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Md Asraul Hoque and Krishnan Chalil

Education Loans in India: Are They Effective, Equitable, and Sustainable?

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National Education Policy—2020 and School Complexes: A Journey towards Quality Ethos

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Economic Challenges to Engineering Education Institutes in India

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Need of New Emerging Technologies for More Educational Enjoyments
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Education Loans in India: Are They Effective, Equitable, and Sustainable?

Md Asraul Hoque* and Krishnan Chalil**

Investing in education and providing 21st century skills for students are fundamental components to the nation's continued growth and prosperity.

Craig Barrett

No other investment yields as great a return as the investment in education. An educated workforce is the foundation of every community and the future of every economy.

Brad Henry

The financial and economic crisis that began in India and later expanded to other nations in the region should be considered while analysing the Indian financial crisis and the beginning and early development of the student loan programme in India. The early underlying causes of these extraordinarily high economic growth rates were primarily external, including the tourism industry's explosive growth and foreign investment; later, domestic investment and consumer demand played a significant role. The crisis has severe repercussions for the educational system. Reduced public resources were made available for the education sector due to the financial strain on the Government. The crisis also impacted the education sector through its effects on welfare and family incomes. It made it harder for families to pay for college tuition and other expenses, which led to an increase in late tuition payments, a decline in enrollment, and a rise in student dropout rates (Cresswell, 1999). Families with lower incomes were hurt the hardest.

Loan financing is not new in India. To increase access to higher education while reducing the burden on the Government to cover all costs, the National Loan Scholarship Scheme was established in 1963–1964. Since student loans were first offered in 1963 through 1987–88, a total of Rs. 869 million has been invested in them. Certain estimations may be made based on the available data. However, the repayment rate is relatively low. The Government invested around Rs. 42 million in the Loan scholarship programme in 1977–1978; of that amount, Rs. 4.4 million was recovered as loan scholarship repayment. When the programme was first implemented in 1963–1964, there were 1.3 million students enrolled in higher education; by 1988–1989, there were 9.2 million (Tilak, 1992). However, the Government was compelled to abandon the plan by 1991 due to

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several issues, including exorbitant overdue and a lack of vision (Tilak,2018). There was no comparable scheme in the nation for the following ten years. An established commercial Bank oversees the 2001 introduction of India's school loan programme. It encompasses a broad spectrum of post-matriculation to doctoral-level courses in higher education, both in India and overseas.

Current Central and State governments run different Schemes. Like The Vidya Lakshmi site, a single point of entry for students to information and applications for educational loans was established by the Government of India on August 15, 2015. For students looking for educational loans, Vidya Lakshmi is a pioneering website. The Government of India also introduced the Credit Guarantee Fund Scheme for Education Loans (CGFSEL), which offers up to Rs. 7.5 lakh in collateral-free loans. I.B.A. Model Plan According to the IBA Model Scheme, the maximum amount for an education loan is Rs. 10 lakh (\$20,000) for domestic studies. The state government aims to take all necessary steps to increase the GER of Bihar by 30% while making it equal to the national average, and the state should be put on the front line of the developed states. It was decided to implement the Bihar Student Credit Card Yojana Bihar, developed under the State Government's good governance program 2015-20. The Bihar Student Credit Card Yojana was launched on the occasion of Gandhi Jayanti on October 02, 2016. To help young people in West Bengal become "self-reliant," the state government launched the "Student Credit Card scheme" on June 30, 2021. This programme supports students as they pursue secondary, higher secondary, madrasah, undergraduate, and postgraduate studies, including professional degrees and other equivalent courses, at institutions inside and outside India. KSSY is a loan programme for students that was introduced by the chief minister of Odisha, Naveen Patnaik, in 2016. Under the programme, students are eligible for loans up to Rs. 10 lakhs with a 1% interest rate. Candidates can make both online and offline applications for the programme. The Jharkhand state government has created a programme to give students financial aid to continue their education without financial stress. In its state, the Jharkhand state government introduced the Guruji Credit Card Scheme on March 3, 2022. This programme will shortly begin to aid state kids. This programme would offer non-collateral soft loans to low-income students up to Rs. 10 lakhs each.

They will be given this soft loan for their graduate education. This loan's anticipated basic interest rate is 4% annually. The pupils will have 15 years to repay their loans. Banaras Hindu University has launched an interest-free loan support programme. According to a release, the programme would provide annual assistance of Rs 12,000 to pupils whose family has a below poverty line (BPL) card, whose parents have passed away from COVID-19 or are no longer alive, and the child was dependent on their income. This has allowed them to finish their university coursework without interruption.

Its goal is to increase educational access (to upper secondary and tertiary education) for poorer sections of the population, resulting in increased equality of educational opportunity and more significant social equity. The student loan programme specifically aimed to lessen the financial burden on students studying at the upper secondary and tertiary levels. Even though the strategy was developed and implemented before the crisis, it was considered crucial in preserving student enrollment and preventing dropouts from the educational system. One of the main subjects of this monograph is how much of this has been demonstrated to be true in practice. In the past, high economic growth helped to significantly raise the standard of living, particularly in rural areas (Kakwani and Pothong, 1998). However, due to the financial crisis, these improvements were largely halted, and the already significant gaps between rural and urban areas and regions have widened. The northeastern region, which is the poorest in the nation and is home to five of the most impoverished provinces, was hardest hit by the crisis.

The Education System: Budgets and Financing

In general, as in most other nations, education is provided and funded mainly through the public sector in India. We will, however, draw attention to the significance of for-profit educational institutions in various fields, particularly in higher education and vocational training. This section contains details on the Government's role in funding education, how the budget is allocated among different areas, and current developments in private school finance.

Public Educational Expenditure

The amount allocated for education by the central Government in 2022 is Rs 104278 crore, an increase of Rs 11,054 crore from the year before.

Subsidies for private schooling and sizable subsidies for local government spending are included. The amount spent on education as a percentage of G.D.P., the primary indicator of overall economic activity, is comparable to that of other nations in the region (Cresswell, 1999). The demand for tertiary education is on the increase in our country. The improving socio-economic conditions of the people, liberalization and privatization policies and globalization measures have contributed to escalating demand for higher education. These increasing demands have resulted in consistent growth in several educational institutions and enrolment. As per the All-India Higher Education Survey Report 2018-19, 53,620 higher education institutions, 3.50 crores of students and 14.04 lakhs teachers are in our higher education landscape. The type-wise distribution of the institutions shows that 78 per cent are colleges, 20 per cent belong to standalone nature, and universities comprise 1.9 per cent. Table 1 gives the features of our higher education system.

Table 1: Higher Education Statistics of India-2019

Institutions	Number	Teachers (in Lakhs)	Students (lakhs)
Universities	993	1.58	69.46
Colleges	41901	10.99	260.00
Standalone Institutions	10726	1.47	20.23
Total	53620	14.04	349.69

Source: All India Survey on Higher Education 2018-19, MHRD, Government of India

A disaggregated analysis of the university-level institutes, as given in Table 2, points out that State Public Universities and State Private Universities constituted about 68 per cent of the total institutions.

As a supplement to the above information, we have compiled a time series trend in the composition

of institutions and enrolment in the private and Government higher education institutions in Table 3. The Table clearly indicates the enlarging size of the private higher education system in the country, which is a testimony of the privatization of the higher education system of our government.

Gross Enrolment Ratio (GER)

The GER is an accepted indicator for understanding the accessibility to education at various levels. The percentage of the population in the age group of 18-23 who has access to higher education is the GER of higher education. Access to education basically depends on the number of educational institutions. It also rests on the capacity of society to bear the cost of education. When we look at the status of GER in higher education in India, it is still below the international average. In 2018-19, India's GER in higher education was 26.4, whereas globally, it varies from an average of 8% in sub-Saharan Africa to 75% in Europe and North America. We are nowhere nearer to the Scandinavian countries (Table 4). These figures show the necessity of increasing enrolments at various higher education levels.

Education Loan in India

The expansion of higher education enrollment is influenced by several variables, with finance playing a significant role. A rising market economy like India needs trained professionals that bank credit plays an essential role in fostering. In 2001, the Indian Banks Association (I.B.A.) introduced an education programme that inspired the concept of promoting student loan borrowing. One can see that there has been a continuous increase in the number of education loan accounts and the distribution of education loans since adopting the Model Education Loan Scheme. Table 5 presents these figures.

Table 2: Distribution of University Level Institutions-Type-wise (in percentage)

Sl. No.	Institutions	%	Sl. No.	Institution	%
1	State Public University	37.4	7	State Open University	1.4
2	State Private University	30.6	8	Deemed University (Government-Aided)	1.0
3	Institute of National Importance	12.8	9	Institutes under State Legislative Act	0.5
4	Deemed University (Private)	8.1	10	State Private Open University	0.1
5	Central University	4.6	11	Central Open University	0.1
6	Deemed University (Government)	3.4		Total	100.0

Source: *Ibid*

Table 3: Distribution of Higher Education Institutions and Enrolments between Government and Private Sector in India

Type	2000-01*	2005-06*	2010-11	2018-19
Percentage share of institutions				
Government	33.2	25.0	26.8	22.2
Private Aided	42.1	32.0	14.2	13.5
Private Unaided	24.7	43.0	59.0	64.3
Total	100.0	100.0	100.0	100.0
Percentage share in enrolment				
Government	41.0	35.8	39.2	33.6
Private Aided	37.3	33.5	23.8	21.2
Private Unaided	21.7	30.7	37.0	45.2
Total				

Source: (i)*Agarwal, P (2009), (ii) All India Survey on Higher Education

Table 4: GER in Higher Education (2018-19)

Region	All Categories			Scheduled Castes			Scheduled Tribes		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
India	26.3	26.4	26.3	22.7	23.3	23.0	17.9	16.5	17.2

Source: *Ibid*

To get an idea of the year-wise disbursement of education loans by public sector banks, Table 6 is very useful. An analysis of the disbursement of education loans in the country by public sector banks in the last five years shows that there is no steady growth in the number of education loan accounts. In the case of education loans disbursed, one can see

an absolute increase over the years, but the annual growth rate is still inconsistent. This phenomenon must be viewed very seriously in the context of the sweeping privatization of higher education. Also, the banking institutions' disinterest in promoting the education loan portfolio needs further scrutiny.

