

Teachers in Sri Lanka: Situational Analysis of Teacher Establishment and Deployment



National Education Commission

1st Floor, Block 5,
Bandaranaike Memorial International Conference Hall,
Buddhaloka Mawatha, Colombo 07, Sri Lanka

Published by

National Education Commission, 2023

1st Floor, Block 5, Bandaranaike Memorial International Conference Hall, Bauddhaloka Mawatha, Colombo 07, Sri Lanka

Telephone: +94 11 266 2064 Fax: +94 11 266 2064

Email: chnec2018@gmail.com Web : www.nec.gov.lk

ISBN 978-955-9448-11-2

Right and Permission

The material in this publication is copyrighted. Copying and/or transmitting any part or all of this document without permission may be a violation of applicable law. For permission to photocopy or reprint any part of this document, please send a request with complete information to Chairman, National Education Commission, 1st Floor, Block 5, Bandaranaike Memorial International Conference Hall, Bauddhaloka Mawatha, Colombo 07, Sri Lanka. Telephone: +94 11 266 2064 Fax: +94 11 266 2064.

Research Team

Prof. Sunethra Karunaratne (Team Member)

(B.Sc. (Kelaniya), Postgraduate Diploma in Education (Perad), M.Sc. (Perad), M.Ed. (Bristol, UK), Ph.D. (Michigan State, USA)

Mr. K. S. K. Peiris (Team Member)

(B.Sc. (Peradeniya), PDGE(University of Colombo), Postgraduate Diploma in Buddhist Studies (University of Kelaniya), Postgraduate Diploma in Educational Management (NIE, Maharagama), M Phil in Education (University of Colombo), MSc in Science Education (Peradeniya), MBA (OUSL), MA in Buddhist studies (University of Kelaniya), MA in Sinhala (University of Kelaniya)

Chief Editor

Prof Harischandra Abaygunawardena (Emeritus Professor)
Chairman, National Education Commission

Editorial Assistance

Dr. Thikshani Somarathna (Senior Policy Research Officer)

Mrs. Dumani Jayasinghe (Programme Officer)

Design and Printing

State Printing Corporation, Panaluwa, Padukka.

Preface

The National Education Commission (NEC), established by the National Education Commission Act No. 19 of 1991, functions as the apex policy formulation body to make recommendations to the President on Education Policy and on a wide spectrum of matters connected with education reforms and development.

In executing this mandate, the NEC has recognized the importance of encouraging education-related research as well as facilitating a continuous dialogue among the key stakeholders on matters of importance for the continuous improvement of quality and standards of the national education system. In this regard, the NEC has been engaging in-house as well as commissioned research on areas and themes of importance. The findings of these research are published as NEC Research Series that since the inception of the NEC in 1991.

The NEC Research Series (2023) - I presents an in-depth analysis of current status of teacher establishment and deployment with the view to provide empirical analysis of the current status on an important topic of national education system to policy makers, administrators and to other stakeholders to facilitate evidence-based policy and strategy making.

Prof. Harischandra Abeygunawardena

Chairman

National Education Commission

June 2023

Table of Contents

1. Introduction	1
2. Overview of Basic Statistics of Teachers in Education System	1
2.1 Student: Teacher Ratio	2
2.2 Teacher Distribution by Gender.....	6
2.3 Teacher Distribution by Qualification.....	7
3. Teacher Establishment	10
3.1 Teacher Recruitment	10
3.2 Teacher Confirmation	11
3.3 Teacher Promotions	12
3.4 Teacher Development	14
3.5 Teacher Retirement	20
4. Teacher Deployment	21
4.1 Mathematics Teacher Availability	22
4.2 Science Teacher Availability	24
4.3 English Teacher Availability.....	28
5. Conclusion	29
6. Acknowledgements	30

1. Introduction

The national development of any country rests on the standards of education. Education enables students from all socio-economic backgrounds to realize their full potential - as empowered individuals, constructive members of their communities, productive participants in the economy, and caring citizens of a given country and the world. In this context, teachers as facilitators of learning have a crucial role in developing young people to meet challenges in future with confidence and to become caring, productive and responsible persons. To carry out this mission well, teachers must have the required competencies and enthusiasm to perform the task and positive attitudes towards their profession.

Being the apex body for national education policy-making, the National Education Commission (NEC) in its recent policy document (National Education Policy Framework 2020-2030) has emphasized the need for establishing the standards for the teaching profession, and thereby enhance the quality of teachers so as to ensure the quality teaching-learning-assessment processes. Further, it elaborates policy and recommended strategic activities to enhance the quality of teaching-learning process (*Core Area GE 5: Benchmarking and Quality Assurance*) and the quality of human resources in education (*Core Area GE 11: Quality of Human Resources*) thus emphasizing the significance of quality of teachers. The quality of teachers rests on several key interrelated elements – pre-service training, teacher recruitment, promotions and deployment, in-service training and continuous professional development opportunities for teachers¹. Though the role teachers in Sri Lanka are well recognized, their quality and efficiency appear to be constrained by many issues. Some of them are in relation to pre-service/initial training, teacher recruitment and deployment, in-service training while the other crucial issues are linked to remunerations and service conditions.

Therefore, the objective of the **Situational Analysis of Teacher Establishment and Deployment** is to review elements relating to teacher establishment and deployment in Sri Lanka while highlighting the shortcomings and possible interventions. In this analysis, under the topic of teacher establishment, all five elements or functional aspects that have been identified by the Human Resource Management Division of the Ministry of Education have been considered². They are, i) Teacher Recruitment, ii) Teacher Confirmation, iii) Teacher Development, iv) Teacher Promotion, and v) Teacher Retirement. Under the topic of Teacher Deployment, the norms and establishment procedures in relation to teacher deployment and prevailing imbalances in teacher deployment in the subject specialties of Mathematics, Science and English are analyzed on the basis of statistical data published by the School Census and Statistics Branch of the Ministry of Education and prevailing imbalances are discussed.

2. Overview of Basic Statistics of Teachers in Education System

Over the past few decades, Sri Lanka has made progressive improvements in the coverage of education provision including the supply of teachers to cater to the rising demands. Basic statistics of the teachers in the education system with respect to the number of teachers, students, and schools

¹ National Education commission, National Education Policy framework (2020-2030), 2022, ISBN: 978-955-9448-56-3.

² Ministry of Education, Human Resource Management division, 2021. <https://moe.gov.lk/>.

and their distribution over the past 5-year period are given in Table 1. As shown in Table 1, the number of government schools has increased from 10,144 in 2015 to 10,155 in 2020, and while student enrollment has fluctuated from 4,129,534 to 4,063,685 during the same period. Along with this expansion, the teacher population has increased from 233,883 in 2015 to 249,494 in 2020, and in parallel to that, the Student: Teacher (S/T) ratio has reduced from 18:1 to 16:1.

Table 1: Basic Statistics of the Teachers in the Education System of Sri Lanka

Indicator	2015	2016	2017	2018	2019	2020
Total Number of Schools	10,144	10,162	10,194	10,175	10,165	10,155
Total Number of Teachers	233,883	232,555	241,591	247,334	246,592	249,494
Total Number of Students	4,129,534	4,143,330	4,165,964	4,214,772	4,061,653	4,063,685
Student: Teacher Ratio	18:1	18:1	17:1	17:1	17:1	16:1

Source: Annual School Census of Sri Lanka by Ministry of Education (2021)³

2.1 Student: Teacher Ratio

The number of Students to Teacher ratio (S/T) is a very important factor that influences the quality of teaching-learning process. It is one of the proxy indicators of the extent of the relationship between the students and teachers in a given school. Student: Teacher ratio is calculated by dividing the number of students at the specified level of education by the number of teachers at the same level of education. When the number of students in a class is small, it is easy for the teacher to pay individual attention to students and also to get an understanding of the students' academic performance and also about their social backgrounds including any difficulties that may be compromising their performance. This understanding helps a teacher to provide appropriate guidance and assistance as and when required.

The S/T ratios across districts and across 4 types of schools are given in Tables 2 and 3, respectively. Data given in Table 2 show that a fair S/T ratio is maintained in all except 4 districts (i.e., Colombo, Gampaha, Polonnaruwa and Puttalam). The S/T ratio varies from 12:1 to 21:1 among types of schools; lowest values are shown in the functional Type 2 schools where only the classes from Grade 1 to Grade 11 or up to GCE (O/L) are offered and highest values are recorded in Type 1AB schools. The reason for the high S/T ratio in Type 1AB schools appears to be due to influx of student from Type 3 schools and following the Grade 5 Scholarship Examination.

³ Ministry of Education (2021). Annual School Census Report of Sri Lanka.

