

## **Barriers to Talent Development: Examining How Socioeconomic Inequality Limits Access to Artistic and Skill-Based Opportunities among children from the bottom 20 percentile of the income bracket in India**

Aaliyah Bajaj

Pathways School Gurgaon

DOI: 10.46609/IJSSER.2026.v11i10.015 URL: <https://doi.org/10.46609/IJSSER.2026.v11i10.015>

Received: 16 September 2026 / Accepted: 4 October 2026 / Published: 12 October 2026

### **ABSTRACT**

*Development of artistic talent is not solely influenced by an individual's ability; rather it is impacted by a plethora of factors such as the **access and infrastructure, qualification and availability of teachers, socioeconomic inequality, awareness and exposure, and cultural preferences towards STEM education**. This research adopts a comparative analysis between two states in India, **Kerala and Bihar**, analysing the six key factors stated above, which may act as barriers to talent development. The study utilizes a combination of qualitative and quantitative indicators : quantitative indicators include co-curricular rooms , computer facilities , pupil-teacher ratios , drop rates, multidimensional poverty , internet connectivity and literacy rate while qualitative indicators include evidence from government schemes, academic research and educational initiatives. This study acknowledges that socioeconomic circumstances and the broader educational atmosphere determine a child's ability to develop talent , instead of income alone. The contrast of Bihar and Kerela , thus show insights into how distinctions in teacher availability , socio-economic conditions , educational infrastructure , and exposure may affect the development of creative skills. Ultimately this research investigates whether children from economically disadvantaged households face any structural barriers that precludes their ability from being recognised and nurtured , emphasizing the cruciality of equitable access to skill-based and artistic opportunities regardless of the social or financial background.*

*This paper explores how socio-economic disparities can restrict access to skill based and artistic opportunities amongst children from the bottom 20 percentiles of the income bracket in India. It examines the extent of the influence income and other such factors have over accessing basic resources and guidance necessary to develop talents beyond the traditional academic curriculum.*

**Key words :** Universal Access , Development, Opportunities, Marginalised Students , Artistic talent, Holistic education

## **Introduction**

A crucial component of holistic education is the recognition and nurturing of artistic talent among school going children . Within modern education systems , particularly following reforms such as India's National Education Policy ( NEP ) 2020 , there has been a rising focus on experiential learning , creativity and the development of non - academic skills along with traditional scholastic achievement. The same has been argued by Ms Geeta Thakur [1] that education must move beyond rote learning to foster "holistic development," which includes individual talent and creative expression. This transition demonstrates the significance of identifying artistic abilities at an early stage , a time where children are especially receptive to exploration and acquiring skills.

Artistic talent in children is shaped by environmental , social and institutional factors rather than being a merely innate ability . Research undertaken by Anila Jamal [2] highlights that creativity is closely connected to motivation , metacognition and opportunities for self expression in a class room. This reveals that talent recognition is not automatic and it is shaped by whether children are in environments that appreciate and encourage such abilities . Likewise , studies on teacher attitudes towards art education suggests that educators play a crucial role in either overlooking or encouraging artistic potential.

However, the recognition of artistic talent becomes significantly more complex when examined through the lens of socioeconomic inequality. Children from lower-income backgrounds often face structural barriers that limit both exposure to the arts and opportunities for skill development. According to broader research on creativity development, such as Miller and Gerard's work [3] , illustrate that family influences, parental support, access to resources, and cultural capital are key determinants in whether a child's creative abilities are nurtured. In the Indian context given the high percentage of inequalities of income as well as disparities in access to schools in the rural and urban areas , the disparities between the top and bottom percentiles are further exacerbated by problems that exist at the ground level with respect to access to quality schooling, extracurricular activities, and trained educators in both scholastic and in creative fields. Along with this there is the lack of infrastructure and teacher absenteeism that further enhances unequal structure.

Additionally , the perception and valuation of artistic talent is also influenced by gender-based and geo- cultural differences. As demonstrated in a study by Lilly K. Varuthunny and Sudhakar Venukapalli [4], social conditioning and cultural context mould the expression of creativity and

its acknowledgement by others. This suggest that talent is not only developed uniquely across contexts , but also assessed through socially constructed standards , which come as a disadvantage for the marginalised children.

Importantly , the framework of the school system has always played a decisive role in the identification or artistic talent. Research conducted by Alpana U. and Vinny W. [5] underscores the role of authorities in prioritising academic achievements over creative disciplines which along with marginalized children, marginalizes art in education. This is fortified by studies on classroom environments and perceptual training , such as the one researched by Winner et Al [6] , which demonstrate that guided practice , exposure and “*feedback from teachers*” are critical for developing artistic skills. Many children – specially for those who are underprivileged—may never have their talents recognized without such support from mentors.

This paper aims to explore such issues by analysing the several factors which impact the recognition of artistic talent within school going children facing socioeconomic disparities. This study seeks to comprehend reasons why and how certain talents are overlooked while others are nurtured by examining the importance of the role of school systems, broader social structures and familial backgrounds.

