retooling | Ministry of | Ongoing | Prepare teachers for | All teachers in |
| Teachers - | Education, | | online teaching using | Guyana |
| Online | ProFuturo, OAS | | ICT tools and | |
| Learning | | | strategies; Develop | |
| Programme | | | ICT competence, | |
| | | | enhance education | |
| | | | delivery in various | |
| | | | modalities, foster | |
| | | | innovation. | |

Source: Ministry of Education., 2025

Accessibility and Modes of Delivery

To promote accessibility and satisfy the diverse needs of aspiring and experienced teachers, Guyana's teacher training institutions use a range of delivery methods. CPCE offers online and blended learning options in addition to traditional classroom-based training, which mixes some in-person engagement with the flexibility of internet resources. Due to the

success of Guyana's online teacher training program, there are ongoing talks to expand it to other Caribbean countries [19]. This shows that Guyana's online teacher education program is becoming more widely regarded for its efficacy and scalability. As indicated by its involvement in the online teacher training program established in conjunction with CPCE, the OAS, and ProFuturo, the University of Guyana (UG) is also progressively adopting online

program delivery. Teachers in Guyana now have even more access to higher education options because to the university level trend towards online learning. Through efforts like the Guyana Basic Education Teacher Training (GBET) project, which was established in 1999, and the Guyana In-service remote Education (GUIDE) project, which was founded in 1995 [9]. Guyana has traditionally used remote education methodologies for teacher training and upgrading. These projects exhibit a long-standing dedication to employing flexible learning methodologies to reach teachers, especially those in underprivileged or rural places.

One key issue has been the accessibility of teacher training for persons living in isolated areas of Guyana. The eighteen in-service satellite centres that make up CPCE's statewide network are positioned strategically to offer teachers working in diverse sections of the nation, including those who are remote from the capital, specialist training opportunities. With a concentration Aboriginal on teachers, particularly women, the Guyana Education Teacher Training (GBET) project targeted unqualified teachers in the hinterland areas. To assist these educators in gaining secondary school equivalency and teacher training certificates, this project provided options for online study [1]. Even while these programs have enhanced access, difficulties still exist. The high expenditure transportation to get to the Regional Centres, where in-person meetings are usually held, is disadvantageous to some aspiring instructors. Even when there are satellite centres nearby, this financial burden might be especially severe for teachers in remote locations, which may impede their participation in training programs. An adaptable method has been utilised in Region 10 (Linden) to manage this challenge. Teacher trainees who reside in isolated riverine regions are transferred to Linden in Region 10, or adjacent schools and are housed in a dormitory [4]. This indicates the attempts being made to get beyond geographic barriers and guarantee that educators from even the most rural places have access to teacher training.

Strategic Frameworks and Government Policies

The Government of Guyana, via the Ministry of Education, exerts significant and directive influence on the conduct of teacher preparation in the nation. The Ministry is responsible for formulating policies, allocating finances, and overseeing the entities responsible for teacher education. One of the primary policy objectives is to ensure that all teachers in Guyana are satisfactorily trained by 2025 [19]. This objective illustrates the government's steadfast enhancing commitment to educational standards through the recruitment of capable educators. The Ministry collaborates with the University of Guyana (UG) and the Cyril Potter College of Education (CPCE) on various initiatives designed to enhance the quality of teacher preparation and transform the delivery of teacher education.

The Ministry's swift response to the educational problems posed by the COVID-19 outbreak exemplified its initiative-taking strategy [19]. The Ministry initiated an online teacher training program in partnership with the Organisation of American States (OAS) and the ProFuturo Foundation, ensuring the persistence of teacher development amid significant disruption [9].

