Research article

Asian Journal of Comparative Politics
1–12

DOI: 10.1177/2057891120935993
journals.sagepub.com/home/acp


Allocation of teachers among public schools and minimization of cost: The case of public education in Sri Lanka

Tikiri Nimal Herath
Economics Department, University of Sri Jayewardenepura, Sri Lanka

Abstract

Overall, in Sri Lankan public schools, the student–teacher ratio is very low. The number of teachers is considerably greater than the number of classes; sometimes the former is double or more than double the latter. In a school in which all the teachers are individually deployed in each class, many teachers have to remain idle. Thus, every day a certain number of teachers remain idle. This situation points to two issues. Firstly, in Sri Lankan public schools, resources are underutilized and hence costs are not minimized. Secondly, since there is an excess of teachers in schools, a formal and logical method is required to determine the optimal number of teachers. This article tries to develop a formula to determine the required number of teachers for a school, and thereby to find ways to minimize costs when employing teachers. Primary data on classes, teachers and subjects offered with respect to 40 public schools in the North Central Province were collected. When empirical data on the number of teachers in sampled schools were compared with calculated teacher requirements in terms of the developed formula, it was found that school authorities are underutilizing teachers. The article concludes that (a) based on the developed formula to determine the required number of teachers, many public schools have an excess of teachers and hence current transfer policy for school teachers is not logical, (b) teacher requirement can be decided according to the developed formula and (c) by adopting one teacher-two subjects-one school and one teacher-one subject-more schools models, government authorities can minimize costs further.

Keywords

cost minimization, one teacher-one subject-more schools model, one teacher-one subject-one school model, one teacher-two subjects-one school model

Corresponding author:
Tikiri Nimal Herath, Economics Department, University of Sri Jayewardenepura, Nugegoda, 10100, Sri Lanka.
Email: n-herath@sjp.ac.lk

Introduction

Sri Lanka provides free education at all levels of school. Its free school education package includes free tuition in public schools, textbooks, school uniform once a year, meals for some primary-level students and financial assistance for students from low-income families who pass the grade 5 scholarship examination. Since October 2017, these facilities have been included in a free insurance scheme (named *suraksha*) for students in public schools. Overall, the government spent Rs. 11,804 per student in 2015 and Rs. 11,357 in 2016 (Ministry of Education). By 2016, 41 million students had been enrolled in approximately 10,000 public schools, and 232,000 teachers had been employed. When all schools are considered, Sri Lankan public schools are running with a significantly low number of students per teacher, e.g. 18 students per teacher in 2016 (Table 1). Once the numbers of teachers and classes in a school are compared, in many schools there is a significant surplus of the former. In all the sampled schools except one, there was a surplus in the number of teachers in comparison with the number of classes. In Sri Lanka, for each primary class, a single teacher is deployed to teach all the subjects for that class. In such a situation, in a school with primary classes only, the number of teachers needs to be equal to the number of classes. However, in many such schools, there is a significant excess number of teachers (first three rows in Appendix 1). The larger the school, the greater the number of surplus teachers (Appendix 1). This situation firstly gives a picture of the underutilization of resources, and secondly it leads researchers to analyse and determine the school-wise requirement of teachers in a logical manner. To achieve these objectives, a convenient sample of 40 public schools in Anuradhapura district, in the North Central Province, was selected and school-wise primary data on the number of teachers, the total number of parallel classes of each grade and the subjects taught in each class were collected. After analysing the data, a formula was constructed and the teacher requirement for each school was determined. Considering and comparing three possible models, namely one teacher-one subject-one school, one teacher-two subjects-one school and one teacher-one subject-more schools, the teacher requirement for each school was reassessed. This article is organized as follows. The second section gives a brief introduction on education in public schools in Sri Lanka. The third section develops a formula to determine the teacher requirement for each school. In the final section, conclusions are presented and directions for future research are explained.