Table 5: Outstanding Education loans in India

Year	Accounts	Annual Growth	Amount (₹. Crores)	Annual Growth
2000-01	112000	--	1028.00	--
2001-02	157000	40.18	1527.00	48.54
2002-03	239000	52.23	2870.00	87.95
2003-04	347000	45.19	4179	45.61
2004-05	489445	41.05	6694.33	60.19
2005-06	668351	36.55	11296.39	68.75
2006-07	1026215	53.54	14390.99	27.39
2007-08	1247083	21.52	20258.48	40.77
2008-09	1613444	29.38	27746.62	36.96
2009-10	1972053	22.23	36923.74	33.07
2010-11	2287843	16.01	42992.84	16.44
2011-12	2464124	7.71	48220.33	12.16
2012-13	2590045	5.11	52738.67	9.37
2013-14	2681360	3.53	57164.17	8.39
2014-15	2671316	-0.37	59336.04	3.80
2015-16	2636624	-1.30	61831.00	4.20
2016-17	2547246	-3.39	62854.00	1.65
2017-18	2427512	-4.70	61773.00	-1.72
2018-19	2307871	-4.93	62456.00	1.11

Source: *Statistics on Indian Economy, Reserve Bank of India*

Figure 5.1: Trend Line of Outstanding Education Loan Accounts

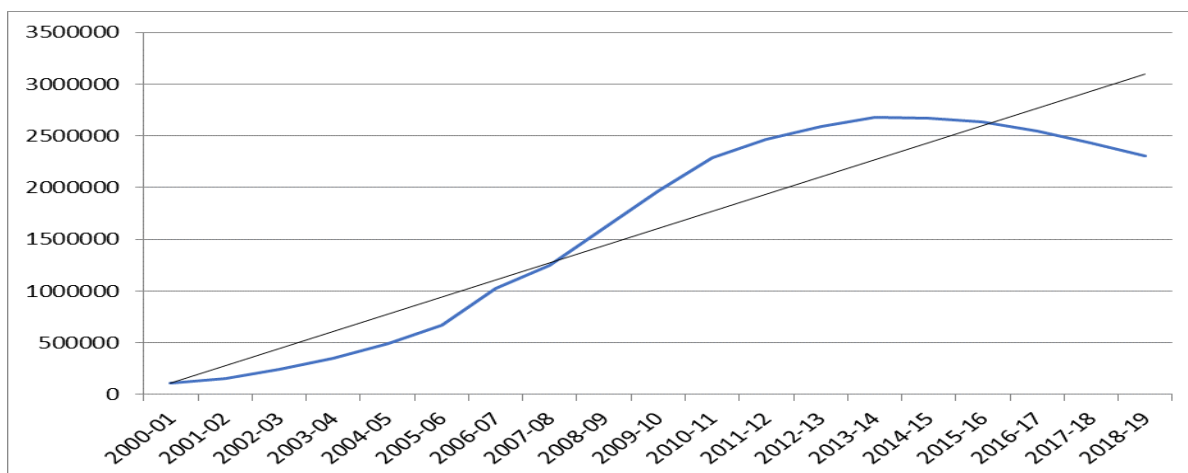


Figure 5.2: Trend line of Outstanding Education Loan Amount

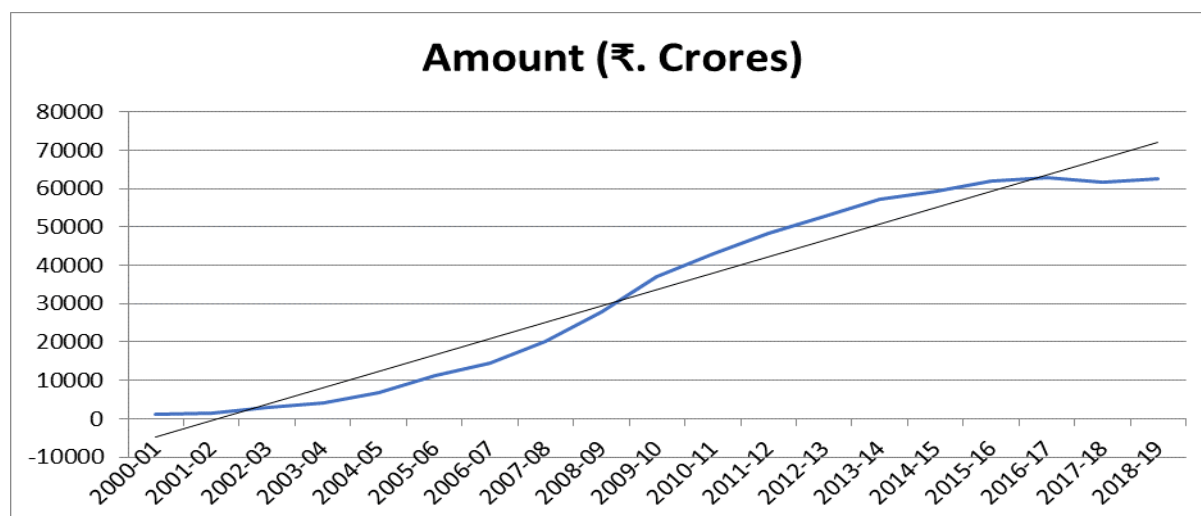


Table 6: Disbursement of Education Loans by Public Sector Banks in India

Financial Year	No. of Accounts	Annual Growth	Education Loan Disbursed (₹ Crore)	Annual Growth
2014-15	681685	--	9190.45	--
2015-16	684836	0.46	12595.39	37.05
2016-17	599729	-12.43	11175.91	-11.27
2017-18	786312	31.11	13470.47	20.53
2018-19	696656	-11.40	15030.13	11.58

Source: Lok Sabha, Unstarred Question No.2189, December 02 2019, GoI

The regional distribution of education loans and priority sector advances reveals interesting facts (See Table 7). While the percentage of outstanding priority sector advances to Southern States was 28.75 to total Priority Sector Lending, the share of outstanding advances under Education Loans was 54.39 per cent of the total outstanding education loans. Whereas in the Western Region, the percentage of outstanding P.S.L. to total P.S.L. was 31.58 per

cent to total, its share in total education loans was only 11.80 per cent.

Objectives and expectations

Goals and guidelines for the alternative loan programme

The overarching goal and the policies employed vary depending on the situation. There

Table 7. Region-wise percentage distribution of Priority Sector Advances and Education Loan

Sl.No.	Region	Total Priority Sector		Education Loan	
		Accounts	Amount	Accounts	Amount
1	Central Region	14.69	12.57	9.71	10.69
2	Eastern Region	18.15	8.50	10.60	12.46
3	Northern Region	9.95	17.32	7.41	9.60
4	North-Eastern Region	3.32	1.28	0.97	1.06
5	Southern Region	41.10	28.75	60.31	54.39
6	Western Region	12.79	31.58	11.00	11.80
	All-India	100.00	100.00	100.00	100.00

Source: *Ibid*

are potentially five main sets of goals for student loan programmes, all of which will impact the programme's overall structure, functionality, and viability. Pure cost collection, meeting specific labour requirements, alleviating financial pressures on students, and social goals like increasing equity and access for the underprivileged are all made possible by these (Ziderman, 2002a). A given scheme could include multiple goals.

Cost Recovery

Governments have implemented strategies to increase student enrollment in response to the rising social demand for higher education; yet, due to national budgetary restrictions, the growth in student numbers is largely not matched by equivalent extra government support. To tap into new financing sources, many university systems have shifted to increased cost recovery. The establishment or increase of student payments for received services is the major focus of these measures. These could lead to increased subsidies for subsidized housing and meals or higher, more reasonable tuition prices. The introduction of a system with significant student fees will also have an impact on the educational system. It results in a shift in the institution's relationship with students toward one of provider and customer, giving students more influence over institutional decisions.

Raising student fees—whether for tuition or living costs—may be politically and socially undesirable; vested interests from all spheres of society will vigorously fight the imposition of student expenditures that would amount to several times what the average worker already makes. Banks are notoriously reluctant to lend for educational programmes, which is a clear example of a market failure. As a result, turning to the banking system for loans to lessen this payment burden may not be successful. Therefore, the purpose of a government-

backed student loan programme, which is provided at market rates, is to close this gap. Students can pay for their education and living expenses by taking out loans; the burden of repayment is lessened by the anticipated increase in earnings made possible by the additional education.

Facilitating the Expansion of Higher Education

The demands of rising social demand for education expansion will necessitate significant increases in public spending. Still, we have suggested these increases could be restrained by reducing public institutional support to balance off additional revenues from increases in student fees. Encouragement of the expansion of private educational institutions is a complementing action. Total costs are covered by students, placing little strain on public coffers. Full-cost fees, however, are probably substantial and out of the price range of vast portions of the population. Suppose private education is to be widely accessible and not only the privilege of the wealthy. In that case, a student loan programme may play a crucial role in reducing the burden of private costs. Loans given to students attending private universities in Colombia and Brazil have allowed these schools to grow, boosting overall access to higher education while reducing the fiscal burden on the Government. Academically talented but financially strapped students attending or desiring to enrol in private higher education institutions are the focus of Mexico's SOFES loans programme. The Government heavily subsidizes this programme, but in theory, a programme for student loans developed for this reason does not have to be.