The government delineates its long-term objectives and strategic priorities for education, including teacher preparation, through its Education Sector Plans (ESPs). The objectives of the Guyana Education Strategic Plan (ESP) 2021–2025 align with the CARICOM Human Resource Development Strategy, which acknowledges the essential role of educators within the educational framework. This adherence to a regional framework indicates a deeper understanding of the importance of teacher development in the Caribbean context [10]. The primary objective of ESP 2021–2025

is to provide all individuals with access to equitable, high-quality education opportunities for lifelong learning. A crucial strategy for attaining this objective is educator training, focussing on improving overall learning results and modernising educational facilities across the country. Teacher development was significantly emphasised in previous editions of ESP. The ESP 2014-2018 prioritised enhancing educational results across all levels and reducing disparities in learning achievements across different subgroups, particularly between students in coastal and hinterland regions [19]. Teacher training was recognised as a crucial instrument for achieving objectives. Teacher The Framework of Guyana provides a wide-ranging blueprint for managing and enhancing the nation's teaching workforce. This framework delineates key policy pillars encompassing several stages of a teacher's career, including initial teacher training, professional development, certification, appraisal, and deployment. The concept for establishing a teacher expertise framework, closely aligned with the acknowledged Guyanese teaching standards, alongside a robust certification system and an advanced professional development pathway, constitutes a vital element of the framework. This signifies a transition in educator development towards a systematic standards-oriented more and methodology.

The framework recognises the importance of teacher motivation and seeks to address factors that may influence it, such as excessive workload, rigid organisational structures, and the quality of relationships with school administration. It further acknowledges the persistent challenge of ensuring equitable teacher distribution across Guyana's diverse geographic landscape and underscores the need for targeted initiatives, supportive frameworks, and effective incentives to address this urgent issue. In 2010, Guyana developed draft standards for teacher education to establish

explicit criteria for professional expectations and teacher quality. The primary objectives of these standards are to guarantee the overall quality of education and to delineate the abilities expected of educators at various levels within the system. These standards are founded on the following guiding principles: educators' pedagogical expertise and competencies, their command of subject matter, their capacity to manage classroom diversity, their steadfast dedication to the children under supervision, and their proficiency in fostering a nurturing and inclusive learning environment. Guyanese In the context, these recommendations aim to provide a definitive framework for delineating effective teaching techniques. The Caribbean Community (CARICOM), comprising educators, educational leaders, and instructors, established regional standards for the teaching profession alongside these national initiatives

Teacher development policies and activities in the Caribbean Community (CARICOM), including Guyana, are significantly shaped by CARICOM. The Human Resource Development Strategy of **CARICOM** recognises the essential role of educators in regional development, influencing national policy in member states. The regional standards established by CARICOM encompass teachers, educational leaders, and teacher educators within the teaching profession. These principles establish a consistent level for professionalism and quality across the Caribbean. CARICOM, collaboration with the Caribbean (CDB) Development Bank and Organisation of Eastern Caribbean States (OECS), initiated the Learning Recovery and Enhancement Programme (Let us REAP) to mitigate learning deficits resulting from the COVID-19 epidemic [19]. The program encompasses professional development training for educators in CARICOM member states, including Guyana. To underscore the significance of educators in promoting regional

integration, CARICOM has conducted training workshops for secondary school teachers in Guyana on the CARICOM Single Market and Economy [14].

Challenges and Issues in Guyana's Teacher Training System

Despite the progress and recent initiatives, Guyana's teacher training system continues to face several challenges and issues. One area significant is access and equity, particularly concerning the provision of training to teachers in hinterland and remote areas. Infrastructure limitations, unreliable internet access, and financial constraints can hinder teachers in these regions from accessing quality training opportunities [1]. This disparity in access may contribute to the regional differences observed in student performance, with students in hinterland areas often performing below the national average. Addressing these inequities is crucial for ensuring that all students in Guyana have access to well-qualified teachers, regardless of their geographical location. Transportation costs and logistical difficulties further compound the challenges of providing face-to-face training in remote areas.

