Present Status Assessment of the 13-year Guaranteed Education Programme in the Western Province of Sri Lanka











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# Present Status Assessment of the 13 Years Guaranteed Education Programme in the Western Province of Sri Lanka



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# Preface

The school system in Sri Lanka is structured to provide 13 years of education, beginning at age 5 and culminating with the General Certificate of Education Advanced Level (GCE A/L) examination. However, students who do not pass the General Certificate of Education Ordinary Level (GCE O/L) examination are typically ineligible to complete the full 13 years of schooling. As a result, many students drop out of the education system after failing to qualify for further academic studies at the GCE O/L level.

To address this issue, the concept of '13-Year Education' was introduced—an initiative that allows students to complete 13 years of schooling by offering an alternative vocational and skills-based educational pathway. The 13 Years of Guaranteed Education Programme (13YGEP), launched in 2017, aims to reduce school dropouts and provide viable routes for students who face challenges with traditional academic subjects, equipping them with marketable skills for employment or further education.

This descriptive research study evaluates the status of the 13YGEP vocational stream in selected schools in the Western Province of Sri Lanka. It focuses on student enrollment trends, the availability of resources, and the perceived satisfaction of teachers and principals involved in the program. Findings indicate a clear upward trend in student enrollment in the vocational stream between 2017 and 2023. This increase may be attributed to various factors, including students' desire to complete their secondary education, acquire employable skills, or prepare for opportunities in both local and foreign job markets. The study also highlights existing challenges within the program and incorporates insights from principals and teachers. These findings are expected to inform future policy recommendations aimed at strengthening the program. A well-structured vocational stream is essential for facilitating the smooth transition of students from academic environments to the workforce, ultimately enhancing youth employability in Sri Lanka.

As Chairman of the National Education Commission (NEC), I am pleased to present this final report on the descriptive research study, which provides an in-depth analysis of the 13-Year Guaranteed Education Programme and its impact on vocational education in Sri Lankan schools.

Mrs. Padmini Ranaweera Chairperson National Education Commission 2024

# Acronyms and Abbreviations

DTET	Department of Technical Education and Training
GCE A/L	General Certificate of Examination Advanced Level
GCE O/L	General Certificate of Examination Ordinary Level
NAITA	National Apprentice and Industrial Training Authority
NVQ	National Vocational Qualification
NYSC	National Youth Services Council
SLITHM	Sri Lanka Institute of Tourism & Hotel Management
TVEC	Tertiary and Vocational Education Commission
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training
VTA	Vocational Training Authority

# **Table of Contents**

1.	Executive Summary1
2.	Introduction2
3.	Research Approach4
3.1	Objectives of the study4
3.2	Significance of the study4
3.3	Methodology4
3.3.1.	Sampling/Overview4
3.3.2.	Data analysis5
4.	Results6
4.1	Demographic profile of the respondents6
4.2	Descriptive information about the surveyed schools7
4.3	Trend patterns for 13 years guaranteed education program8
4.3.1.	Student enrollment8
4.3.2.	Students' course completions and dropouts over the period9
4.3.3.	Number of external candidates enrolled for the 13 years guaranteed education programme
4.3.4.	Classroom composition11
4.3.5.	Based on GCE O/L qualification teachers' perception of student enrollment to the 13 years guaranteed education programme11
4.4	Availability of the human resources and technical facilities to deliver a quality education program
4.4.1.	The number of teachers available to manage GCE A/L vocational stream classes12
4.4.2.	Teacher's vocational subjects selection based on the first appointment12
4.4.3.	Subjects have been taught by the surveyed teachers13
4.4.4.	Teachers responses on available facilities & resources14
4.4.5.	Principals' responses on the availability of internet facilities15
4.4.6.	Principals' responses regarding the amount of financial assistance received16
4.4.7.	Teachers' responses on the maintenance of provided teaching aids & instruments17
4.5	Principals' and teachers' opinions and viewpoints regarding the 13 years guaranteed education programme
4.5.1.	Principal's overall satisfaction with the introduced 13 years guaranteed education programme
4.5.2.	Teachers perceived satisfaction with teaching the subjects and teaching facilitating items
4.5.3.	Teachers perceived satisfaction with the direction of the 13 years guaranteed education programme

4.5.4.	Teachers perceived satisfaction with the existing career guidance support21
4.6	Teachers' awareness and guidance regarding the students' course selection21
4.6.1.	Teachers' responses related to the availability of two-week career guidance programme 21
4.6.2.	Teachers' responses to their access to the TVEC website to search courses and training institutions
4.6.3.	Teachers responses on their guidance for students to use the TVEC website to access required information
4.6.4.	Teachers' recommendations of the training institutions for students' training requirements
4.7	Major constraints to continuing the 13-year guaranteed education programme25
5.	Discussion
6.	Conclusion and Recommendations
7.	References
8.	Acknowledgement

# List of Tables

Table 1: Composition of the Survey Respondents	6
Table 2: School Distribution	8
Table 3: Teacher's Vocational Subjects Selection Based on the First Appointment	13
Table 4: Information on Subjects taught by Surveyed Teachers	14
Table 5: Principal's Overall Satisfaction with the Introduced Programme	18
Table 6: Teachers Perceived Satisfaction with Teaching the Subjects and Teaching Facilitating Items	19
Table 7: Teachers Perceived Satisfaction with the Direction of the Programme	20
Table 8: Teachers Perceived Satisfaction with the Existing Career Guidance Support	21
Table 9: Teachers' Recommendations of the Training Institutions for Students' Training	
Requirements	24

# List of Figures

Figure 1: Student Enrollment	9
Figure 2: Students' Course Completions and Dropouts over the Period	10
Figure 3: Enrollment of External Candidates	10
Figure 4: Classroom Composition	11
Figure 5: Student Enrollment to the Programme	11
Figure 6: Teachers Availability of the Schools	12
Figure 7: Responses of the Teachers on Available Facilities & Resources	14
Figure 8: Availability of Internet Facilities	15
Figure 9: Principals' Responses on Financial Assistance Received	16
Figure 10: Amount of Financial Assistance Received	17
Figure 11: Maintenance of the Provided Teaching Aids & Instruments	17
Figure 12: Availability of Two-week Career Guidance Programme	21
Figure 13: Access to the TVEC Website to Search Courses and Training Institutions	22
Figure 14: Guidance for Students to Use the TVEC Website to Access Required Information	23
Figure 15: Major Constraints to Continuing the Programme	25

## 1. Executive Summary

After introducing any educational programme, a proper evaluation is crucial for improving delivery and achieving expected benefits by reducing discrepancies. Therefore, assessing the recently introduced 13-year guaranteed education programme is essential for policymakers and line ministries to manage the system effectively. In light of the above objective, this descriptive research study aimed to evaluate the status of 13-year vocational General Certificate of Examination Advanced Level (GCE A/L) stream schools in the western province of Sri Lanka, focusing on students' enrollment details, available resources, and perceived satisfaction of the teachers and principals. Data was collected using a self-prepared structured questionnaire through stratified sampling, and the data obtained was analysed using descriptive statistics. The study results indicate that survey respondents were satisfied with the introduced Advanced Level (GCE A/L) vocational stream programme and its direction and teaching. Student enrollment in the new vocational Advanced Level (GCE A/L) stream rose during the six years from 2017 to 2022; however, a considerable drop-out rate was also observed over time.

