

# A Comparative Study on the Performance of State Syllabus Based and Central Syllabus Based School Educational Systems in Kerala State of India

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## INTRODUCTION

The education system in India has undergone innumerable changes based on the recommendations of the education commissions appointed by the Government from time to time. The relentless efforts taken up by NCERT and the SCERT deserve much appreciation in streamlining the school education system to a great extent. However, according to educational experts, a viable and realistic culmination of Indian education system is yet to be achieved.

The Kerala State Education Syllabus, which has been operational for decades stands out as one of India's premier State syllabuses. Developed by SCERT, the Kerala State Syllabus places a strong emphasis on co-curricular activities, including arts, sports and environmental initiatives. The curriculum also places a lot of importance on language proficiency as a foundational skill for academic success and personal growth. As one of India's leading education boards, the Central Board of Secondary Education (CBSE) holds a distinguished position in the nation's educational landscape. Acknowledged by the Indian government as a premier national educational authority, CBSE has become a cornerstone of academic excellence across the country. CBSE education is not solely focused on academics, but embraces a holistic approach that values arts, sports, and life skills alongside academic pursuits. The flexible curriculum encourages creativity and exploration, ensuring that every student finds their passion and purpose. It recognizes that every child has the potential to become a visionary leader (Source: Choosing the Right Educational Path. Exploring Kerala State Syllabus vs. CBSE. <https://nskinternationalschool.org/cbse-vs-kerala-state-board>).

Among the Indian States, Kerala has achieved far better position in social indicators such as education. The State has higher literacy rate, higher enrolment rate of students, higher percentage of girl, SC and ST students in schools and low dropout rate among students. Kerala State government and local self-government institutions are very particular in providing good quality infrastructure and hygienic environment in educational institutions [1]. It has been reported that the achievement of mass literacy with gender balance in Kerala is explained by reforms driven State activism [2].

## Objective of the Study

The study reported in this article was carried out to compare the performance of State syllabus based and Central syllabus based education systems up to 10<sup>th</sup> standard in Kerala based on perceptions of the parents of students.

## METHODOLOGY

The study was undertaken by WEDO, an NGO based at Kozhikode in Kerala State of India. The responses obtained through an on-line questionnaire from 150 people, whose children had studied under the State syllabus-based education system, and 150 people, whose children had studied under the Central syllabus-based education system in Kerala were considered under the study. The questionnaire contained 13 questions (education related parameters) for evaluating the performance of the education sector in the State up to 10<sup>th</sup> standard/class under the State Syllabus Based and Central Syllabus Based School Educational Systems and the characteristics of the respondents, namely, sex, age, education level, marital status and profession.

For the positive education related parameters, score of 5, 4, 2 and 1 were given for the responses, namely, extremely good, good, low and very low respectively. For the negative parameters, score of 5, 4, 2 and 1 were given for the responses, namely, strongly disagree, disagree, agree and strongly agree respectively. For all the education related parameters, a score of 3 was given for the two responses, namely, moderate and neutral opinion. Provision was made for giving neutral opinion response so that those who are not sure of giving positive or negative responses to the questions due to their unawareness/ambivalence (on account of being genuinely torn between different opinions, and hence, unable to choose a response) can also respond.

School education system performance index was worked out as the sum of scores of the education related parameters. The data was analysed as proportion reporting, scores and through statistical tests.

## RESULTS

### *School Educational System Performance Index*

The range of school educational system performance index based on rating by the respondents is shown in Table 1.

Table 1. Range of school educational system performance index based on rating by the respondents

State syllabus-based education system			Central syllabus-based education system		
Range of school educational system performance index*	Classification of school education performance**	Respondents (%)	Range of school educational system performance index*	Classification of school education performance**	Respondents (%)
< 43.4	Low	23.3	< 48.8	Low	16.7
43.4-60.3	Moderate	65.3	48.8-77.7	Moderate	66.6
> 60.3-73.8	High	11.4	> 77.7-93.8	High	16.7
Total		100	Total		100

\* as % of the maximum possible index value, which indicates 100 % performance

\*\* Based on mean and SD value

### *Responses towards various parameters related to the performance of school educational system*

Table 2 shows the responses towards various parameters related to the performance of the two school educational systems.