Human Resources Need

Loan programmes may be designed expressly to help students who want to study or work in sectors that are important for the nation's human resources,

like engineering (doctors or teachers servicing remote rural areas).

Easing Student Financial Burdens

Even with low tuition prices, students' financial obligations can be relatively high, even for non-poor students. Students in higher education are at an age where they are legally and financially independent. However, they still sacrifice prospective earnings while in school, and living expenditures can be high, especially if they do not attend a nearby university. Students can work while they are in school in several nations. As illustrated by the American idea of "earning your way through college," this may take the form of part-time, primarily casual, student employment (on or off campus). In other situations, scheduling and university policies make combining regular employment with studies easier. However, these options might not be easily available in some systems, or student employment might not be the norm. The widespread availability of student loans in these circumstances might lessen the financial demands that might otherwise have a detrimental impact on a student's motivation and performance. While these costs may be borne disproportionately by the poor, loans may be made available to all students, including those who are not poor, but they would not be subsidized.

Social Objectives – Increasing Access for the Poor

None of those mentioned above justifications for establishing a student loan programme support the use of heavily subsidized loans. Increasing access to education for these demographic segments has become a vital component of the educational and social policy due to many nations' comparatively low enrollment of poor and disadvantaged kids in non-compulsory education. There is widespread agreement that there must be clear financial incentives provided to ease the burden of tuition payments and living expenses and overcome parental resistance to income losses and the possibility that the educational process may not yield appreciable benefits.

Objectives of the Indian Loans Scheme

How many of these goals are reflected in the Indian loan programme? To accomplish economic growth and boost the nation's competitiveness, human resources must be developed. Given these demands, educational advancement must be sped up. By expanding the educational chances for pupils from

low-income families, existing issues of educational inequality in society can be resolved. This will significantly raise everyone's standard of living. The Student Loans Scheme must be established to accomplish these objectives.

These and other sources demonstrate that the Scheme's primary goals are social in nature: the provision of student loans will increase educational possibilities for the underprivileged, raise living conditions, and advance population equality. The longer-term goals of improving the country's human capital, competitiveness, and development are economical, but human capital development will be ensured by focusing on the underprivileged. There are no other objectives listed. Given that most student loan programmes have several aims and strongly emphasize economic outcomes, particularly better cost recovery through higher tuition fees and lower state expenditures, the exclusive focus on social objectives is surprising.

Characteristics of the Indian Loans Schemes

It appears likely that the Indian Loans Scheme's strong emphasis on social goals may account for four of its distinctive features.

Unusually, the programme includes both higher and tertiary education as well as upper-secondary education. Student loan programmes are virtually solely related to higher education; loans make up a very small portion of the total amount of financial help offered to students. Due to the opportunity costs of studying instead of working, poor students are particularly at risk. The question is whether subsidized loans targeted at the poor (rather than grants) constitute the best instrument for achieving the desired outcome. For this reason, government subsidy of the private costs of upper-secondary & higher education, particularly for the poor, is an essential element of social policy.

Second, the terms for loan repayment are incredibly lenient, suggesting a substantial lending subsidy. Repayments are spread out over 10 and 15 years following a two-year grace period. The repayment percentage is initially fixed at extremely low rates before gradually increasing over time. Repayments are made in nominal terms, and the interest rate is only 1% for women and disabled people and 4% for others. These lenient repayment conditions may have been introduced due to the loan program's inception as primarily serving social goals

and placing little emphasis on its financial features. The unresolved point, however, is the extent of the loan subsidy that results; an excessive subsidy not only calls into question the financial viability of the entire programme but may also suggest that a system of grants would be a more economical alternative.

Third, numerous indicators indicate that the strategy was implemented quickly and without much thought. Difficulty must be resolved when bringing about a change that society needs. Effective implementation necessitates thorough planning and preparation stretched over some time, but this will delay the delivery of the essential service during what may be a protracted planning phase. If there was a choice between quicker implementation and greater effectiveness when setting up the loan scheme, the decision was made to follow the latter approach. As a result, the programme operated in its early years ad hoc, without a formal Act, full-time management, senior employees, or buildings.

Finally, the decision to utilise existing administrative and organisational structures rather than developing new ones focused explicitly on achieving the goals of the Scheme may be explained by the decision in favour of speedy implementation. The mechanism aims to ensure that each level of the ministry's organisational hierarchy, all the way down to the level of the educational institution that distributes the loans to students, receives a "fair portion" of the budget for loans. Nevertheless, this loan budget allocation method disregards the Scheme's primary goal of focusing on the poor, with the partial exception of M.O.E. loans budget allocation to the provincial offices.

Conclusions and Reform Policy Implications

Reforming the Organization: Enhancing Targeted and Horizontal Equity

The current method of arbitrary top-down budget allocation for loans combined with unfair institution-based (decentralized) loan distribution has not benefited the loan programme. To facilitate targeting and prevent horizontal unfairness, the direction of change proposed here is its replacement with a bottom-up system of loan applications to a central loans distribution authority. Reform will be considered separately for the two levels of education due to the stark differences between secondary and higher education needs.

One more thing should be said concerning the SLSB's roles regarding the assistance provided to

tertiary students. As most other nations do, India's student loan programme offers subsidized loans that lie in between commercial loans and outright grants. Given the concealed grant component, student loans share many of the same social goals as need-based student scholarships and call for the same administrative procedures. Due to this, it would be beneficial to combine the administration of student loans and federal scholarships under the governance of a single entity, such as the SLSB and Vidya Lakshmi Portal.

Finally, we highlight the disparities between the goals sought after by the decentralization of educational management and the reform of the student loan system. The latter emphasizes regional autonomy, regional diversity, and a range of educational offerings. However, the focus of loans and scholarship programmes is on finance rather than on providing educational services. This essay's central focus is the significance of upholding horizontal fairness and an acceptable level of treatment uniformity in response to need. A loan or scholarship programme does not need to be connected to the established framework for managing and administering education to accomplish these goals.

According to the Act, the main goals of the student loan programme are to provide financial aid to needy students and increase possibilities for children from low-income homes to pursue higher education and other limited-scope programmes. Only a carefully thought-out loan distribution system that tailors loans to the clientele may achieve these goals. Unfortunately, the Scheme's adopted loan allocation mechanism is not built to accomplish this goal.

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National Education Policy—2020 and School Complexes: A Journey towards Quality Ethos

Harish Kumar* and Aparajita Sengupta**

The concept of school complexes was first recommended in the report of the National Education Commission in 1964-66. The idea behind introducing the concept of a school complex was that the nearby locality approx. within 5-10km of the complex should be benefitted from each other's facilities in terms of infrastructural resources, expertise that exists in different schools, and also terms of governance and management. However, over these years the implementation has not been easy and there have been various quality aspects that have turned up. The authors in this article have tried to bring into focus the quality aspect of the school complexes along with the suggestions of various strategies with regard to NEP—2020 that could be used for the implementation of school complexes.

The challenges are manifold; but it is time to learn from previous lapses (in the implementation of school complexes) and keep on moving ahead to improve the quality of education and achieve three primary goals of Indian education i.e., access, equity, and equality. Now it is expected that the strategies proposed in the paper will certainly help the stakeholders in strengthening the success rate of the school complexes and achieving the goal of quality education.

Payal Ruchi (2020) in her article cited that, “the dual administration by the Sub-Divisional Education Officer, who is under the District Education Officer for the secondary level and Block Extension Education Officer, under Deputy Education Inspector, who is under District Superintendent of Education for Middle and Primary schools has made school situation worse. It fragmented the government resources and efforts and break the flow of education in the same area. The primary, middle, and secondary schools although found in the same area remained uncoordinated. The secondary school

teachers blamed the middle school teachers, who further pass on the blame to primary teachers for sending unprepared students. Their universes did not overlap, there was a break in the flow of education within the same school area .”

Apart from improper coordination and inadequate resources some of the other problems include the multiple-grade teaching that prevails in most schools in rural areas or villages across the country, the prevalence of single teachers teaching all the subjects, and problems related to governance and management (Payal Ruchi, 2020). Thus, the Kothari Commission gave the recommendation for clustering of schools. The school complex would comprise “one secondary school together with all other schools offering lower grades in its neighborhood including *Anganwadis*, in a radius of five to ten kilometers” (NEP 2020,p.29). The main reason for this recommendation was to promote the sharing of expert resources as well as the infrastructure of the schools in the locality. To be specific if in an area, within accessible distances, there are a small and fairly manageable number of teachers, then they could work in collaboration to establish face-to-face relation. This is basically proper utilization of resources both in the form of expertise as well as infrastructure with minimum wastage of both.

The idea behind introducing the concept of a school complex was that the schools that are nearby should be benefitted from each other's facilities in terms of infrastructural resources and expertise that exist in different schools. This could be achieved by the establishment of a school complex; where learning could occur collaboratively and in cooperation with each other's support. School complexes could comprise a set of primary schools, high schools, and other training schools, which would work jointly towards the educational goal of improving the educational standards and quality of school education.

Some of the objectives behind the recommendation of the school complex by the Kothari commission include:

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- To break the barrier faced by schools functioning in isolation.
- To raise the quality of education by interlinking the high schools with other schools.
- To help schools work cooperatively to raise standards of education for all.
- To promote sharing of educational aids and other resources like the library, amongst the various schools of the complex. Also, the complex could provide such resources to the secondary schools in a given area that are part of the complex.
- To endorse the economical use of resources.
- It would allow the teachers of different schools of the complex to work in collaboration and make proper use of both human and material resources for the upliftment of standards of education.
- It would provide better opportunities for school teachers to coordinate with the locals and communities to come together and resolve educational issues.
- It would provide in-service training to lesser qualified teachers to upgrade their teaching skills.
- It would help to develop improved teaching methods and establish best teaching practices in school education.

