



AN EVALUATION OF THE PERFORMANCE OF KEY INDICATORS OF SCHOOL EDUCATION IN INDIA: WITH SPECIAL REFERENCE TO JHARKHAND

Arti Mehta¹, Umendra Singh²

¹ Research Scholar, University Department of Economics, Vinoba Bhave University, Hazaribag

² Assistant professor, University Department of Economics, VBU

Abstract

Education is the foremost and crucial of all the other factors that contribute to the development of the economy. It provides human resource for the future production and development process in the country. The present paper scrutinized the performance of key indicators of school education in India and Jharkhand. The study used secondary data and analysis done on six indicators taken from School Education Quality Index (SEQI). The study results that Jharkhand is lagging behind national average in terms of Adjusted NER and Learning Outcomes. Also, there is an improvement in the key indicators of school education in Jharkhand in the last few years.

Keywords- School Education, Enrollment, Performance, Learning Outcomes.

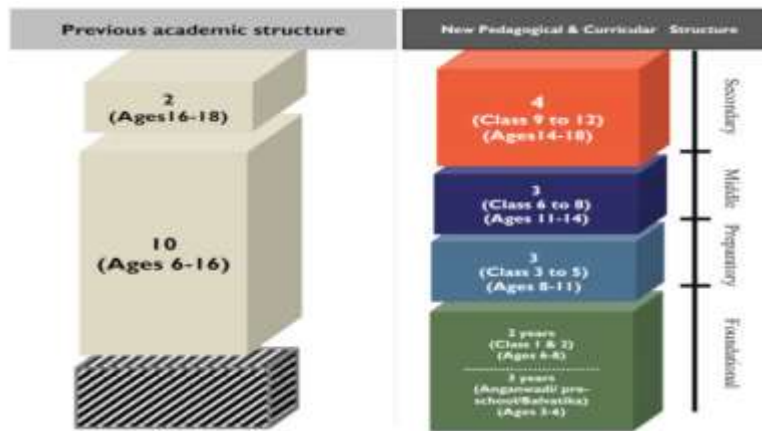
1. Introduction

Education is one of the main elements of the social sector and ultimately it directly helps in improving as well as boosting a country's economy. Education in India covers different levels of learning, such as primary education (class 1-5), upper primary education (class 6-8), elementary education (class 1-8), secondary education (class 9-10), senior secondary education (class 11-12) and higher education.

As per New Education Policy (NEP) 2020, school education comprises pre-school to class 12 (3- 18 years). Also, new academic system consists of four stages. The stages are-

¹ Research Scholar, University Department of Economics, Vinoba Bhave University, Hazaribag

² Assistant professor, University Department of Economics, VBU



1.1 Status of Literacy Rate in India and Jharkhand

After Independence one of the major concerns for Indian Government was the improvement in social sector (Education and Health sector) and for improvement in Education sector, Literacy rate is a very crucial indicator to measure the refinement in Education sector. As per the Census 2011, the National literacy rate stands at 74.04% where the literacy rate among male population is 82.14% which is higher than the literacy rate among female population i.e. 65.46%. Also literacy rate of Jharkhand stood at 67.63% which is 6.41% lower than national average and of that literacy rate among male population and female population were 78.45% and 56.21%.

Table 1: Literacy Rates in Jharkhand and India (Among age group 7 & above years), 2020-21

Literacy Rate (7 & above years)		Male	Female	Total
Jharkhand	Rural	79.7	59.9	69.9
India		53.2	67.7	75.6
Jharkhand	Urban	91.8	78.6	85.4
India		92.2	83.3	87.8
Jharkhand	Total	82.3	63.8	73.1
India		85.9	72.3	79.2

Source- Jharkhand Economic Survey 2022-23

As per Jharkhand Economic Survey 2022-23, the literacy rate among age group 7 and above years in India is 79.2% and in Jharkhand is 73.1% i.e. Jharkhand is lagging behind the national average by 6.1%. Both India and Jharkhand having high Literacy rate in urban areas which is 87.8% in India and 85.4% in Jharkhand. Also, Literacy rate among male population is high as compared to female population in India as well as Jharkhand by 13.6% and 18.5%.