Further results revealed a significant need for teaching staff to support the programme's progress, while resources such as laboratory assistants, workshops, internet facilities, and computers were lacking within the surveyed sample. Moreover, results suggest that government intervention is needed to strengthen vocational teachers' capacity development and alleviate their workload by recruiting trained academic staff in a timely manner that is in line with the subject requirement. Overall, the vocational Advanced Level (GCE A/L) stream has provided positive perceived satisfaction among the respondents while attracting a sufficient number of G.C.E failed students, in line with its intended compulsory educational objectives.

**Keywords:** 13-year guaranteed education, Enrollment, Drop-outs, Vocational education, Resources

# 2. Introduction

Education plays a vital role in the national development of the nations and provides various benefits to the different stakeholders. When considering the major stakeholders, obtained benefits are accrued toward either society or individuals (Johnes et al., 2017). Therefore, as a vital stakeholder group, students should be able to gain all the necessary competencies while meeting the required target and complete full compulsory schooling years without interruptions.

The number of years students spend on schooling is one of the essential constituents that estimate the quality of compulsory education; consequently, it symbolises the higher skill absorbance by the pupils. Therefore, mandatory education is crucial and well-debated by empirical authors to obtain the maximum output from the education process. For example, authors such as Llach et al (2009) discussed the positive and negative effects of prolonging school days in Argentina on tertiary education. In contrast, Lochner and Moretti (2004) pointed out a lower crime rate in the United States due to a positive benefit. Further, A, Meyer, and Thomsen (2018) discussed the students' discovery of talents, preferences, and interests due to the optimal level of schooling. However, other than schooling duration, factors are also incorporated into the equation, including quality of instruction and time available to learning outside the school, to enhance the correlation between instruction time and educational performance (EACEA, 2019).

Apart from the importance of extended learning, the primary goals of compulsory education vary with the country's development status. The primary objective of secondary education in developed countries is to prepare students for higher education and cope with labour market requirements (Thomsen, 2015). Despite that, due to the poor economic background of the families, the decision to attend secondary school is more difficult in low-income countries (Diaz-Serrano, 2020). Moreover, child schools attempt decisions taken by the parents after comparing the benefits and cost of schooling (Lewis & Nguyen, 2020). Hence, government intervention occurs within the education system using policy intervention or establishing rules according to country-specific requirements to extend the duration of schooling.

When considering the history of mandatory education policies, the introduction of compulsory education dates back to the last third of the 19<sup>th</sup> century in most countries of the Western world (Miller, 1989). After that, world nations recognised the value of extended schooling, and government attention was directed toward facilitating compulsory education; thus, in 1985, 80% of nations had compulsory education (Ramirez, 1989). In recent decades, according to the Dakar Framework for Action, compulsory education has been accepted by most countries that are members of the United Nations Educational, Scientific and Cultural Organization (UNESCO) while ensuring compulsory education (Martens & Windzio, 2022) within them. Eventually, as a member state of UNESCO, Sri Lanka also adhered to the Compulsory Education policy. When considering the brief history

of the Sri Lankan education sector, it is well managed by the government legislation. Among those, the enactment of Education Ordinance No. 31 of 1939 can be identified as a milestone of the education process. Then, the educational reforms governed in 1997 further progressively encouraged the students' continuous attendance in schools.

In Sri Lanka, general education is divided into two major segments, mainly primary education and secondary education, where the duration spans 12 years to 13 years. As a country with a free education system, to subsidise schooling-related costs, the government has been allocating higher expenditures to providing textbooks, uniforms, and many other facilities for students (Alawattegam, 2020). However, with these provisions also due to many factors, the number of students who drop out from the system before entering the collegiate level is considerably high (National Education Commission, 2022), making it a problem to develop human capital. Considering the rampant situation, a new government programme on 13 years of guaranteed education was introduced in 2017 to facilitate student retention up to GCE A/L with a vocational stream apart from their obtained General Certificate of Examination Ordinary Level (GCE O/L) results. Besides, this GCE A/L stream opens new pathways for enrolled students who have completed the required two years to obtain National Vocational Qualification (NVQ) level 4 certification from their preferred subjects. Eventually, all these developments would benefit the advancement of the domestic labour force and Sri Lanka's national economic growth. Indeed, a lot of educationrelated research has been carried out regarding general education outputs. However, no research has been conducted to survey the status of the 13-year guaranteed education programme introduced in Sri Lanka. Therefore, getting a clear insight into the new programme is worthwhile in avoiding recurring weaknesses and improving the vocational stream to a more popular level than other GCE A/L streams. Hence, the primary objective of this descriptive research study is to investigate the status assessment of the 13-year guaranteed education program to understand the reality of the education field by evaluating the opinions and satisfaction levels of the teachers and principals.

# 3. Research Approach

# **3.1** Objectives of the study

The objectives of the study are listed as follows.

- 1. Identify students' enrollment patterns for the new vocational stream over the last six years.
- 2. To evaluate the available human resources and technical facilities to deliver a quality education program.
- 3. Evaluate the vocational education stream teachers' and principals' opinions and viewpoints regarding the 13-year programme and its direction.
- 4. Identify the teachers' awareness and guidance regarding the students' course selection.
- 5. Identify issues and gaps existing in the present programme.

# **3.2** Significance of the study

The present study findings offer a conceptual idea of the delivery effectiveness of the 13 years guaranteed education programme over the period. Therefore, by using these research outputs, educators and decision-makers can design implementation methods to solve issues found within the system to optimise future benefits. Furthermore, identifying the students' actual demand for vocational course modules and the number of allocated teachers for the same module would be worthwhile in reconsidering required cadre positions. Furthermore, this study will reveal the number of students who joined the introduced program to study the ongoing trend pattern.

## 3.3 Methodology

## 3.3.1. Sampling/Overview

The study was arranged based on the descriptive research approach describing the population's characteristics. According to the Western Provincial Education Department website information, 89 Vocational stream schools were identified as the study population. From the above population, 70 schools were randomly designated as a survey sample based on the stratified sampling and occupied sampling size determined by Krejcie & Morgan (1970) method.