Table 2: District-wise Student/Teacher Ratios from 2015 to 2020

Province	District	2015	2016	2017	2018	2019	2020
Western	Colombo	22:1	22:1	21:1	21:1	20:1	20:1
	Gampaha	22:1	23:1	22:1	22:1	21:1	21:1
	Kalutara	20:1	20:1	20:1	20:1	20:1	19:1
Central	Kandy	16:1	16:1	16:1	16:1	15:1	16:1
	Matale	15:1	15:1	16:1	15:1	15:1	16:1
	Nuwaraeliya	16:1	17:1	16:1	16:1	16:1	15:1
	Galle	20:1	20:1	20:1	19:1	18:1	17:1
Southern	Matara	16:1	17:1	16:1	16:1	16:1	16:1
	Hambantota	17:1	17:1	16:1	17:1	17:1	16:1
	Jaffna	15:1	15:1	13:1	13:1	11:1	11:1
Northern	Mannar	14:1	14:1	13:1	13:1	12:1	13:1
	Vavuniya	14:1	14:1	13:1	13:1	12:1	12:1
	Mullativu	16:1	15:1	14:1	14:1	12:1	13:1
	Kilinochchi	18:1	16:1	15:1	15:1	15:1	14:1
	Batticaloa	19:1	20:1	19:1	17:1	16:1	16:1
	Ampara	18:1	18:1	18:1	16:1	15:1	15:1
North-Western	Trincomalee	19:1	19:1	18:1	17:1	16:1	16:1
	Kurunegala	17:1	17:1	17:1	17:1	16:1	16:1
	Puttalam	22:1	21:1	20:1	19:1	19:1	18:1
North-Central	Anuradhapura	16:1	17:1	16:1	16:1	17:1	17:1
	Polonnaruwa	18:1	19:1	18:1	18:1	18:1	18:1
Uva	Badulla	14:1	14:1	13:1	14:1	13:1	11:1
	Moneragala	16:1	16:1	15:1	16:1	16:1	16:1
Sabaragamuwa	Ratnapura	17:1	17:1	17:1	17:1	17:1	16:1
	Kegalle	15:1	15:1	14:1	14:1	14:1	14:1
Sri Lanka (Mean)		18:1	18:1	17:1	17:1	17:1	16:1

Source: Data management division, Ministry of Education (2015-2020)⁴

⁴ Ministry of Education (2015-2020), Data management division, Ministry of Education.

Table 3: School Type-wise Student/Teacher Ratios

Type of School *	2015	2016	2017	2018	2019	2020
Type 1 AB Schools	21:1	21:1	21:1	21:1	19:1	19:1
Type 1 C Schools	17:1	17:1	17:1	16:1	16:1	16:1
Type 2 Schools	13:1	13:1	13:1	12:1	12:1	12:1
Type 3 Schools	18:1	19:1	18:1	18:1	18:1	18:1
Overall S:Tratio	18:1	18:1	17:1	17:1	16:1	16:1

Source: Annual School Census of Sri Lanka by Ministry of Education (2015-2020)⁵

- * Note: **1 AB** - Schools having Science Stream Classes in advanced Level
1 C - Schools having Advanced Level classes other than Science Stream
Type 2 - School having Classes only up to Grade 11
Type 3 - School having Classes Grade 5 or Grade 08

As of the data presented by the latest School Census Report (2020), the gross S/T ratio at the national level (n= 10,155 government schools) has shown an improvement with the declining trend of the ratio from 18:1 in 2015 to 16:1 in 2020. The S/T ratio is often used to compare the quality of schooling across countries. The comparative data compiled by UNESCO (Table 4) shows that the S/T ratio in Sri Lanka (17.10 in 2018) is at a better level than those of many Asian countries, and is at a moderate level when compared with those of developed countries.

⁵ Ministry of Education (2015-2020). Annual School Census Report of Sri Lanka.

Table 4: Student/Teacher Ratio of Some Countries Available

Country	Ratio (Number of Students/Number of teachers)	Year
Malaysia	11.66	2017
Singapore	14.92	2017
Japan	15.66	2017
Korea	16.29	2017
China	16.43	2018
Thailand	16.64	2018
Indonesia	17.03	2018
Sri Lanka	17.10	2018
Nepal	19.74	2019
Vietnam	20.28	2018
Myanmar	24.36	2018
Philippines	29.08	2017
Bangladesh	30.05	2018
India	32.75	2017
Cambodia	41.70	2018
Pakistan	44.08	2018
Afghanistan	48.79	2018
Israel	12.07	2016
Sweden	12.23	2017
Finland	13.67	2017
United States	14.20	2017
United Kingdom	15.13	2017
Australia	17.88	1999
France	18.18	2013
Russia	21.74	2018

Source: UNESCO Institute for Statistics (<http://uis.unesco.org/>)⁶

In summary, all over the country teacher supply in terms of S/T ratio appears to be satisfactory. However, in highly populated districts, namely Colombo and Gampaha, the Student-to-Teacher ratio is comparatively high. Type 3, 2, and 1C schools possess a low Student-to-Teacher ratio compared to 1AB schools. Student migration from one district to another where there are more popular schools may increase the Student/Teacher ratio in some districts, particularly in urban areas. Such student movements are also taking place possibly due to uneven resource distribution among schools and also due to inadequate welfare facilities and poor social interaction in rural schools. Providing common facilities and physical resources to every school, irrespective of school location and the

⁶ UNESCO (2021). Institute for Statistics. <http://uis.unesco.org/>.

number of students, will be helpful to overcome these unforeseen changes in the student population in schools that are creating challenges in teacher deployment processes.

2.2 Teacher Distribution by Gender

The distribution of teachers based on gender is depicted in Table 5. The total number of teachers has increased from 2015-2020. During the same period, the total number of male teachers has decreased (with retirements) while the number of female teachers has increased. The ratio of the number of female teachers to male teachers is shown in Table 6, and as shown in the Table the percentage of female teachers has increased from 2015-2020.

Table 5: Teacher Distribution by Gender

Gender of Teachers	2015		2016		2017		2018		2019		2020	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male Teachers	63,639	27.20	63,068	27.10	64,635	26.80	64,310	26.00	62,467	25.30	61,747	24.70
Female Teachers	170,244	72.8	169,487	72.9	176,956	73.20	183,024	74.00	184,125	74.70	187,747	75.20
Total	233,883	100	232,555	100	241,591	100	247,334	100	246,592	100	249,494	99.9

Source: Annual School Census of Sri Lanka by Ministry of Education⁷

Table 6: Ratios of Number of Female Teachers to Number of Male Teachers

Year	2015	2016	2017	2018	2019	2020
Female teachers/Male teachers Ratio	2.70	2.69	2.73	2.85	2.95	3.04

Source: Author's Illustration

In general, there has been a significant decline of number of male teachers in teaching profession. In 2015, there were 27.2% male teachers and it has further decreased to 24.70% in 2020. Along with this decline, the ratio between the number of female teachers and the number of male teachers has gradually increased from 2.70 to 3.04. This imbalance may affect many school activities, particularly in relation to sports and personality development programmes with significant negative impact on male students. One of the reasons for this trend may be that the females opting for teaching more than males particularly for devoting more time with children and household chores. Another reason is the males' preference for jobs with good fringe benefits compared to the teaching profession, irrespective of long hours of work.

⁷ Ministry of Education (2015-2020). Annual School Census Report of Sri Lanka.

2.3 Teacher Distribution by Qualification

The pre-service teacher training is primarily provided by the network of National Colleges of Education (NCoEs) established in 1986 by upgrading teacher training colleges functioned island by an Act of Parliament⁸. Through this Act, the NCoEs are functionally linked to National Institute of Education Act⁹. In this arrangement, the Colleges of Education conduct courses of study as of the curriculum prescribed by the NIE leading to the award of diplomas and other academic distinctions of the Institute which are recognized as teaching qualifications by the NIE under the National Institute of Education Act, No. 28 of 1985. Selection of students for National Colleges of Education (NcoE) is done by the Teacher Education Division of MoE on the basis of the candidates' academic performance at the GCE (A/L) examination. At present there are 19 NCoEs operating at different parts of the country, and total intake to NCoEs during 2015 to 2020 period are given in Table 7. The trainees are prepared to become trained teachers by providing them with courses that will help to build up understanding of teaching (pedagogical knowledge¹⁰) and transforming subject-matter into forms that are more accessible to students with the consideration of curriculum, multiple ways of presentations and assessment (pedagogical content knowledge¹¹). The other pathway for pre-service teacher education is the Bachelor of Education (B.Ed.) degree programmes offered by 5 Universities – Colombo, Peradeniya, Jaffna, Rajarata and Open University of Sri Lanka. Both categories of teachers are called 'trained teachers'. In addition to that, the graduates with bachelor's degree of outside the specialty of education are also be given teaching appointments time to time in large numbers, and these teachers are called 'graduate' teachers, and they have to earn a postgraduate diploma in education to become 'trained' teachers. Candidates besides these qualifications such as GCE (A/L) too have been absorbed into teaching service and they are considered as 'untrained' teachers until they get the required qualification; that is a diploma in education, certificate of teacher training or B.Ed. degree.

As such in the school census, the teachers are often categorized into five categories according to their qualifications. There are "graduate teachers", "trained teachers", "untrained teachers", "trainee teachers", and "other teachers". The term "graduate teachers" as described earlier are those who are recruited as teachers yet they only have a bachelor's degree with a focus outside discipline of education and they are yet to earn postgraduate diploma in education to become qualified as 'trained teachers'. Therefore, the term "trained teachers" refers to graduates with a Bachelor of Education or graduates in other disciplines but with a Postgraduate Diploma in Education or individuals who have earned a teaching credential from a Teachers' College, either internally or externally, as well as those who graduated with Diploma in Education received from Colleges of Education. The "untrained teachers" are those who are recruited based on their GCE (A/L) credentials. The other category, "trainee teachers" are the ones who are following Diploma in Education programme in Colleges of Education and undergoing the compulsory internship training as a fulfillment of the requirements for their diploma training programme. "Other teachers" are teachers who cannot be categorized into any of the aforementioned four groups.