Questions surrounding the quality and effectiveness of current teacher training programs also persist. There are concerns about the extent to which training programs adequately prepare teachers for the diverse realities of the classroom and effectively contribute to improved student learning outcomes. The need for continuous professional development and the cultivation of reflective teaching practices are vital for ensuring that teachers remain throughout their careers [17]. The low performance of students in national examinations, such as the CSEC, raises questions about the impact of teacher training on student achievement and suggests a need for ongoing evaluation and improvement of training curricula and methodologies [22].

Effective coordination and collaboration between the Cyril Potter College of Education (CPCE) and the University of Guyana (UG) are seamless essential for creating a teacher education progressive system. However, historical reports indicate a lack of full coordination between these two key institutions, with potential gaps in recognition of CPCE qualifications at the university level [4]. Strengthening the linkages and ensuring better articulation between their respective programs would enhance teacher mobility and professional growth opportunities.

Finally, attracting and retaining qualified teachers, especially in specific subject areas and in geographically challenging regions, remains an ongoing issue [20]. Factors such as salary levels, working conditions, and the availability of professional support play a significant role in teachers' decisions to enter and remain in the profession [10]. The difficulty in attracting teachers to certain subject areas, such as modern languages, and concerns about inadequate compensation highlight the need for comprehensive strategies that address the broader factors influencing teacher recruitment and retention.

Analysis of Challenges

Significant challenges persist in Guyana's teacher training system, despite collaborative efforts. The calibre and credentials of educators remain a concern. A considerable number of educators in the Guyanese educational system remain untrained notwithstanding the ongoing initiatives. The substantial proportion of novice educators generates significant apprehension regarding the overall quality of education and their preparedness to effectively meet diverse student learning requirements. Most recently, the pre requisite qualifications to enter the system have been lowered and this poses a plethora of issues within the school system as basic functionality is lacking. The inadequate qualified retention rate of educators

necessitates reliance on individuals lacking formal pedagogical training, contributing to this issue. The system struggles to recruit and keep a cadre of highly qualified teachers, resulting in a cyclical issue. Concerns have been expressed regarding the actual quality of instruction provided by teacher preparation programs. These institutions' curricula and instructional practices may inadequately equip teachers with contemporary knowledge and practical skills essential for effective classroom instruction. Evidence indicates that certain educators, including those who have undergone training, continue to employ traditional, teacher-centered methodologies. Students may encounter diminished opportunities for active engagement in their education, refinement of critical thinking skills, and attainment of a profound comprehension. Similar to numerous other regions, the teaching profession in Guyana possesses a diminished social status, which may impede the recruitment of skilled individuals. The nation is experiencing a teacher shortage, particularly in critical subject areas such as Science, Mathematics, Technical Drawing, Building Technology, Electrical Technology, Clothing Textile and Management and Spanish [19]. These shortages may compel educators to assume additional current responsibilities, resulting in stress diminishing the quality of education in these critical disciplines. A persistent problem is the exodus of qualified and experienced instructors from the Guyanese system to countries offering more lucrative employment opportunities. The comparatively inadequate compensation for teachers is a substantial element leading to recruiting and retention challenges. Insufficient remuneration might render teaching a less attractive career option for numerous individuals, particularly in comparison to other occupations that necessitate equivalent levels of education and responsibilities. The difficulties of retaining teachers in the profession are exacerbated by adverse working circumstances and a perceived deficiency in adequate

incentives. Educators may experience dissatisfaction and leave the field due to issues such as high administrative burdens, limited resource availability, and insufficient support.

Substantial regional disparities in the educational system persist in Guyana. These disparities often manifest as inequitable access contemporary technologies, qualified educators, and essential resources. Notably, the proportion of trained educators is suggestively smaller in inland regions compared to coastal ones. The calibre of education for students in remote communities is influenced by the inequitable allocation of skilled educators. Moreover, student-to-trained teacher ratios are often significantly elevated in rural regions, exerting greater pressure on the limited number of qualified educators and potentially affecting the level of individualised attention afforded to children. The challenges of integrating technology into the classroom are particularly evident in rural regions, where teachers' and students' access to online learning tools may be hindered by inconsistent or inadequate internet connectivity.