As per the survey requirement, two structured questionnaires were constructed. The questionnaire of the principals was prepared to identify trends associated with the 13-year programme, whereas the teachers' questionnaire mainly focused on identifying perceived values. Then, the structured questionnaires were posted to selected schools, and all the necessary instructions were circulated to respondents to prevent any errors in answering. As for the respondents, one headteacher representing the coordinator role in the vocational stream and one principal from each school were assigned. After two weeks of submission,

responses from the schools were received through the posts. After that, phone requests were arranged, and a reminder was made to motivate a sufficient number of submissions.

### 3.3.2. Data analysis

Finally, the responded survey sample consisted of 42 principals and 43 school teachers. Compared to the expected sample size, the response rate was 64.28%, and those responses were incorporated for the data analysis. In addition, the observed response rate was well acceptable based on the findings of the previous research study (Rao et al., 2021). All the data analyses were conducted using MS Excel and SPSS 24.0(SPSS Inc.,Chicago, IL, USA). The descriptive analysis was mainly used to compare the study findings. The question items were prepared to measure the satisfaction calculated by using a five-point Likert scale with answers ranging from 1 (*Strongly Dissatisfied*) to 5 (*Strongly Satisfied*) based on Sengupta & Pandey (2022). The reliability of the instruments was measured by using Cronbach's alpha method. The observed alpha ( $\alpha$ ) was 0.8, thus acceptable for survey purposes.

### 4. Results

### 4.1 Demographic profile of the respondents

When considering the demographic information (Gender, Age, Teaching Experience, GCE A/L stream, BSc Degree major field of study, Appointment type) of the survey sample, the summarised results are listed in Table 1. From the two respondent groups, one demographic variable (Gender) was assigned for the principals, and six demographic variables were separately tabulated for teachers based on the survey requirement. Among the principal group, male representation stood at 61.9%, whereas female representation dominated at 74.4% among teachers.

Regarding the age category, a higher number (n=39) of teachers belonged to the age category of 30-39, and a greater percentage (62.8%) of teachers had 6 to 10 years of teaching experience. Regarding the GCE A/L streams followed by the teachers', most of them studied the GCE A/L Art stream, while science and commerce streams represented 25.6% and 16.3 respectively. The obtained BSc degree qualifications of the responded teachers were clustered into three distinctive groups, and people who received any other BSc degrees represented the highest majority (48.8%). In contrast, the lowest percentage of teachers (11.6%) had Natural science, Physical Sciences, and Mathematics related degrees within the surveyed sample. Almost 72.1% of teachers were appointed as graduate teachers, while 20.9% of respondents were recruited under the appointment type of trainee graduate.

Demographics	Category	Frequency	Percentage%
Gender (Principals)	Male	26	61.9
	Female	16	38.1
	Total	42	100.0
Gender (Teachers)	Male	11	25.6
	Female	32	74.4
	Total	43	100
Age (Teachers)	25-29	3	7.0
	30-39	39	90.7
	40-49	1	2.3
	Total	43	100.0
Teaching Experience	Less than 1	4	9.3
	01-05	11	25.6

Table 1: Composition of the Survey Respondents

	06-10	27	62.8
	16-20	1	2.3
	Total	43	100.0
GCE A/L Stream	Art	21	48.8
	Science	11	25.6
	Maths	3	7
	Commerce	7	16.3
	Technology	1	2.3
	Total	43	100
BSc Degree Major	Natural Science, Physical Sciences,		
Field of Study	Mathematics	5	11.6
	Arts, Social Sciences, Education	17	39.5
	Any Other Degree	21	48.8
	Total	43	100.0
Appointment Type	Trained	1	2.3
	Graduate	31	72.1
	Trained Graduate	9	20.9
	Not Responded	2	4.7
	Total	43	100.0

Source: Survey Data

## 4.2 Descriptive information about the surveyed schools

Based on the responses of the School principals (n=42), the descriptive school information was tabulated and depicted in Table 2. The summary statistics reveal that a higher number of 13-year guaranteed education programmes were established in 2018 and 2020 after the introduction of 2017. The 61.9% of responded schools belonged to the class 1AB category, and 35.7% identified as type 1C schools. Compared to single-sex schools, more mixed schools (90.5%) have participated in the 13 years guaranteed education programme. In addition, most responded schools (47.6%) had at least two classrooms allocated for the programme, whereas 7.1% of schools functioned without any classroom for a particular programme.

#### Table 2: School Distribution

Variable	Category	Frequency	Percentage%
Education Programme Initiated Year	2017	4	9.5
	2018	14	33.3
	2019	6	14.3
	2020	14	33.3
	2021	2	4.8
	2023	2	4.8
	Total	42	100
School Type	1AB	26	61.9
	1C	15	35.7
	Type 2	1	2.4
	Total	42	100
School Type (Based on Sex)	Boys School	3	7.1
	Girls School	1	2.4
	Mix School	38	90.5
	Total	42	100
Number of Classes Assigned for 13			
Years Guaranteed Education Program	3 Classes Only	8	19.0
	2 Classes Only	20	47.6
	1 Class Only	10	23.8
	No Class at All	3	7.1
	Not Responded	1	2.4
	Total	42	100

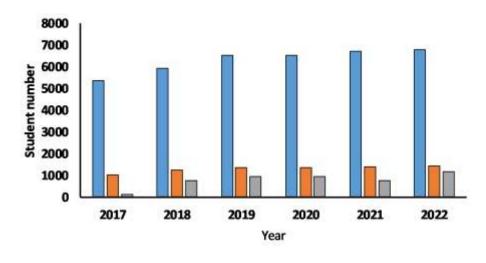
Source: Survey Data

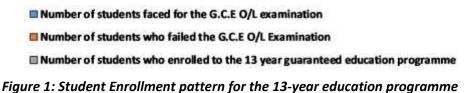
# 4.3 Trend patterns for 13 years guaranteed education program

### 4.3.1. Student enrollment

The results of the study show that there was an increasing trend for students to join the 13 years guaranteed education over the six-year duration. In 2017, approximately the least number of students were attracted by the programme, and this value reached its peak in

2022. Compared to the number of students who failed the GCE O/L examinations each year, fewer students continuously joined the vocational education program. However, this observed gap reached its lowest level in 2022. The number of students who faced the GCE O/L examination remained steady during the last 4-year period from 2019 to 2022, while the value observed was 6000 students approximately per year. The student group who attempted to study the 13-year program in 2022 represented 17.23% of the total number of students compared to those who faced the GCE O/L examination in the same year.





#### 4.3.2. Students' course completions and dropouts over the period

The bar chart illustrates the number of students who completed the particular courses and candidates who dropped out from the guaranteed education system from 2017 to 2022. It can be seen that student dropout numbers were comparatively higher over the period. The highest dropout rate was observed in 2019, after which it decreased slightly and remained steady. However, the course completion number also expanded during the same six consecutive years and reached its highest in 2020.