Table 2. Responses towards various parameters related to the performance of the school educational system

Parameter	Response	Respondents (%)	
		State syllabus-based education system	Central syllabus-based education system
The quality of education imparted at the school in general	Extremely good and Good	62.0	96.0
	Moderate	34.7	04.0
	Low	03.3	Nil
The competence of school teachers in general	Extremely good and Good	72.7	91.3
	Moderate	23.3	08.7
	Low	04.0	Nil
In private schools, the teachers did not have much motivation to teach properly because they were not paid good salary	Strongly agree and Agree	42.6	29.3
	Neutral	30.7	20.7
	Disagree and Strongly disagree	26.7	50.0
The motivation of the school teachers (in Private or Govt. or Govt. aided school) to teach properly was not much because they were not given sufficient in-service training by the school	Strongly agree and Agree	50.0	29.3
	Neutral	26.7	24.7
	Disagree and Strongly disagree	23.3	46.0

The subjects taught at the school level were not oriented to provide sufficient knowledge related to professional courses such as Medicine, Dentistry, Engineering, Agriculture Science, Environmental Science etc.	Strongly agree and Agree	80.7	46.0
	Neutral	08.0	20.7
	Disagree and Strongly disagree	11.3	33.3
The type of education imparted at the school was oriented more towards learning the subjects by heart rather than using a conceptual method of understanding subjects through logical thinking	Strongly agree and Agree	76.7	42.0
	Neutral	08.0	16.7
	Disagree and Strongly disagree	15.3	41.3
Tuition classes were necessary to improve studies	Strongly agree and Agree	54.0	37.3
	Neutral	15.3	16.7
	Disagree and Strongly disagree	30.7	46.0
Not much of laboratory work was given at the school for science and other subjects	Strongly agree and Agree	100	54.0
	Neutral	Nil	04.0
	Disagree and Strongly disagree	Nil	42.0
Not much of emphasis was given at the school to develop the life skills of the students in areas such as social communication, group work, time management, behaviour / character improvement, reducing stress / anxiety, facing challenges in life etc.	Strongly agree and Agree	96.0	62.4
	Neutral	04.0	08.7
	Disagree and Strongly disagree	Nil	28.9
Not much of enthusiastic, appropriate physical education activities to facilitate individual development of children were provided at the school	Strongly agree and Agree	76.7	37.3
	Neutral	11.3	28.7
	Disagree and Strongly disagree	12.0	34.0
The ill effects of involvement of students in politics were there at the school	Strongly agree and Agree	50.0	24.7
	Neutral	15.3	12.0
	Disagree and Strongly disagree	34.7	63.3
Improper preparation of curriculum resulted in overload in studies in school	Strongly agree and Agree	46.0	46.0
	Neutral	34.7	24.7
	Disagree and Strongly disagree	19.3	29.3
In Govt and Govt aided schools, the teachers were entrusted with many other activities other than teaching, which affected the teaching standard of the school	Strongly agree and Agree	61.3	42.0
	Neutral	15.3	41.3
	Disagree and Strongly disagree	23.4	16.7

*Statistical significance of the difference in school educational system performance index based on the type of syllabus followed*

Table 3 shows the results of statistical test of the difference in educational system performance index based on the type of syllabus followed.

**Table 3. Statistical significance of the difference in school educational system performance index based on the type of syllabus followed**

Mean school educational system performance index *		t value and statistical significance
State syllabus-based education system	Central syllabus-based education system	
51.8	63.2	-3.39; $p < 0.001$

\* as % of the maximum possible index value, which indicates 100 % performance

*Statistical significance of the difference in scores for school educational system performance parameters based on the type of syllabus followed*

Table 4 shows the results of statistical significance of the difference in scores for various school educational system performance parameters based on the responses of State syllabus-based and Central syllabus-based respondents.