Other policies that came after the Kothari Commission has given certain recommendations on school complex. The National Education Policy, of 1986 had given recommendations on the promotion of school complexes based on a flexible pattern, with the objectives of advancement of professionalism amongst teachers as well as sharing of facilities.

The need for and importance of the school complexes are mentioned in Figure 1. The figure clearly shows that sharing of material resources, sharing of instructional material and works, and collaboration amongst schools would ultimately break the barriers of schools working in isolation. Further the in-service training of teachers for the upgradation of

their skills and qualifications; would help in better achieving the educational objectives. All in all, all these interconnected factors would together lead to the upliftment of the educational standards in school education; which would ultimately help in achieving the broader national goal of improving quality in the education system.

Sahodaya School Complexes in India

In the year 1987, the Central Board of Secondary Education (CBSE) came forth with the concept of ‘freedom to learn and freedom to grow through Sahodaya School Complexes (SSCs)’. The Sahodaya school complexes comprise of certain number of schools who are voluntarily associated and have come together based on common mutual goals of working together for improvement of educational standards. Sahodaya literally means rising together. The six areas identified for collaboration between schools are given in figure 2.

Though it was the Kothari Commission that recommended the setting up of school complexes for the first time, actually it was the National Education Policy 1986, that set the tone for setting up these complexes for quality education. To date, there are 260 such complexes that are active in the country.

At the 26th Annual Conference of Sahodaya School complexes held in December 2020, various

Figure 1: Importance of School Complex

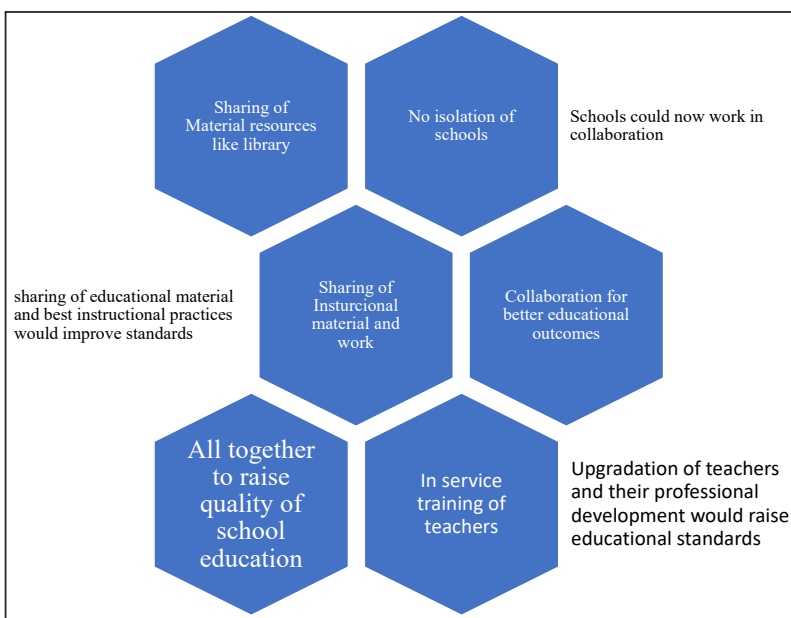
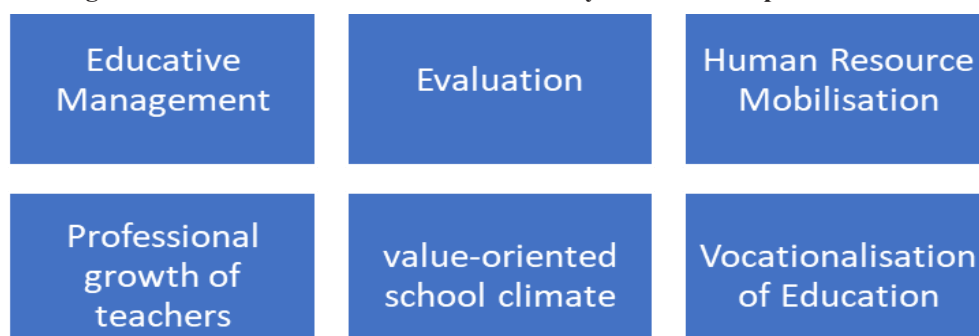


Figure 2: Areas of Collaboration for Sahodaya School Complexes in India



recommendations and resolutions were given which are reproduced in Table 1.

Role of School Complex on Quality Education

The National Education Policy, 2020 aims to put into effect the unrealized suggestion of

school complexes, given originally by the Kothari Commission. The NEP mentions the various benefits of the school complexes like better support for children with disabilities, “more topic-centred clubs and academic/sports/arts/crafts events across school complexes”, sharing of teachers in various subjects

Table 1: Recommendations and Resolutions for schools according to the 26th Annual Conference of Sahodaya School complexes

RECOMMENDATIONS	
1.	Schools will make efforts for Personalized Competency-based Learning focusing on the student’s strengths and providing opportunities to integrate real-life experiences into their learning
2.	Schools will ensure Joyful Learning by adopting experiential learning pedagogies like integration of Arts, Sports, Life Skills, Crafts, Values, Toys, Stories, Research etc.
3.	Schools will create an Eco System for ICT-integrated teaching learning and will make the best use of e-resources available at different platforms such as DIKSHA and SWAYAM.
4.	Schools must emphasize harnessing the Emotional Quotient of every child to cultivate positive emotional health and the right attitudes . For this, mindfulness, meditation and yoga should be practiced by students as well as teachers. Well-structured School Mental Health and Wellbeing Programmes to be implemented appropriately across the developmental span of children.
5.	Schools must work towards the plantation of saplings by their students in and around their campus to carry forward the campaign of One Student One Tree .
6.	Schools will make dedicated efforts to promote Multilingual Learning to support Foundational Literacy.
7.	Schools to emphasize Skill Education to realize the vision of Self-Reliant India. Students need to be trained in Technology-Based Skills as well.
8.	Schools will ensure the implementation of the recommendations of NEP-2020 in letter and spirit.
9.	School Leadership should redesign the curriculum, teaching-learning processes, and activities to allow for more inclusivity in all aspects of schooling.
10.	Capacity Building Workshops should be conducted for the School Leaders and Teachers to enhance their ability to adopt Cross-Cutting Themes to achieve standards.
11.	Schools will design Authentic Assessment Tools following the Feed Forward Methodology which offers constructive guidance for self-improvement.
12.	Principals shall act as Change Makers to lead, guide and support all the concerned stakeholders of the institution.
RESOLUTION	
	As envisaged in the NEP 2020, schools will build the competencies in the students to make them self-reliant and global citizens. The attitudes, skills and knowledge of the learners will be prioritized. Implementation of experiential and research-based learning will be taken up in a mission mode

Source: <http://www.sahodayaschools.org/userfiles/26-Recommendations-Resolutions.pdf>

along with the use of ICT tools for virtual classes, sharing of counselors and improved governance through School Complex Management Committees (NEP 2020, MHRD).

One of the quality aspects of school education as raised in the NEP 2020 document: These small school sizes have rendered it economically suboptimal and operationally complex to run good schools, in terms of deployment of teachers as well as the provision of critical physical resources. Teachers often teach multiple grades at a time, and teach multiple subjects, including subjects in which they may have no prior background; key areas such as music, arts, and sports are too often simply not taught; and physical resources, such as lab and sports equipment and library books, are simply not available across schools (p.29, NEP,2020, MHRD)

Smaller schools pose a “systemic challenge for governance and management.” Thus, the revamping of the school complex was recommended. The school complexes and their quality aspect is one of the issues to ponder upon. There is a need to develop institutional managerial skills amongst the leaders and other teachers to bring about efficiency in the system. Once this is achieved, then only the school complexes could effectively function. There is a need to focus on generating individual and collective capacities of the teachers, administrative staff, and other members to facilitate the smooth functioning of the school complexes.

For any system to work effectively, the leaders have to be efficient and well aware-of their system. In the schooling system, the Principal is the leader and captain of the ship who gives direction for the strategic growth of the school. The NEP also focuses on the training of the principals or leaders of the school for effective functioning. Some of the features or strategies to ensure that quality is maintained in the school complex system are discussed here.

Promoting Professionalism Amongst Teachers

The teachers must be open to the idea of a school complex system. There should be no feeling of competing with other teachers, but rather the aim should be to create a healthy environment of collaboration and extension. The motive should be to break all boundaries and try to create the best possible learning environment for the learners as per their

needs. Achieving the goals of the school complex is a long-term process and can't be achieved instantly. For this, efforts must be made to make the primary stakeholders i.e., the teachers more professionally sound and developed. Professionalism must be promoted amongst the teachers in form of pieces of training and workshops by the relevant authorities. Teachers must be reminded that quality is the prime pillar of the education system and as a teacher, it is our responsibility to contribute wholeheartedly without any hostility with teachers of other institutes.

Improving the Quality of Educational Resources and Infrastructure

To maintain the quality; the infrastructure and educational resources available in the schools of the complexes must be overhauled and upgraded. The libraries, sports facilities, and other related infrastructure must be re-organized so that even the students or teachers from the other schools of the same school complex have easy access.

Common Portal for Best Pedagogical and Evaluation Practices

Best pedagogical practices must be shared and bought into practice amongst the schools of the complex. This sounds easier than done though. Authentic assessment tools must be bought into practice that helps in proper reviewing and reflection. For the pedagogical and evaluation-related resources, a common virtual platform must be created where each teacher could upload their best teaching practices and evaluation techniques with examples.