This digital divide exacerbates the educational disparities between the hinterland and the coast.

The fair utilisation of technology to enhance education nationwide is obstructed by this divide. Furthermore, digital educators' expertise and confidence in utilising digital resources for instruction differ. To ensure that all educators possess the requisite ICT skills for effective technology integration classroom, targeted and ongoing professional development programs are essential. While the necessity for professional development in ICT is recognised, educators continuous evaluation is essential to ascertain the programs' true effectiveness and impact to ensure they meet the requirements of teachers. The COVID-19 pandemic necessitated a rapid transition to online education, revealing the existing technology deficiencies in infrastructure and discrepancies.

A noteworthy challenge remains addressing the diverse educational needs of all students, particularly those with Special Educational Needs and Disabilities (SEND). The Guyanese educational system dictates enhanced inclusive infrastructure and resources to effectively accommodate students with diverse learning difficulties. The existing infrastructure physical and specialised resources may inadequately address the diverse needs of each student. Few specialised institutions in Guyana accommodate children with disabilities, and numerous mainstream schools assert they lack the necessary resources, support, and training to address the requirements of these kids. Consequently, students with SEND may encounter diminished possibilities for high-quality learning in inclusive settings. Despite the emphasis on special education needs and disabilities in new teacher training programs, it is challenging to ensure that all educators, irrespective of their specialisation, are adequately equipped to assist diverse kids in inclusive classrooms. Negative societal opinions of individuals with special needs can severely impede access to education and full integration into the school system and community. Numerous teachers express feelings of inadequacy and a deficiency in the skills and knowledge required to teach children with diverse learning needs in inclusive environments. This underscores the necessity of comprehensive and practical training in inclusive pedagogy as an essential component of teacher preparation.

Results

This section presents the key findings derived from the thematic analysis of various policy documents, reports, academic articles, and institutional publications pertaining to teacher training in Guyana. The analysis revealed several interconnected themes concerning the current landscape of teacher education, the programmatic offerings, and the strategic initiatives aimed at enhancing teacher

quality. These themes are organized to reflect the comprehensive overview derived from the textual data.

Theme 1- The Dual Training System of Teacher Education

Document analysis consistently highlighted a formalized two-tiered system for teacher education in Guyana, primarily orchestrated by the Cyril Potter College of Education (CPCE) and the University of Guyana (UG). CPCE the foundational serves as institution, predominantly offering the Associate Degree in Education (ADE) and historically the Trained Teacher's Certificate (TTC), aimed at preparing teachers for nursery, primary, and secondary levels. Documents from the Ministry of Education (2022) and historical accounts for example [4] trace CPCE's evolution since 1928, underscoring its long-standing commitment to initial teacher preparation.

The proliferation of CPCE's in-service satellite centers (18 nationwide) and its flexible delivery modes (face-to-face, online, blended) signify a strategic governmental effort to expand access to teacher training, particularly targeting educators in geographically dispersed and remote areas. Recent reports [4] confirm CPCE's substantial output of qualified teachers, with over 20,000 certified individuals and significant annual graduation numbers.

Conversely, the University of Guyana (UG), through its Faculty of Education and Humanities, provides advanced education programs, including Bachelor of Education (B.Ed.), Postgraduate Diploma in Education, and Master of Education (M.Ed.) degrees. These programs cater to educators seeking higher specialization, academic rigor, and preparation for leadership roles, with specializations ranging from traditional school subjects to educational administration and research [28]. The varying durations and academic prominence of programs across both institutions reflect a structured pathway for

teacher professional development, from initial qualification to advanced leadership.