### **Literature review**

Artistic talent is an evolving process , not a fixed inborn trait . Mackinnon conducted a psychological study in California in which he found that creativity is developed though education and experiences rather than just artistic inclination [7]. Even in modern day , researchers like Feist [8] argue that the innate abilities alone are insufficient , emphasizing on roles that social interactions and culture play on developing talents. He states that talent is “wasted” without nurturing environments . Moreover the affinity of an adolescent towards artistic activities is particularly shaped by the support of parents and peers, as found in a review study by Zanden et Al [14] .

Furthermore, It is important to have access to cultural and educational resources for young minds to train their own originality . This idea has been shared by PISA (Programme of International Student Assesment ) [9] which gives rise to the fact that embodying creativity requires resources and exposures rather than just the ability to do so. All of these factors and more are presented in a holistic study undertaken by Swanzy-Impraim [13] which explores the education system and institution support in detail . The study indicates that learning environments , student teacher relationships , flexibility of learning structures and availability of materials either enable or restrict recognition and growth of artistic talent. Around the world many such barriers have been identified . In Australia , Davis et al [17] found that there was

limited empowerment and resources for creative activities for children from low-socioeconomic-status backgrounds, which instilled social exclusions that prevented full participation. In the UK a research based on 6800 participants [18] found that mental health, social isolation, limited opportunities and environment were important to engage marginalised groups. In countries in Africa Huss et al. [19] concluded that children face barriers like confidence, stigma, lack of facilities and support which prevented them from reaching their pinnacle.

In the Indian subcontinent, there are around 12.4% people who are suffering from extreme poverty and 31% [10] [11] of the population are considered to be a part of the lower middle class. Such disparities and financial constraints resulted in limited exposure of cultural institutions and artistic environments which ultimately resulted in reduced participation in arts. A recent research by Parida et al. [12] demonstrated that marginalized children face high drop out rates and limited academic participation. In such circumstances where survival and basic schooling are unstable, creative subjects become a luxury not a priority. Subsequently, Bhawuk [16] also found that values are shaped by what is prioritized in a cultural context. In India there is a greater emphasis on academics, spirituality and stability whereas pursuing creative fields may be frowned upon due to the uncertainty surrounding it.

Additionally, a study of 131 educators across India identified that there is insufficient support, gaps in creative exploration, and a lack of interdisciplinary learning for students. Reddy [15] underscores the idea that even in places where creativity appears to be valued, it is not effectively nurtured due to the existing institutional gaps. Other gaps like limited access and uneven distribution of formal art education in India, addressed by Upadhyaya et al [5], make it more challenging for students to pursue visual and performing arts.

In developing countries like India where there is a large percentile of the population that struggles to meet ends, the possibility of children engaging in artistic pursuits seems negligible or almost non-existent.

### **Research Gap**

This paper analyses the impact of socio-economic environment and levels of income in the Indian economy as a deterrent to the nurturing of artistic talent. Despite achieving high levels of primary schooling in the country, what is the availability of school facilities and teachers in helping these children discover their artistic self? Does the introduction of the National Education Policy (NEP) take this lacuna into account? How far would children be aided with the universal application of NEP? What is the impact of parental support and their income on children pursuing their artistic endeavors? Does Universal literacy play an important role in pursuing the 'arts'? Data from Kerala and Himachal (literate states) in terms of artistic talent

would be compared to states like Bihar and Madhya Pradesh( relatively illiterate states ) in understanding the importance of education .

### **Methodology**

The methodology adopted would be of the mixed method type where both quantitative and qualitative analysis from authentic secondary sources would be applied.

### **Analysis**

To understand the barriers to the development of artistic talent amongst children in India , data from Bihar and Kerala between 2015 and 2025 have been analysed. These states are selected because of their contrasting literacy levels and educational outcomes . The analysis focused of factors such as :

1. **Access and infrastructure**
2. **Qualification and availability teachers**
3. **Socio - economic conditions**
4. **Awareness and exposure**
5. **Education systems prioritizing STEM / Cultural stigma**

#### **1. Access and infrastructure**

Access and infrastructure determine the environments and resources available to students , thus they play an important role in artistic development. Arts rooms act as spaces for performing practical activities while computer facilities support digital creativity. Both the states , Kerala and Bihar , have invested in educational infrastructure , gaps in availability may influence the extent to which a student can access , develop and display their artistic talent.