Feedback Mechanism for Reflection

A Feedback mechanism needs to be generated where the teachers could further reflect upon their teaching practices, for further improvement. For example, observation of a teacher by Senior or master teachers at the school complex. Apart from this, as a part of the professional development of teachers, the open classroom model could be made use of. In this model, lessons are created by teachers, and other teachers are invited to observe and provide feedback after the lesson. Both categories of teachers: those who observe and the teacher who is observed benefitted. Such feedback mechanisms should be a part of the professional development

of teachers and could be counted in the CPD (continuous professional development) hours. Like this feedback mechanism, the school administration must be open to suggestions from other stakeholders like the teachers, parents, and students.

Family Engagement for Better Learning Outcomes

As per the studies by various institutions especially Harvard University, it has been proved with data that family engagement at all levels of school, is beneficial for the student's success and achievement. Family engagement as defined by National Family, School, and Community Engagement Working Group (now the NAFSCE Policy Council), "Family engagement is a shared responsibility in which schools and other community agencies and organizations are committed to reaching out to engage families in meaningful ways and in which families are committed to actively supporting their children's learning and development". The family-school collaboration or the parent-teacher association is crucial for the improvement of the child not only academically but socially and emotionally as well. The concept of family engagement is relatively new to India but needs to be bought into practice with greater thrust. Some of the simple examples of family engagement as mentioned by the NAFSCE include the following:

- Building of strong relationships between schools and families through home visits and class meetings.
- Sharing data on the students' skills developed with family on a regular basis (like through messages).
- Guiding families to incorporate effective teaching methods at home.
- Effective teacher-family relationships would help teachers to know more about students' interests and challenges and about the cultural background of the child. This information could be used by the teachers to plan their instructions as per the learner's needs.

More Autonomy to the Teachers

The NEP 2020 also raises the point of giving greater autonomy to teachers. They should be allowed to use their own pedagogical approaches and evaluation techniques. They should be given

greater liberty to interact with the community and body of inspectors or policymakers for giving their valuable suggestions for improvement in the quality of education.

Better Coordination Amongst the Various Administrative Levels of the Complex

Most of the policies come up with various recommendations, but at the ground level, such suggestions fail to succeed many times due to a lack of proper coordination between the administration of various stakeholders involved. The school complex is a great idea on paper, but for it to be effective, there has to be an extreme level of coordination at all levels throughout. Coordination amongst all the schools associated, and the

Use of Technology While Ensuring Access and Equity to Improve Quality

The use of ICT tools in teaching learning and assessment has become the new normal in education, especially during the pandemic times. COVID-19 has forced us to think and proceed with the new normal in education in India. However, as mentioned by Michael P. A. Murphy (2020); making e-learning the new normal in education would mean generating inequalities in terms of class and race; which the schools have been trying to remove forever. There are several factors involved in the usage of technology or virtual classrooms like language problems, professional training of teachers, lack of motivation and leadership, unavailability of smartphones, and poor internet connection in rural areas. Each problem area needs to be tended to.

The suggestive Framework of School Complex for Different Stages of School Education As Per NEP 2020

The concept of a school complex must be implemented at various hierarchical levels, and so would have various strategies at each level. As suggested by the National Institute of Educational Planning and Administration, 2020 the broader level would include implementations strategies like:

- Developing the criteria for identification of the lead schools of the complex,
- Specification of both academic and administrative functions,
- Identifying indicators for the school complexes,

- Implementation of the case study of a successful complex school,
- Development of guidelines for the school management committee,
- Setting up various committees under the school complex,
- Development of a School development plan (SDP) and School complex development plan (SCDP),
- Defining the roles of the supporting institutions like DIET, SCERT, and other local authorities
- Development of the school complex Leadership

The above implementation strategies are the steps to be taken by the higher educational bodies in the hierarchy. Now talking about the steps that would be taken at the ground level, i.e., at the school level or the teacher level, there needs to be an implementation plan as well. This would be a part of the SDP and the SCDP. These plans would be both short-term and long-term and would be prepared in collaboration with the school management committees. As highlighted by the National Institute of Educational Planning and Administration, 2020: The SCDP will be developed by the principal and teachers associated with the school complex. The SCDP will also include a plan for associated institutions such as vocational educational institutions. The plan will include details in terms of human and material resources, innovative agendas, financial resources, teacher development, and educational outcomes (pp.61).

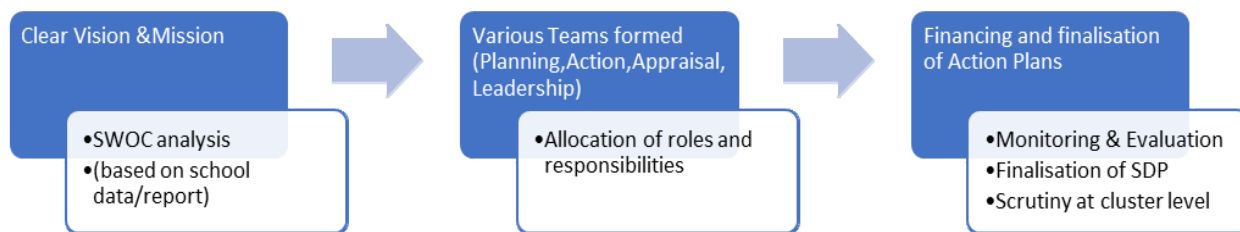
Before the specific norms, framework, and implementation strategies are given, some of the steps for the development of SDP as given by NIEPA.2020 are given in Figure 3.

The NIEPA has also suggested various criteria or components for the preparation of the SDP. Some of the criteria include strategies for developing

overall and academic results of students, an attractive and lively school environment, teachers' training needs and CPD plans, school sports art, music, and health interventions. Based on these components, some of the strategies suggested for the action plan to be developed are given below:

- The focus of the school complex should be to bring about such activities that help to achieve the goals of access, equity, and equality. Activities such as Job and career fairs could be organized for the secondary (IXth & Xth) and senior secondary students (XIth & XIIth). It would help senior secondary students get clarification related to career options in higher education and would help secondary students in choosing their streams after class Xth. Career counselors or counselors having expertise in this area should be invited for career guidance to students.
- The Alumni of the cluster schools must be contacted and invited to motivate the students of their alma mater and other cluster schools. The concept of the school complex must not be limited to the current batch of students but must aim to bring back their successful alumni to take learnings from their experiences. For example, the cluster schools could invite a group or individuals who have qualified for national-level exams like NEET or other competitive exams to come and participate in open house discussions or invited lectures to motivate and guide the novices.
- Any teacher of the cluster schools, who have been honored or awarded or has received some recognition at the state or national level; must be given opportunities for motivating the other teachers of the complex. This could be done in form of meetings, workshops, or seminars. This is like the cascade model of professional development where the star teachers cascade down their learnings to the other teachers. This could

Figure 3: Steps for Development of SDP



be made as a part of the Continuous Professional Development programs (CPD) as well.

- As mentioned earlier also, the school complex implementation is not possible overnight, and not without the upgradation and professional development of teachers. So, the teacher's training must be brought into focus and it must be ensured that every single teacher of the complex is given appropriate training. There should be no biases in the selection of teachers for training. Every teacher has a contribution to make, so every teacher needs upgradation professionally. It should not be that every time the best performing teachers would be given the chance of upgradation. The most important point that must be ingrained in teachers' minds is that CPD is a necessary part of their professional growth, and it should not be taken as a burden or just for completion of CPD hours. It should be a truthful attempt by the teachers to upgrade their skills and knowledge for improving the quality of education.
- As a part of CPD hours the teachers must be allowed to attend it.
- There could be certain community work opportunities created for both teachers as well as students within the cluster schools; to make them more sensitive toward the various societal problems that exist. For example, there could be a drive where a group of girl students along with a few teachers could go to their nearest village (in collaboration with the panchayats) and spread awareness about the importance of health and hygiene amongst women. They could present posters; present street plays or simply showcase some documentaries. Similarly, there could be a certain group of students back at the leader school preparing for some small innovative projects to further make such drives more concrete in nature. Once these little innovative projects are completed; they could be showcased in the form of exhibitions. All these are easier said than done. The biggest problem is the time constraint. The students as well as teachers do not get time after the regular classes or schedule. Some of such activities must be incorporated into the curriculum and should be taken in true spirit by both teachers as well as students. The ministry must ensure that such activities are considered a part of its curriculum. Also, for such drives, there must be some incentives for both teachers as well as students. For students in form of marks, and for teachers in form of CPD hours.
- Certain action research projects could be taken up based on the local school problems by the teachers. For doing so, the teachers must get full support from the staff and the various committees of the complex. Action research projects would enable the faculty to get an insight into the existing system and how to improve further. For example, action research could be done on absenteeism by certain students of a given grade. The possible reasons could be found out based on interaction with parents and other community members.
- The best performers in sports and various games of different cluster teams could be made to form a single team, and they could further represent the school complex as a whole. Similar initiatives could be taken in the field of arts and sciences.
- The technological interventions to the school education system have already geared up in the pandemic times. As highlighted in the NEP 2020, technological interventions are required for "purposes of improving teaching-learning and evaluation processes, supporting teacher preparation and professional development, enhancing educational access, and streamlining educational planning, management, and administration including processes related to admissions, attendance, assessments, etc"(NEP 2020,MHRD, pp.57). For such educational technology initiatives to be successful, first the teachers, as well as students, need to be trained. The offline mode of learning would resume once the pandemic is over, but the educational system must be prepared for any other kind of such pandemic- i.e., using online modes of education. Thus, it is crucial that teachers must be professionally upgraded in how to use technology in teaching. Faculty development programs must be a frequent feature of the cluster schools. Those teachers of the complex who are already trained must help other teachers of the complex; to get trained through various

online sessions and workshops. Similarly, for students, such training must be organized by the individual cluster schools for middle, secondary, and senior secondary students of those localities who have less exposure to such facilities.