⁸ Colleges of Education Act No. 30 of 1986

⁹ National Institute of Education Act No 28 of 1985

¹⁰ Shulman, L.S., (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-21.

¹¹ Park, S., & Oliver, J.S. (2008). Revisiting the conceptualisation of pedagogical content knowledge: PCK as a conceptual tool to understand teachers as professionals. *Research in Science Education*, 38 (3), 261-284.

Table 7: Student Admission into NCoEs (2015-2020)

Year	Annual Intake
2016	3864 (Based on A/L results 2014)
2017	4547 (Based on A/L results 2015)
2018*	-
2019	7784 (Based on A/L results 2017)
2020	4140 (Based on A/L results 2018)

Source: Data management division, Ministry of Education (2015-2020) ¹²

* Note that in 2019 two batches were recruited; that could be the reason for not reporting the annual intake for 2018.

Categories of teachers according to qualifications are given in Table 8 and the distribution of teachers among provinces and districts across the country according to their qualifications is depicted in Table 9 ¹³. As shown in Table 8, the total number of teachers in the year 2020 was 249,494 and out of those numbers, 121,569 (48.70%) were 'graduate' teachers and 121,769 (48.80%) are 'trained' teachers. However, not all graduate teachers are trained teachers. The graduate teachers who are recruited with graduate-level qualifications other than a Bachelor of Education qualification should follow a postgraduate diploma in education to become a 'trained graduate teacher' which is a subcategory of 'trained' teachers. The majority of State school teachers (97.5%) are either 'graduate' but untrained or 'trained' teachers throughout the period considered (2015 to 2020). The trends in teacher distribution by category are shown in Figure 1. As shown in the Figure 1, a majority of teachers in the country, are either university graduates or trained teachers.

Table 8: Teacher Categories by Qualification

Teacher categories	2015		2016		2017		2018		2019		2020	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Graduate Teachers	97,295	41.60%	99,724	42.90%	106,756	44.20%	110,741	44.80%	119,323	48.40%	121,569	48.70%
Trained Teachers	130,878	55.96%	127,857	55.00%	129,638	53.70%	130,635	52.80%	120,848	49.00%	121,796	48.80%
Trainee Teachers	2,315	0.99%	1,887	0.80%	1,293	0.50%	4,019	1.60%	4,759	1.90%	4,525	1.80%
Untrained Teachers	2,751	1.17%	2,426	1.00%	3,311	1.40%	1,621	0.70%	1,518	0.60%	1,472	0.60%
Other Teachers	644	0.28%	661	0.30%	593	0.20%	318	0.10%	144	0.10%	132	0.05%
Total	233,883	100.00%	232,555	100.00%	241,591	100.00%	247,334	100.00%	246,592	100.00%	249,494	99.95%

Source: Annual School Census of Sri Lanka by Ministry of Education (2012-2020) ¹⁴

¹² Ministry of Education (2015-2020). Data management division, Ministry of Education.

¹³ Ministry of Education (2015-2020). Gender wise teacher distribution, Annual School Census Report of Sri Lanka.

¹⁴ Ministry of Education (2015-2020). Annual School Census Report of Sri Lanka.

Table 9: Distribution of Graduates and Trained Teachers among Provinces and Districts (2015 to 2020)

Province	District	Graduates and trained teacher percentage (%)					
		2015	2016	2017	2018	2019	2020
Western	Colombo	99.16	99.28	99.00	98.92	94.80	95.09
	Gampaha	99.35	99.21	99.05	99.63	95.56	95.89
	Kalutara	99.35	99.24	98.92	98.81	92.05	92.60
Central	Kandy	97.16	97.69	97.58	96.77	98.71	98.85
	Matale	97.38	97.68	97.31	97.15	98.48	98.65
	Nuwaraeliya	89.75	93.99	95.13	93.29	94.72	96.62
Southern	Galle	98.61	98.83	98.25	98.34	99.40	99.45
	Matara	98.88	98.94	98.77	98.38	99.51	99.59
	Hambantota	98.70	99.02	98.79	98.98	99.50	99.59
Northern	Jaffna	99.24	98.74	99.30	98.73	97.80	97.61
	Mannar	98.70	95.16	98.49	99.10	95.44	95.09
	Vauniya	96.20	96.27	99.65	96.88	96.34	96.28
	Mullativu	94.76	89.76	95.75	97.52	93.93	93.43
	Kilinochchi	99.35	88.75	99.43	95.90	95.07	94.62
Eastern	Batticaloa	98.83	98.55	99.01	97.17	98.38	98.17
	Ampara	97.67	98.37	98.28	97.46	97.06	96.90
	Trincomalee	97.01	97.15	98.05	96.57	93.91	93.48
North-Western	Kurunegala	98.23	98.46	97.77	97.73	97.93	98.09
	Puttalam	97.57	98.27	97.62	97.63	99.16	98.75
North-Central	Anuradhapura	97.90	98.82	98.31	98.28	99.23	99.15
	Polonnaruwa	97.44	98.34	98.19	97.98	96.11	96.36
Uva	Badulla	93.94	94.47	93.64	95.21	97.82	98.04
	Moneragala	95.83	95.63	94.95	96.69	98.66	98.92
Sabaragamuwa	Ratnapura	97.82	98.51	98.40	97.35	99.23	99.16
	Kegalle	97.49	98.15	97.54	97.07	99.37	99.16
Sri Lanka		97.56	97.86	97.85	97.59	97.40	97.54

Source: Data management division, Ministry of Education (2015-2020)¹⁵

¹⁵ Ministry of Education (2015-2020), Data management division, Ministry of Education.

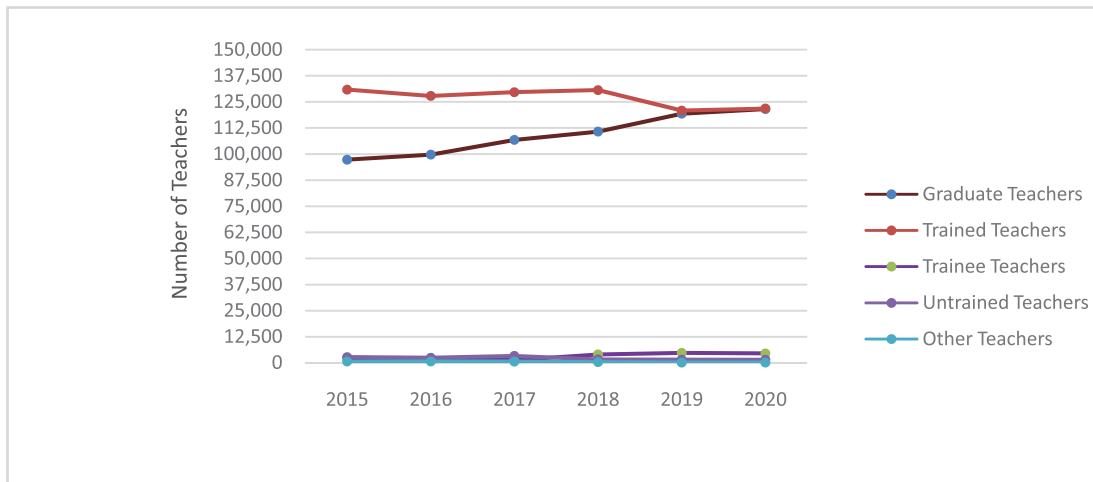


Figure 1: Teacher Categories According to Qualification ¹⁶

Source: Data Management division, Ministry of Education

3. Teacher Establishment

The term "Teacher Establishment" in this review refers to functional domains of recruitment, confirmation, promotions, development and retirement. All these functions, as in the case with all other State services, are regulated by the rules and regulations, and guidelines issued by the State; Government Establishment Code and the Teacher Service Minute are two key documents in this regard.

The Government Establishment Codes deal with administrative regulations and the financial regulations of Sri Lanka which are common for all State services while the Service Minutes of a particular category of officers (e.g., Sri Lanka Teacher Service¹⁷) deals with eligibility criteria and recruitment procedure including confirmation and promotions.

3.1 Teacher Recruitment

Establishment matters relating to State Services of Sri Lanka are administered by the regulations prescribed through Service Minutes of a given service and such regulations are prepared by the respective Ministries subject to the approval of the Salaries and Cadre Commission of Sri Lanka and the Treasury. After the required approvals, these documents are published as a Gazette notification by the respective Ministers. Examples of such documents are; Service Minutes of All Executive Services (such as Sri Lanka Administrative Service, Sri Lanka Planning Service, Sri Lanka Engineering Service, Sri Lanka Medical Service, Sri Lanka Agricultural Service, Sri Lanka Education Administration Service, Sri Lanka Teacher Educator Service, etc.) and Service Minutes of many Non-executive Services (such as Sri Lanka Technological Service, Sri Lanka Nursing Service, Sri Lanka Management Assistant Service, Sri Lanka Principal Service, Sri Lanka Teacher Service, etc.).

¹⁶ Ministry of Education (2015-2020). Annual School Census Report of Sri Lanka

¹⁷ Service minutes of Sri Lanka, Ministry of Education.