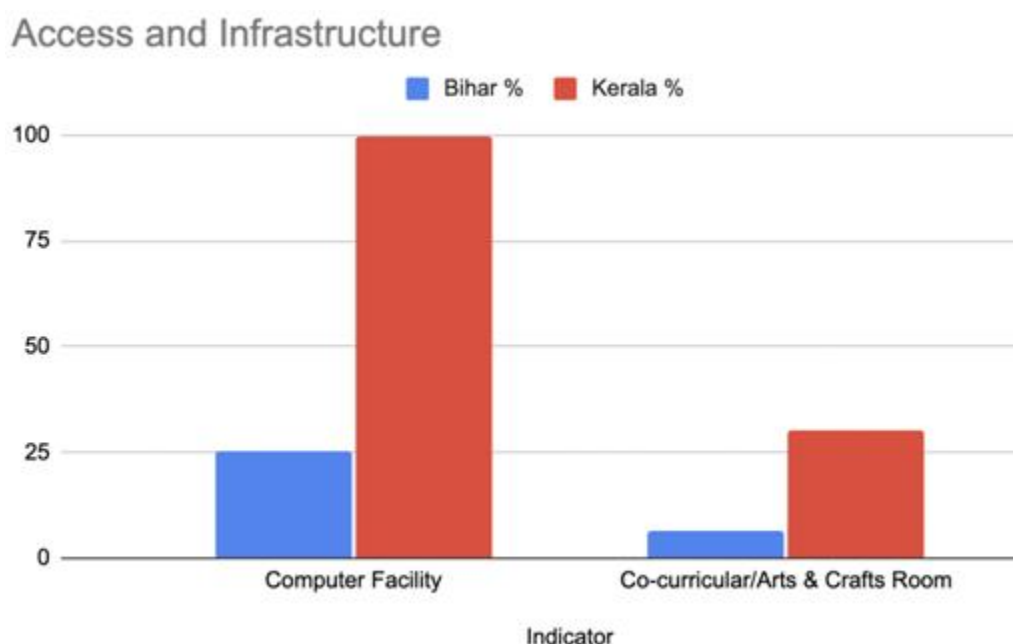
**Table 1 : Comparison of access and infrastructure in Bihar and Kerela for 2024**

| <b>Indicators</b>   | <b>Bihar schools' availability</b> | <b>Bihar total schools</b> | <b>Percentage availability (Bihar)</b> | <b>Kerela schools' availability</b> | <b>Kerela total schools</b> | <b>Percentage availability (Kerela)</b> |
|---------------------|------------------------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------|-----------------------------------------|
| Computer facility : | 23750                              | 94339                      | 25.18 %                                | 15683                               | 15757                       | 99.53%                                  |

|                                                                           |      |       |       |      |       |         |
|---------------------------------------------------------------------------|------|-------|-------|------|-------|---------|
| co - curricular activity room/ arts and crafts room facility availability | 6033 | 94339 | 6.39% | 4767 | 15757 | 30.26 % |
|---------------------------------------------------------------------------|------|-------|-------|------|-------|---------|

Source:[https://dashboard.udiseplus.gov.in/report-new-v.6demo2025/static/media/UDISE%2B2024\\_25\\_Booklet\\_existing.118ba29d4773e6372f72.pdf](https://dashboard.udiseplus.gov.in/report-new-v.6demo2025/static/media/UDISE%2B2024_25_Booklet_existing.118ba29d4773e6372f72.pdf)

**Graph 1: Illustration of the table above**



### Indicator 1 of factor 1 : Computer facilities

Both Bihar and Kerala have paid emphasis on the improvement of digital infrastructure in schools by introducing initiatives. While Kerala paired national programmes with large scale initiatives like KITE ( Kerala Infrastructure and Technology for Education ) , Bihar used centrally sponsored schemes such as Samagra Shiksha to expand it's ICT facilities. However , computer facilities are only available 25.18% of schools in Bihar compared to 99.53% in Kerala. A greater availability of computers increases a student's exposure to graphic design software , digital art , animation and online learning platforms , further creating opportunities for artistic exploration and skill development.

**Indicator 2 of factor 1 : Co-curricular activity rooms / arts and crafts room facility**

Both the states , Bihar and Kerela , understand the crucialness of co-curricular education through competitions , cultural programmes and activities . Yet still , Kerala seems to has a substantially higher proportion of schools which dedicated co-curricular arts and crafts room ( 30.26%) than Bihar ( 6.39%) . This reflects kerela's broader focus on holistic education through initiatives such as the Kerela School kalosavam. These art spaces support students in practicing creative skills , receiving guidance and collaborating with peers. Deficient access to such facilities might reduce opportunities for participation and artistic development.