Public school education in Sri Lanka

Out of a student population of 4.3 million in Sri Lanka, 95 percent are enrolled in public schools (Table 1). There are four types of schools, namely 1AB, 1C, Type 2 and Type 3 (Ministry of Education, 2017). 1AB schools offer the General Certificate of Education (Advanced Level) (GCE (AL)) in science stream and other streams (commerce, technology and arts). In addition to secondary classes, these schools may also have primary classes. The second category of schools has primary classes, secondary classes and advanced level arts and/or commerce and/or technology streams but no science stream. Type 2 schools provide education for grades 1–11. The last category, Type 3, has classes from grade 1 to 8 (Ministry of Education, 2016). In Sri Lanka, grade 1–5 classes are labelled as primary level, grades 6–11 as secondary level and grades 12–13 as collegiate level. Teachers are mainly categorized as graduates, trained, trainee, untrained or other. The graduate category includes first degree holders, postgraduate degree holders, postgraduate diploma holders and graduate trainees. Trained teachers are teachers who have graduated from Teacher Training Colleges and National Colleges of Education and those who have a two-year

Table 1. Basic details of schools and student population in Sri Lanka, 2016.

School type	No. of schools	No. of teachers	No. of students	Student–teacher ratio
Public	10,162 (92.2%)	23,2555 (94.6%)	4,143,330 (95.4%)	18
Private	105 (1.0%)	6872 (2.8%)	136,407 (3.1%)	20
Pirivena	754 (6.8%)	6503 (2.6%)	66,003 (1.5%)	10
Total	11,021 (100%)	245,930 (100%)	4,345,740 (100%)	18

Source: Ministry of Education (2016).
Note. Pirivena is a school established in some Buddhist temples. Only Buddhist monks and male students study in *Pirivenas* but are not directly controlled by the government. However, government pay the salaries of teachers in these institutions.

Table 2. Categorization of teachers by their educational qualifications, 2016.

Category	Graduate	Trained	Trainee	Untrained	Other	Total
Number	99,724	127,857	1887	2426	661	232,555
%	41.5	56.0	1.0	1.2	0.3	100.0

Source: Ministry of Education (2016).

diploma in science/mathematics. Trainee teachers are those who have not been absorbed into the Sri Lanka Teacher Service. The next category includes untrained teachers and 2–3 year diploma holders who are not absorbed into the Sri Lanka Teacher Service. The last category , 'other', includes teachers paid by other government institutes or by non-government institutes and/or organizations (Ministry of Education, 2016). Graduates and trained teachers represent 42 and 56 percent respectively of the entire teacher population (Table 2). Furthermore, in 2015 there were 50 PhD qualified teachers in public schools (Ministry of Education, 2015). Every year in April, August and December, schools are closed for the holidays for one month or more. During this time, teachers are not expected to report to work.

Deployment of teachers and cost minimization

In Sri Lankan public schools, teachers are usually expected to work for six hours a day, starting at 7.30 am. They annually enjoy about two months of holiday and are paid a pension after attaining their 55th year. Teachers need to be efficiently allocated in schools to optimize school outputs and inputs. If Sri Lanka continuously increases public expenditure, it may lead to bigger fiscal deficits and finally to expanded borrowings. Moreover, inflation and expanding the size of the public sector are the other related problems in the economy. Sri Lanka's public expenditure and debt are gradually increasing. Taking prompt actions to minimize public expenditure is a timely requirement.

In Sri Lanka, schools are open for education on weekdays. Schools start teaching at 7.30 am and close at 1.30 pm. The day includes eight teaching periods, of 40 minutes each, and there are 40 periods in a week. Curricula are designed by the Ministry of Education for all levels of school education – primary, secondary and collegiate. For primary classes (grades 1–5), a common set of subjects is offered by all schools, and hence all students study the same subjects, which are taught for each class by a single teacher. In grade 5, students sit the grade 5 scholarship exam. From grade 6 to 9, there are about 20 subjects to choose from, with each student studying 13 subjects (Appendix 2). However, they are only required to take exams for 11 subjects. No examinations are held for IT or