According to the Service Minutes of Sri Lanka Teacher Service, the minimum academic qualification for recruitment as a teacher is a pass grade for all subjects from G.C.E. (Advanced Level) examination. At present, the responsibility of recruiting teachers to the national schools are vested with the Ministry of Education while recruiting teachers into the provincial schools is vested with the respective Provincial Councils.

In Sri Lanka, basically, two types of teachers are recruited considering professional qualifications for teaching. They are professionally qualified teachers and professionally not qualified teachers. Professionally qualified teachers are also of two types, namely, Diploma holders from the National Colleges of Education and Bachelor of Education graduates from State universities. The second type is professionally not qualified teachers. They are university graduates of other disciplines (such as Arts, Science, Agriculture, etc), diplomats from technical colleges or the equivalent, and certificate holders who just have G.C.E. (A/L) qualifications. Teachers who are university graduates but not professionally qualified are required to complete satisfactorily the Postgraduate Diploma in Education to become professionally qualified teachers. All other professionally not qualified teachers are given training at Government Teachers' Colleges, and the certificate provided by such institutions are equivalent to the National Diploma awarded by Colleges of Education. In addition, NIE conducts weekend courses leading to the qualification of a Postgraduate Diploma in Education for graduate teachers and B.Ed. degree courses for non-graduate teachers.

Non-empirical evidences suggest that different types of recruitment into teaching service have created imbalances in matters relevant to remunerations and promotions. Further, untrained teachers in schools appear to create issues related teaching-learning-assessment process. This practice appears to recur unabatedly in the absence of a professional body in Sri Lanka to accredit qualification holders who wish to pursue career in teaching (as has been done by many other professions such as medical, dental, veterinary, law, etc.).

3.2 Teacher Confirmation

Any recruitment into the State service and semi-government positions is subjected to a compulsory probationary period, usually of three years before the recruits are confirmed in their respective appointments. During this period, the recruits in the probationary period are required to demonstrate satisfactory conduct and work performance in the assigned posts and duties. The confirmation is subjected to the conditions stipulated by the relevant Service Minutes. For the confirmation of teacher in the State service, the probationary teacher has to complete three years of satisfactory service endorsed by the principal of the school to which the he/she is assigned and this endorsement has to be certified by the Zonal Director of Education. And thus the completion of three years of service satisfactorily is an eligibility requirement for newly recruited teachers to apply for confirmation and to get a registration number in the service. The confirmed teachers have the right for pension and eligibility to apply for promotions (Gazette 865/3 dated 1995/04/03 info@moe.gov.lk ¹⁸).

¹⁸ Ministry of Education. The Gazette of the Democratic Socialist Republic of Sri Lanka, No. 865/3, 03 April 1995: cited by info@moe.gov.lk

3.3 Teacher Promotions

The teacher promotions are granted strictly according to the Teachers' Service Minutes. According to the Teacher Service Minutes, there are three main classes in the Teaching Service; Class 3, 2, and 1. There are opportunities for teachers to get promotions from Class 3 to 2 and Class 2 to 1. Also, there are sub-classes within each Class- such as Class 3-II, 3-I, 2-II and 2-I. Moving upward from one class to the next higher class is the promotion as in all other State services. However, moving from teacher service to other services within the education sector (such as Sri Lanka Principal Service, Sri Lanka Education Administration Service, Sri Lanka Teacher Educator Service) is not considered as a promotion. Teacher promotion schemes have been amended from time-to-time and legalized through gazette notifications as in the extraordinary Gazette Number 865/3 dated 1995/04/03¹⁹ and the most recent update of teacher promotion scheme became effective from 2021/11/09. Professional qualifications namely, Teacher Training Certificates awarded by Teachers' Colleges, Diploma in Teaching awarded by National Colleges of Education, and Postgraduate Diploma in Education offered by the National Institute of Education or by a university are the qualifications prescribed for teacher promotions from one grade to the next higher grade in addition to the completion of compulsory modules conducted by the island-wide network of 112 Teacher Centres which are administered by the respective Zonal Education Offices.

Distribution of teachers as of teacher grade categories during the period from 2015 to 2019 is given in Table 10 and the trend in teacher distribution as of their Class in the service is given in Figure 2. The numbers given in Table 10 clearly illustrate an increase in the proportion of Grade 1 teachers in the State school system from 2015 (20.81%) to 2019 (30.56%). Moreover, the overall proportion of teachers in Grades 1 and 2 also gradually increased from 2015 (64.91%) to 2019 (76.59%). The increasing trend of having teachers of higher grades is depicted in Figure 2. Increasing number of teachers in upper grades (Grade 1 and Grade 2) in the State school system indicates increasing availability of experience and qualified teachers for teaching, learning, and assessment processes.

¹⁹ Teacher Promotion. Ministry of Education. The Gazette of the Democratic Socialist Republic of Sri Lanka (Extra Ordinary), No. 865/3, 03 April 1995

Table 10: Number of Teachers in Different Categories of Teacher Grades

Teacher categories	2015		2016		2017		2018		2019		2020*
	Number	%	Number	%	Number	%	Number	%	Number	%	
Class 3		35.09		34.69		29.15		27.04		23.41	
3-II	5,980	2.67	2,215	0.99	3,063	1.31	2,847	1.23	2,910	1.29	
3-I											
3I-C	72,630	32.42	6,308	2.83	4,110	1.83	4,033	1.75	2,995	1.33	
3I-B			22,974	10.30	13,634	6.08	13,930	6.04	13,043	5.80	
3I-A			45,864	20.56	44,515	19.86	41,523	18.00	33,674	14.98	
Class 2		44.10		39.74		40.79		42.94		46.03	
2-II	59,434	26.53	53,464	23.97	57,049	25.46	64,366	27.92	64,704	28.79	
2-I	39,373	17.57	35,164	15.77	34,350	15.33	34,624	15.02	38,762	17.24	
Class 1	46,621	20.81	57,036	25.57	67,376	30.07	69,233	30.03	68695	30.56	
Total	224,038		223,025		224,097		230,556		224783		

*Note: 2020 data are not available in the data management division, Ministry of Education (Source: Ministry of Education)²⁰

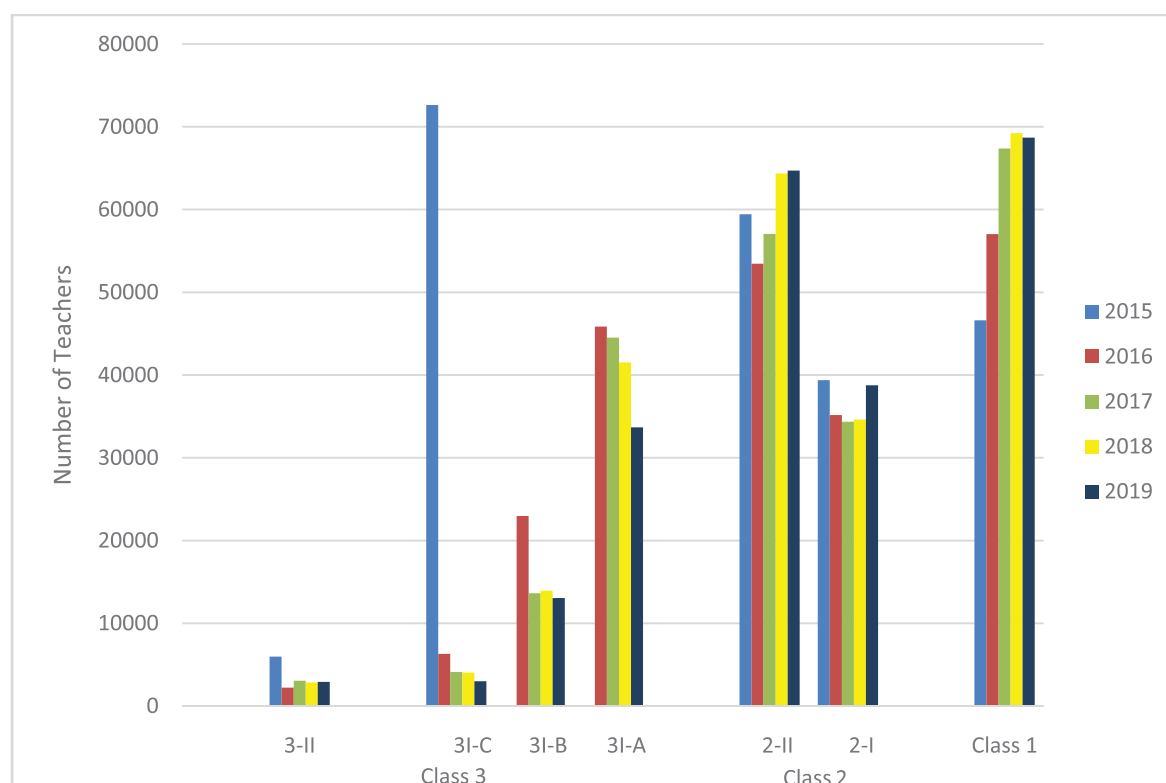


Figure 2: Different Categories of Teacher Grades 2015-2019

²⁰ Ministry of Education 2015-2020, Data management Division.