**Factor 2 : Qualification and availability of teachers****Importance of qualification and availability of teachers :**

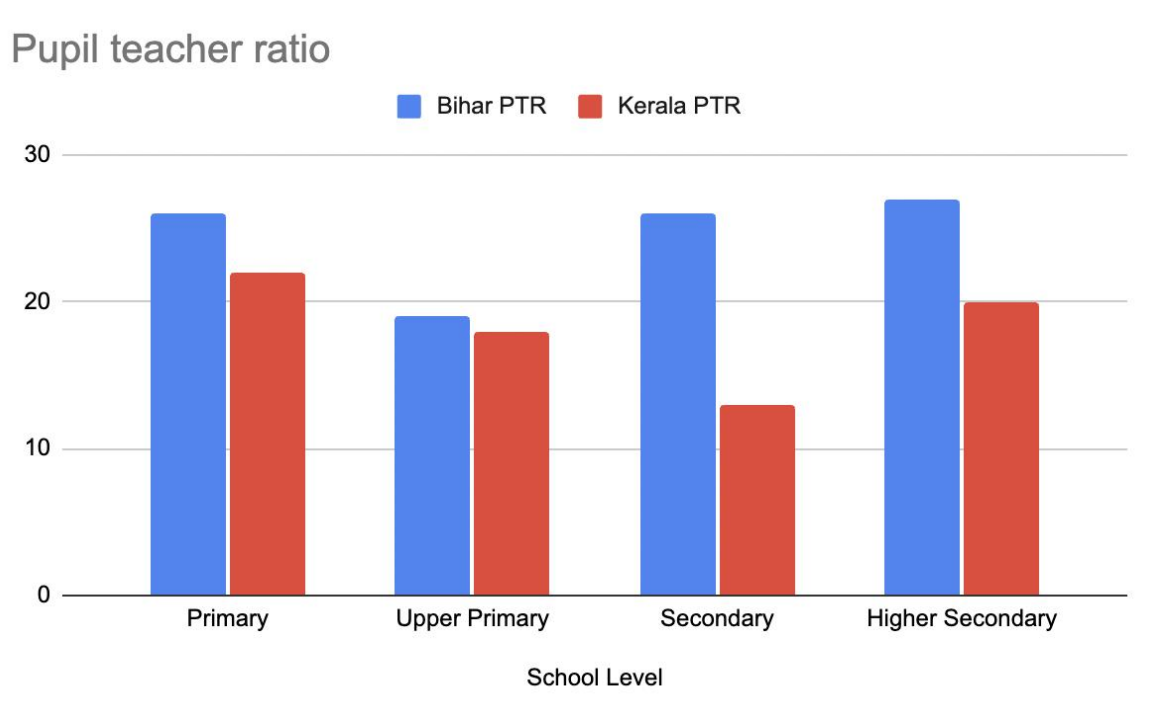
Availability and quality of teachers are both integral factors contributing to artistic development of a student. While well-trained teachers are able to recognise , encourage and develop artistic talent , a low pupil-teacher ratio can increase opportunities for individual support . Combined , these factors can influence the extent to which schools can foster artistic achievement and creativity , through the quality of learning experiences available to the students.

**Table 2 : Comparison of Pupil teacher ratio in Bihar and Kerela for 2024**

| Pupil teacher ratio |         |               |           |                  |
|---------------------|---------|---------------|-----------|------------------|
| state               | primary | Upper primary | Secondary | Higher secondary |
| Kerela :            | 22      | 18            | 13        | 20               |
| Bihar:              | 26      | 19            | 26        | 27               |

Source:[https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024\\_25\\_Booklet\\_existing.118ba29d4773e6372f72.pdf](https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024_25_Booklet_existing.118ba29d4773e6372f72.pdf)

**Graph 2 : Illustration of table 2**



### **Indicator 1 of factor 2 : Pupil teacher ratio (PTR)**

Generally , Bihar has a higher pupil-teacher ratio than Kerala , specifically at the secondary level where Bihar's PTR is 26 compared to Kerala's 13 . While both states made teacher recruitment efforts in order to improve staffing levels : Kerala has adopted continued investment in educational staffing and Bihar used widespread BPSC ( Bihar Public Service Commission) teacher recruitment drives. Kerala's relatively lower PTRs allows teachers to provide focused guidance and identify each students' creatives strengths , which is extremely important in skill based displines such as dance , visual arts , and music .

### **Indicator 2 of factor 2 : Teacher Training and Professional Development**

Both Kerela and Bihar recognise the significance of teacher training and it's impact on the quality of education provided. Kerala complements extensive professional development through KITE and state level training programmes with national initiatives , While Bihar has implemented programmes like NISHTA ( National Initiative for School Heads' and Teachers' Holistic Advancement ). The distinction mostly lies in the reach and the integration of these programmes within schools. Educators which undergo effective and thorough training are equipped with skills to organise artistic activities , use creative teaching methods , and foster

student talent. Consequently, stronger professional development programmes can contribute to creating more opportunities for artistic growth .

### Factor 3 : Socio economic conditions

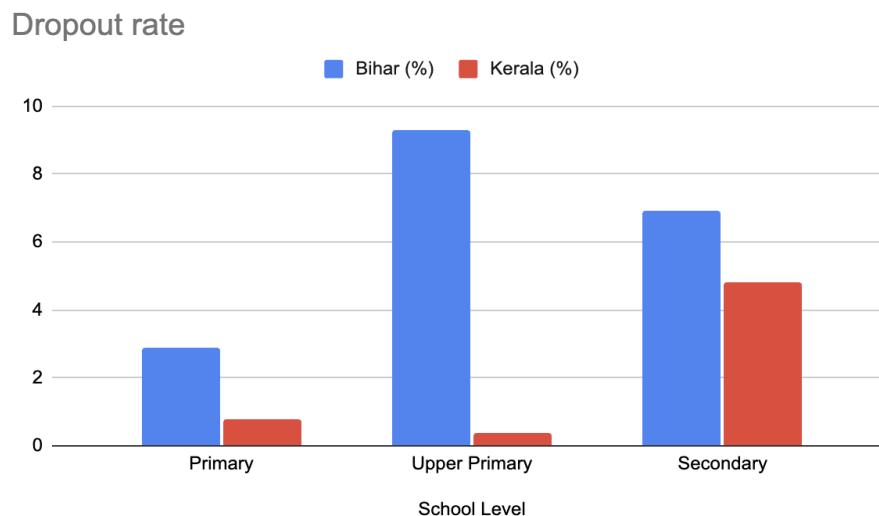
Socio economic conditions have a great influence on determining if a student can fully partake artistic and educational opportunities . While lower poverty levels can enhance access to enrichment activities and resources , lower dropout rates can increase sustained exposure to arts education . Together these factors can help expound how social and economic circumstances might shape a students's ability to pursue and develop artistic talents and interests.