Theme 2- Curriculum Evolution and Modernization

The analysis of policy documents and institutional reports revealed a consistent effort to evolve and modernize the curriculum of teacher training programs. CPCE's ADE curriculum, for instance, encompasses a broad range of specializations from Literacy Education to Special Education Needs and Disabilities (SEND), aiming to equip educators for diverse educational environments, including Technical Vocational Education Training (TVET) [15, 4]. The inclusion of specific admission pathways for individuals without initial qualifications but with a "profound enthusiasm for teaching" (CPCE documents) indicates a flexible approach to broadening access to the profession.

A significant finding is the integration of the UNESCO ICT Competency Framework for Teachers (CFT) into both CPCE and UG curricula [19, 27]. This integration, supported by initiatives like the Guyana Improving Teacher Education Project (GITEP), which provided subsidized laptops and notebooks to trainees and lecturers [6], underscores a strategic shift towards enhancing teachers' digital literacy and their ability to integrate technology into pedagogy. The emphasis on interactive media, learning management systems, for example Moodle, and online library resources (EBSCO/Notes Master) reflects a move towards hybrid learning approaches [13].

Assessment procedures at UG have also evolved towards a semester-based system with a focus on continuous evaluation (quizzes, projects, presentations), complementing the traditional examination approach [26]. Both institutions place strong emphasis on the teaching practicum, with CPCE revamping its student teaching to include "guided teaching practice" and a structured assessment tool for

performance evaluation in key domains like communication and classroom management [4].

Theme 3 – Strategic Initiatives for Quality Enhancement and Professional Development

Government documents and project reports highlight continuous strategic initiatives aimed at improving the quality of teacher education and the teaching force as a whole. The Guyana Improving Teacher Education Project (GITEP) emerges as a pivotal initiative, specifically targeting the qualifications of teachereducators, refining program quality at CPCE, and aligning the ADE with UG's B.Ed. program [12]. A key component of GITEP is the mandatory induction year for pre-service ADE graduates, where they receive supervision, assessment, and support from Ministry officials and school leadership, coupled with continuous peer teaching [12]. This structured induction is a significant policy intervention aimed at easing the transition from training to practice.

The National Centre for Education Resource Department (NCERD) is identified as the primary agency for continuous professional development (CPD) for active teachers and administrators. Its shift from centrally dictated courses to offering choices based on surveyed perspectives educator (2008-2013),providing credits for professional advancement, indicates a move towards more teacher-centric CPD models [3, 8]. Despite these efforts, documents consistently point to a "persistent issue" of unqualified educators, particularly in critical subjects like Mathematics and Science at the secondary level [19]. This signals an ongoing challenge in attracting and retaining specialists in these fields.

Furthermore, [21] acknowledges the importance of improving the quality of new entrants into teaching, aligning academic prerequisites for teacher training with university entry standards. Figure 1 from the Ministry's strategic plan (2018) positions the

Teaching Service Commission at the core of enhancing recruitment quality, suggesting a top-down approach to ensuring higher caliber individuals enter the profession. Figure 2 outlines assumptions for improving the quality of the active teaching force, emphasizing competitive salaries, the crucial role of head teachers in monitoring quality, and the necessity of robust, accessible CPD programs utilizing diverse media and facilitated peer learning. These initiatives demonstrate a recognition of multifaceted challenges and a strategic commitment systemic to improvements.

Discussion

This section interprets the findings from the document analysis, contextualizing them within broader educational discourse and exploring their implications for the future of teacher training in Guyana. It connects the observed patterns to the research's overarching goals of assessing current programs, identifying challenges, and highlighting opportunities for enhancement.

Interpretation of the Dual Training System and its Implications

The findings underscore Guyana's established dual-training teacher education system, with CPCE as the primary institution for initial teacher training and UG for advanced qualifications. This structure, common in many developing countries, allows for mass training at the foundational level while providing avenues for specialized and higher academic pursuits. CPCE's extensive network of satellite centers and flexible delivery modes are crucial strategic responses to the perennial challenge of access and equity in a geographically diverse nation. This decentralized model commendable for reaching teachers in remote areas, echoing global efforts to democratize access to education [28]. However, the sheer volume of CPCE graduates, while addressing the quantitative demand for teachers, prompts questions about the uniformity of quality across diverse delivery modes and satellite centers, a concern often raised in discussions about scaling educational programs [26].