Practical Technical Skills. In addition to the subjects taught for grades 6–9, 11 subjects have been introduced for grades 10 and 11 (GCE Ordinary Level) (Appendix 2). The curriculum for this level includes six compulsory subjects (Mathematics, Science, English Language, Sinhala Language, History and Religion) and three elective subjects. At the end of grade 11, students sit the GCE (OL) exam, and those who pass move onto GCE (AL) classes. There are four main subject streams for GCE (AL) – science, arts, commerce and technology. Each student studies three main subjects according to their stream. The science stream includes three subdivisions – biological sciences, physical science and agriculture. For all three subdivisions in the science stream, some subjects are common while some are stream-specific. For example, chemistry is a common subject for all the sub-streams in the science stream. Common subjects in the commerce and arts streams are e.g. economics, IT and languages. After two years, GCE (AL) students sit the university entrance exam.

Teacher requirement: Things to be considered and the background to developing the formula

A recent working paper by the National Bureau of Economic Research (Fryer, 2016) explores whether teacher specialization (assigning teachers fewer subjects, e.g. only Mathematics, Science or Social Studies) promotes productivity in elementary schools. Fryer (2016) states that:

> having teachers specialized may increase the quality of human capital available to teach students through sorting, but may lead to inefficient pedagogical choices. Empirically, I find that teacher specialization, if anything, decreases student achievement, decreases student attendance, and increases student behavioral problems. (Fryer, 2016: 23)

Some countries use specialized teachers on some occasions. China uses subject specialized teachers in elementary schools. English is taught by English teachers and Drawing is taught by a teacher specialized in Drawing. However, the situation is different in American elementary schools. Here, one teacher teaches all subjects, including Mathematics, Reading, Writing, Health, Arts, Social Studies, Science etc. Consistent with Fryer's (2016) idea, in Sri Lankan primary classes where no elective subjects are offered, all subjects are taught by one teacher. As such, the requirement of teachers in a primary school is equal to the number of classes.

Existing policy for the determination of the required number of teachers in a school

The School Census 2017 shows that 44 percent of Sri Lankan teachers are graduates and 54 percent are trained teachers. Thus, the country has qualified teachers but they are not equally distributed. Primary school students are taught by teachers who are graduates of colleges of education. Subjects which need special training to teach, like English Language, Science, Mathematics, Dancing and Music, are taught by qualified teachers. The Ministry of Education, in its circular No. 01/2016, instructed directors and principals at all levels of education regarding the determination of teacher requirements for each school. Each principal was expected to fill in a form and to inform higher authorities about the teacher requirements of their school. This form contained the number of classes and students at primary level (1–5); the number of classes, selected subjects and students at secondary level (6–11); the number of classes, selected subjects and subject streams at collegiate level (12–13); the number of teachers they had at that time; and the shortage or surplus of teachers. Accordingly, each principal was expected to determine the teacher requirements of their school.

Table 3. Minimum number of teaching periods needed for each GCE (AL) class.

Subject	Minimum no. of periods per week
30 periods equally allocated for three main subjects	30
English Language	6
Library	4
Total per week	40

Source: Ministry of Education, Circular No. 2006/13.

Circular No. 01/2016 did not consider the allocation of minimum time periods for each subject in determining teacher requirements. Moreover, it implied that teachers who teach grades 12–13 need not teach GCE (OL) classes. This is a waste or underutilization of resources.

General formula

Through circular No. 2006/09 of 7 March 2006, the Ministry of Education instructed school authorities that minimum time periods needed to be separately allocated for teaching each subject for grades 6–9, 10–11 and 12–13 (Appendices 3 and 4, and Table 3). In classes other than primary level, the teacher requirements for each school depend on three main variables, namely the number of subjects offered, the time periods allocated for each subject and the number of classes (parallel classes and grade span) for each subject. Taking these three variables into consideration, the following formula has been developed to determine the requirement of teachers for each school. Since the formula assumes that a teacher teaches only one subject, it is based on the one teacher-one subject-one school model:

$$NT_x = \sum_{j=1}^{n}\left[\frac{TP_j^{6-9}}{40} * NC_j^{6-9}\right] + \sum_{k=1}^{m}\left[\frac{TP_k^{10-11}}{40} * NC_k^{10-11}\right] + \sum_{l=1}^{P}\left[\frac{TP_l^{12-13}}{40} * NC_l^{12-13}\right]$$

$$+ \text{Number of primary classes}$$

$$NT_x = \sum_{j=1}^{n} X_j + \sum_{k=1}^{m} Y_k + \sum_{l=1}^{p} Z_l + \text{Number of primary classes}$$

where,

$$X_j = \left(\frac{TP_j^{6-9}}{40} * NC_j^{6-9}\right)$$

$$Y_k = \left(\frac{TP_k^{10-11}}{40} * NC_k^{10-11}\right)$$

$$Z_l = \left(\frac{TP_l^{10-11}}{40} * NC_l^{12-13}\right)$$

Where NT_x is the Number of Teachers (NT) required for school X; and TP_i^{6-9}, TP_k^{10-11} and TP_l^{12-13} are the time periods respectively allocated per week to teach the subjects j, k and l in individual class ranges of 6–9, 10–11 and 12–13. NC_i^{6-9}, NC_k^{10-11} and NC_l^{12-13} are the Number of Classes (NC) within

each individual class range of 6–9, 10–11 and 12–13, for which the subjects j, k and l are respectively offered in a week. N, m and p are the number of subjects offered in the class range of 6–9, 10–11 and 12–13 respectively. The total number of time periods available for teaching in a week, or the number of time periods a teacher can be assigned to teach, are represented by 40. In this formula, values of X_j, Y_k and Z_l respectively give the number of teachers required to teach subjects j, k and l, and decimal values for any X_j, Y_k and Z_l are respectively counted as unity. When the same subject is taught at any two levels, $j = k$ or $k = l$, or at all three levels, $j = k = l$, then the values for X, Y and Z can be added.

Under the assumption that one teacher teaches one subject, the teacher requirement of 40 sampled schools covering all types was calculated using the developed formula – see column 3 of Appendix 5. This Appendix includes the number of teachers required for each school in the sample as per circular No. 01/2016, which has been calculated and presented with actually allocated numbers of teachers for these schools (columns 4 and 2 respectively). However, the actually allocated number of teachers at many schools is significantly greater than both the number of teachers calculated according to circular No. 01/2016 and the calculated number of teachers in terms of the developed formula. In all schools, where 1139 teachers are employed, there is a surplus of 55 teachers in comparison with teacher requirements calculated according to circular No. 01/2016. This surplus increases to 79 once the actually allocated number of teachers of all these schools is compared with the number of teachers calculated using the formula. However, according to the data, the number of allocated teachers includes school principals too. One can argue that principals need not teach and therefore should not be counted as teachers. However, this is a controversial issue because in some primary schools there are only five grades from 1 to 5. In the sample, there are seven such schools. The deployment of a non-teaching principal for such a school is controversial. Moreover, in many 1C and 1AB schools there is non-teaching supporting staff to pursue administrative work. Thus, the way in which the administrative workload can be counted needs to be analysed. In the 40 sampled schools, if 40 teachers are excluded, there is still a surplus of 15 in the allocated number of teachers when compared to the calculated number of teachers as mentioned in circular No. 01/2016. According to the formula, the surplus goes up to 39 when the calculated number of teachers is compared with the allocated number of teachers. The whole analysis of teacher requirement emphasizes that public schools waste teacher resources, and if the whole country is considered the extent of the waste is very high. In almost all schools in the sample, either an excess or a shortage of teachers can be observed. This situation points to an inefficient use of teacher resources. Furthermore, according to the formula, in schools where there are only primary classes, the teacher requirement is equal to or marginally greater than the number of classes. Empirical data show either an excess or a shortage in the number of teachers in small schools (Type 3 and Type 2). However, in almost all schools with a higher student population (1C and 1AB), there is an excess number of teachers.