**Table 3 : Comparison of drop out rate in Bihar and Kerela for 2024**

| Dropout rate    |         |               |           |
|-----------------|---------|---------------|-----------|
| state           | primary | Upper primary | Secondary |
| <b>Kerela :</b> | 0.80    | 0.40          | 4.8       |
| <b>Bihar:</b>   | 2.90    | 9.30          | 6.90      |

Source:[https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024\\_25](https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024_25)

**Graph 3 : Illustration of table 3**



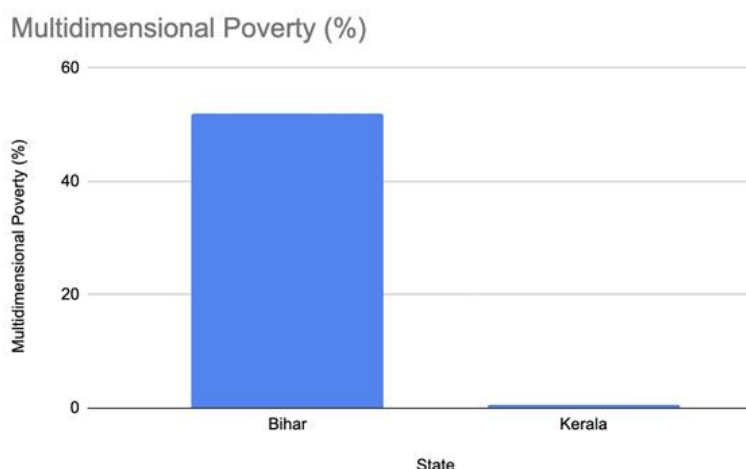
**Indicator 1 of factor 3 : Drop out rate**

Kerela and Bihar have implemented solution-driven initiatives with the aim of reducing school drop out rates , through schemes such as Samagra Shiksha and various other student support programmes. However the records of Kerela show lower dropout rates across all levels , specifically at the upper primary stage where it is 0.4% compared to Bihar's 9.3%. The gaps in the results are a result of differences in educational awareness , household income and access to support services. Higher drop out rates can limit a students' understanding of artistic education and exposure to co-curricular activities, thus constraining opportunities to discover and develop artistic talent.

**Table 4 : Comparison of multidimensional poverty percentage in Bihar and Kerela for 2021**

| Multi dimensional poverty percentage for 2021 : |      |
|-------------------------------------------------|------|
| state                                           | %    |
| <b>Kerela :</b>                                 | 0.7  |
| <b>Bihar:</b>                                   | 51.9 |

Source : <https://www.legacyias.com/50-population-of-bihar-multidimensionally-poor/>

**Indicator 2 of factor 3 : Multidimensional poverty percentage**

Social welfare and poverty alleviation programmes , such as initiatives related to education , nutrition and healthcare have been implemented by governments of Bihar and Kerela. However,

multidimension poverty still affects 51.9% of the population in Bihar (2021) compared to 0.7% in Kerela. This big difference can impact families' ability to invest resources and time in artistic pursuits as basic needs take priority. Students from disadvantages backgrounds may face greater barriers in accessing training , materials , competitions , and extracurricular opportunities which support talent development .

#### **Factor 4 : Awareness and exposure**

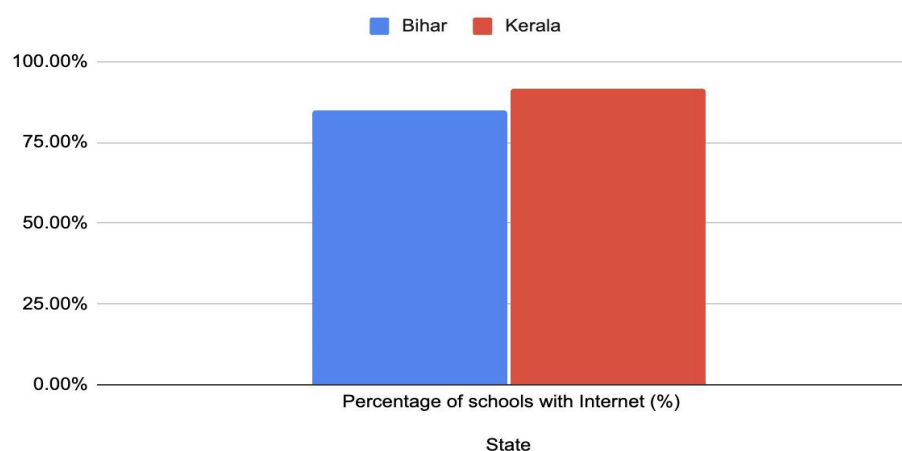
Exposure and awareness play a major role in informing students regarding the artistic opportunities that exist and how to access them. Faster internet connectivity helps students gain more information and creative resources, while high literacy encourages families and students to engage with such opportunities. Combined, these indicators have a great impact on the extent to which students can explore , discover and pursue artistic interests beyond the school curriculum.