**Table 4. Statistical significance of the difference in scores for school educational system performance parameters based on rating by State syllabus-based and Central syllabus-based respondents**

Parameter	Mean score for the parameter		t value and statistical significance
	State syllabus-based education system	Central syllabus-based education system	
The quality of education imparted at the school in general	3.7	4.2	-2.9; $p < 0.001$
The competence of the school teachers in general	3.8	4.0	t value is not statistically significant
In private schools, the teachers did not have much motivation to teach properly because they were not paid good salary	2.7	3.3	-1.9; $p < 0.10$
The motivation of the school teachers (in Private or Govt. or Govt. aided school) to teach properly was not much because they were not given sufficient in-service training by the school	2.7	3.2	-1.7; $p < 0.010$
The subjects taught at the school level were not oriented to provide sufficient knowledge related to professional courses such as Medicine, Dentistry, Engineering, Agriculture Science, Environmental Science etc.	2.2	2.9	-2.5; $p < 0.01$
The type of education imparted at the school was oriented more towards learning the subjects by heart rather than using a conceptual method of understanding subjects through logical thinking	2.2	3.0	-2.9; $p < 0.01$
Tuition classes were necessary to improve studies	2.8	3.1	t value is not statistically significant
Not much of laboratory work was given at the school for science and other subjects	2.0	2.9	-3.9; $p < 0.001$
Not much of emphasis was given at the school to develop the life skills of the students in areas such as social	1.7	2.5	-2.9; $p < 0.01$

communication, group work, time management, behaviour / character improvement, reducing stress / anxiety, facing challenges in life etc.			
Not much of enthusiastic, appropriate physical education activities to facilitate individual development of children were provided at the school	2.3	3.0	-2.9; $p < 0.01$
The ill effects of involvement of students in politics were there at the school	2.7	3.4	-2.2; $p < 0.05$
Improper preparation of curriculum resulted in overload in studies in school	2.6	2.8	t value is not statistically significant
In Govt and Govt aided schools, the teachers were entrusted with many other activities other than teaching, which affected the teaching standard of the school	2.5	2.8	t value is not statistically significant

## DISCUSSION

The range of school educational system performance index observed in the study is from 40 % to 73.8 % of the maximum possible index value (which indicates 100 % performance) under the State syllabus-based education system, while the range of the index is comparatively higher (40 % to 93.8 % of the maximum possible index value) under the Central syllabus-based education system. Further, under the State syllabus-based education system, the performance index is in the range of 47.7 % to 73.8 % of the maximum possible index value, as calculated based on the responses of 69.2 % of parents of the children. However, under the Central syllabus-based education system, the range of performance index is comparatively higher (47.7 % to 93.8 % of the maximum possible index value), as calculated based on the responses of 96.2 % of parents.

65.3 % respondents have rated the school educational system performance as “moderate” under the State syllabus-based education system, 11.4 % as high performance and 23.3 % respondents as low performance (Table 1). Almost similar proportion (66.6%) of respondents have rated the school educational system performance as moderate under the Central syllabus-based education system also (Table 1). However, when compared to the State syllabus-based education system, under the Central syllabus-based education system, a higher proportion of respondents have rated the performance as high, while a lesser proportion only have rated it as low (Table 1).

It is also evident from Table 1 that under the Central syllabus-based education system, the range of mean school educational system performance index of the high-performance category is higher (77.7 to 93.8 % of maximum possible index value), when compared to the range of mean school educational system performance index of the high-performance category under the State syllabus-based education system (60.3 to 73.8 % of maximum possible index value).

Similarly, Table 1 shows that the range of mean school educational system performance index of the moderate performance category (48.8 to 77.7 % of maximum possible index value) under the Central syllabus-based education system is more than the range of performance index of that category under the State syllabus-based education system (43.4 to 60.3 % of maximum possible index value).

It can be made out from Table 1 that when compared to the State syllabus-based education system, the educational system performance is moderate and high (when considered together) as per the responses of a higher proportion of people under the Central syllabus-based school education system.