- Some other activities that could be carried out by the cluster schools, are various club activities and the organization of fairs and exhibitions for each subject.

Conclusion

There are various challenges associated with the implementation of school complexes successfully. Despite all the efforts by the government, the educational resources in schools have not been escalated up to the mark. Now when resource sharing is brought into focus, it would not be an easy process. It could also lead to misuse or mishandling of the available resources, based on the decision of a few people. Another big challenge is that even if everything is established and implemented as desired, then who will evaluate whether the system is functioning properly and is fruitful or not? There is no clear mention about the Grievance redressal mechanisms; as to where the problems or lacunae in the system be reported so that there are necessary actions taken (Payal Ruchi, 2020). The tendency of the “system” to always show “positive results or outcomes” of any project is generally a biased decision. The reported outcomes of any project must be based on real data, and the ground realities, rather than just to get applauded for something that never happened. One such example as reported by Payal Ruchi, 2020 is:

Maharashtra government’s experience (Poona, Bombay, Nagpur, and Aurangabad) bring in forefront various problems, like problems in the committee meetings, the attitudes of teachers and headmasters towards the school complexes, the orientation of teachers for participation in the school complex activities, the effectiveness of complexes in the Adivasi’s areas and backward rural areas, hardships in playground activities due to the distance among the schools.

Clearly, implementation of the strategies was not a cakewalk and has faced various hurdles. The implementation of strategies has to be done very carefully and strictly, keeping in mind the views of all the stakeholders. The school complex is a concept that when implemented properly could bring about phenomenal changes in the school education system; providing all the stakeholders understand the crux and importance of the school complex and clustering mechanism. The biggest challenge is again getting all the stakeholders aligned for a single cause-bringing better quality to education. The causes of failures of the earlier school complex models must be thoroughly researched and then only the new mechanisms or strategies must be implemented for the re-establishment of the school complexes.

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Economic Challenges to Engineering Education Institutes in India

Sanjay P Shekhawat*

A huge volume of unemployable graduates, industrial growth below expectations, and a variety of problems have compelled me to analyze the educational scenario, especially in the Indian context. It is observed that the problem of quality education is complex. It has social, economic, political, and policy-related aspects that are deeply interwoven. The present paper vis – a – vis examines the complexities of these aspects and identifies human resources as an ignored factor. This ignorance or giving little weightage to the factor of human resources has been the big hurdle in the educational sector owing to which the sector is not meeting the expectations of modern India. The new education policy has emerged as a ray of hope in the dark and the education sector looks towards it with great aspiration.

The demand for new technology is increasing day by day, and new technologies such as Artificial Intelligence, Machine Learning, Blockchain Technology, Virtual Reality, and Augmented Reality will play an important role in Industry 4.0. But institutes are lacking in trained teachers and resources for such advanced technology in our country. Battling to achieve excellence in education delivery is particularly difficult because of these challenges, which are instrumental in EEIs development. Yet, today's educational system in India is failing to create employability/entrepreneurship in students (NEP 2020).

Basic Elements of Economics in EEI

Any self-finance engineering education institute is mainly developed on the generation of financial resources through student fees. This fee is fixed by the state fee committee based on the expenditure incurred in the last financial year and the intake capacity of the EEI. But the interesting fact is that many engineering colleges are unable to fill all available seats. It results in a reduction in fees in successive academic years and a total collection

of fee receipts. It leads to a financial crunch and affects the quality of education in the EEI.

Delay in scholarship amount disbursement from the governments and less fee receipt due to fewer admissions, leads to the increased financial burden on EEIs. Salaries, regular expenses, etc., in many EEIs, affect the overall performance of these engineering colleges and adversely affect the reputation/ branding of the EEIs. This results in fewer admissions and this vicious circle hampers the overall performance of the institutes.

The demand of Technocrats and Societal Attitudes

Despite emerging shortages of skilled manpower in an increasing number of sectors and advancements in technology, the behavior of parents and students is conventional in nature. The way students choose among different courses of their study is completely non-scientific and does not consider their interests, liking, skills, and career paths of themselves. In the course or college selection, people are more dependent on trends rather than anything else, which leads them to ambiguous information and career paths that are most often unsuitable for them (Wheelbox, 2019).

The demand for new technology is increasing day by day, and new technologies such as Artificial Intelligence, Machine Learning, Blockchain Technology, Virtual Reality, and Augmented Reality play an important role in Industry 4.0. But institutes are lacking in trained teachers and resources for such advanced technology in our country. Due to the disruptive gap between income and awareness in the rural and urban sectors of the country, the resulting demand for engineering colleges is very expensive. Whereas, the parents have been spending a good deal on education and are ready to pay in urban areas as opposed to rural areas. In urban areas both the income and substitution effects are strong and the quality demanded responds strongly to fee increases as compared to rural sections.

Investment in EEIs

The financing of higher education needs to

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be critically examined. Basic needs in education like skill development and literacy are not yet fully filled. Targets that were to be achieved about half a century ago remain unfulfilled even today. It is also realized that higher education could expand only with the support of privatisation. Only those economies that mobilize the growth of investment in higher education are found to be able to achieve global standards of education. Secondly, the number of educated unemployed is bulging year after year, resulting in huge waste investment made by society in higher education. In this overall background, a few major dimensions of investment in higher education in India are to be critically examined (Jandhyala, Tilak, 1993).

Huge investment in infrastructure development in EEIs but very little in human resource development such as faculty development, student training, internationalization, the technology used in teaching-learning, etc have hampered the quality of the campuses. The new National Education Policy (NEP) takes note of this scenario and suggests many corrective measures in these regards.

Uncertainty in Education Sector

Life is full of uncertainties. Suppose your stakes in EEI, you might be a governing member, teacher, or staff member. What obstacles would you face? You would face major risks that industrial slowdown in the country – the risk of unemployment will decrease admissions in engineering colleges. Added to these are the uncertainties of inflation rates, taxes, and in uncharted terrain; you are unfamiliar with climate conditions and the performance of the agriculture sector, the income of households (Agarwal Pawan 2006).

The economic issues in your EEI present complexities that are not possible to forecast at very early. Many of these issues involve risk, uncertainty and lack of information. Our EEIs must deal with the uncertainties of performance of industry and service sector, unemployment status, inflation, taxes, financial condition of society, educational loan rates, etc. Likewise, parents must contend with uncertainty about future wages or employment possibilities for their ward and about the return on their investments in education; stakeholders also face the same fear in investment in EEIs. Hence the realities of EEIs is not complete without a thorough study of the

economical, societal and national issues involved in decision making under uncertainty and risk involved (Agarwal Pawan 2006).

The Challenge of Quality Education in EEIs

We have emphasized that EEIs face great obstacles in combining the four elements of progress – human resource, capital, investment, and Entrepreneurship and Innovation. In addition, EEIs find that the difficulties reinforce each other in a vicious cycle of low-quality education (Agarwal Pawan 2006).

Fig.1: Obstacles of Quality Education in EEI

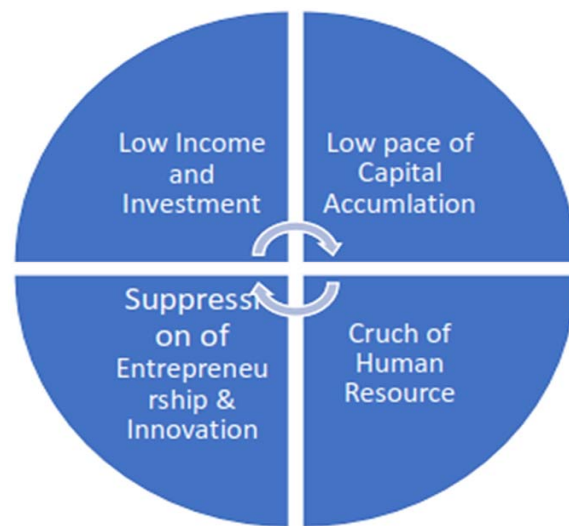


Figure 1 illustrates how one hurdle raises yet another hurdle. Low income and investment lead to a low pace of capital accumulation; creates a crunch of human resources and retards entrepreneurship and innovations i.e. the outcome of professional education as a quality remark. It is accompanied by low levels of education, technological literacy, and skills; these in turn prevent the adoption of new and improved technologies and lead to rapid degradation of the quality of educational growth, which eats away at its improvements (BRICKS 2016). Battling to achieve excellence in education delivery is particularly difficult because of these challenges, which are instrumental in EEIs development.

Conclusion

India is a country with the ancient most universities in the world. Ancient India had a perfect educational system and the country had been attracting scholars and students from the entire world.

(contd. on pg. 27)

Enhancing Productivity of Healthcare Professionals : The Skills Dimensions

Ashok G Matani*

A CNBC report states that the median salary of data scientists is US\$ 100k-130k while that of AI engineers is US\$124k-150k. Hence, the future of AI professionals seems bright. Hiring AI professionals has increased by 32% since 2019 despite the grave scenarios due to the pandemic. And this growth continues to surge as the demand for AI-powered applications and services is on the rise. Today Artificial Intelligence (AI) and Machine Learning (ML) are transforming the way healthcare industry adopts technology to predict diseases on the basis of data and patterns that indicate the conditions for a disease to develop. The use of AI will decrease medical costs as there will be more accuracy in diagnosis and better predictions in treatment and prevention. This paper highlights the importance of skills required for implementing Machine Learning and Artificial Intelligence in various healthcare industries and services.

Not every emerging technology will alter the business or social landscape – but some truly do have the potential to disrupt the status quo, alter the way people live and work, and rearrange value pools. The 10 technologies that are leading the fourth industrial revolution are presented in Table-1.