3.4 Teacher Development

Once the teachers are recruited into the teaching service, it is necessary to develop their competencies in all aspects of their functions, namely, teaching and assessments, student and career counseling, co-curricular activities, community services, etc., and this is facilitated by offering them in-service capacity-building programmes. These capacity-building training programmes are commonly referred to as "Continuous Professional Development" (CPD) programmes as they support the professional development of teachers by updating their competency profiles.

3.4.1 Institution-based Training

Many State universities and National Institute of Education offer teacher development programmes at diploma and degree levels. Teachers in-service (in both national and provincial) are granted paid-study leave to follow these programmes, depending on their service requirements.

Graduate teachers can apply for the Postgraduate Diploma in Education Programmes (PGDE), either full-time or part-time, conducted by the State universities. The graduate teachers can also apply for the postgraduate diploma courses conducted by the National Institute of Education (NIE), which are part-time offered during weekends. Also, teachers without graduate level qualifications could also apply to follow full-time first-degree courses offered by the NIE in science, mathematics and English as a main subject, provided that certain prerequisites are met. The prerequisites are the successful completion of the university's first year as an external candidate and being a teacher appointed for the teaching of science, mathematics, or English. The applicants for full-time postgraduate diplomas or bachelor's degree programmes are provided with paid leave in accordance of relevant circulars.

The data on the enrollment of teachers for the Postgraduate Diploma in Education (PGDE) from 2014 to 2020 is given in Table 11. As shown in the Table 11, the total enrolment for PGDEs has shown some significant variations over the time period considered - with 4144 in 2014/15, 875 in 2016/17, and then to 5068 in 2017/18. And Table 12 depicts the percentage of "untrained" graduate teachers trained during the study period from 2015 to 2020.

Table 11: Enrollment in PGDE (at Universities and NIE)

Medium of Instruction of the PGDE at University /Institute	2014/2015		2015/2016		2016/2017		2017/2018		2018/2019		2019/2020		2020/2021	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Colombo(S)	98	1093	0	0	96	0	77	859	34	0	43	942	0	0
Colombo(E)	0	130	0	0	0	0	0	121	0	0	0	0	0	113
Colombo(T)	23	0	0	0	33	0	16	0	8	0	12	0	0	0
Peradeniya (S)	0	0	0	0	143	183	100	0	70	392	54	556	0	18
Jaffna(T)	0	0	82	72	102	64	74	59	74	91	78	91	88	151
Rajarata(S)	0	0	0	297	0	167	0	0	0	184	12	0	7	152
Eastern(T)	0	-	0	-	60	-	0	-	0	-	60	-	0	-
OUSL	-	2800	-	4560	-	-	-	0	-	2895	-	0	-	-
PGIS	-	0	-	40	-	27	-	16	-	0	-	10	-	11
NIE	-	0	-	0	-	-	-	3746	-	-	-	0	-	3891
Sub Total	121	4023	82	4969	434	441	267	4801	186	3562	259	1599	95	4336
Total	4144		5051		875		5068		3748		1858		4431	

Source: Respective Universities, NIE, PGIS 2015-2020 ²¹

Note; (S) - Sinhala
(E) - English
(T) - Tamil

PGIS - Post Graduate Institute of Science
NIE - National Institute of Education
OUSL - Open University of Sri Lanka

²¹ Ministry of Education (2015-2020). Data management division, Ministry of Education.

The fluctuation of the numbers of total graduate teachers being trained indicates that only a few graduate teachers were trained by the State institutions conducting PGDEs despite the existence of the need of graduate teachers of non-educational disciplines to obtain PGDE to become ‘trained’ graduate teachers. This appears to be the results of several factors; absence of a consistent policy with regard to the release of teachers from the MoE or Provincial Ministries and the lack of regularity in the offerings and the variability in the number of students admitted into the postgraduate teacher training programmes offered by the State institutions. The latter is plausible because the offering of PGDE programmes and teacher intake for the programmes at any institution is determined independently by the respective institutes.

Table 12: Number of Untrained Graduate Teachers Trained

Year	2015/16	2016/17	2017/18	2018/19	2019/20
Total graduate teachers being trained (from Table 10)	5051	875	5068	3748	1858
Total number of teachers in 3-1A category (from Table 9)	-	45864	44515	41523	33674
Percentage of untrained graduate teachers being trained	-	1.91	11.38	9.03	5.52

In addition to local training, the Ministry of Education with the support of internationally funded projects and in collaboration with foreign universities grants scholarships to obtain postgraduate qualifications for teachers. Teachers have to apply for these scholarships through their respective Heads of Departments. In addition to overseas institutional-level training, the teachers are also provided training through overseas educational tours.

3.4.2 In-service Training

Continuous updating of teachers both in subject contents and pedagogy is required for all category of teachers. Such trainings are given to teachers in the form of short-term training during the course of employment and are known as in-service training. These programmes are organized and conducted by the respective Zonal Education Office according to the training needs and availability of funds. Some of these programs are provided by the Teacher Training Centers; some programs are directly conducted by the Zonal Education Office and very technical programs are conducted by institutions outside the Ministry of Education.

To illustrate the types and number in-service training provided by the Zonal Education Office, the data from Educational Zones of Sabaragamuwa Province is considered below. The number of teachers who followed in-service training in the Educational Zones of Sabaragamuwa Province is given in Table 13. These training programmes had been conducted according to the subjects. In addition, in-service training programmes on special topics/themes are conducted at the National Institute of Education, Maharagama. The details of in-service teacher training conducted by the National Institute of Education in 2021 is given in Table 14. Data from other provinces and institutes were not available for analysis.

Table 13: In-service Training in Sabaragamuwa Province

Sabaragamuwa province	Number of Teachers who followed in-service training according to subjects								
	2019			2020			2021		
Educational Zone	Maths	Science	English	Maths	Science	English	Maths	Science	English
Balangoda	102	138	171	64	45	204		17	19
Embilipitiya	246	145	368	96	57		4	7	51
Nivitigala	140	195	355	37	18	97	91	17	49
Ratnapura	633	302	575	16	14	65	11	109	23
Dehiowita	186	125	484	179	166	453	8	39	142
Kegalle	118	126	248	248	30	114	106	121	
Mawanella	527	159	410	213	58	20	111		23
PDE office	150	332	160	83		9	101	77	163
TOTAL	2102	1522	2771	936	388	962	432	387	470

Source: Provincial Department of Education, Sabaragamuwa (2019-2021)²²

Table 14: National Institute of Education -Details of In-Service Teacher Training - 2021

Subject	Grade	Training Programme	No. of Teachers Trained	
			Male	Female
Pre School & Primary Education	Pre School	Early Childhood Development officers based on activity book coordination with provinces	0	131
Aesthetics	6- 13	Promoting social cohesion through Music Education	13	70
Health & Physical Education	6- 11	Promoting social cohesion through Recreational Sports	45	15
Career Guidance	6- 11	ToTs on career guidance trainers aligned with the MoE training programmes based on TG & Activity Book	18	182
Instructional Leadership		Principals' training programme on instructional leadership based on the secondary curriculum reform		2659

Source: National Institute of Education

3.4.3 In-service Adviser Service

In-service advisers (ISAs) or master teachers are selected after calling on applications from experienced teachers in the school system. The applicants need to sit for an examination conducted by the Department of Examinations or by the relevant Provincial Department of Education and appear before an interview organized by the Ministry of Education. They are seconded from the schools where they work to the Zonal Education Office. They are not considered as a part of the permanent cadre of any school but report to the Zonal Education Office for attendance and draw the salary from the schools to which they were attached prior to their release to ISA service. They visit

²² In-service training data, Provincial department of Education, Sabaragamuwa (2019-2021)

the assigned schools, observe teaching, and provide feedback for improvement. They conduct in-service training sessions for teachers, guide the teachers to implement new curricula reforms, assist teachers in developing lesson plans, adopting new teaching methods and instruments (assisted teaching), conduct supervision, and in general guide the teachers to develop themselves. The ISA service is administered by the Zonal Education Office. In-service Teacher adviser's work is subjected to the supervision of the Deputy Zonal Director of Educational Development of the respective zone. They are given travel expenses for their school visits.

As the appointments of in-service advisers were not coming under a permanent cadre category, they had so many grievances. Thus, the 'In-service Advisers' Unions demanded that they be absorbed into the Sri Lanka Education Administration Service (SLEAS). However, it was opposed by the all Unions of SLEAS officers. Thereby they demanded to absorb them into the Sri Lanka Teacher Educator Service (SLTES). The latter attempt was also failed due to the strong opposition exerted by all Unions of SLTES. Ultimately, respecting the service rendered by the In-service Advisers the Ministry of Education established Sri Lanka Teacher Adviser Service as the fifth service in the school education system in 2020.

In 2020, the empowerment of teachers (those whose establishment is in accordance with Teacher Service minutes) has been officially implemented by introducing In-Service Teacher Advisor Service, the fifth service in the school education system to cater to the needs of the school education system. This paved the path for the full recognition of previous work done by ISAs, and qualified and experienced teachers. Only the Class 1 and Class 2 teachers are entitled to join the service, but it is not mandatory; eligible teachers can continue as classroom teachers if they wish to do so after submitting relevant consent forms (Extra Ordinary Gazette No. 2182/36 of 01.07.2020 and Ministry of Education Circular 21/2020 dated 20.08.2020) ^{23,24}. The in-service advising service is predominantly done for the teachers who teach primary classes and up to grade eleven. In the past, eligible teachers for the In-service Advisory Service were selected by an examination conducted by the Department of Examination or by the relevant Provincial Department of Education in the past. However, with the implementation of Sri Lanka Teacher Adviser Service (SLTAS) the selection (recruitment) is purely according to the service minutes of SLTAS in which Class-2 and Class-1 teachers are requested to apply for the existing vacancies. At present, there are 4471 all Island cadre positions in the In-Service Teacher Adviser Service.