It is possible to adjust the formula for language of teaching by calculating teacher requirements according to language. However, in Sri Lanka, the language of teaching does not significantly matter in determination of school-wise teacher requirements. This is because, according to the 2017 school census, out of the total number of schools (10,194), 62.1 percent are purely Sinhala and 29.5 percent are purely Tamil, i.e. 91.6 percent have a single teaching language. Therefore, the formula can still be used for single language schools since it is based on the one teacher-one subject-one school model.

Other teaching models

Under the one teacher-one subject-one school model, one teacher is assigned to teach only one subject. With this model, the efficient deployment of teachers is very difficult in small schools. In

Type 3 schools, in addition to primary classes, other classes range only from 6 to 8. Where there are only three secondary classes, one teacher can be assigned to about three periods (two hours) if they are assigned to teach only one subject, so meaning a surplus of human resources. However, if one teacher can be assigned at least two subjects to teach, then human resources can be utilized more productively. For example, Mathematics, Science, Buddhism and Sinhala Language are compulsory for students in secondary classes. Science teachers can also teach Mathematics at secondary level, while Sinhala Language teachers can teach Buddhism. Then schools can look into the adoptability of the one teacher-two subjects-one school model.

In some areas/towns, schools are closely located. One school might be separated by a fence or wall from another school. In Anuradhapura town, Anuradhapura Central College, Swarnapali MahaVidyalaya, Walisingha Harischanra Maha Vidyalaya, Sahira MahaViyalaya and Vivekananda Maha Vidyalaya are located very close to each other. At present, teachers are assigned to teach in only one school. Consequently, during some work periods some teachers have to stay idle. However, there may be a class in a school without a teacher for a subject that a teacher in an adjacent school specializes in. For those schools, the one teacher-one subject-more schools model can be adopted and, without damaging teacher specialization, teaching resources can be utilized at a higher productive level. This model is more relevant for subjects which require a certain type of specialization, are not compulsory and which are selected by a small number of students, e.g. Western Music or Drawing.

Conclusions

This article analysed decision making on teacher requirements in schools. The study revealed that the actually allocated number of teachers in selected schools in Anuradhapura district is greater than the calculated teacher requirements for those schools in terms of Ministry circular No. 01/2016. It can be concluded that current procedures and policies for the placement of teachers in each school and in the school system do not minimize costs. After considering the number of classes (both parallel and year-wise), minimum teaching periods need to be allocated for each subject at each level and the number of subjects offered at each level, a formula was postulated to determine the number of teachers required for a given school. Based on this formula, the calculated teacher requirements for selected schools were lower than both the number of actually allocated teachers and the number of teachers calculated for each selected school in terms of Ministry circular No. 01/2016. This situation again re-stresses the non-minimization of costs by public authorities and the inefficiency of current transfer policies of teachers in Sri Lankan public schools. In the case of Type 3 and Type 2 schools, it is very easy to determine teacher requirements. However, even in these schools, there is an excess in the number of teachers. On average, in terms of the one teacher-one subject-one school situation, in many schools there is a surplus in the number of teachers. This is also the case in schools where there are grades up to 5. If teachers are deployed in terms of the one teacher-two subjects-one school model, they can be more productively deployed, especially in Type 2 and Type 3 schools. At present, in the Sri Lankan public school system, teachers are adequately available in terms of the available data. However, they are not efficiently deployed. This issue points to the current transfer policy of teachers and the irregular non-matching distribution of teachers. The formula in this study is generic and it is possible to be modified to include other related issues such as the annual leave entitlement of teachers.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Author wishes to extend his sincere thanks to the Research Council of the University of Sri Jayewardenepura for funding this research.

ORCID iD

Tikiri Nimal Herath https://orcid.org/0000-0003-4302-6211

References

Fryer RG Jr (2016) The 'pupil' factory: Specialization and the production of human capital in schools. Working Paper 22205, National Bureau of Economic Research. Available at: http://www.nber.org/papers/w22205 (accessed 27 May 2018).