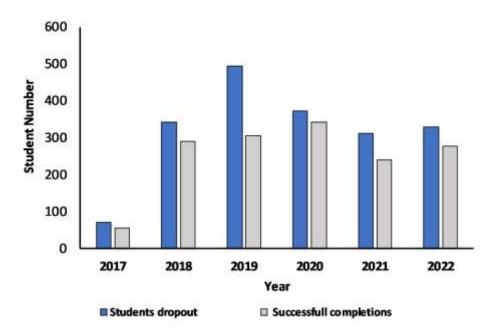


Figure 2: Statistics on Students' 13 Year based Course Completions and Dropouts over the Period

# 4.3.3. Number of external candidates enrolled for the 13 years guaranteed education programme

The enrollment of external candidates for the 13-year guaranteed education programme increased over six years. The lowest enrollment was observed in the year 2017; thereafter, it rose until 2019 and fell slightly in the next two years. In 2022 the external candidate enrollment was seven times higher than in 2017.

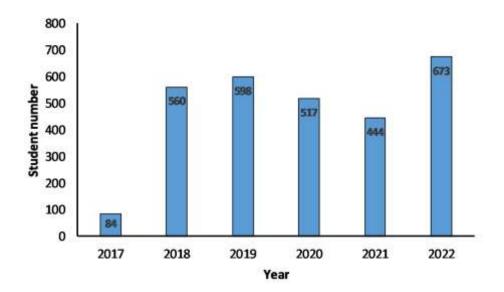
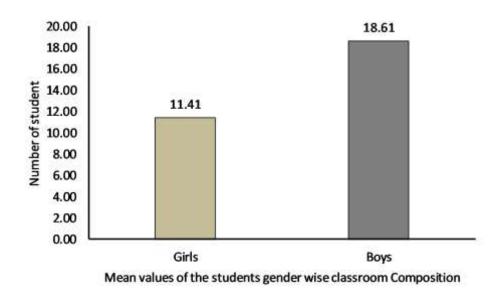


Figure 3: Enrollment of External Candidates

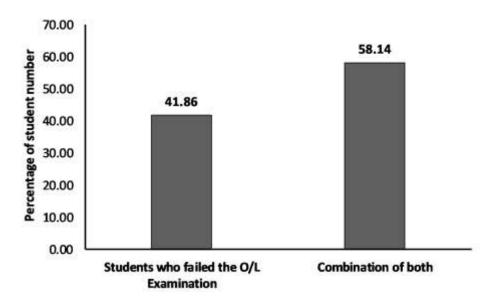
#### 4.3.4. Classroom composition

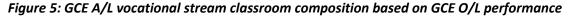


#### Figure 4: GCE A/L vocational Stream Classroom Composition by gender

In 2023, the vocational stream's gender-based classroom composition is illustrated in Figure 4. The average number of boys who participated in learning (Average) was greater than the number of female participants. Furthermore, female composition in classes was 38% less than the average boys composition. Nonetheless, there was a considerable variation between the schools concerning this constitute.

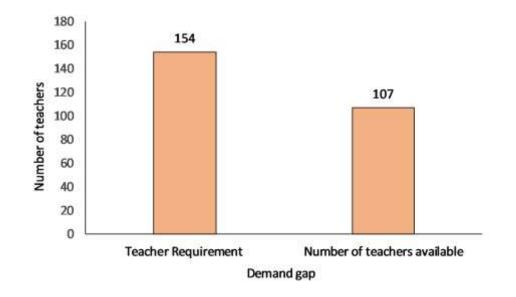
# 4.3.5. Based on GCE O/L qualification teachers' perception of student enrollment to the 13 years guaranteed education programme





The larger number of responded teachers (58.14%) explained that, in the most recent year, their vocational classroom included a higher number of students representing the combination of both groups (O/L examination failed and passed students). On the other hand, just above 40% of teachers stated that their classes only comprised students who failed the GCE O/L exam.

# 4.4 Availability of the human resources and technical facilities to deliver a quality education program



4.4.1. The number of teachers available to manage GCE A/L vocational stream classes

#### Figure 6: Vocational stream teachers availability in the surveyed Schools

For the effective functioning and delivery of the 13-year guaranteed education program, 154 teachers were required across all 42 schools. However, within the system, there were only 107 teachers available to impart the subject matters to students. The teacher requirement was observed as 47 teachers.

#### 4.4.2. Teacher's vocational subjects selection based on the first appointment

In the first appointment, 18.6% of teachers were assigned to teach hospitality and tourism management modules. Meanwhile, 14% and 11.6% of respondents opted to teach performing arts and food processing studies, respectively. The subject preferences of other respondents were more evenly distributed, with lower percentage values.

Selected subjects	Frequency	Percentage
Psychology & Care	2	4.7
Physical Education & Sport	2	4.7
Arts & Crafts	3	7.0
Event Management	4	9.3
Performing Arts	6	14.0
Fashion Designing	1	2.3
Graphic Designing	1	2.3
Landscaping	1	2.3
Livestock Product Studies	1	2.3
Food Processing Studies	5	11.6
Aquatic Resources Studies	1	2.3
Plantation Product Studies	2	4.7
Construction Studies	1	2.3
Electrical & Electronic Studies	1	2.3
Software Development	3	7.0
Tourism & Hospitality	8	18.6
Not Responded	1	2.3
Total	43	100

Table 3: Teacher's Vocational Subjects Selection Based on the First Appointment

Source: Survey Data

#### 4.4.3. Subjects have been taught by the surveyed teachers

In the present context, 23.26% of teachers taught all the subjects related to vocational and non-vocational education in the surveyed schools. The lowest percentage (2.3%) spent their time teaching general subjects and didn't teach any vocational subjects. Only 18.6% of teachers had taught their appointed subjects as per the appointments, while the same percentage of teachers imparted all the vocational subjects (Appointed, Second & thirdly offered subjects) to students.