2.0 Review of Literature

A paper presented by **P. K. Pradhan (2017)** to measure the level of Infrastructural development in Odisha at two points of time i.e. 1994-95 and 2011-12. This paper shows specific evidence about the fact that there has been slow progress in Infrastructural development in the state. It is, therefore a matter of serious concern and requires immediate attention of the Government.

In the publication, **Tanu Sharma (2018)** presents a comprehensive analysis of the state of school education in India. The outcome indicates a shift towards policy-making that is grounded in empirical evidence, as states that have attained high rankings have already accomplished the objective of ensuring that schools have complete boundary walls, access to drinking water and electricity and nearly universal access to toilet facilities.

In his paper, **Esmatullah Karimi (2019)** analyses the technical efficiency of elementary schools in all 33 districts of Rajasthan, India from 2014 to 2016. The results of the paper show that average technical efficiency was high in 2016 compared to the other two years. After comparing the literacy rate and technical efficiency score of the districts, some evidence of a high literacy rate but low technical efficiency score was found which reveals that a high literacy rate does not necessarily imply that districts are technically efficient.

A study conducted by **UNDP (2021)** emphasizes appraisal of the Aspirational Districts Programme is aimed to assess the effectiveness of the flagship Programme of the Government of India and generate evidence-based documentation that can be used to support NITI Aayog and other stakeholders in their efforts to address existing gaps, evidence-based planning and decision making. The findings of this evaluation confirmed that significant progress has been made since the inception of the programme.

A study conducted by **Education for All in India (2023)** examined the quality of School Education in India. The study finds the government of India is making concerted efforts to improve the quality of school education in the country through various initiatives and policies. However, India still has a long way to go, and sustained efforts are required to achieve the desired outcomes.

4.0 Objectives of the Study

1. To analyse the trends of the performance of key indicators of School Education in India and Jharkhand.
2. To study the Performance of key school Indicators in Jharkhand.

5.0 Research Questions

1. Is Jharkhand lagging behind the national average in terms of the performance of key indicators of school education?
2. Whether the performance of key school indicators in Jharkhand has improved?

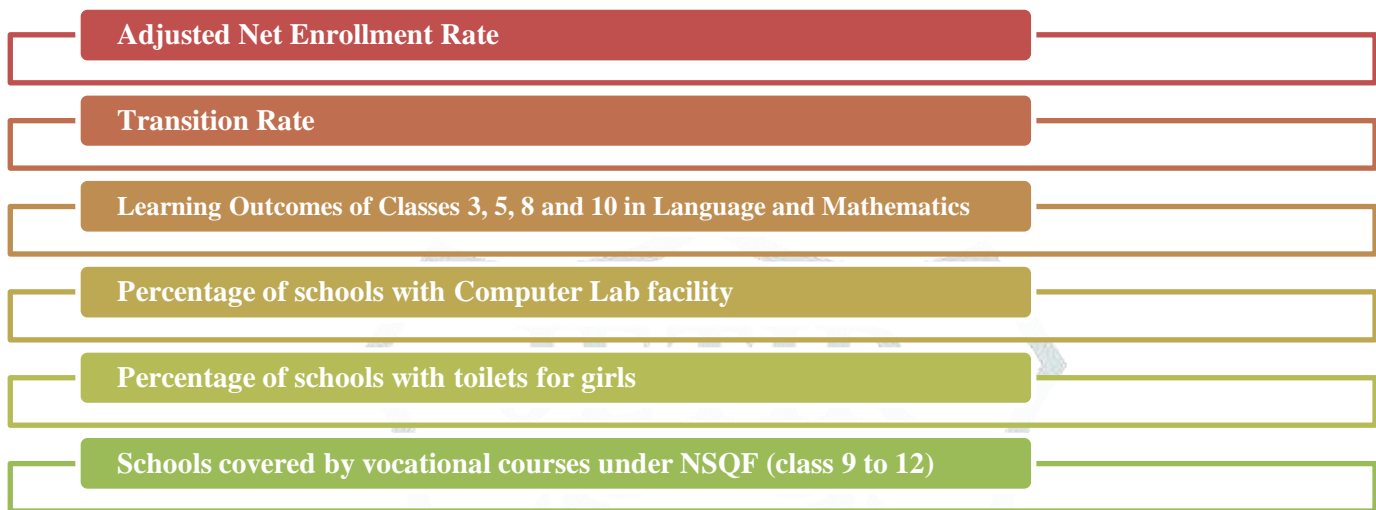
6.0 Methodology

6.1 Sources of Data

The study is based on **secondary data**. The **secondary data** prepared by a report on the Unified District Information System for Education Plus (UDISE+) 2021-22, the National Achievement Survey (NAS) of the Ministry of Education (MoE), School Education Quality Index (SEQI) of Niti Aayog, etc.