²³ Ministry of Education. The Gazette of the Democratic Socialist Republic of Sri Lanka (Extra Ordinary), No. 2182/36, 01 July 2020

²⁴ Ministry of Education. The Gazette of the Democratic Socialist Republic of Sri Lanka. Circular 21/2020, 20th August 2020

Table 15: Cadre information of Teacher Adviser Service-Sinhala and Tamil medium

<i>Province</i>	<i>Approved number of Sinhala Medium Teacher Advisers</i>	<i>Approved number of Tamil Medium Teacher Advisers</i>	<i>Total</i>
Western	746	69	815
Central	414	222	636
Southern	505	05	510
Northern	05	377	382
Eastern	96	370	466
North Western	466	74	540
North Central	282	22	304
Uva	290	71	361
Sabaragamuwa	384	73	457
Total	3188	1283	4471

Source: Government Gazette Extraordinary No 2182/36 dated 01/07/2020²⁵

Medium-wise Distribution of Teachers and In-service Advisers:

Medium-wise summary of the total number of teachers in Grades 1 to 11 and in-service advisers (year 2020) by Provinces is given in Table 16.

As shown in Table 16, the teacher to ISA ratio ranges from a minimum of 40 to 153. This wider gap is due to the imbalances that prevail in three provinces, namely, Northern Province for Sinhala medium (the ratio = 77:1), Southern Province for Tamil medium (ratio = 153:1) and North Central Province for Tamil medium (ratio = 70:1). Excluding these three outliers, the Island average number of teachers that an ISA should cater are 41 and 40 in Sinhala medium and Tamil medium, respectively. Without considering outliers (Northern Province for Sinhala medium; Southern and North Central Provinces for Tamil medium) the percentage variation from the Island-wide means of Teacher: ISA ratios range from -2.43 to 4.88 for Sinhala medium teachers and ranges from -14.63 to 14.63 for Tamil medium teachers. This indicates to achieve fairness between the two media, more Tamil medium ISAs should be deployed. Also, the disparities prevailing in the Teacher: ISA ratio in three Provinces – in Southern Province for Tamil medium, in Northern Province for Sinhala medium and in North Central Province for Tamil medium - need to be rectified. It appears that teacher cadre positions were not considered when deciding cadre positions of In-service Adviser Service and as a result, the imbalance between the two media of instruction appears to have resulted.

²⁵ Ministry of Education. The Gazette of the Democratic Socialist Republic of Sri Lanka (Extra Ordinary), No. 2182/36, 01 July 2020

Table 16: Total Number of Teachers and In-Service Advisers

Province	Number of Teachers			(Number-of-Teachers)/(Number-of-Teacher Advisers)	
	Sinhala Medium	Tamil Medium	Total	Sinhala Medium	Tamil Medium
Western	30087	3271	33358	40	47
Central	16624	8964	25588	40	40
Southern	21753	763	22516	43	153
Northern	383	13730	14113	77	36
Eastern	3850	14485	18335	40	39
North Western	18775	3234	22009	40	44
North Central	11641	1537	13178	41	70
Uva	12198	3066	15264	42	43
Sabaragamuwa	16472	2580	19052	43	35
	131783	51630	183413	41	40

Source: Ministry of Education, Data Management division, 2020)²⁶

In general, there is ample non-empirical evidence to suggest the need for improving the quality of teacher education both at the level of pre- and in-service teacher training and to ensure the availability of such programmes in regular manner. The possible intervention includes establishment of a professional body/institute to regulate teacher education both in terms of the quality of both pre- and in-service teacher training and the regularity of offerings.

3.5 Teacher Retirement

The guidelines for teacher retirement are given under the School Teachers Pension Ordinance. A teacher, as he/she approaches the age of 60 years, a request for retirement must be made. The pension scheme has been established under the School Teachers Pension Ordinance No. 6 of 1927. Grant of pensions, gratuities and other allowances to teachers are prescribed by the pension scheme.

The number of teachers retired and the service grade of retiring teachers and percentage values given in Table 17. As shown in the Table 17, show that at retirement most of the teachers have reached the grade of Class 1, and this trend has gradually increased for the time period considered (from 2015 to 2019). In other words, many teachers achieved the highest grade of service prior to their retirement. Obviously, the retirements from Class 2 and Class 3 have gradually decreased for the considered period. The possibility of attaining the highest grade in the service can be considered as an indication of the service quality. As shown in Table 17, with the fulfillment of required qualifications and service experience, more than 72% of teachers have reached Class 1 grade prior to the retirement during period considered.

²⁶ Ministry of Education, Data management division, 2020.

Table 17: The Number and Percentage of Teachers Retired and the Service Grade of Retiring Teachers

Retirements	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
	Numbers						Percentages					
Class 3	560	885	636	659	527	670	2.21	3.14	2.15	2.03	1.63	1.68
Class 2	5,941	6,735	3,492	3,097	2,499	3,338	23.54	23.93	11.82	9.55	7.74	8.37
Class 1	18,727	20,524	25,407	28,666	29,239	35,830	74.23	72.92	86.02	88.41	90.62	89.94
Total	25,228	28,144	29,535	32,422	32,265	39,838	99.98	99.99	99.99	99.99	99.99	99.99

Source: Ministry of Education(2015-2020) ²⁷

As shown in Table 18, the number of teachers, retiring is much higher than the number of recruitment in all years from 2015-2020. During the 6-year period from 2015 to 2020, there were 187,432 retirements compared to 61,244 new recruitments.

Table 18: Comparison of Teacher Recruitment and Retirements

Year	Teacher Recruitments (from Table 8)	Teacher Retirements (from Table 17)
2015	9,338	25,228
2016	11,453	28,144
2017	13,434	29,535
2018	7,828	32,422
2019	15,489	32,265
2020	3,702	39,838
Total for 6 years	61,244	187,432

Source: Ministry of Education (2015-2020)

4. Teacher Deployment

Teacher deployment is referred to the allocation of teachers according to service requirements across provinces, districts and schools. In general, teacher deployment is governed by rules and regulations prescribed from time-to-time by the Ministry of Education and Provincial Authorities and it is expected that teacher allocation should be done strictly according to the prescribed rules and regulations. Accordingly, it is envisaged that the teacher deployment is done in a fair manner to ensure every school irrespective of the type and location are provided with teachers in required number and in the disciplines that are necessary to conduct the envisaged training.

The relevant circulars issued by the MoE further guide the calculation of the number of teachers in specific subjects permitted considering the medium of instruction and number of classes and students in each grade level in the school. All Heads of Schools are required to obtain the approval for teacher cadre from the relevant educational administrative authorities and no excess teacher is allowed according to the prescribed circular instructions issued by the MoE (Ministry of Education Circular 06/2021 dated 28/04/2021) ²⁸.

²⁷Ministry of Education, Data management division (2015-2020), 2021.

²⁸ Ministry of Education. 28 April 2021. Circular No.1963/30

In general, teacher transfers are handled by the 'Teacher Transfer Boards' operating at 3 levels- Divisional Educational Office Level, Zonal Educational Office Level and Provincial Level. All such boards should also include representatives of the teacher unions. Also, at present a standard observed by all Teacher Transfer Boards is that no teacher should exceed ten years of service continuously in a single school. Further, the 'ten-year' norm is the national policy. Time-to-time different grading systems are also used by the Transfer Boards to ensure the fairness in effecting transfers. Some other factors that are considered for evaluating applications for transfers are the place of permanent residence and the place of spouse's residence.

The imbalances in teacher deployment are analyzed by calculating excess and deficient percentages of teachers deployed for the subjects Mathematics, Science, and English from 2015 to 2020. Results are presented for the subjects of Mathematics, Science and English in Tables 19 through 27. As of existing Circulars issued by the MoE pertaining to teacher deployment, the norms prescribed for these three subjects are as follows: a Mathematics teacher is required to engage in teaching of mathematics at least in five classes and Science and English teachers are expected to engage in teaching respective subjects at least in six classes.

The calculations to construct the above-mentioned tables are done based on the above prescribed norms. For example, in 2015 there were 4,966 classes from Grade 6 – 11 and 1,123 mathematics teachers teaching in Colombo district. Thus, according to the norms prescribed, the total number of mathematics teachers needed to cater is 993 ($4966/5 = 993.2 \approx 993$); However, there were 1,123 Mathematics teachers were deployed in Colombo District. Therefore, there was excess of 130 teachers ($1123 - 993 = 130$) for mathematics or in terms of percentage, the excess is 13.09% $\{(130/993)*100\}$.

The computed tables of teacher deployment in Mathematics, Science and English are given in Tables 19, 22 and 27, respectively. Since all these condensed tables are constructed based on the data available in national databases, it is assumed that 90% significance is fair enough to interpret results and draw inferences. Thus, the percentage of 10.0 or above considered as significantly teacher excess districts while the percentage of -10.0 or less are considered as significantly teacher deficient districts.