Table 4: In	formation a	on Subiect	s tauaht b	v Survev	ed Teachers
10010 4.111	, or mation (	511 5465500	s taagiit s	y Survey	cu reachers

		Category	Frequency	Percentage%
	Teaching	Vocational stream-related Subjects according to the first appointment	8	18.60
		Teaching a second vocational subject other than to first choice	4	9.30
Present Subjects		Teaching the third vocational subject	6	13.95
		Other Subjects only (not related to vocational stream)	1	2.33
		Above I and II	6	13.95
		Above I, II, and III	8	18.60
		Above I, II, III, IV	10	23.26
		Total	43	100.00

Source: Survey Data

# 4.4.4. Teachers responses on available facilities & resources

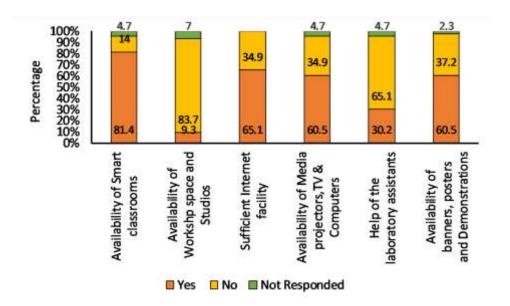
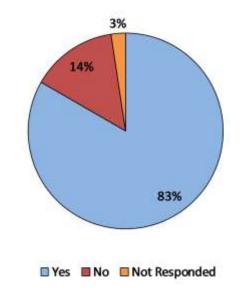


Figure 7: Teachers Responses on Available Facilities & Resources

The chart shows the teachers' percentages of responses for six different resources required to continue the programme. The most striking point of the bar chart is responses regarding classroom availability, with 81.4% of teachers expressing the availability of classrooms and 14% responding that they didn't have classrooms for the 13-year program. The worst responses were observed regarding the availability of workshop space and studios, with 83.7% of teachers mentioning they lacked a particular facility. Subsequently, concerning the help of the laboratory assistants, the unavailability percentage was observed as 65.1%, with only 9.3% indicating availability. For sufficient internet facility, responses for availability and not availability were observed as 65.1% and 34.9%, respectively. However, a similar percentage of responses was observed for facilities such as the availability of media projectors, TVs, and computers, as well as the availability of banners, posters, and demonstrators.



#### 4.4.5. Principals' responses on the availability of internet facilities

Figure 8: Responses on Availability of Internet Facilities

As shown in figure 8, 83% responded that they had internet facilities in schools to continue the 13-year program. 14% of respondents mentioned that the facility was unavailable for the programme.

#### 4.4.6. Principals' responses regarding the amount of financial assistance received

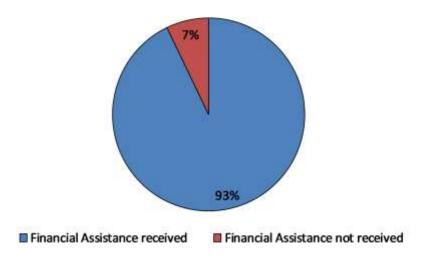


Figure 9: Principals' Responses on Financial Assistance Received

93% of principals indicated that they had received financial assistance for the 13-year program, in contrast to 7 % who responded that they didn't receive any monetary assistance.

Data analysis revealed that nearly half of the surveyed schools had received financial assistance equal to 500,000 Sri Lankan rupees. Then, 33.3% of schools were awarded 100,000 rupees to strengthen the 13-year guaranteed education programme. However, a minority of schools received higher financial assistance, from Rs. 650,000 to Rs. 1000,000, collectively accounting for a 7.2% proportion. Notably, one school reported receiving no financial aid in terms of rupee value.

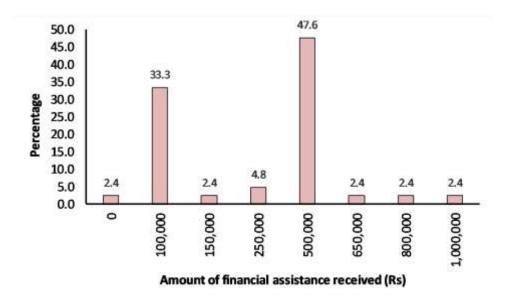


Figure 10: Distribution of Financial Assistance among surveyed schools

#### 4.4.7. Teachers' responses on the maintenance of provided teaching aids & instruments

The survey results, as shown in the chart, explain that most teachers (51%) were satisfied with the maintenance of their supplemented teaching aids and instruments, whereas 40% were dissatisfied with the existing maintenance process.

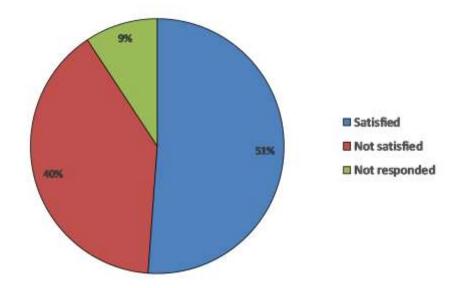


Figure 11: Responses on Maintenance of the Provided Teaching Aids & Instruments

# 4.5 Principals' and teachers' opinions and viewpoints regarding the 13 years guaranteed education programme

# 4.5.1. Principal's overall satisfaction with the introduced 13 years guaranteed education programme

Table 5 illustrates the overall mean satisfaction scores of the principals on questionnaire items related to the introduced 13-year guaranteed education programme. Based on the study results, principals were satisfied with the visiting lecturers' performance on the delivery of subjects (Mean = 3.53). Also, they perceived positively regarding areas such as the on-the-job training provided by outside institutions, introduced 13 years guaranteed programme, and received financial assistance. However, they held neutral responses for available facilities (*Laboratory, workshop space, Studios*) to efficiently continue GCE A/L vocational stream classes (Mean =2.93) and maintenance of the existing infrastructure facilities required for the programme (Mean =3.05).

No	Item	Ν	Minimum	Maximum	Mean	SD
1	Satisfaction with the Visiting lecturer's performance	38	1	4	3.53	0.762
2	Satisfaction with present school facilities (Laboratory, workshop space, Studios)	41	1	5	2.93	1.081
3	Satisfaction with the maintenance of the present school facilities (Laboratory, workshops, Studios, Machines)	40	1	5	3.05	0.959
4	Satisfaction with On-the-job training provided by outside institutions	42	1	4	3.52	0.804
5	Satisfaction with the introduced 13 years guaranteed education programme	41	2	5	4.02	0.758
6	Satisfaction with the financial assistance and grants you received for the 13-year programme	39	1	5	3.21	1.105

Source: Survey Data

# 4.5.2. Teachers perceived satisfaction with teaching the subjects and teaching facilitating items

Table 6 summarizes the feedback on teachers' perceived satisfaction with the teaching and given teaching aids. Except for the training programme received to teach the third vocational subject (Mean = 2.75), respondents provided feedback with high mean score values for all the other items. Regarding the teaching skills and ability to teach without interruptions, observed as the main two items with high mean scores stood at 4.14 and 3.93, respectively.