All these results indicate better performance of the Central syllabus-based education system, when compared to the State syllabus-based system in Kerala.

The interpretation of responses towards various parameters related to the performance of the two school educational systems based on the data presented in Table 2 is given below. It may be noted that in this interpretation, the proportion who are responding as good relates to those who have given the responses, namely, Extremely good and Good considered together, as agreeing relates to those who have given the responses, namely, Strongly agree and Agree considered together, and as disagreeing relates to those who have given the responses, namely, Strongly disagree and Disagree considered together.

### **The quality of education imparted at the school**

96 % respondents under the Central syllabus-based education system have rated the quality of education as good, while, under the State syllabus-based education system, 62 % respondents only have rated it as good (Table 2). The quality of education in schools in Kerala is usually good. The outcome depends on the quality of teachers and the taught (students). Generally, highly qualified, efficient teachers are appointed in Govt. schools. But, in private schools, maybe due to compulsion, average or below average, not fully qualified persons are appointed. This makes much difference in the way of teaching. Further, students belonging to rural areas, with socially and financially low background may not be able to present better educational performance.

### **The competence of school teachers**

91.3 % respondents under the Central syllabus-based education system have rated the competence of the school teachers as good. However, under the State syllabus-based education system, only 72.7 % respondents have rated their competence as good (Table 2). This may be probably because the teachers under the Central syllabus-based education system get better training, and are evaluated for their performance more than the teachers under the State syllabus-based education system. Teachers in schools under the Central syllabus-based education system may be probably paid more salary than those who are under the State syllabus-based education system, which might also be contributing to better commitment in teaching by them. This would have probably reflected in their competence. Competency also depends on other factors such as external disturbances curtailing individual freedom, stringent financial control etc.

The public, in general, are found to have a better attitude towards the schools having the Central syllabus on account of better quality of education in terms of syllabus, quality of teachers, method of teaching etc.

### **In private schools, the teachers did not have much motivation to teach properly because they were not paid good salary**

50 % respondents under the Central syllabus-based education system have disagreed with this, when compared to only 26.7 % under the State syllabus-based education system (Table 2). This may be probably because the private schools following the Central syllabus charge higher fees than the schools having the State syllabus, and hence, they are in a position to pay better salary to the teachers. On the whole, reasonable salary is paid in Govt controlled schools, whereas private schools fail to do so in many cases.

### **The motivation of the school teachers (in Private or Govt. or Govt. aided school) to teach properly was not much because they were not given sufficient in-service training by the school**

Table 2 shows that while 50 % respondents under the State syllabus-based education system agree to this, only 29.3 % of respondents under the Central syllabus-based education system have agreed to it (Table 2). This indicates that the teachers under the Central syllabus-based education system are given more in-service training by the schools. This may be probably because of such a strictly enforced mandatory requirement in such schools. However, such a requirement may not be there much in State syllabus-based schools, especially in Govt schools, which are also more in number under the State syllabus-based schools than the Central syllabus-based schools in Kerala.

In many cases, teachers are not given in-service training at required intervals for professional development opportunities, on account of which, they can become outdated in knowledge and skills. This can lead to redundancy in their teaching work and make it challenging for them to adopt to new curriculum, latest technologies and new methodologies.

### **The subjects taught at the school level were not oriented to provide sufficient knowledge related to professional courses such as Medicine, Dentistry, Engineering, Agriculture Science, Environmental Science etc**

It can be seen from Table 2 that while 80.7 % respondents under the State syllabus-based education system agree to this, the figure for the Central syllabus-based education system is only 46 % respondents (Table 2). This implies that more knowledge orientation with respect to professional fields such as Medicine, Engineering etc. is there under the Central syllabus-based education system than the State syllabus-based education system.

The National Education Policy (NEP) formulated in 2020 expects to bring about a dynamic change in the education policy. Based on this, NEP 25 is all set to implement the reforms soon. It has a well-defined plan to mitigate the deficiency in promoting professional competency in school education through technology integration, digital education and vocational and life skill training. It also provides autonomy for educational institutions to innovate and experiment with curriculum design and development. Industry-Academia collaboration and partnership with educational institutions is also a salient feature of NEP 25.