**Table no 5 : Comparison of access to internet in schools in Bihar and Kerela 2024**

|                                        | <b>Bihar schools' availability</b> | <b>Bihar total schools</b> | <b>Percentage availability (Bihar)</b> | <b>Kerela schools' availability</b> | <b>Kerela total schools</b> | <b>Percentage availability (Kerela)</b> |
|----------------------------------------|------------------------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------|-----------------------------------------|
| <b>Access to internet connectivity</b> | 80035                              | 94339                      | 84.84 %                                | 14442                               | 15757                       | 91.78 %                                 |

Source [https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024\\_25\\_Booklet\\_existing.118ba29d4773e6372f72.pdf](https://dashboard.udiseplus.gov.in/report-new-v.6-demo2025/static/media/UDISE%2B2024_25_Booklet_existing.118ba29d4773e6372f72.pdf)

**Bihar and Kerala**



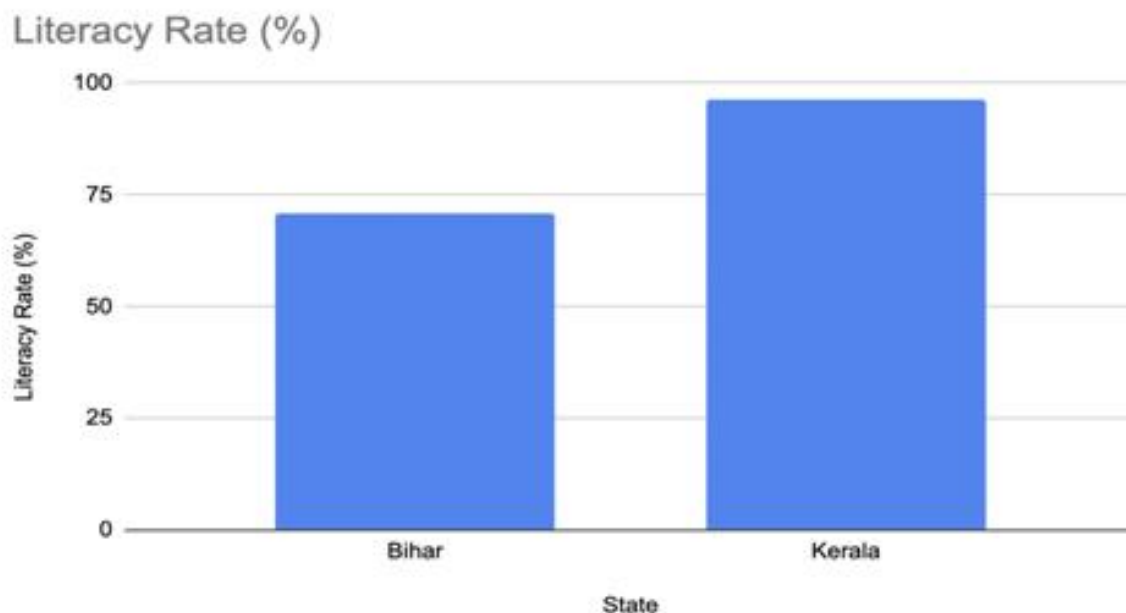
### Indicator 1 of factor 4 : Internet Availability in Schools

Both Bihar and Kerala have worked to improve internet connectivity in schools through initiatives under Digital India and Samagra Shiksha. However, internet access is available in 91.78% of schools in Kerala compared to 84.84% in Bihar. Although the gap is not too big as compared to other indicators, increased connectivity can significantly contribute to the growth of students' exposure to artistic opportunities. With the support of the internet , students can learn through watching and engaging in virtual workshops , competitions, performances , tutorials and portfolios of many artists from around the globe. Thus this expansion in access broadens awareness of creative pathways and help students to develop skills outside the classroom.

**Table no 6 : comparison of literacy rates between Bihar and Kerela for 2024**

| Literacy rate for 2024 |             |
|------------------------|-------------|
| state                  | %           |
| <b>Kerela :</b>        | 96.2        |
| <b>Bihar:</b>          | <b>70.9</b> |

Source : <https://www.noidabusinessguide.com/literacy-rate-in-india-2024/>



### **Indicator 2 of factor 4 : Literacy Rates**

The two states have carried out programs to stimulate growth in educational participation and literacy rates . Nonetheless, Bihar's literacy rate at 70.9% is substantially lower than Kerela's at 96.2%. A higher literacy can improve and expand the awareness of educational and extracurricular opportunities , as students and their families would gain access to lots of information about cultural events , specialised training programmes, competitions and scholarships. It might also increase the parental engagement in education . All in all , a higher literacy can be beneficial in shaping an environment where artistic talents and interests are more likely to be discovered , encouraged and pursued.