Table 6: Teachers Perceived Satisfaction with Teaching the Subjects and Teaching Facilitating Items

No	Item	N	Minimum	Maximum	Mean	SD
1	Satisfaction with the teaching of Vocational stream subjects (same as the applied and appointed)	43	1	5	3.77	0.947
2	Satisfaction with the teaching of Vocational stream subjects (Not the same as first time appointed)	42	2	5	3.71	0.774
3	Due to the other general subject you teach in school, is there any influence on your teaching in the 13-year education program? how about your perceived satisfaction	42	1	5	3.52	0.862
4	Satisfaction with own teaching skills relevant to the 13-year guaranteed program subjects?	43	3	5	4.14	0.467
5	Satisfaction to teach without any interruptions during lecture hours	43	2	5	3.93	0.593
6	Satisfaction with the allocated time for teaching Vocational Stream subjects	43	2	5	3.86	0.743
7	Satisfaction with the training program received for teaching a second vocational subject	29	2	5	3.45	0.783

8	Satisfaction with the training program you received for teaching a third vocational subject	12	1	4	2.75	0.754
9	Satisfaction with the teaching aids provided	43	1	5	3.47	1.032

Source: Survey Data

# 4.5.3. Teachers perceived satisfaction with the direction of the 13 years guaranteed education programme

When considering the teachers' perceived satisfaction with the direction of the 13-year guaranteed education programme, the obtained mean score values are listed in Table 7.

For all question items, respondents positively responded. Notably, regarding the introduced program and students' ability to absorb 13-year program subjects, they responded with an average mean score of 4.12 as the highest score value. Additionally, mean scores of 3.74 and 3.72 were observed for the current employment market for students and the 13-year program's actual ability to retain students in school.

No	Item	Ν	Minimum	Maximum	Mean	SD
1	Satisfaction with the introduced 13 Years Guaranteed Education Programme	43	1	5	4.12	0.851
2	Satisfaction with students' ability to absorb 13-year programme subjects and use those taught concepts for their future career development	43	3	5	4.12	0.448
3	Satisfaction with the 13 years guaranteed education programme's practical applicability on direct student retention in a school system	43	2	5	3.74	0.727
4	Satisfaction with the existing job market for students program	43	2	5	3.72	0.766

#### Table 7: Teachers Perceived Satisfaction with the Direction of the Programme

Source: Survey Data

### 4.5.4. Teachers perceived satisfaction with the existing career guidance support

Table 8 results reflect teachers' satisfaction level with the existing career guidance support. Respondents felt positively that the two-week career guidance programme (Mean =3.88) and the services provided by the Tertiary and Vocational Education Commission (TVEC) website (Mean=3.76) were satisfactory for facilitating students' career guidance and course selection.

Table 8: Teachers Perceived Satisfaction with the Existing Career Guidance Support

No	Item	Ν	Minimum	Maximum	Mean	SD
1	Satisfaction with the two-week career guidance program	42	2	5	3.88	0.705
2	Satisfaction with the service provided by the TVEC website	42	2	5	3.76	0.576

Source: Survey Data

### 4.6 Teachers' awareness and guidance regarding the students' course selection

# 4.6.1. Teachers' responses related to the availability of two-week career guidance programme

Most of the teachers (86%) responded that their schools offered a two-week career guidance programme to provide sufficient information for vocational stream students to facilitate their career guidance choices, with very few of them (12%) stating that their schools had not conducted the two-week preparatory activity.

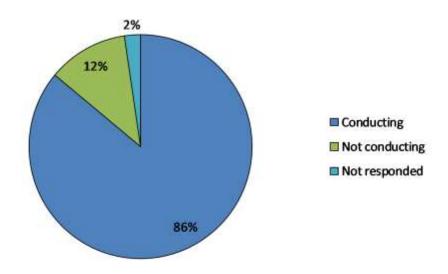


Figure 12: Availability of Two-week Career Guidance Programme

# **4.6.2.** Teachers' responses to their access to the TVEC website to search courses and training institutions

According to the figure 13, 81% of teachers indicated that they had accessed the TVEC website and had searched for information on vocational courses and training programmes. A small proportion (19%) didn't search the TVEC website at all.

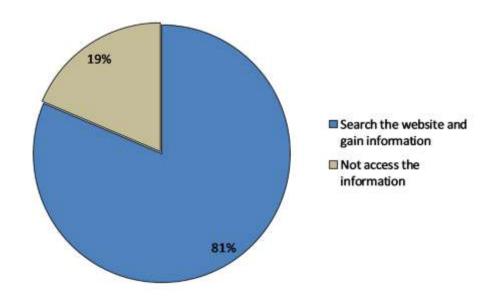


Figure 13: Access to the TVEC Website to Search Courses and Training Institutions

# 4.6.3. Teachers responses on their guidance for students to use the TVEC website to access required information

After accessing the TVEC website, 81% of participants guided their pupils and motivated them to search on the same site. However, a smaller proportion of teachers (19%) didn't guide their students to access the TVEC website. Furthermore, 5% of respondents didn't answer the question.

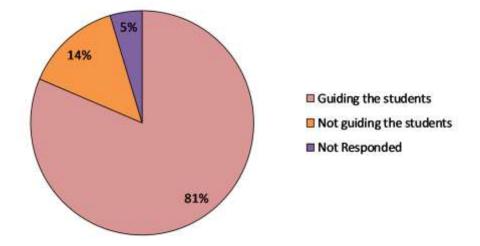


Figure 14: Teachers Guidance for Students on using the TVEC Website to Access Required Information

# 4.6.4. Teachers' recommendations of the training institutions for students' training requirements

Table 9 shows information about the teachers' recommendation of preferred vocational training institutions for following seven different training courses for their students. As for Aluminum fabrication training, 44.2% of respondents preferred Vocational Training Authority (VTA), and 27.9% opted for Department of Technical Education and Training (DTET), while for National Youth Services Council (NYSC) and National Apprentice and Industrial Training Authority (NAITA), preference percentages stood at 4.7 and 2.3%, respectively. Notably, 20.9% of survey respondents did not answer the question item. For automobile tinkering, a higher percentage of teachers selected VTA, whereas a minor percentage (7%) selected NAITA as the preferred choice. The closer preferred choice percentages were observed for courses such as Graphic design, Motorcycle mechanics, and automobile air conditioning, where all the respondents highly preferred to choose VTA for their students' training. For the professional cookery and beauty culture training, they opted to choose Sri Lanka Institute of Tourism & Hotel Management (SLITHM) and NYSC as second choices by indicating 34.9% and 25.6 preference percentages. However, a higher percentage of respondents preferred VTA for two courses as their first choice.