4.1 Mathematics Teacher Availability

According to the calculated figures given in Table 19, in the year 2018 none of the districts faced mathematics teacher deficiency and in fact 9 districts had excess mathematics teachers in 2018. However, this has changed in 2019 and imbalances were noted that continued to 2020. As shown by the data presented in Table 19, the number of districts facing deficiency of mathematics teachers has significantly increased in 2019 and 2020 (reaching up to 17) and only the Jaffna district had excess mathematics teachers in 2020.

Table 19: Mathematics Teacher Availability (excess/deficient %) from 2015-2020

Districts	2015	2016	2017	2018	2019	2020
Colombo	13.09	6.91	9.26	9.94	9.24	-4.05
Gampaha	2.72	-0.6	-0.31	0.62	-5.59	-9.43
Kalutara	-0.91	-4.11	45.44	0.76	-2.84	-9.55
Kandy	12.73	1.6	7.25	14.08	-4.66	-16.65
Matale	11.33	0.82	3.38	13.01	-8.5	-23.38
Nuwaraeliya	3.57	-9.52	-0.18	14.44	-6.62	-20.47
Galle	4.62	4.67	-1.11	3.16	3.11	-1.85
Matara	21.14	22.3	17.51	20.11	13.65	4.02
Hambantota	3.1	-1.47	1.51	1.98	-1.96	-4.35
Jaffna	-3.86	-4.09	7.65	26.68	18.76	23.19
Mannar	-23.73	-20.16	-11.97	-4.35	-19.51	-21.49
Vavuniya	-18.06	20.48	-10.9	32.24	-17.2	-23.53
Mullativu	-35.59	-46.77	-18.18	-8.55	-5.88	-14.29
Kilinochchi	-37.5	-37.78	-37.5	-1.59	-18.9	-19.69
Batticaloa	-15.85	-15.67	-9.07	-2.55	-23.94	-39.28
Ampara	0	0.18	1.96	14.23	-4.01	-18.39
Trincomalee	-9.3	-15.01	-9.25	-8.31	-24.02	-44.44
Kurunegala	-5	-6.56	-3.84	9.93	-15.86	-18.29
Puttalam	-6.73	-9.87	-6	0	-24.23	-42.91
Anuradhapura	-7.31	0	0.16	4.95	-9.15	-19.18
Polonnaruwa	-16.54	-13.81	106.43	-0.37	-10.47	-24.56
Badulla	1.02	1.12	4.84	11.48	-2.04	-7.77
Moneragala	-8.92	-9.25	-2.4	5.95	-10.58	-16.09
Ratnapura	0.81	0.39	4.71	7.64	-6.49	-12.55
Kegalle	-34.9	-2.7	11.61	11.07	-1.51	-15.72
Significantly teacher excess districts	4	2	4	9	2	1
Significantly teacher deficient districts	7	6	4	0	9	17
TOTAL NUMBER	11	8	8	9	11	18
TOTAL % of teacher excess or deficient districts (out of 25 districts)	44	32	32	36	44	72

Authors' illustration

Eliminating Batticaloa district for analysis, Table 20 gives the summary table for mathematics teacher deployment. In 2020 there were 12,211 teachers deployed for mathematics teaching. However, the requirement of mathematics teachers was 14,139. Hence, the deployment of mathematics teachers was significantly below the required level in the country. Table 20 shows that mathematics teachers were properly deployed only for 7 (29.16%) districts in 2020; Under deployment of mathematics teachers can be seen in 16 (66.67%) districts and over deployment of mathematics teachers can be seen in only one (4.17%) district. The divisional-wise view is also presented in the same table. Accordingly, there were 82 (27.52%) divisions with proper deployment of mathematics teachers; under deployment of mathematics teachers can be seen in 196 (65.77%) divisions and over deployment of mathematics teachers can be seen in 20 (6.71%) divisions.

Table 20: Mathematics Teacher Deployment Status in 2020

Teacher deployment status	Districts		Divisions	
	Number	Percentage	Number	Percentage
Under-deployed	16	66.67	196	65.77
Over-deployed	1	4.17	20	6.71
Properly-deployed	7	29.16	82	27.52
Total	24	100	298	100

A cross-analysis of divisional data presented in Table 20 is illustrated in Table 21. Accordingly, there are 196 under-deployed divisions, of which 166 are in under-deployed districts, two are in over-deployed districts, and 28 are in properly-deployed districts. Similarly, there are 20 over-deployed divisions of which three are in under-deployed districts, nine are in over-deployed districts, and eight are in properly-deployed districts. Table 21 further indicates that all three types of divisions (under-deployed divisions, properly-deployed divisions, and over-deployed divisions) exist in all districts, irrespective of the type of district (under-deployed district, properly-deployed district, and over-deployed district).

Table 21: Cross Tabulation of District Status and Divisional Status of Mathematics Teacher Deployment Status in 2020

Teacher deployment status	Divisions						Total	
	Under-deployed		Over-deployed		Properly-deployed		Number	Percentage
	Number	Percentage	Number	Percentage	Number	Percentage		
Under-deployed	166	55.70	3	1.01	23	7.72	192	64.43
Over-deployed	2	0.67	9	3.02	4	1.34	15	5.03
Properly-deployed	28	9.40	8	2.68	55	18.46	91	30.54
Total	196	65.77	20	6.71	82	27.52		
Grand Total							298	100

4.2 Science Teacher Availability

The deployment status with respect science teachers during the period from 2015 to 2020 is shown in Table 22. It clearly depicts that at least 12 districts are blessed with excess science teacher deployment for the years from 2015 to 2020. Also, exceptionally excessive science teacher deployment can be observed in Kalutara and Polonnaruwa districts in 2017. This pattern shows the unplanned science teacher deployment policy in the school education system.

Table 22: Science Teacher Availability (excess/deficiency %) from 2015-2020

Districts	2015	2016	2017	2018	2019	2020
Colombo	33.21	9.86	31.66	27.13	27.29	19.08
Gampaha	17.79	15.44	15.01	19.09	12.93	10.84
Kalutara	15.88	14.61	67.86	14.94	10.59	5.19
Kandy	23.29	6.82	14.60	24.14	25.13	22.05
Matale	18.37	10.78	17.23	20.76	23.81	15.54
Nuwaraeliya	14.74	0.41	8.41	16.23	17.60	19.40
Galle	33.65	27.24	22.39	26.14	23.32	17.56
Matara	40.96	32.68	35.07	35.86	41.34	26.90
Hambantota	20.21	10.30	18.65	18.25	18.28	18.80
Jaffna	11.14	13.79	29.18	36.98	34.27	31.76
Mannar	0	-10.68	8.16	2.08	-4.9	12.87
Vavuniya	5.43	-4.35	13.08	-57.48	7.63	8.66
Mullaitivu	12.24	-6.80	1.98	14.43	26.26	38.38
Kilinochchi	-0.93	0.89	-0.93	-7.62	3.77	3.77
Batticaloa	-11.2	-15.38	-9.26	69.17	4.83	8.94
Ampara	5.27	-1.47	1.71	20.95	26.1	25.63
Trincomalee	-11.15	-11.86	-9.37	-4.81	-9.06	-11.00
Kurunegala	10.57	3.83	7.03	18.41	10.59	9.06
Puttalam	-11.88	-5.39	-2.84	-4.98	2.39	-0.85
Anuradhapura	9.94	7.92	13.11	14.84	2.93	-4.20
Polonnaruwa	12.26	14.35	133.2	17.98	6.06	-7.17
Badulla	26.19	19.10	25.53	21.47	22.16	17.25
Moneragala	13.64	13.58	9.9	17.86	13.33	10.76
Ratnapura	15.53	15.97	20.09	23.10	9.80	8.60
Kegalle	-32.97	11.07	15.54	14.49	22.13	16.47
Significantly teacher excess districts	16	12	15	20	16	15
Significantly teacher deficient districts	4	3	1	1	0	1
TOTAL NUMBER	20	16	16	21	16	16
TOTAL % of teacher excess or deficient districts	80	64	64	84	64	64

Table 23 gives the summary table for science teacher deployment in 2019. The table shows that science teachers were properly deployed in only 13 (54.17%) districts in 2019; under-deployment of science teachers can be seen in 10 (41.67%) districts, and over-deployment of science teachers can be seen in only one (4.17%) district. A divisional-wise view is also presented in the same table. Accordingly, there were 178 (59.53%) divisions with proper deployment of science teachers; under-deployment of science teachers exists in 107 (35.79%) divisions, and over-deployment of science teachers exists in 14 (4.68%) divisions.

Table 23: Science Teacher Deployment Status in 2019

Teacher deployment status	Districts		Divisions	
	Number	Percentage	Number	Percentage
Under deployed	10	41.67	107	35.79
Over deployed	1	4.17	14	4.68
Properly deployed	13	54.17	178	59.53
Total	24	100	299	100

A cross-analysis of divisional data presented in Table 23 is illustrated in Table 24. Accordingly, there are 135 under-deployed divisions, of which 71 are in under-deployed districts, three are in over-deployed districts, and 61 are in properly-deployed districts. Similarly, there are 50 over-deployed divisions, of which 11 are in under-deployed districts, eight are in over-deployed districts, and 31 are in properly-deployed districts. The figures in Table 24 further indicate that all three types of divisions (under-deployed divisions, properly-deployed divisions, and over-deployed divisions) exist in all districts, irrespective of the type of district (under-deployed district, properly-deployed district, and over-deployed district).

