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Atmanirbhar Bharat-Digitalization of Education in Higher Primary Schools in KGF

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Abstract
The importance of computer education in higher primary schools can't be downgraded. From fifth to Tenth standards teaching computer skills to young learners and achieving self-sufficiency in mastering onlinre tools and techniques has become a goal of the government of India. Thus the role played by the teachers in these schools regarding the imparting of online skills both theoretical and applied has become the main part of all schools curriculum. Virtual classrooms have come into esistence. To underste and this better a small survey was conducted in a economically backward taluk KGF or Kolar Gold Fields. Three schools sampled were Mysore Mine High School (25 samples) Sarvodaya Nursery and Basic Primary school (15 samples) and finally GMHPS KEB Government Higher Primary School (10) samples. A total sample size of 50 teachers were taken from all the three schools. The research gap revealed that the schools though they have computers and computer labs virtual classrooms and smart classrooms are very less compared tp the number of students studying there. The teachers are showing readiness in getting trained in all the pedagogical tools such as Microsoft team collaborate with teams learn to design 100 certificates instantly learn to design presentation Logos, Flyers and Visiting cards YouTube Channel management and live streaming Learning to create animated videos and to Record mix and edit videos and Moodle: learning management systems. The findings also show that though teacher readiness was present but there was infrastructural gaps in schools. All the three schools main goal was to achieve Atma Nirbhar for Bharat in this digital era. There were training centers in KGF, Kolar Bangarpet and Malur Government High Schools.

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Introduction

To understand how far semi-rural and small town schools handled computer education in secondary and high schools a small survey was conducted in KGF or Kolar Gold Fields a small taluka in Kolar district. Three schools were selected on this subject. Mysore Mine High School (ESTD 1962). And Sarvodaya Nursery and Basic Higher SchoolEstd.1955) and KEB higher Primary School 1932. All the three schools were functioning for more than fifty years.

Frequent power cuts unreliable broadband internet connectivity in rural secondary schools hindered lab usage. Teachers were also ready to undergo online training to help educators to transition to digital education pedagogies and manage open educational resources (OER).

Literature Review

Dr. Sumita Sinku (2021), emphasis in her study that, the impact of Covid-19 pandemic in unleashing digital transformation in the education sector in India. In her study she has given importance to some key areas of transformation in education sector and tries to give a roadmap to future e-learning system. The observation points out that, India has some pockets of excellence to drive the education sector to the next level.

Pulkit (2020) explain the current education system in his paper. He wrote India holds a very important place all over the world in education industry. The nation has more than1.5million schools with more than 260 millio, n students enrolled and around more than 800 universities and 65,000

colleges. Although, lot of scope for continuous improvement in the education framework. Indian education industry is ready to face significant development in the years to come, as India have world's biggest tertiary-age population and second biggest graduate ability internationally.

Korableva (2019) highlighted on the benefit of online courses over the traditional class room based teaching. In extend of the study, more insight was on the latest two online platforms, MOOC and Course era, to understand which more user convenience is as well as give the best solution in terms of knowledge.

R.Raja (2018) ICT and other digital tools are very helpful to impart knowledge to our students, and the process of teaching and learning can be more enjoyable with the advent of the latest technology, according to research I conducted on the importance of technology in the education system with reference to schools in Chennai.

Dr. Radhika Kapur (2018) Her research focused on issues with the Indian educational system, such as the value of high-quality instruction, difficulties with the country's traditional educational model, low student involvement, etc. In extend of the study author found education quality, trained teachers, the curriculum & instructional methods are not well developed and these are also contributing as major issues in Indian education system.

Research Gap

Despite the teachers of government schools being well trained in latest computer basics are they self-sufficient in computer knowledge hardware and other programs such as online teaching,Flipped classes? How willing are they in getting trained for digital education pedagogical tools?

Objectives

1. Profile of the surveyed schools selected for the study.
2. To find out the challenges faced after implementation of Atmanirbar Bharat.
3. To find out the teacher's interest and willingness to participate in various computer programs under Atma Nirbhar program.

Research Methodology

Both primary as well as secondary data was taken for understanding the study better. Secondary data was obtained from previously published textbooks and training programs manuals, seminars and national and international conferences materials. For primary data a survey study was conducted in three government schools namely Mysore Mine High School and Sarvodaya middle school and KEB Higher Primary School all located in KGF taluk. A questionnaire was designed to collect data and 50 respondents were interviewed face to face: 25 from Mysore Mine High school and 15 teachers from Sarvodaya Nursery and Basic High School and 10 samples from KEB Higher Primary School. All the sampled respondents were women teachers.

Sample size-50
Area of study: KGF taluk
Sampling technique: Simple random and Probability sampling design.