Training Category	Category	Frequency	Percentage%
Aluminum Fabrication	VTA	19	44.2
	DTET	12	27.9
	NAITA	1	2.3
	NYSC	2	4.7
	Not Responded	9	20.9
Automobile Tinkering	VTA	18	41.9
	DTET	13	30.2
	NAITA	3	7.0
	Not Responded	9	20.9
Graphic Designing	VTA	22	51.2
	DTET	6	14.0
	NAITA	4	9.3
	NYSC	4	9.3
	Not Responded	7	16.3
Motorcycle Mechanic	VTA	26	60.5
	DTET	6	14.0
	NAITA	2	4.7
	NYSC	1	2.3
	Not Responded	8	18.6
Automobile Air Conditioning	VTA	22	51.2
	DTET	9	20.9
	NAITA	2	4.7
	LALTI	2	4.7
	Not Responded	8	18.6
Professional Cookery	VTA	21	48.8
	ΝΑΙΤΑ	2	4.7
	NYSC	3	7.0

Table 9: Teachers' Recommendations of the Training Institutions for Students' Training Requirements

	SLITHM	15	34.9
	Not Responded	2	4.7
Beauty Culture	VTA	22	51.2
	NAITA	4	9.3
	NYSC	11	25.6
	Not Responded	6	14.0

Source: Survey Data

# 4.7 Major constraints to continuing the 13-year guaranteed education programme

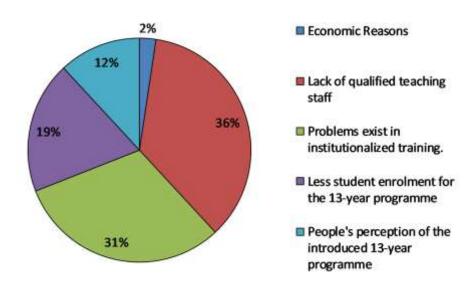


Figure 15: Major Constraints to Continuing the Programme

Figure 15 depicts school principals' responses to five constraints existing in the 13-year guaranteed education programme. As per the highest percentage of (36%) respondents, the lack of qualified teaching staff was the major limitation. 31% felt it was due to the problems within institutionalised training. Out of the respondent group, 19% believed lower student enrollment for the program was a limiting factor, while the lowest percentage (2%) of survey participants identified it as being due to economic reasons.

### 5. Discussion

Technical and Vocational Education and Training is a key area that facilitates national economic development. In Sri Lanka, integrating vocational education with general post-secondary education is a new approach introduced in 2017. It is designed to meet the compulsory national educational requirements by ensuring students' retention in school for up to 13 years while providing them with competent vocational skills. According to the present study findings, we observed a clear increasing trend in the number of students joining the vocational stream from 2017 to 2023. This finding might be coupled with several reasons, such as students' willingness to complete secondary higher education, to gain needed skills to find specific employment within the domestic job market, or to prepare for foreign labour requirements. As discussed (Held & Mejeh, 2024; Powell & McGrath, 2013), Students are joining the Technical and Vocational Education and Training (TVET) to obtain aptitudes and attitudes essential for preparing for future occupations. On the other hand, Milne (2007) argues that pathways from Vocational education to higher education have the potential to reduce the course completion time and cost associated with the degrees.

In Sri Lanka, students who complete the two years of a 13-year programme are eligible to obtain NVQ level 4 national diploma certification. This certification is well recognised for entering the succeeding higher diplomas that are prerequisites to the BSc degree qualification. Furthermore, the NVQ qualification framework established in Sri Lanka in 2004 aims to fulfil the vocational candidates' higher education requirements by appropriately matching their entry NVQ qualifications and providing paths to advance up to higher NVQ levels. Therefore, our observed student attraction to the 13-year programme might be caused by combining the effect of these factors.

Furthermore, our study results revealed that the gap between the number of students who failed the GCE O/L examination and students enrolled in secondary education by joining the 13-year programme, reduced with time. It is a good observation that showcases the success of the introduced 13-year programme's ability to absorb failed students from particular governmental exams. Many study findings have specifically discussed the characteristics of the students who enter vocational programmes. Kelly & Price (2009) explained that vocational students have lower GPAs and are less likely to join high-track classes. However, Poor academic performance should not be considered a limiting factor in being a skillful human, and with this established GCE A/L stream, students can follow their preferred vocational subject to gain the necessary skills irrespective of their GCE O/L grades.

Dropping out is a complex problem that causes significant human and capital loss (Tas et al., 2013). The present study results indicated that a considerable amount of students dropped out from the newly established GCE A/L vocational stream over the period. This course quitting could happen for several reasons, such as lack of education skills held by students, economic factors, following other classes, and a combination of intrinsic and extrinsic factors. Krötz (2024) explained that different reasons cause students to drop out of

vocational training courses and identified as a multifactor phenomenon. Himmel argued (2002) that student dropout resulted from an overall process of interactivity between students, academics, and social spheres of learning institutions. Therefore, the authorities should take preventative measures to minimise student withdrawals after understanding the specific root causes according to the context of the Sri Lankan 13-year-based Vocational Schools. Although dropout numbers were high in the study, successful completions also increased. It suggests that a student tends to complete the required course within the given time duration to obtain relevant NVQ qualifications.

Concerning vocational stream classroom composition, study findings revealed that more male students participated than females. The lower female enrollment in Vocational Education and Training (VET) is well discussed by previous study findings (McDool & Morris, 2020; Ngugi & Muthima, 2017) and therefore aligns with the present study results. On the other hand, majority of teachers' views, 13-year vocational classes consisted of both student groups (O/L failed students and passed students), while a smaller portion perceived their classes to be only comprised of GCE O/L failed students. These results suggest that students are willing to update their existing qualifications to vocational certification and join the competitive labour market with specific skills without worrying about their GCE O/L results. Furthermore, the study results showed an increasing number of external candidates joining the programme, highlighting the growing demand from outside applicants rather than school students.

The present study's findings revealed substantial teacher requirements for continuing the vocational stream schools and indicated that the existing teachers are responsible for teaching subjects that had not been trained. Thus, this creates an additional burden for teachers to effectively prepare and manage vocational subjects. Further, as per the school requirement, a considerable percentage of teachers taught subjects directly relevant to the GCE A/L vocational stream, along with the other general subjects. This situation is identified as quantitative overloading, which implies that the teacher must complete more work within the allocated time (Harden, 1999). Thus, the present study findings pinpoint possible strains placed upon teachers appointed to deliver vocational subjects.

Furthermore, among the 42 schools, 7.1% of schools functioned without any classrooms for vocational classes. The unavailability of scheduled classrooms for vocational studies could negatively affect the learning process. Lawrence (2003) explained that the unavailability of school resources negatively influenced teachers' and students' motivation. In addition, Moluayonge & Park (2017) demonstrated that a lack of instructional resources considerably affects teaching methods and practices. Concerning our study findings, we observed deficiencies related to the availability of workshop spaces, banners, posters, and laboratory assistants, which are essential for delivering 13-year subjects. One notable finding of this study was that 34.9% of responded teachers reported insufficient internet facilities in schools. Collectively, all the facilities mentioned earlier can be considered as instructional resources; thus, this could hinder knowledge acquisition for teachers and students.