6.2 Selected Indicators

The analysis of performance of the school Education in Jharkhand is based on the key indicators of the school education mentioned in the policy document of School Education Quality Index (SEQI). The indicators are:-



6.3 Tools

The tools used in the study are Bar Graphs, Time series, Trend lines, etc.

6.4 Area of the study

The universe of the study is India. Also, we have selected Jharkhand state for the study.

7.0 Performance of School Education in India

7.1 Adjusted Net Enrollment Rate (ANER)

Adjusted Net enrollment is the number of pupils of the school-age group for primary education, enrolled either in primary, upper primary or secondary education, expressed as a percentage of the total population in that specific age group (World Bank). Adjusted Net Enrollment Rate for both boys and girls shows an improvement in primary, upper primary and secondary levels of school education from 2018-19 to 2021-22. Also, ANER is slightly higher for girls than boys, indicating a relatively higher enrollment rate for girls.

Table 2- ANER by Gender and Level of School Education

Years	Primary (1 to 5)			Upper Primary (6 to 8)			Elementary (1 to 8)			Secondary (9 to 10)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2018-19	93.6	95.0	94.3	77.6	79.4	78.5	91.42	92.8	92.08	57.2	58.0	57.6
2019-20	96.3	98.4	97.3	80.9	82.4	81.6	93.6	95.3	94.4	59.7	60.3	60.0
2020-21	97.4	99.9	98.6	84.0	84.9	84.4	95.2	96.9	96.0	61.8	61.9	61.8
2021-22	97.6	100	99.1	87.6	87.5	87.3	95.6	97.5	96.5	64.7	64.7	64.7

Source- UDISE+

7.2 Transition Rate

Transition Rate is the percentage of students moving from one level of education to the other level of education. There is an increase in the transition rate for both boys and girls from the year 2018-19 to 2019-20 (in all the levels). However the year 2020-21 shows a decrease in the transition rate from primary to upper primary and upper primary to secondary level for both boys and girls as compared to 2019-20 because of the corona virus pandemic. Again there is an increase in the transition rate for both boys and girls in all levels of education from 2020-21 to 2021-22.

Table 3- Transition Rate by Gender and Level of School Education

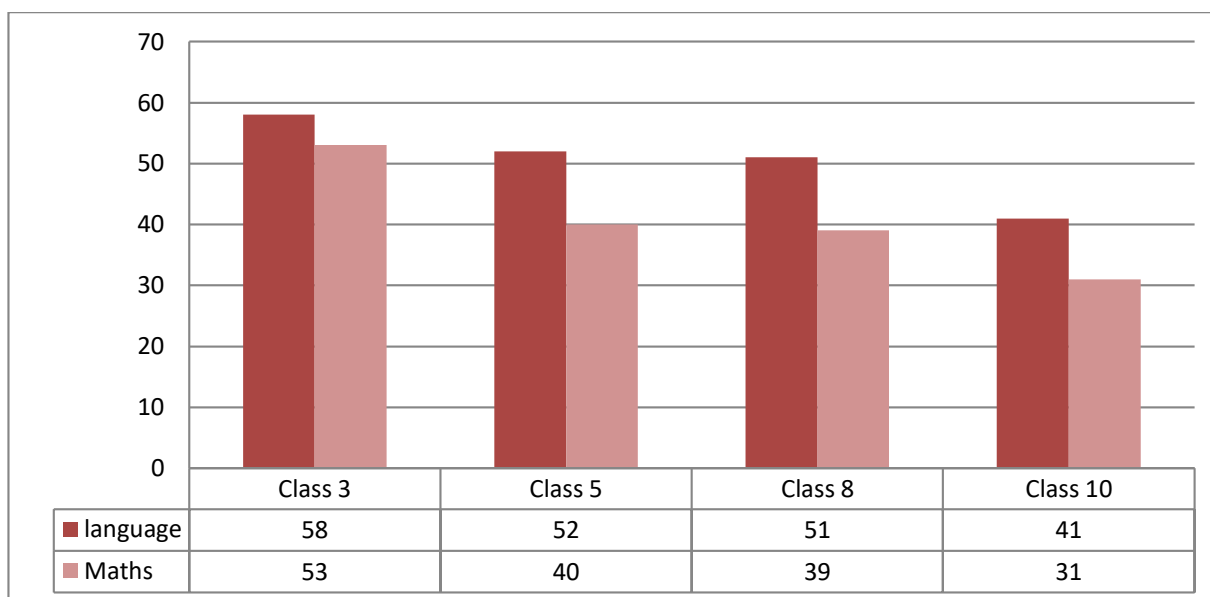
Years	Primary to Upper Primary (5 to 6)			Upper Primary to Secondary (8 to 9)			Secondary to Higher Secondary (10 to 11)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2018-19	90.2	90.8	90.5	91.3	88.4	89.9	67.5	70.2	68.8
2019-20	92.52	93.09	92.80	92.86	89.92	91.4	70.20	73.09	71.60
2020-21	92.0	92.3	92.1	92.4	90.1	91.3	72.5	74.1	89.7
2021-22	93	93.4	93.2	89.7	87.8	88.8	77.6	79.3	78.4