Data Analysis and Interpretation

Table 1: Profile of the respondents

S. No.	Particulars	Frequency	Valid percent
1	Mysore Mine School	25%	50
2	Sarvodaya Government School	15%	30
3	KEB Higher Primary School	10%	20
		50	100

Source: Field Survey 2026 September

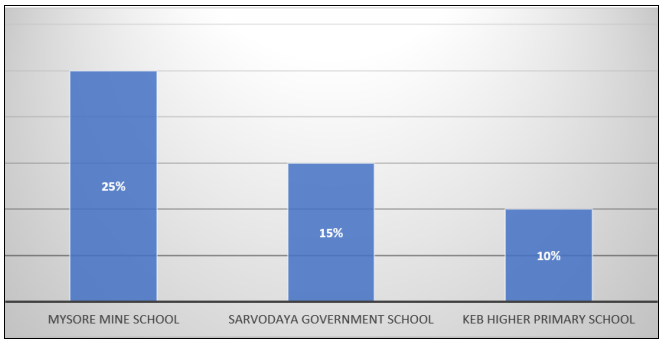
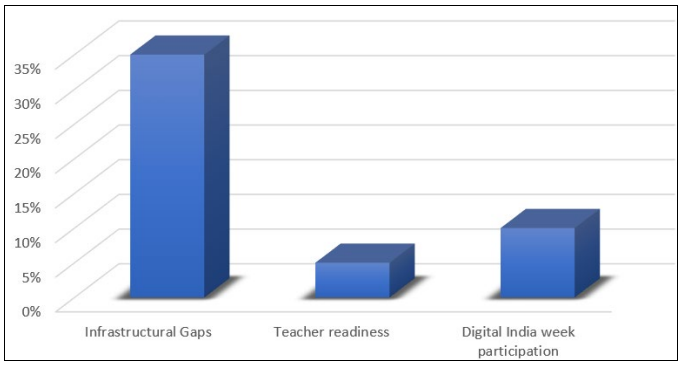


Table Analysis: The table above indicates sampled schools namely Mysore Mine School (25) and Sarvodaya Nursery and Basic High School (15) and KEB Higher Primary School (10). These were the sampled number of teacher respondents from all the three schools totaling 50 respondents. All the 50 respondents were female school teachers. All the sampled teachers are well trained in computer programs and LMS (Learning management systems, MOOCS and Moodle)

Table 2: Implementation Challenges faced by the teachers of three schools Mysore Mine and Sarvodaya Basic High School &KEB Higher Primary school.

S. No.	Particulars	Frequency	Valid percent
1	Infrastructural Gaps	35%	70
2	Teacher readiness	05%	10
3	Digital India week participation	10%	20

Source: Field Survey September 2026.



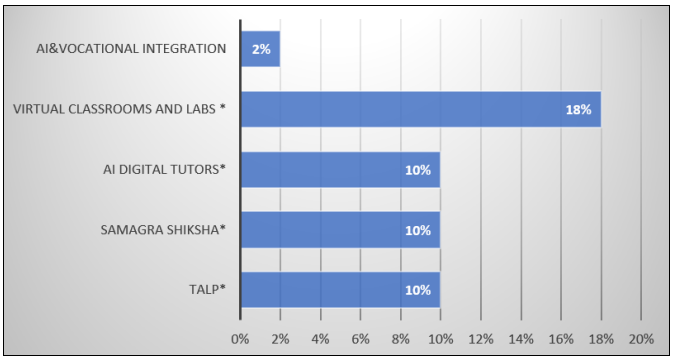
Infrastructural funding and teacher training programs are the basic infrastructural gaps faced by the sampled respondents. Around 35 percent of the teachers face infrastructural gaps by not having two or three smart classrooms for 500 students and required number of laptops in the computer lab was less. Teacher readiness for training in government schools situated in other taluks has received only 5% of respondents.

This was due to travel distance to other taluks with no hostel facilities.10% of teachers show digital India week participation programs which is done online.

Table 3: Atmanirbhar Bharat programs and schemes and infrastructural bottlenecks encountered for these programs and Teacher readiness and Interest. All three schools are combined here.

S. No.	Particulars	Frequency	Valid Percent
1	TALP*	10%	20
2	Samagra Shiksha*	10%	20
3	AI Digital tutors*	10%	20
4	Virtual classrooms and labs *	18%	26
5	AI & Vocational Integration	02%	04

Source: Field survey 2026 September



The above table shows the different Atmanirbar Bharat schemes such as TALPS: Technology Assisted Learning Program where 10% of respondents showed interest and having more students and lesser computers per class for teaching purposes. Samagra Shiksha (ICT & Digital) lack of ICT labs and Smart classrooms 10% of the respondents feel the shortage, Digital Nagarik programs launched with META and Ministry of education to train teachers and students of class 6^{th} -10^{th} garnered only 10% from the respondents regarding data safety and cyber security. The biggest shortage was virtual classrooms meaning there was very few computers and laptops and other capital inventory needed to make students well versed in computers which showed 18% of the respondents vouching for this situation. The last was about emerging technology and AI where the state introduced programs like AI Akashaya Abhiyana which had only 2% of respondents supporting this for 6^{th} standard students as there was very less availability of computer hardware 10% internet connectivity in these schools in backward areas.

Results and Discussion

Limitations

The main limitation was commuting to training centers in Kolar Malur and Bangarpet which is far from KGF.. The other drawback was the infrastructure shortages of less number of computer hardware and software in the schools, two- three virtual classrooms for entire school with 500-600 students studying in higher primary schools.

Suggestions

The government of Karnataka has provided all the Government First Grade Colleges with laptops per student in taluk level. If this facility is extended to schools also it will enhance the training of computer skills to school students also. Well-equipped classrooms with smart boards and projectors and other resources like high speed internet connectivity and laptops must be made available.

Conclusion

To conclude the main gap here was seen as the low infrastructure level in the schools sampled. If this is addressed the core problem will be solved that is teachers are ready to get trained and impart online skills to students while the students also are eager to learn computers. This will ultimately bring about Digitalization of higher primary school education and fulfill self-sufficiency in digital education a part of objectives of Atmanirbhar Bharat for school students by their teachers.

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