### **The type of education imparted at the school was oriented more towards learning the subjects byheart rather than using a conceptual method of understanding subjects through logical thinking**

Conceptual learning gets less importance in the existing educational system. Learning the subject matter byheart is usually considered prominent to get a high score in the examinations. However, NEP 25 is giving importance to conceptual learning.



Only 15.3 % of respondents under the State syllabus-based education system have disagreed that the type of education imparted at the school was oriented more towards learning the subjects byheart rather than using a conceptual method of understanding subjects through logical thinking. However, 41.3 % respondents under the Central syllabus-based education system have expressed their disagreement with this (Table 2). This implies that the method of teaching in Central syllabus-based schools is less oriented towards learning subjects byheart, when compared to the schools under the State syllabus. This is also an indication of better quality of education imparted by schools under the Central syllabus-based education system in Kerala, which has been already observed with respect to the parameter under this study, namely, quality of education.

#### **Tuition classes were necessary to improve studies**

The perception of many parents is that tuition is essential for their children to support better learning. In this context, the booming up of Tutorials in Kerala have given way to even remote internet-based learning. This can be curtailed only through efficient coaching in schools.

Data presented in Table 2 shows that 46 % respondents under the Central syllabus-based education system have disagreed that tuition classes were necessary to improve studies of their children. However, 30.7 % respondents only have disagreed with this under the State syllabus-based education system. This result also helps to establish the already observed trends under this study regarding better quality of education in Kerala, and more competence of teachers under the in the Central syllabus-based schools. This may be the reason why not much of tuition classes were required by the students under the Central syllabus-based education system.

#### **Not much of laboratory work was given at the school for science and other subjects**

Table 2 shows that only 54 % respondents under the Central syllabus-based education system have agreed that much laboratory work was not given to the students for science and other subjects. However, all the respondents under the State syllabus-based education system have agreed to this aspect (Table 2). This result also helps to substantiate the fact that better quality of education is there under the Central syllabus-based education system in Kerala.

Laboratory work and experiments should be given priority in higher classes to instil the concepts learned from class notes and books. However, this may not be very much practicable in lower classes. Classroom labs and libraries will work better in these cases.

#### **Not much of emphasis was given at the school to develop the life skills of the students in areas such a such as social communication, group work, time management, behaviour / character improvement, reducing stress / anxiety, facing challenges in life etc.**

It may be observed from Table 2 that while 28.9 % respondents under the Central syllabus-based education system have disagreed with this, none of the respondents under the State syllabus-based education system have disagreed. This may be considered as an indication of the emphasis given under the Central syllabus-based education system in promoting the life skills of students, unlike the State syllabus-based education system.

In fact, the development of life skills is a wide area where the school authorities should pay much attention to. The modern student community is much isolated from their childhood happiness and pleasantries. Many of them are aloof from friendship and family relationships, which could probably be the dark side of irreversible technological advancements. An ideal atmosphere in the schools and at home is required to make some positive changes. Employing well-trained councillors for the students is something which can be given importance by the schools to develop their life skills.

#### **Not much of enthusiastic, appropriate physical education activities to facilitate individual development of children were provided at the school**

Physical activities such as exercise, games etc. promote mental health, in addition to physical health benefits, ultimately contributing to better wellbeing in life. Hence, physical education should be an important activity in schools. Students will become conscious of their health and wellbeing through physical education activities. Sports and games, combined with health education, practice of yoga, meditation etc. will also help the students to get themselves aloof from social malpractices and harmful addictions in life.

Data presented in Table 2 shows that when compared to the respondents under the State syllabus-based education system, much higher proportion of respondents under the Central syllabus-based education system have disagreed that not much of enthusiastic, appropriate physical education activities were provided at the school to facilitate individual development of children. This indicates that the schools under the Central syllabus have given more emphasis in providing physical education activities to the students, which would ultimately help their development in life.