The 2025 Workforce: Enterprise Learning Required

These technologies could have huge benefits for many companies – but they will also create big challenges. The nature of work will continue to change, and that will require strong education and retraining programs. The World Economic Forum report highlights across nearly all industries, the impact of technological and other changes is shortening the shelf-life of employees' existing skill sets. The talent to manage, shape and lead the changes underway will be in short supply unless we take action today to develop it. Businesses will need to put talent development and future workforce strategy front and center in their growth. Firms can no longer be passive consumers of

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ready-made human capital.

Role and Responsibilities of a Healthcare Manager











Healthcare management is made possible by healthcare managers who perform several roles that help to manage healthcare facilities. Healthcare managers typically have the following roles and responsibilities:-

- Set organization-wide goals to ensure that healthcare services are offered in an efficient manner.
- Supervise the work of the staff and professional service providers.
- Ensure collaboration and coordination of the activities of various healthcare providers.
- Manage finances and budget of healthcare provision.
- Ensure that the healthcare facility is updated and has all essential medical and other equipment.
- Assign duties to the healthcare workers.
- Ensure compliance with legal and organizational policies and standards.
- Undertake the hiring and recruitment of healthcare workers.
- Provide for training and development of the staff.
- Undertake performance reviews.
- Develop strategic goals and action plans to achieve the organization's objectives.
- Ensure wellbeing of the healthcare workers.
- Attend to the needs of patients.
- Monitor and ensure that healthcare records are updated.

Soft Skills Every Employee Will Need in The Age of Artificial Intelligence (AI)

Technical skills and data literacy are obviously important in this age of AI, big data, and automation. But that doesn't mean we should ignore the human side of work – skills in areas that

Table-1: 10 Technologies that are Leading the Fourth Industrial Revolution

<p>Mobile Internet Interfaces, formats, sensors and apps will evolve as mobile computing devices dominate internet connectivity. By 2025, mobile connectivity could be accessed by an additional 4.3 billion people.</p>	
<p>Artificial Intelligence Machine learning and user interfaces such as speech and gesture recognition technology will advance to increase productivity or eliminate some knowledge work altogether.</p>	
<p>Virtual and Augmented Reality The virtual and augmented reality industry to become an \$80 billion market by 2025 – it's around \$7 billion right now. Major upgrades will come to technology infrastructure and an ecosystem of apps will form for consumers and enterprises alike.</p>	
<p>Cloud Technology One of the biggest buzzwords of the last decade will continue to impact the next. Nearly all IT services and web apps could be delivered through the cloud with more enterprises using the public cloud as cyber security improves.</p>	
<p>Internet of Things More than 9 billion devices are currently connected to the internet – that number is estimated to grow between 50 billion to nearly 1 trillion in the next decade. Organizations will face monitoring and securing products, systems, devices and even people.</p>	
<p>Advanced Robotics Advances in artificial intelligence, machine vision, sensors, motors, hydraulics and materials will change the way products and services are delivered. A surge in tech talent for building, operating and maintaining advanced robots will occur</p>	
<p>Biometric Technology A recent survey of security professionals revealed that 72 percent of companies are planning to drop traditional passwords by 2025. This will give rise to new authorization services for face, voice, eye, hand and signature identification</p>	
<p>3D printing 3D printing could enable unprecedented levels of mass customization and dramatically reduce the cost of supply chains generating an estimated economic impact of \$230 to \$550 billion annually by 2025.</p>	
<p>Genomics Genetic engineering technology will grow with faster computer processing speeds. DNA sequencing technologies and advanced analytics will improve agricultural production, reduce reliance on fossil fuels and extend human life expectancy.</p>	
<p>Blockchain Blockchain is best known in the context of virtual currency Bitcoin, but a recent report showed 64 different use cases of blockchain across 200 companies. Streamlined, secure contracting and transacting will drive commercial use</p>	

robots can't do so well. Softer skills will become even more critical for success as the nature of work evolves, and as machines take on more of the easily automated aspects of work. In other words, the work of humans is going to become altogether more, well, human.

Soft skills that are going to become even more precious to employers in the future are:-

Creativity

Robots and machines can do many things, but they struggle to compete with humans when it comes to our ability to create, imagine, invent, and dream. With all the new technology coming our way, the workplaces of the future will require new ways of thinking – making creative thinking and human creativity an important asset.

Analytical (critical) Thinking

As well as creative thinking, the ability to think analytically will be all the more precious, particularly as we navigate the changing nature of the workplace and the changing division of labor between humans and machines. That's because people with critical thinking skills can come up with innovative ideas, solve complex problems and weigh up the pros and cons of various solutions – all using logic and reasoning, rather than relying on gut instinct or emotion.

Emotional Intelligence

Also known as EQ (as in, emotional IQ), emotional intelligence describes a person's ability to be aware of, control, and express their own emotions – and be aware of the emotions of others. So when we talk about someone who shows empathy and works well with others, we're describing someone with a high EQ. Given that machines can't easily replicate humans' ability to connect with other humans, it makes sense that those with high EQs will be in even greater demand in the workplace.

Interpersonal Communication Skills

Related to EQ, the ability to successfully exchange information between people will be a vital skill, meaning employees must hone their ability to communicate effectively with other people – using the right tone of voice and body language in order to deliver their message clearly.

Active Learning with a Growth Mindset

Someone with a growth mindset understands that their abilities can be developed and that building skills leads to higher achievement. They're willing to take on new challenges, learn from their mistakes, and actively seek to expand their knowledge. Such people will be much in demand in the workplace of the future because, thanks to AI and other rapidly advancing technologies, skills will become outdated even faster than they do today.

Judgement and Decision Making

We already know that computers are capable of processing information better than the human brain, but ultimately, it's humans who are responsible for making the business-critical decisions in an organization. It's humans who have to take into account the implications of their decisions in terms of the business and the people who work in it. Decision-making skills will, therefore, remain important. But there's no doubt that the nature of human decision making will evolve – specifically, technology will take care of more menial and mundane decisions, leaving humans to focus on higher-level, more complex decisions.

Leadership Skills

The workplaces of the future will look quite different from today's hierarchical organizations. Project-based teams, remote teams, and fluid organizational structures will probably become more commonplace. But that won't diminish the importance of good leadership. Even within project teams, individuals will still need to take on leadership roles to tackle issues and develop solutions – so common leadership traits like being inspiring and helping others become the best versions of themselves will remain critical.

Diversity and Cultural Intelligence

Workplaces are becoming more diverse and open, so employees will need to be able to respect, understand, and adapt to others who might have different ways of perceiving the world. This will obviously improve how people interact within the company, but I think it will also make the business's services and products more inclusive, too.

Embracing Change

Even for me, the pace of change right now

is startling, particularly when it comes to AI. This means people will have to be agile and cultivate the ability to embrace – and even celebrate – change. Employees will need to be flexible and adapt to shifting workplaces, expectations, and required skillsets. And, crucially, they’ll need to see change not as a burden but as an opportunity to grow.

Technical Skills to Build A Career in Artificial Intelligence (AI)

Computer Programming

One of the fundamental skills to have been the ability to program. Computer architecture, optimization algorithms, data structures, trees, and graphs are just some of the subjects that one would need to be well-versed with.

Statistics and Probability

At the root of data science is statistics. This is a core part of AI and ML, and having a working knowledge of probability concepts including conditional probability, Markov models, Bayesian principles, etc. is very important.

Data Modeling

A strong skill that can help in AI is data modelling. It is used extensively in AI to handle pattern recognition and datasets classification.

Strong Understanding of Unix Tools

AI professionals are required to have a strong understanding of Unix tools, their functions, and

how to best utilize them since most AI processing will take place on Linux-based environments.

Efficiency in Distributed Computing

Majority of the AI jobs require programmers to deal with large volume of data, which cannot be processed effectively using a single machine.

Hence, programmers need to have skills in distributed computing as this data will be equally distributed across systems.

Design and Software

Although on record this may seem like the most irrelevant skill for the AI aspirants to have, still they need to develop this skillset as the ultimate product will be developed in the form of a software only.

Hence, its design will have a huge impact on customer experience.

Non-tech Skills to Build a Career in Artificial Intelligence (AI)

Communication Skills

Just like any other job, AI jobs require professionals to be good communicators. In addition to having technical know-how, AI aspirants need to communicate innovative ideas effectively to their teams.

Collaboration

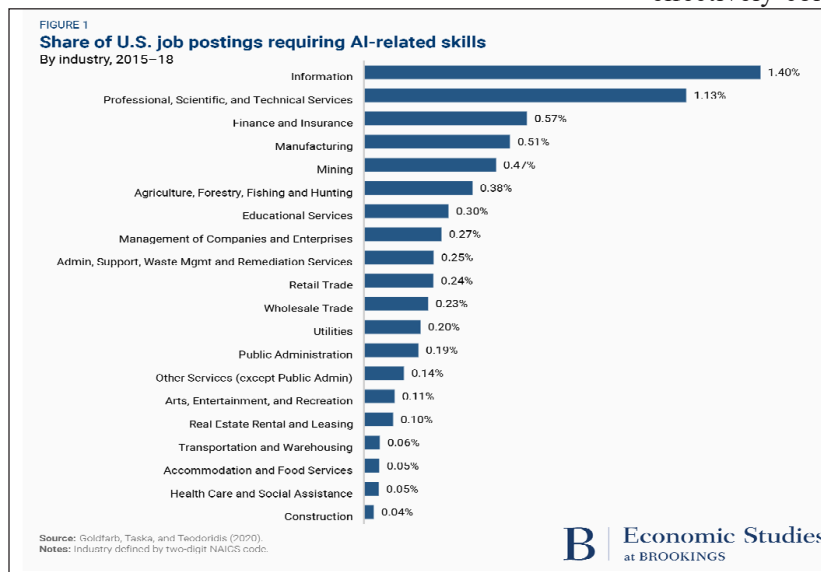
For an AI professional, it is necessary to effectively collect data and convey the information in a comprehensible manner to the team. This requires teamwork. Hence, collaboration becomes an essential part of the job.