The established pathway from CPCE's ADE to UG's B.Ed. signifies a valuable vertical integration in teacher education. This 'laddering' approach offers professional growth opportunities and aligns with global trends promoting continuous professional learning pathways for educators [13]. The Ministry of Education's explicit priority to promote cooperation between CPCE and UG [19] is critical for creating a seamless and competitive system, avoiding potential fragmentation and consistency pedagogical ensuring in philosophies across different qualification levels.

Curriculum Modernization: Bridging Theory and Practice, Embracing Technology

The ongoing evolution of the curriculum, particularly the integration of the UNESCO ICT Competency Framework for Teachers (CFT), represents a significant and forwardlooking strategic shift. This commitment to digital literacy and technology integration (as evidenced by GITEP's provisions and the adoption of various online learning platforms) positions Guyanese teacher training alignment with international standards for 21stcentury education [30]. The shift towards hybrid learning is particularly relevant in Guyana's context, mitigating geographical barriers and fostering self-directed learning skills essential for modern educators.

However, despite these advancements, the documented need for an "induction year" for ADE graduates and the specific focus of GITEP on "refining the quality and framework of programs" at CPCE [13] implicitly suggest that the initial training, while strong in theory, may still require further enhancement in preparing teachers for the practical realities of the classroom. This points to the enduring 'theory-

practice gap' often discussed in teacher education literature [5]. The revamped teaching practicum with "guided teaching practice" [4] is a positive step towards addressing this, but its effectiveness relies heavily on the quality of supervision and the diversity of practical experiences provided. The emphasis on continuous assessment at UG also reflects a contemporary approach to evaluation, moving beyond single high stakes examination.

Strategic Initiatives: Addressing Quality, Retention and Outgoing Professional Development

The analysis reveals a proactive stance by the Ministry of Education in implementing initiatives like GITEP and leveraging NCERD for CPD. The mandatory induction year for preservice graduates is a critical policy intervention, recognizing that initial training is merely the first step. Such induction programs are vital for new teacher retention and effectiveness globally, providing crucial support during the challenging transition from trainee to independent practitioner [9].

NCERD's shift towards more teacher-centric CPD, allowing educators to select courses and earn credits, represents a move towards empowering teachers in their professional growth. This aligns with principles of adult learning and professional autonomy (Knowles, 1984). Nevertheless, the persistent issue of unqualified teachers, particularly Mathematics and Science [19], highlights a systemic challenge in attracting subject specialists. This problem is not unique to Guyana, reflecting a global shortage in STEM fields [30]. The Ministry's five-year plan to enhance knowledge and skills in these areas is a necessary response, but its success will hinge on the attractiveness of incentives and the depth of the training provided.

The Ministry's strategic frameworks (Figures 1 and 2), emphasizing the Teaching Service Commission's role in recruitment quality and the importance of competitive

salaries, effective head teachers, and robust CPD for retention, demonstrate a sophisticated understanding of the complex factors influencing teacher quality. These assumptions align with international research on effective schooling systems, which consistently identify strong leadership and continuous professional learning as pillars of teacher effectiveness and retention [26]. The proposed use of centrally prepared resources and facilitated group learning for CPD is a practical approach for a country with dispersed educators, leveraging technology for wider reach.

Guyana's teacher training system has undergone significant evolution, established a robust dual-track structure and implemented various initiatives to enhance teacher quality. The emphasis on curriculum modernization, particularly the integration of ICT, and the structured induction year for new teachers, signify a commitment to fostering a futureready teaching force. However, persistent challenges related to equitable access, the theory-practice gap, the attraction and retention of subject specialists, and the need for seamless coordination between institutions remain. Addressing these challenges through continuous policy refinement, targeted resource allocation, and sustained support for teacher professional development will be crucial for "cultivating the future" of education in Guyana, ensuring that every student benefits from a proficient and committed educator.