#### **The ill effects of involvement of students in politics were there at the school**

50 % respondents under the State syllabus-based education system have agreed to this, when compared to only 24.7 % respondents agreeing under the Central syllabus-based education system (Table 2). This implies that the level of

political involvement of the students and its consequent bad effects is less in schools following the Central syllabus, when compared to the schools which are following the State syllabus-based education system in Kerala. This is true, since the influence of political parties through the students' unions is found to be comparatively more in State syllabus-based schools in Kerala, especially in Govt run schools, which are also more in number under this educational system than the Central syllabus based educational system. This has resulted in unnecessary strikes in such schools, leading to loss of valuable working days and quality of education.

#### **Improper preparation of curriculum resulted in overload in studies in school**

Curriculum creation is always a matter of controversy. The content in curriculum making mostly depends on the policies of the ruling Government. However, NEP 2020 is more open and gives freedom to educational institutions to create and implement the curricula created by them. Very high proportion (46 %) of respondents under both the educational systems have agreed to this (Table 2). This can be considered as an indication of the overload in studies by students on account of improper curriculum preparation under both the education systems in Kerala.

#### **In Govt and Govt aided schools, the teachers were entrusted with many other activities other than teaching, which affected the teaching standard of the school**

The Government finds it easy to carry out many of its activities and programs such as election related work, collecting census details, health programs, different types of training activities etc. through school teachers. This indirectly affects their teaching work in schools. Teachers in Govt. and Govt. aided schools are mostly allotted this work.

Table 2 shows that 61.3 % respondents under the State syllabus-based education system have agreed that in Govt and Govt aided schools, the teachers were entrusted with many other activities other than teaching, which affected the teaching standard of the school. However, only 42 % respondents agree to this under the Central syllabus-based education system. This indicates that, when compared to the schools in Kerala following the Central syllabus, in State syllabus-based schools, teachers are more entrusted with other activities in addition to teaching, which affects the teaching standard of the schools. This could be the situation mainly in Govt. and Govt. aided schools.

The mean educational system performance index expressed as % of the maximum possible index value (which indicates 100 % performance) is much higher (63.2 %) under the Central syllabus-based education system than the State syllabus-based education system (51.8 %), with statistically significant difference in the index between the two educational systems (Table 3). Once again this confirms better performance under the Central syllabus-based education system.

It can be made out from Table 4 that the mean score for all the parameters is comparatively more under the Central syllabus-based education system than the State syllabus-based education system, with statistically significant difference observed between the two education systems in the scores of nine out of thirteen performance parameters considered under the study. This result helps to once again confirm better performance of the Central education system with respect to majority of the performance related parameters, when compared to the State syllabus-based system in Kerala. Once again, the findings based on data presented in Table 4 help to establish the fact that according to the respondents, the school educational system has performed better under the Central syllabus than the State syllabus.

A study carried out in Madhya Pradesh has reported that CBSE board schools have more quality education system and therefore, their students perform better than State Board students, and they ranked excellent in all the fields [3]. Similarly, a study carried out in West Bengal has reported some favourable aspects with respect to the CBSE system [4]. As per the report of the Comptroller and Auditor General of India on Functioning of Primary Educational Institutions in Karnataka [5], the learning assessment undertaken by Audit in collaboration with Karnataka School Quality Assessment and Accreditation Council (KSQAAC) showed insufficient levels of achievement in Schools.

New Indian Express Newspaper dated 22<sup>nd</sup> June 2025 reported that amid allegations that the quality of General Education is declining in Kerala, the Honourable Minister for Education, Govt. of Kerala has announced major changes in the education sector. This may be expected to produce positive results under the State syllabus-based education system.

### **CONCLUSION**

Based on the perceptions of majority of the respondents under the study, the performance of Central syllabus-based education system and the State syllabus-based education system in Kerala is "moderate". However, the results of statistical tests of the education system performance index and the scores for various education related parameters suggest that the Central syllabus-based education system is performing comparatively better than the State syllabus-based education system in Kerala.



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