Source- UDISE+

7.3 Learning Outcomes

Learning outcomes are statements of the skills, knowledge and abilities every student should have. As per National Achievement Survey (NAS) 2021, there has been a drop in learning outcomes (for classes 3, 5, 8 and 10) in the last three years and the main cause of this drop is the pandemic.

Figure 1- Learning Outcomes of Classes 3, 5, 8 and 10 in Language and Mathematics (2021-22)

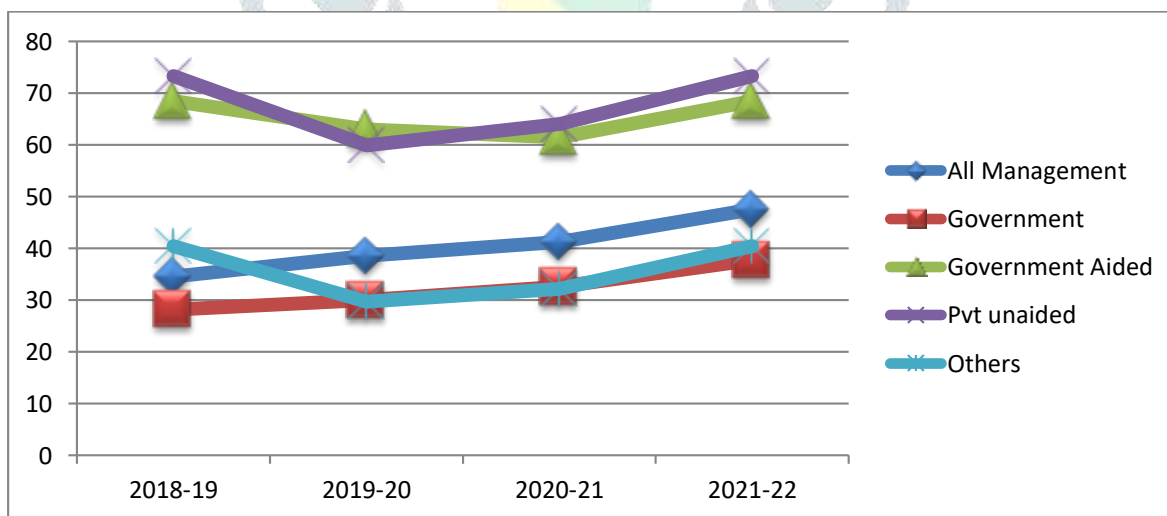


Source- National Achievement Survey (NAS), 2021

7.4 Computer Lab Facility

Digital technology in the field of education is gaining importance and also becoming an integral part of studies. As per UDISE+ Report, there is growth in the schools having computer lab facilities from 2019-20 to 2021-22. Also, there was a fall in the number of schools having computer lab facilities in the year 2019-20 as compared to 2018-19 because of the corona pandemic and after the pandemic there has been rapid growth in the number of schools having computer lab facilities.