### **Factor 5 : Education systems prioritising STEM / cultural sigma**

Across India, STEM subjects are often perceived as offering greater job security, social prestige, and opportunities for upward mobility than arts or humanities subjects. Research suggests that parents, teachers, and wider social expectations frequently influence students towards engineering, medicine, and other STEM-related careers, even when their interests lie elsewhere. A study on Indian high school students found that social influences play an important role in shaping educational and career choices, while another study reported that many students experience pressure from parents to pursue STEM fields over humanities and arts. Furthermore, research on humanities awareness in India found that arts and humanities are sometimes viewed as options for academically weaker students, reinforcing negative stereotypes. Such attitudes may discourage students in both Bihar and Kerala from investing time and effort into artistic pursuits, reducing participation in arts education and limiting the development of artistic talent.

In India STEM subjects are often perceived as superior and as those which offer better job security , opportunities for upward mobility and prestige in comparison to humanities or art subjects [20] Previous research suggests that wide social expectations push students towards medicine , engineering and other STEM related careers even when personal interest does not lie in the same area. A study on Indian high school students in Mumbai showed that social influences impacted education and career choices [21]. While another study reported that many students faced immense pressure from their parents to pursue STEM fields such as mechanical engineering over the more creative disciplines [22] . Moreover many articles on humanities awareness in India indicate that art subjects are sometimes viewed as options for academically weaker students which strengthens the negative stereotypes [23] . Such perceptions may discourage students in both Kerela and Bihar from giving effort and time towards creative pursuits, which can reduce participation in art education and limit development of artistic talent.

## **Limitations**

Throughout the research , there were several limitations which could have affected the comparability of the findings between Bihar and Kerela. To begin with , there was more data available for Kerela than that for Bihar particularly regarding infrastructure and extracurricular opportunities. This could mean that Kerela's education system may have been analyzed in greater detail, as comparable evidence for Bihar was sometimes inadequate.

Furthermore, the government schemes varied in both states. While some initiatives were implemented in both states by central funding, others were more state - specific. Thus these differences in funding , implementation and reach could make it more tedious to understand whether differences in outcomes were a result of the schemes themselves or of the wider state-level factors . In addition , some available data was from different years which reduces the accuracy of comparison .

There were also limited quantitative data on the number of teachers that were specifically required for extracurricular activities at the primary and secondary levels. Even though the PTR gave an understanding of the total teacher availability, it was not a suitable indicator of whether schools had sufficient specialist teachers for visual or performing arts .

Lastly , quantitative evidence was also lacking for factor 6 which concerns the cultural preference of STEM over art-related subjects . Even though research shows that Indian society holds greater value for careers in the STEM field, there is no consistent data set or survey to measure this attitude and compare it particularly between Kerela and Bihar . Hence, this factor should be perceived as contextual evidence as it was evaluated qualitatively rather than a numerical comparison.

## **Conclusion**

Data on development and encouraging artistic abilities among children in Bihar and Kerela indicated that both the states were working efficiently through the institution and development of various programs that actively encouraged these activities. The two states are diametrically opposite each other in terms of literacy levels as well as cultural mindset, but in spite of that, there has been a concerted effort from the Bihar government in increasing the availability of opportunities for the population. The dropout rate among the students are a major concern for the Bihar government, but it was not so for Kerela. However, the effort made towards universal availability of integral facilities, improving the pupil-teacher ratio, and the transparent recruitment process under the BPSC will definitely go a long way in addressing the limitations that are prevalent in Bihar. While Kerela being a hundred percent literate, the acceptance and the encouragement of holistic development becomes much easier. Kerala has adopted a large

number of state-driven schemes which are aligned to the culture of the state. This along with the central schemes have led to greater all round development of the children in the state. Bihar on the other hand would require a greater effort on achieving high rates of literacy before they are in a position to reach universal development of their youth.

### **Bibliography**

- [1] Geeta Thakur , Experiential Learning for Holistic School Education As Envisaged in NEP 2020 , January 1 2024 [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=5328979](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5328979)
- [2] Aneesa Jamal , “Children as Earth Authors: A Story of Creativity, Metacognition and Motivation among Indian School Children” , 22 May 2023 <https://onlinelibrary.wiley.com/doi/abs/10.1002/jocb.591>
- [3] Miller, B. C., & Gerard, D. (2026). Family influences on the development of creativity in children: An integrative review. *Family Coordinator*, 28(3), 295–312. [https://eric.ed.gov/?id=EJ204296&utm\\_](https://eric.ed.gov/?id=EJ204296&utm_)
- [4] Lilly K.V , Sudhakar Venukapalli, Gender and Geocultural Differences in Children’s Appreciation of Art, 31 may 2021 [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4458927](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4458927)
- [5] Dr. Alpana Upadhyaya & Vinny Wadhwa , Cultivating Creativity : The Emergence of Art Schools in India , March 2024 <https://www.granthaalayahpublication.org/Arts-Journal/ShodhKosh/article/view/1452/1270>
- [6] Winner, E., Goldstein, T. R., & Vincent-Lancrin, S Art for art's sake?: The impact of arts education. (2013). <https://psycnet.apa.org/record/2013-27753-000>
- [7] Mackinnon, D. (n.d.). *The nature and nurture of creative talent* . American Psychologist. (Original work published 1962) <https://doi.org/10.1037/0003-066X.17.1.1>
- [8] Feist, G. (2013, May 22). *Scientific talent: Nature shaped by nurture*. OUP Academic. <https://academic.oup.com/book/11606/chapter-abstract/160487318?redirectedFrom=fulltext&login=false>
- [9] Wang, G. X., & Shen, Y. (2022). *Home environment and student creative thinking: An educational data science analysis of PISA 2022*. <https://arxiv.org/abs/2511.05737>
- [10] Wikipedia Contributors. (2026, July 24). *Poverty in India*. Wikimedia Foundation. Wikipedia. [https://en.wikipedia.org/wiki/Poverty\\_in\\_India](https://en.wikipedia.org/wiki/Poverty_in_India)