Conclusion

The current state of teacher training programs and institutions in Guyana reflects a dynamic and evolving landscape. The Ministry of Education, along with key institutions like CPCE and UG, plays a crucial role in shaping teacher education. A variety of programs are offered to cater to distinct levels and specializations, and recent initiatives demonstrate a commitment to addressing identified gaps and enhancing teacher quality through online learning and targeted programs

[1]. Despite these advancements, challenges persist in areas such as equitable access to training, ensuring the quality and effectiveness of programs, fostering coordination between institutions, and attracting and training retaining qualified educators. Low social standing, insufficient educators in essential emigration, subjects, and inadequate compensation and working conditions are factors that impede recruitment and retention. Disparities in resource accessibility competent educators between coastal and hinterland regions persist as a significant issue [1]. Notwithstanding endeavours to integrate technology into education, challenges related to access, infrastructure, and teacher preparedness remain unresolved. Moreover, sustained attention and financial resources are essential to ensure inclusive education for students with diverse learning requirements. The COVID-19 epidemic has underscored the necessity for resilience and adaptability within educational system, accelerating the implementation of online learning and necessitating specialised interventions mitigate learning losses. Research demonstrates that teacher preparation enhances educational results [15]. Evaluations and studies of specific projects by international bodies provide valuable insights that can inform future initiatives.

Recommendations

Based on this analysis, several recommendations can be made to further strengthen teacher training in Guyana:

1. Enhance Coordination and Collaboration: Foster stronger partnerships and clearer pathways between CPCE and UG to ensure seamless progression and recognition qualifications across institutions. Improve the calibre of teacher preparation by updating and fortifying the CPCE and UG curricula on a regular basis to make sure they are in line with national teacher

- standards and relevant to modern classroom demands. Put more of an emphasis on student-centered pedagogies, reflective practice, and practical teaching techniques. Make an investment in teacher educators' professional development to make sure they have the newest research techniques and pedagogical knowledge. Use thorough and diverse evaluation techniques to gauge trainees' practical teaching abilities.
- 2. Improve Access and Equity: Develop innovative delivery methods and provide targeted support systems to enhance access to quality training for teachers in hinterland and remote regions, addressing infrastructure and financial barriers. Invest in giving schools in the hinterland access to technology and better internet connectivity.
- 3. Strengthen **Program** Quality **Effectiveness:** Implement continuous evaluation mechanisms for teacher training aligning curriculum programs, pedagogy with classroom needs and best practices to improve student learning outcomes. Invest in the professional development of teacher educators to ensure they are equipped with the latest knowledge and skills.
- 4. Attract and Retain Quality Teachers:

 Develop comprehensive strategies to attract high-caliber individuals to the teaching profession and improve retention rates, including competitive salary structures, enhanced working conditions, and robust professional support systems.
- 5. Leverage Technology Strategically:
 Continue to expand and enhance the use of
 technology in teacher training, ensuring
 that programs are effective in developing
 teachers' ICT competencies for both online
 and face-to-face instruction.
- 6. Establish Robust Quality Assurance Mechanisms: Implement clear standards and accreditation processes for all teacher

- training programs to ensure consistent quality and accountability across the sector.
- 7. Increase Teacher Recruitment and Retention: Ensure teacher benefits and salaries are competitive, create specialised recruitment plans for underserved and shortage areas.
- 8. **Promote Inclusive Education:** Require all teacher training and preparation programs to include thorough instructions on inclusive education. Provide sufficient resources and assistance to educators who have students with different learning needs. Introduce initiatives that combat the stigma associated with people with special needs.

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Conflict of Interest Statement

The author(s) declare no competing interests.

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