Table 24: Cross Tabulation of District Status and Divisional Status of Science Teacher Deployment Status in 2019

Teacher deployment status	Divisions						Total	
	Under- deployed		Over-deployed		Properly deployed		Number	Percentage
	Number	Percentage	Number	Percentage	Number	Percentage		
Under-deployed	71	23.75	11	3.68	25	8.36	107	35.79
Over-deployed	3	1.00	8	2.68	3	1.00	14	4.68
Properly deployed	61	20.40	31	10.37	86	28.76	178	59.53
Sub Total	135	45.15	50	16.72	114	38.13		
Grand Total							299	100.00

Table 25 gives the summary table for science teacher deployment in 2020. The table shows that science teachers were properly deployed in only 19 (76%) districts in 2020; under-deployment of science teachers can be seen in five (20%) districts, and over-deployment of science teachers can be seen in only one (4%) district. A divisional-wise view is also presented in the same table. Accordingly, there were 126 (40.38%) divisions with proper deployment of science teachers; under-deployment of science teachers exists in 142 (45.52%) divisions, and over-deployment of science teachers exists in 44 (14.10%) divisions.

Table 25: Science Teacher Deployment Status in 2020

Teacher deployment status	Districts		Divisions	
	Number	Percentage	Number	Percentage
Under-deployed	5	20	142	45.52
Over-deployed	1	4	44	14.10
Properly deployed	19	76	126	40.38
Total	25	100	312	100

A cross-analysis of divisional data presented in Table 25 is illustrated in Table 26, depicts the cross-relationship of science teacher deployment status (under-deployed, over-deployed, and properly deployed) between districts and divisions in 2020. Accordingly, there are 142 under-deployed divisions, of which 46 are in under-deployed districts and 96 are in properly-deployed districts. Similarly, there are 44 over-deployed divisions, of which three are in over-deployed districts, and 41 are in properly-deployed districts.

Table 26: Cross Tabulation of District Status and Divisional Status of Science Teacher Deployment Status in 2020

Teacher deployment status	Divisions						Total	
	Under-deployed		Over-deployed		Properly deployed		Number	Percentage
	Number	Percentage	Number	Percentage	Number	Percentage		
Under-deployed	46	14.74	0	0	10	3.21	56	17.95
Over-deployed	0	0.00	3	0.96	3	0.96	6	1.92
Properly deployed	96	30.77	41	13.14	113	36.22	250	80.13
Sub Total	142	45.51	44	14.10	126	40.38		
Grand Total							312	100

4.3 English Teacher Availability

The deployment status with respect English teachers during the period from 2015 to 2020 is shown in Table 27.

Table 27: Summary of deficit/excess percentage of teachers for teaching of English

District	Excess/Deficit %					
	2015	2016	2017	2018	2019	2020
Colombo	6.87	-6.80	7.40	-1.86	-0.23	-23.25
Gampaha	1.42	-10.44	-3.59	-4.78	-5.62	-23.40
Kalutara	-7.48	-19.43	40.48	-20.26	-13.47	-32.52
Kandy	8.39	-10.20	3.62	3.53	8.38	-9.19
Matale	-2.63	-17.81	-6.71	-7.78	-0.65	-20.26
NuwaraEliya	-18.99	-30.10	-24.82	-24.83	-19.13	-28.59
Galle	-12.39	-16.23	-10.33	-11.63	-10.33	-22.01
Matara	-8.02	-18.88	-10.40	-18.56	-11.19	-27.37
Hambantota	-20.54	-31.17	-21.14	-28.76	-25.64	-34.92
Jaffna	-39.06	-43.27	-32.92	-33.80	-27.40	-32.30
Mannar	-34.76	-48.40	-41.42	-43.10	-40.80	-40.34
Vavuniya	-30.23	-44.64	-26.39	-87.67	-29.28	-39.37
Mullaitivu	-50.64	-55.75	-49.69	-44.91	-46.95	-53.01
Kilinochchi	-28.40	-39.01	-31.14	-40.24	-27.27	-29.94
Batticaloa	-24.41	-38.15	-28.25	-25.30	-23.04	-25.74
Ampara	-21.01	-28.17	-9.82	-10.21	-3.72	-13.21
Trincomalee	-20.97	-31.82	-29.49	-15.42	-20.97	-32.01
Kurunegala	3.99	-10.92	-4.63	-11.69	-4.43	-21.00
Puttalam	-9.83	-23.18	-19.38	-27.31	-15.28	-29.83
Anuradhapura	-10.42	-17.46	-17.93	-48.08	-15.34	-28.16
Polonnaruwa	-17.84	-32.43	90.88	-24.39	-21.87	-38.16
Badulla	-0.23	-18.80	-5.80	-4.94	-2.57	-11.49
Moneragala	-17.32	-29.90	-15.45	-27.74	-15.81	-20.77
Ratnapura	-16.60	-22.34	-16.88	-34.01	-22.57	-35.05
Kegalle	-37.11	-23.53	-5.47	-10.14	-4.67	-23.43
Significantly teacher excess districts	0	0	2	0	0	0
Significantly teacher deficient districts	13	24	15	20	17	24
All Island	-11.22	-21.35	-7.21	-18.24	-11.26	-25.02

Source: Authors Illustrations

The result depicted in Table 27 show that there is a scarcity of English teachers in across the provinces except in few district. Only the districts of Colombo, Gampaha, Kandy, and Matale districts

were managed with fair deployment for the recent years except for 2020. In the absence of teachers for teaching of English for some primary classes, that responsibility is carried out by the class teachers themselves. Further, to make matters worse, the assistance of English teachers is taken until primary teachers are deployed for the primary grades. Also, Grade 12 and Grade 13 teaching of English carried out by English medium graduates and other teachers may be fluent in English. For the computation, these complex factors were not considered.

In general, there is a shortage of Mathematics and English teachers in the school system. On the other hand, there are too many teachers in Science. Further, it is observed that though there are rules and regulation and circular guidelines, these imbalances do recur regularly. Therefore, the strengthening monitoring system at the provincial level to ensure adherence to prevailing rules and regulations for teacher deployment is recommended. In order to address the shortage of English teachers in the educational system, recruitment of teachers for the subject should be prioritized. Therefore, the teachers should be recruited based on the demands as reflected by the number of teacher vacancies rather than the number of retirees so as to fulfil the conditions needed in the classroom to carry out a quality teaching-learning process.

5. Conclusion

The above analysis highlighted the status of teacher establishment (i.e. teacher recruitment, teacher confirmation, teacher development, teacher promotion, and teacher retirement) and deployment over 6-year time span (2015-2020). As highlighted, two key aspects of teacher establishment, the teacher recruitment and development appear be saddled with issues. Unplanned recruitments and also the recruitment of candidates without having any pre-training such as graduates without pre-service training in education and GCE (A/L) qualifiers into teaching service have created imbalances in matters relevant to deployment, quality of offerings, and also in remunerations and promotions. This practice of recruiting untrained personnel appears to recur unabatedly in the absence of a professional body to accredit prospective candidates (as has been done by many other professions such as medical, dental, veterinary, law, etc.) for teaching profession in Sri Lanka. Further, there is ample non-empirical evidence to suggest the need for improving the quality of teacher education both at the level of pre- and in-service teacher training and to ensure the availability of such programmes in regular manner. The possible intervention to address this crucial issue as highlighted previously is the establishment of a professional body/institute to regulate teacher education both in terms of the quality of both pre- and in-service teacher training and the regularity of offerings. Another factor which affects the teacher service is the imbalances in teacher retirements and recruitment related to unplanned recruitments that has taken place in time-to-time. In addition, the issues related teacher deployment have continued affect the quality of academic provisions offered by schools of many districts, particularly in economically disadvantaged regions of the country. Recurrent imbalances have been more acute for Mathematics and English teachers in the school system while there have been too many teachers in Science and other disciplines. This appears to recur despite the existence of rules and regulation and circular guidelines on teacher deployment. Therefore, it is imperative that these imbalances must be addressed through recruitment process that rely on the annual demand projections that take into account of the number of retirees and projected expansion and demand for different subjects.

6. Acknowledgements

The authors of the review wish to express their sincere gratitude to;

- Prof. Harischandra Abeygunawardena Chairman/ National Education Commission, Mrs. Padmini Ranaweera, Vice-Chairman Policy/ NEC, Mr. Kingsly Fernando Vice-Chairman Planning/ NEC for providing us the opportunity to share their expertise in compiling this review and providing guidance and constructive criticisms throughout the study;
- Director, Data Management Branch, Senior Statistician Ministry of Education and Senior Statistician of The Department of Census and Statistics for providing the necessary data;
- Director of the Provincial Education Department, Sabaragamuwa Province for providing us in-service teacher training data;
- National Universities and The National Institute of Education for providing enrollment data of post graduate diploma programmes; and
- All academic and non-academic staff members of The National Education Commission for providing technical assistance in compiling of this report.