Ministry of Education (2015) *School census preliminary report 2015*. Colombo: Ministry of Education.

Ministry of Education (2016) *School census preliminary report 2016*. Colombo: Ministry of Education.

Ministry of Education (2017) *School census preliminary report 2017*. Colombo: Ministry of Education.

Appendix 1. Details of selected public schools in Anuradhapura district, 2018.

School no.	No. of teachers	No. of classes	Excess/shortage	School type (as defined in text)	Class range
1	7	5	2	Type 3 Primary	1 to 5
2	8	5	3	Type 3 Primary	1 to 5
3	16	14	2	Type 3 Primary	1 to 5
4	6	5	1	Type 3 Primary	1 to 5
5	11	10	1	Type 3 Primary	1 to 5
6	6	5	1	Type 3 Primary	1 to 5
7	6	5	1	Type 3 Primary	1 to 5
8	6	5	1	Type 3 Primary	1 to 5
9	7	5	2	Type 3 Primary	1 to 9
10	11	9	2	Type 3	1 to 9
11	11	9	2	Type 3	1 to 9
12	8	9	-1	Type 3	1 to11
13	16	11	5	Type 2	1 to 11
14	16	11	5	Type 2	1 to 11
15	12	11	1	Type 2	1 to 11
16	16	11	5	Type 2	1 to 11
17	23	11	12	Type 2	1 to 11
18	26	17	9	1C	1 to 13
19	21	13	8	1C	1 to 13
20	16	11	5	1C	6 to 13
21	40	16	24	1C	6 to 13

(continued)

Appendix 1. (continued)

School no.	No. of teachers	No. of classes	Excess/shortage	School type (as defined in text)	Class range
22	35	18	17	1C	6 to 13
23	44	22	22	1C	6 to 13
24	41	19	22	1C	6 to 13
25	35	20	15	1C	6 to 13
26	24	16	8	1C	1 to 13
27	39	21	18	1C	1 to 13
28	52	28	24	1C	1 to 13
29	41	16	25	1C	1 to 13
30	44	26	18	1C	1 to 13
31	47	26	21	1C	1 to 13
32	21	13	8	1C	1 to 13
33	37	21	16	1C	1 to 13
34	36	23	13	1C	1 to 13
35	22	13	9	1C	1 to 13
36	24	13	11	1C	1 to 13
37	51	27	24	1AB	6 to 13
38	90	40	50	1AB	6 to 13
39	73	40	33	1AB	6 to 13
40	93	49	44	1AB	6 to 13
Sum	1139	649	489		

Source: Field survey, 2018.

Appendix 2. Subjects offered for secondary level grades in Sri Lanka, 2018.

	Grade						
Subject	6	7	8	9	10	11	Total
Buddhism	✓	✓	✓	✓	✓	✓	6
Catholicism	✓	✓	✓	✓	✓	✓	6
Islam	✓	✓	✓	✓	✓	✓	6
Christianity	✓	✓	✓	✓	✓	✓	6
Shivenary	✓	✓	✓	✓	✓	✓	6
English Language	✓	✓	✓	✓	✓	✓	6
Sinhala Language	✓	✓	✓	✓	✓	✓	6
Tamil Language	✓	✓	✓	✓	✓	✓	6
Sinhala Language & Literature					✓	✓	2
Sinhala Literature					✓	✓	2
English Literature					✓	✓	2
Mathematics	✓	✓	✓	✓	✓	✓	6
Science	✓	✓	✓	✓	✓	✓	6
Geography	✓	✓	✓	✓	✓	✓	6
History	✓	✓	✓	✓	✓	✓	6
Health & Physical Education	✓	✓	✓	✓	✓	✓	6
Art	✓	✓	✓	✓	✓	✓	6

(continued)

Appendix 2. (continued)