Government financial assistance is indispensable for expanding and stimulating national education. Various study findings have discussed the importance of financial aid to public schools (Friedman, 1955; J. Meyer et al., 1987; Odden & Picus, 2008). The present study demonstrated that most 13-year vocational schools had received substantial financial assistance from the government and revealed the timely availability of funds. However, we also observed unequal distribution of monetary funds among some schools. The previous study by Condron & Roscigno (2003) highlighted spending inequalities in American urban schools related to Consequences for achievement in five subject fields. For example, the latest laboratory equipment and machines used in some vocational courses are expensive, and without purchasing particular devices, teaching in the classroom is more difficult for teachers. Sometimes, they want to visit nearby vocational institutions to gain knowledge about the same types of equipments. Hence, timely delivering the sufficient monetary allocation to 13- year vocational schools would be needed.

Concerning the respondents' perception, both groups (principals and teachers) were satisfied with most of the question items and didn't observe any unsatisfactory feedback. In this study, principals held neutral perceived responses about the existing resources related to vocational programmes and maintenance of the school facilities, which implies those areas should be a further concern for improvements until they reach satisfaction status. However, they were satisfied regarding the items such as visiting lecturers' performance, on-the-job training, 13-year programme, and given financial assistance.

Concerning the observed results, teachers were satisfied with the teaching subjects, irrespective of the appointed vocational subjects. This observation indicates that they are willing to teach students a broader range of vocational subjects. At the same time, they held a neutral perceived response to training programmes that had to teach the third vocational subjects with a lower mean score value. Indirectly, this implies that there is an out-of-the-field teaching situation within the school context. Out-of-the-field phenomena mainly happen due to the shortage of teachers; thus, timely recruitment of teachers and specific training is essential. Porsch & Whannell (2019) highlighted that subject-specific training for teachers is vital for improving teaching skills and increasing student proficiency.

The results show that teachers are satisfied with the introduced 13-year programme, students' ability to learn subjects, the practical applicability of the GCE A/L vocational stream to retain students, and the job market for the students enrolled in the 13-year guaranteed education. Therefore, the program's direction is more in line with the established objectives of retaining the students for up to 13 years.

Regarding the observed results on career guidance, we found that a minor percentage of teachers responded that their schools hadn't conducted the two-week career guidance support program. Besides, they were satisfied with the two-week career guidance programme, expressing a high mean score value. Therefore, those results suggest that respondents perceived the importance of such facilitative activities and that they should be available on time for all 13-year program-based schools. Pertaining to instrumental

rationality theories, teenagers collect relevant information and consider the cost and benefits of alternative actions to make a final decision by multiplying the benefits (Paton, 2007). It suggests that for final course selection, updated and relevant information should be provided to students. On the other hand, Agbenyo & Collett (2014) stressed the policymakers' role in promoting a more balanced approach related to career guidance and advice in schools on vocational options. Overall, the two-week career guidance programme improves students' course selection decisions and changes their career perspectives, leading them to achieve their desired career potential with a good income status.

Teachers' role in guiding students toward their future path is a well-recognised practice since ancient times. In this study, most responding teachers accessed the official Tertiary Vocational Education Commission website (TVEC) to search for information relevant to vocational courses and institutions. Additionally, they used the gathered data to provide career guidance for students. Therefore, these results suggest that there is clear student-teacher interaction within the schools, which can help prepare students for future job profiles. However, the observed responses also reveal that a lower percentage of teachers had not accessed the website and had not guided the students. Thus, government intervention is vital to minimise such ground-level incidents and get the expected output from the GCE A/L Vocational stream.

Further, respondents highly preferred VTA as the most suitable training institute to direct their students from the selected seven vocational courses (Aluminium fabrication, Automobile tinkering, Graphic designing, Motorcycle mechanic, Automobile air conditioning, Professional cookery, and Beauty culture). The observed preference pattern might be associated with the social recognition of the institution and past performance. Usually, if a particular institution is highly accepted by society, there is a tendency for students to enrol in the prestigious academic institution to gain a competitive advantage. Aula & Tienari (2011) discussed fame as one of the main factors students consider when they choose their preferred university. Furthermore, in the Sri Lankan context, VTAs cover a wider area, and people are more aware of the VTA courses. Additionally, they offer more flexible entry requirements for applicants than other vocational training institutions while providing a variety of subject modules ranging from short duration to extended periods. These institution-based characteristics might explain the higher preference shown by respondents.

The current study uncovers the two main issues identified by the Principals: the lack of qualified teaching staff and problems existing in institutionalised training. Following that, lower student enrolment and social recognition of the VET are also observed as constraints which hinder the growth of the introduced Vocational GCE A/L stream. These observations align with previous studies that explained the same constraints in different countries. Ladan (2023) highlighted that the shortage of qualified teachers significantly affects vocational education in Nigeria as a limitation factor. Fewer teachers are available to teach vocational subjects, creating an unfavourable learning environment for students and instructors,

potentially interrupting the learning process. In addition, Hansen & Woronov (2013) discussed that vocational education in China has lower prestige and status than academic education. Therefore, it describes the recognition related to vocational education, which also plays a crucial role in mediating students' enrollments into the 13-year vocational stream.

### 6. Conclusion and Recommendations

During the six years from 2017 to 2023, student enrollment for the 13-year guaranteed education programme increased, indicating a strong and consistent demand from the applicants. Although applicant enrollment is high, we observed considerable vocational student drop-out from the schools. This student drop-out is a complex phenomenon driven by various reasons; proper evaluation is needed to understand the reality of the situation, which should be addressed in future research studies.

Furthermore, study findings reveal a shortage of teachers in the evaluated sample. Also, the available teachers were assigned to teach multiple subjects, other than the vocational stream subjects, as required by the schools during their teaching hours. Therefore, timely recruitment of qualified teachers is necessary to maintain the quality of the subjects delivered and to support the development of the GCE A/L vocational stream. Moreover, allocating teachers to teach applied vocational subjects should be appropriately arranged based on their specialisation. If any teacher needs special training to learn the modules, a mechanism should be established to provide such training, either through the ministry or a nearby vocational training institute.

Concerning the respondents' observed satisfaction, survey participants expressed satisfaction with the introduced 13-year GCE A/L vocational stream, the program's direction, teaching the subjects, and providing career guidance. However, Teachers had a neutral perception of teaching the third vocational subject and received training, which suggests a continued need for professional training to expand their teaching capacity relevant to applied subjects. As well, results indicate a lack of school instructional resources among the schools to continue classes. Additionally, a small percentage of schools lacked classrooms for the GCE A/L vocational stream. Moreover, the maintenance of the education-supporting facilities is not in optimum condition. Therefore, scheduled government intervention is necessary to monitor the availability and maintenance of resources. Such intervention would help to reduce wastage and prevent unequal distribution. These findings emphasise that efforts by the government and line ministry should be focused on GCE A/L vocational schools to address these challenges and streamline the educational process to achieve the desired outcomes.

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National Education Commission