- [11] Shukla, R. (2023). *Price 360*. Price360.In. <https://www.price360.in/expertview/the-rise-of-indias-middle-class-a-force-to-reckon-with/#:~:text=The%20middle%20class%20is%20the,and%2060%20percent%20in%202047>.
- [12] Parida, J., & Das, A. (2026). Barriers and facilitators to education for tribal populations in India: A mixed-methods systematic review. *Children and Youth Services Review*, 185(108976).<https://www.sciencedirect.com/science/article/abs/pii/S019074092600229X>
- [13] Swanzy-Impraim, E. (2026). Creativity development in art education: A proposed framework. *Discover Education*, 5(1). <https://link.springer.com/article/10.1007/s44217-026-01296-1?>
- [14] J. A. C. van der Zanden, P., Meijer, P. C., & Beghetto, R. A. (2020). A review study about creativity in adolescence: Where is the social context? *Thinking Skills and Creativity*, 38, 100702. <https://www.sciencedirect.com/science/article/pii/S1871187120301760?>
- [15] Reddy, G. C. (n.d.). *Nurturing Creativity in Indian Design Education: Insights and a Conceptual Mind Map: Vol. 3* . World University of Design. (Original work published 2025) <https://doaj.org/article/2a6f74881e6944c0bd4857d343de4798?>
- [16] Bhawuk, D. P. S. (2003). Culture's influence on creativity: The case of Indian spirituality. *International Journal of Intercultural Relations*, 27(1), 1–22. [https://doi.org/10.1016/s0147-1767\(02\)00059-7](https://doi.org/10.1016/s0147-1767(02)00059-7)
- [17] Davis, E., Davies, B., Cook, K., Waters, E., Gibbs, L., & Priest, N. (2026). A cross-cultural examination of barriers to social inclusion for children: A qualitative study using child-centred methods. *International Journal of Mental Health Promotion*, 10(1), 42–52. <https://researchportalplus.anu.edu.au/en/publications/a-cross-cultural-examination-of-barriers-to-social-inclusion-for-/?>
- [18] Fancourt, D., & Mak, H. W. (2020). What barriers do people experience to engaging in the arts? Structural equation modelling of the relationship between individual characteristics and capabilities, opportunities, and motivations to engage. *PLOS ONE*, 15(3), e0230487. <https://doi.org/10.1371/journal.pone.0230487>
- [19] Huss, K., Schlebusch, L., Ramaahlo, M., & Samuels, A. E. (n.d.). *Barriers and facilitators to participation for children and adolescents with disabilities in low- and middle-income countries – A scoping review*. African Journal of disability. (Original work published 2021) [https://www.researchgate.net/publication/349864383\\_Barriers\\_and\\_facilitators\\_to\\_participation](https://www.researchgate.net/publication/349864383_Barriers_and_facilitators_to_participation)

[for children and adolescents with disabilities in low- and middle-income countries - A scoping review?](#)

[20] Dheya Career Mentors India Pvt. Ltd. (2026, June 4). *Dheya career mentoring frameworks*. Dheya. [https://www.dheya.com/insights/stem-vs-arts-career-india?srltid=AfmBOoq7MW1K1mR\\_XeEHVtRoBGdThF7YTbZzyDI5TDYNAZRF1G-fFCM9](https://www.dheya.com/insights/stem-vs-arts-career-india?srltid=AfmBOoq7MW1K1mR_XeEHVtRoBGdThF7YTbZzyDI5TDYNAZRF1G-fFCM9)

[21] Kamat, T. (2023). Lack of awareness of hass- humanities, arts, social science among high school students in Mumbai India. *International Education and Research Journal (IERJ)*, 9(10). <https://www.ierj.in/journal/index.php/ierj/article/view/3136>

[22] Raj, M., & Karthikeyan , J. (n.d.). *INCREASING PRESSURE ON INDIAN STUDENTS IN CORE MECHANICAL ENGINEERING AND OTHER BRANCHES OF STUDIES* (Vol. 9). (Original work published 2018) [https://iaeme.com/MasterAdmin/Journal\\_uploads/IJMET/VOLUME\\_9\\_ISSUE\\_8/IJMET\\_09\\_08\\_122.pdf](https://iaeme.com/MasterAdmin/Journal_uploads/IJMET/VOLUME_9_ISSUE_8/IJMET_09_08_122.pdf)

[23] Ahmed, S. (2017, June 6). *‘Only weak students opting for arts a misconception’*. Times Of India. The Times of India. <https://timesofindia.indiatimes.com/city/nagpur/only-weak-students-opting-for-arts-a-misconception/articleshow/59005089.cms>