Subject	Grade						Total
	6	7	8	9	10	11	
Dancing	✓	✓	✓	✓	✓	✓	6
Traditional Dancing					✓	✓	2
Western Music	✓	✓	✓	✓	✓	✓	6
Eastern Music	✓	✓	✓	✓	✓	✓	6
Drama & Theatre	✓	✓	✓	✓	✓	✓	6
Art & Craft					✓	✓	2
Practical & Technical Studies	✓	✓	✓	✓			4
Life Skills & Citizenship Education	✓	✓	✓	✓	This will be Citizenship Education in grade 10		4
Citizenship Education					✓	✓	2
Home Economics					✓	✓	2
Business Studies & Accounts					✓	✓	2
Information & Communication Technology					✓	✓	2
Agriculture & Food Technology					✓	✓	2
Entrepreneurial Education					✓	✓	2
Total	20	20	20	20	29	29	

Sources: Sri Lanka Ministry of Education and field survey 2018.

Appendix 3. Minimum number of teaching periods needed for each class for grades 6–9.

Subject	Minimum no. of periods per week
Religion (Buddhism/Catholicism/Christianity/Shivenary/Islam)	2
Sinhala Language & Literature / Tamil Language & Literature	5
English	5
Mathematics	5
Science	5
History	2
Geography	2
Life Skills & Citizenship Education	2
Aesthetic Subjects	3
Practical Studies	3
Health and Physical Education	2
Second Language Sinhala/Tamil	2
Library	1
Non-allocated periods	1
Total per week	40

Source: Ministry of Education, circular No. 2006/09.

Appendix 4. Minimum number of teaching periods needed for each class for grades 10–11.

Subject	Minimum no. of periods per week
Religion (Buddhism/Catholicism/Christianity/Shivenary/Islam)	2
Sinhala Language & Literature / Tamil Language & Literature	5
English	5
Mathematics	6
Science	6
History	2
1st basket subjects	3
2nd basket subjects	3
3rd basket subjects	3
Library	1
Non-allocated periods	3
Total per week	40

Source: Ministry of Education, circular No. 2006/09.

Appendix 5. Comparison of the calculated number of teachers according to formula, circular No. 01/2016 and the actually allocated teachers in selected schools in Anuradhapura district, 2018.

(1)	(2)	(3)	(4)	(5)	(6)
School no.	Allocated no. of teachers	Required no. of teachers in terms of formula	No. of teachers as per circular	Allocated-required (2–3)	Allocated-circular (2–4)
1	7	5	6	2	1
2	8	5	6	3	2
3	16	14	16	2	0
4	6	5	6	1	0
5	11	10	12	1	-1
6	6	5	6	1	0
7	6	5	6	1	0
8	6	5	6	1	0
9	7	5	6	2	1
10	11	15	16	-4	-5
11	11	17	16	-6	-5
12	8	16	16	-8	-8
13	16	17	16	-1	0
14	16	19	18	-3	-2
15	12	16	19	-4	-7
16	16	18	18	-2	-2
17	23	17	18	6	5
18	26	28	37	-2	-11
19	21	22	27	-1	-6
20	16	21	22	-5	-6
21	40	30	22	10	18
22	35	31	29	4	6
23	44	40	32	4	12

(continued)

Appendix 5. (continued)

(1)	(2)	(3)	(4)	(5)	(6)
School no.	Allocated no. of teachers	Required no. of teachers in terms of formula	No. of teachers as per circular	Allocated-required (2–3)	Allocated-circular (2–4)
24	41	37	29	4	12
25	35	38	31	-3	4
26	24	23	33	1	-9
27	39	37	43	2	-4
28	52	44	53	8	-1
29	41	27	33	14	8
30	44	39	46	5	-2
31	47	41	46	6	1
32	21	21	27	0	-6
33	37	36	34	1	3
34	36	34	43	2	-7
35	22	25	27	-3	-5
36	24	22	27	2	-3
37	51	47	42	4	9
38	90	65	64	25	26
39	73	80	54	-7	19
40	93	77	74	16	19
Sum	1139	1059	1082	79	55
Mean	28.55	26.475	27.05	-	-

Source: Based on field survey 2018.