Figure 2- Percentage of schools with Computer Lab facility



Source- UDISE+

7.5 Toilet for Girls

Girls' toilet is the basic school infrastructure which is most needed for the girls studying in the school. Also, a high girls' dropout rate was noted in the year 2017 and one of the main reasons for dropout is the lack of girls' toilets in the school. There is a rapid increase in the number of girls' toilets in the schools from 2018-19 to 2021-22.

Table 4- Percentage of schools with toilets for girls

Years	All Management	Government	Government aided	Private unaided	Others
2018-19	95.66	96.53	92.2	95.74	83.7
2019-20	96.88	97.36	92.81	98.06	86.43
2020-21	97.32	97.45	94.44	99.07	87.9
2021-22	96.2	95.5	95.1	99.3	90.9

Source- UDISE+

7.6 Vocational Courses

As per the UDISE+ Report, the number of schools covered by vocational courses under the National Skill Qualification Framework (NSQF) increased from 2018- 19 to 2020-21 but there was a decline in the number in the year 2021-22 as compared to 2020-21 due to corona pandemic.

Table 5- No. of schools covered by vocational courses under NSQF (class 9 to 12)

Years	All Management	Government	Government aided	Private unaided	Others
2018-19	7471	7454	17	0	0
2019-20	11038	10992	46	0	0
2020-21	12292	12208	81	3	0
2021-22	10770	10686	84	0	0

Source- UDISE+

8.0 Performance of School Education in Jharkhand

8.1 Adjusted Net Enrollment Rate (ANER)

As per UDISE+ Report, Adjusted Net Enrollment Rate for both boys and girls shows an improvement in primary, upper primary and secondary levels of school education from 2019-20 to 2021-22 but there is a decline in ANER in the year 2019-20 as compared to 2018-19. Also, ANER is a bit higher for girls than boys, indicating a relatively higher enrollment rate for girls.

Table 6- ANER by Gender and Level of School Education

Years	Primary (1 to 5)			Upper Primary (6 to 8)			Elementary (1 to 8)			Secondary (9 to 10)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2018-19	97.4	96.2	96.8	75.6	78.1	76.8	92.43	92.63	92.53	52.6	54.4	53.5
2019-20	96.0	96.5	96.2	75.3	78.6	77.0	91.5	92.9	92.2	46.6	48.1	47.3
2020-21	96.5	97.3	96.8	77.9	80.6	79.2	92.3	93.5	92.9	47.2	49.4	48.3
2021-22	98	100	98.9	82.8	84.6	83.7	93.6	95.3	94.4	52.5	55	53.6

Source- UDISE+

8.2 Transition Rate

There is growth in the transition rate for both boys and girls from the year 2018-19 to 2019-20 (in all the levels). But the year 2020-21 shows a decrease in transition rate from upper primary to secondary level for both boys and girls as compared to 2019-20 due to the corona virus pandemic. Again there is an increase in the transition rate for both boys and girls in all levels of education from 2020-21 to 2021-22.

Table 7- Transition Rate by Gender and Level of School Education

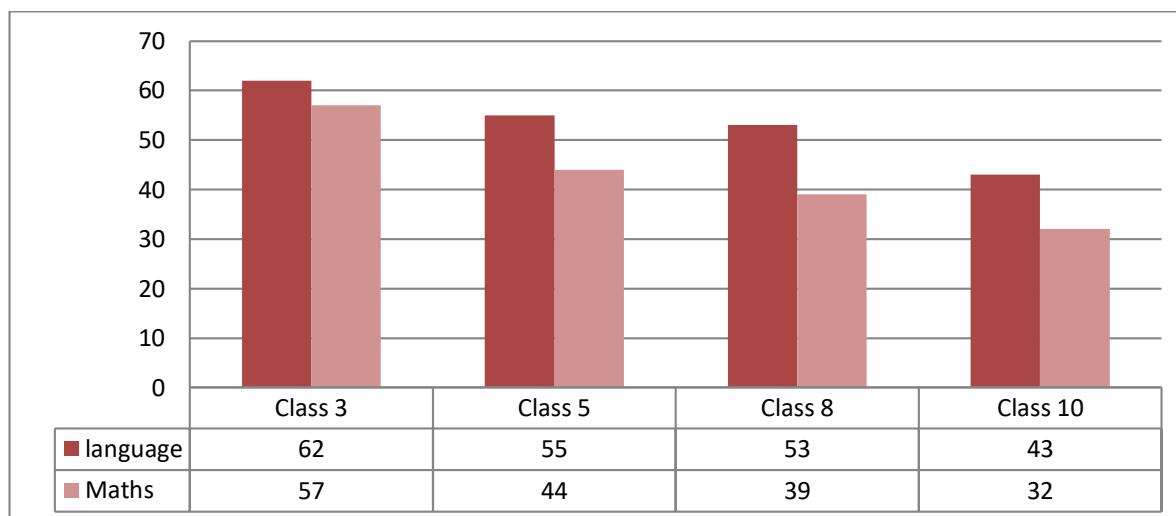
Years	Primary to Upper Primary (5 to 6)			Upper Primary to Secondary (8 to 9)			Secondary to Higher Secondary (10 to 11)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2018-19	84.2	87.7	85.9	77.2	77.8	77.5	67.2	64.9	66.1
2019-20	84.47	88.83	86.61	79.79	80.23	80.01	79.37	75.29	77.32
2020-21	85.5	88.4	86.9	79.1	79.9	79.5	79.6	76.9	78.2
2021-22	92.1	95	93.5	85.6	85.9	85.7	83.6	84	83.8

Source- UDISE+

8.3 Learning Outcomes

As per National Achievement Survey (NAS) 2021, the learning outcomes of classes 3, 5, 8 and 10 are dropped as compared to the past few years and the main reason for the decline is the corona virus pandemic and lockdown in the country.

Figure 3- Learning Outcomes of Classes 3, 5, 8 and 10 in Language and Mathematics (2021-22)

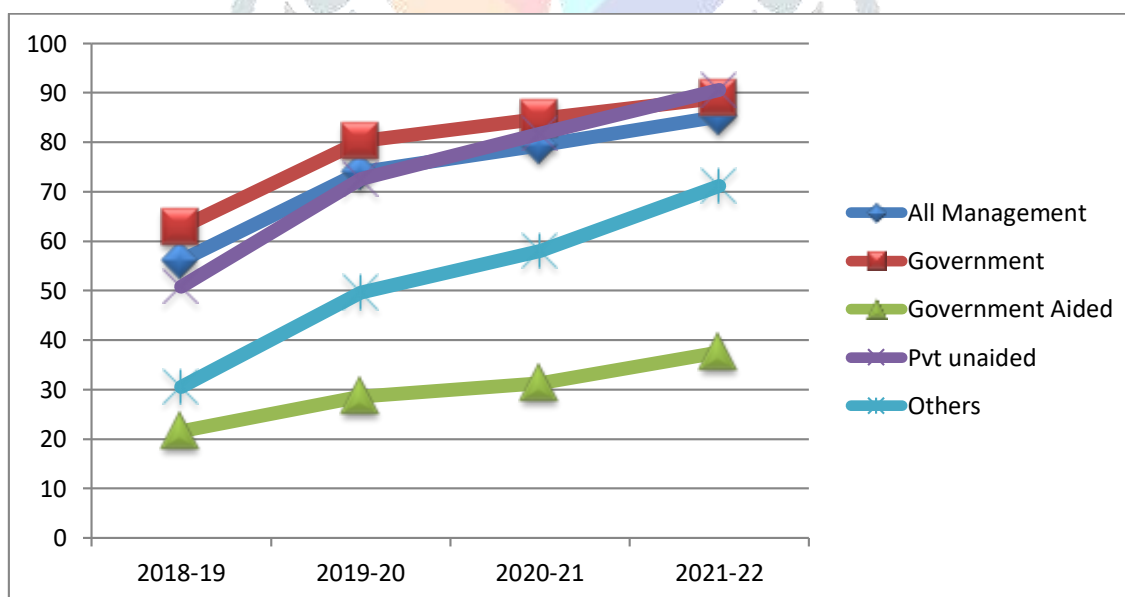


Source- UDISE+

8.4 Computer Lab Facility

There is a rise in the number of schools having computer lab facilities in Jharkhand from 2018-19 to 2021-2022. Also, there is a rapid growth of schools having computer lab facilities in the year 2019-20 as compared to 2018-19.

Figure 4- Percentage of schools with Computer Lab facility



Source- UDISE+

8.5 Toilet for Girls

As per UDISE+ Report, Schools having toilets for girls is increasing from 2018-19 to 2020 but there is a decline in the schools having girls' toilets in the years 2020-21 and 2021-22 due to the corona virus pandemic.

Table 8- Percentage of schools with toilets for girls

Years	All Management	Government	Government aided	Private unaided	Others
2018-19	98.21	98.86	84.41	98.99	96.96
2019-20	99.05	99.39	87.43	99.9	99.2
2020-21	99.02	99.31	87.64	99.8	99.18
2021-22	98.2	98.4	88.7	99	98.8

Source- UDISE+

8.6 Vocational Courses

There is a consistent increase in the number of schools covered by vocational courses under NSQF from 2018-19 to 2020-21 but there is a decline in the number in the year 2021-22 as compared to 2020-21 due to corona pandemic.

Table 9- No. of schools covered by vocational courses under NSQF (class 9 to 12)

Years	All Management	Government	Government aided	Private unaided	Others
2018-19	111	111	0	0	0
2019-20	388	388	0	0	0
2020-21	440	440	0	0	0
2021-22	436	436	0	0	0

Source- UDISE+

9.0 Findings

It was found that the Adjusted NER for all levels of school education and the Learning Outcomes of Classes 3, 5, 8 and 10 in Language and Mathematics stood high in India as compared to Jharkhand. On the other hand, the Transition rate for primary to upper primary level and secondary to higher secondary level stood high in Jharkhand as compared to India but the Transition rate for upper primary to secondary level stood high in India as compared to Jharkhand as per the UDISE+ Report (2021-22).

Also, It was found from the UDISE+ Report (2021-22) that there is growth in the Adjusted NER for all levels of school education, the Transition rate for primary to upper primary level, upper primary to secondary level and secondary to higher secondary level, the Learning Outcomes of Classes 3, 5, 8 and 10 in Language and Mathematics, percentage of schools with computer lab facilities, percentage of schools with toilets for girls and number of schools covered with Vocational courses under NSQF (class 9 to 12) in Jharkhand as compared to UDISE+ Report (2018-19). But there is decline in the number of schools covered with Vocational courses under NSQF (class 9 to 12) in Jharkhand in the year 2021-22 as compared to 2020-21 due to corona pandemic.

10.0 References

- Pradhan P. K. (2017), “Empirical Analysis of Inter District Infrastructural Development in Odisha”, SSRG International Journal of Humanities and Social Science, vol. 4, no. 6, pp. 23-26, <https://doi.org/10.14445/23942703/IJHSS-V4I6P106>.
- Sharma Tanu, (2018), “Performance of states with Respect to Facilities Provided in Schools of India”, Journal of Advances and Scholarly Researches in Allied Education, Vol. 15, Issue No. 8, ISSN 2230-7540.
- Karimi Esmatullah, (2019), “Measuring Inter-District Variation of Efficiency of Elementary Schools using Data Envelopment Analysis: Evidence from Rajasthan, India”, Journal of Emerging Technology and Innovative Research (JETIR), Volume 6, Issue 1.
- United Nations Development Programme, (2021), “Aspirational Districts Programme: An Appraisal”, New Delhi-110003, <https://www.undp.org/sites/g/files/zskgke326/files/2023-06/ad>.
- Education for All in India, (2023), “School Education Quality in India”, <https://educationforallinindia.com/school-education-quality-in-india-2023/>.
- Education for All in India, (2023), “School Education Quality in India”, <https://educationforallinindia.com/school-education-quality-in-india-2023/>.
- Government of India, (2019), School Education Quality Index, Niti Aayog.
- Government of India, (2018), “Transformation of Aspirational Districts”, Ministry of Education, New Delhi.
- Government of India, (2022), Unified District Information System for Education Plus (2021-22), Ministry of Education, New Delhi.