Marketing Skills

No matter how good your idea or project is, it will not sell itself. Being able to market your ideas is crucial to succeed in the AI space.

Systematic and Analytical Thinking

Systematic and analytical thinking is very important when building a career in AI. One needs to have a curious mindset, and a thirst for problem solving.



Source: <https://hospitalnews.com>

Conclusion

Hospital industries and services, industries and businesses will need to put talent development and future workforce strategy front and center to their growth. Firms can no longer be passive consumers of ready-made human capital. They require a new mindset to meet their talent needs. Across nearly all industries, the impact of technological and other changes is shortening the shelf-life of employees' existing skill sets. The talent to manage, shape and lead the changes underway will be in short supply unless we take action today to develop it.

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(contd. from pg. 21)

Yet today’s educational system in India is failing to create employability/entrepreneurship in students. It does not evolve creativity in students. The present paper has identified the principal cause of it is the limited financial resources available to educational institutes. In the entire cycle of education, the teacher is the most ignored factor. It is hoped that the new educational policy will give due emphasis to human resources and will transform the entire scenario. This will help in building the youth of the future who in turn will build the future of the country. The country awaits to regain its status of ‘Jagat Guru’ (Master of the World).

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Need of New Emerging Technologies for More Educational Enjoyments

Kris Gopalakrishnan, Padma Bhushan delivered the Convocation Address at the first Convocation Ceremony of Somaiya Vidyavihar University, Mumbai on October 30, 2022. He said, “Try to follow rules and regulations in business and in life. Do not forget your duties to society and our country. Building something that lasts, and that is useful to society takes some time. Life is a marathon and not a sprint. These ideas are important to build a strong society. And for you to sleep peacefully at night as you enjoy the fruits of your success.” Excerpts

Thanks for inviting me to participate in today’s convocation. This is a momentous occasion for the graduates and their families. I congratulate each one of you and your families. Your hard work, especially during Covid, has paid off, and now you are ready to move to the next innings in your lives. Whether it is to take up a job, start a business or continue your studies, I wish you all the very best in your future endeavors.

As you transition to becoming alumni of this university, please remember that you have a responsibility to uphold the reputation of the university. And the university will also be keen to track your future accomplishments and successes. You are now forever an alumnus of this university and there is an expectation that you will contribute back to the future growth of the university with time, money, advice, and support within your capacities. The student’s current and future will look forward to your support for them.

I congratulate the leadership, faculty, and staff of this university and I am sure that you are all proud of the work you have done in moulding the graduates into confident young professionals.

I compliment the vision of the Founder Padma Bhushan Karamshi Jethabhai Somaiya Ji in laying the real foundation of this university by creating Somaiya Vidyavihar in 1959 and starting the first College. The Somaiya Vidyavihar has grown from then to now with sustained support from other leaders and today consists of 34 institutions in different locations with about 40,000 students and 1,500 teachers. I compliment the current President of the Somaiya Trust and Chancellor of the University Shri Samir Somaiya for continuing this tradition of providing quality education. I am glad to note that the University caters to diverse fields of education,

including Management, Engineering, Humanities, Sciences, Design, Library & Information Science, Religion & Culture, Sports, Music, and Performing Arts. Somaiya Vidyavihar University offers students the opportunity to explore a wide range of learning opportunities through the ‘major-minor’ combinations available and brings the ambitious chance to interact with a large pool of global alumni networks.

My own graduation was from IIT Madras in 1979. Seems a long way back. I graduated with M.Tech in Computer Science at the right time – some of you may recollect that Apple introduced the personal computer in 1978 and IBM PC was introduced in 1981. This made the computer within reach of ordinary people, and it became a personal productivity tool for individuals, first at the office and later in their homes. Lots of software had to be written to automate business tasks like sales order entry, inventory management, shipping of goods, invoicing, payments and receivables, banking transactions, and so on. Some of us, the founders of Infosys, saw this as an opportunity to set up Infosys as a software development services business to cater to this growing demand for custom business software.

We created a new model for software development which we called the global delivery model for services, the first of the services being software development. Even though data communication links between countries came up later, we started writing software from India for our global clients. Since the concept of first-generation entrepreneurship from India was new, with no venture funding available in India, the initial years were very tough, growth was slow, and we had to work hard for many years before we tasted success. Fast forward to today, the IT services industry is today a USD 200

billion industry, employing about 5 million people. Developing software and delivering several services including R&D from India has become the norm now. I believe this first wave of start-ups and the entrepreneurs who succeeded have given confidence to the current generation of start-up founders and entrepreneurs.

Few lessons for you from this:

1. Identify technology trends and waves that will impact the world in a big way and try to join these waves of innovations. Every business and our lives will get impacted by these waves. So, find a business or even start a business that disrupts the way existing businesses are run or work is done. These transitions provide opportunities for new businesses to be created, and new leadership to emerge.
2. With so many emerging technologies, like cloud and mobile computing, the Internet of Things, AI/ML, AR/VR, 3D printing, synthetic biology, genomics, space technologies, brain sciences, explosive growth in data, and every business is going to be disrupted. So you can choose which industry and business or research area you want to join or pursue. You have indeed lots of choices – the key is to find one which you can contribute to and be part of the transformation.
3. Some of the founders have to work together to build an industry and scale the industry to global levels. In the top 10 companies in the IT services space, 5 are Indian.
4. I was lucky to be part of the digital computer revolution, the globalization of services work, and the growth of the IT services industry in India. I along with 2 of my colleagues have written a book called “Against all odds – The IT story of India” documenting the experiences of the leaders who created this industry in India. This got published recently.

The second point I want to make is the opportunity provided by India. In the last 30 years, India grew from an economy of USD 600 billion to USD 3.2 trillion. That is a 5-fold growth in 30 years. In the next 30 years, India can grow to become a USD 10-15 trillion economy. The per capita income of an Indian will go from USD 2000 of today to USD 5000-6000 at least which means that India will become a middle-income country, which is where

China is today. India will be the 2nd or 3rd largest economy in the world.

The world is facing many problems today – problems of climate change and sustainability, affordability of products, equity of opportunities, access to products and services and justice, etc. Can India become a developed nation addressing many of these challenges – in fact, convert these challenges into opportunities for creating a better model for development – one that is equitable, sustainable, affordable, and accessible to all the 1.4 billion Indians and 7 billion people of the world?

I believe that we can. We have the knowledge – your graduation today is proof for that. We have access to the best of technologies. We have the resources. We need the will to work hard and create a better India and a better World. I had the opportunity to do this in one industry; you have the opportunity to do this in multiple industries. You have the opportunity to provide leadership to the world as India transitions to a developed economy, a middle-income country.

As India develops, India will be a young country with the majority of the population below the age of 35 years whereas most other countries will be older countries with most of the population above the age of 35 years. India will be a lower-cost economy for the next 30 years whereas the countries above us in development are all higher-income countries. It will be cheaper to ideate, design, develop and manufacture products in India for many years. We will also be a large consuming economy with 20% of the world’s population. The entire world is investing in India and wants to tap into the Indian market.

I believe that India is the best place to live, work and bring up a family over the next 30 years. India will develop, grow, and lead the world in many sectors. India will provide opportunities to create jobs and create wealth. I have seen this from close quarters as the IT services industry developed in India.

How do you take advantage of these? How do you become lucky as I was? Can you make your own luck? I believe you can. I realized this much later in life – but you can do this by design, by plan, and by taking the right steps starting today.

First is a good education and I believe that you have this – this convocation is a testament to this. The second is to build a lifelong network of friends and colleagues. Again, you are on your way. Please keep in touch with your classmates, batchmates, and teachers. You all have shared experiences and hopefully, you will help each other in the future. Third, commit to lifelong learning – technology, tools that we use, and business are all changing rapidly, and you need to continuously learn to stay relevant and productive. In fact, I believe that your alma mater can play a role in lifelong learning by providing continuing education courses.

Fourth, is to build good habits and good health. Commit to eating right, exercise regularly, meditate regularly to take care of mental health, and be grateful for your successes and the people who have helped you. None of us can achieve anything in life without others helping and supporting us – our parents, siblings, friends, colleagues, teachers, people who provide security like police and defence forces, doctors, and nurse who take care of you when you fall sick and so on. There are lots of people to whom we need to be grateful.

Try to follow rules and regulations in business and in life. Do not forget your duties to society and our country. Building something that lasts, and that is useful to society takes some time. Life is a marathon and not a sprint. These ideas are important to build a strong society. And for you to sleep peacefully at night as you enjoy the fruits of your successes.

Lastly, develop the habit of giving back. You may think what do I have to give back today? Time – is a precious resource that you can never get back. Volunteer for a good cause. Volunteer to help others. Help another person to get a good education. As your wealth grows you can think about giving back in kind.

If you practice these, I am confident that you will find that the odds of your success increase. People will gladly come forward and help you. You will be healthy and full of energy. You will be optimistic about the future and that allows you to think creatively and take risks better. You will find a good life partner. As you embark on your journey of life, you will find that there are many things that are not under your control – like the Covid pandemic. But if you control things that are under your control then there are fewer things to worry about.

In conclusion, I am optimistic about the future of your generation. I am optimistic about the opportunities provided by emerging technologies to create new businesses and leadership. I am optimistic about India and its growth. If you make your luck by cultivating good habits and having good friends and networks, you will be successful. Once again, I wish each one of you all success in your future endeavours. May the Force be with you. Thanks.

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CAMPUS NEWS

International Conference on Transforming Indian Higher Education

A three-day International Conference on 'Transforming Indian Higher Education for a New World Order: Envisions, Roadmaps and Implementation' was jointly organized by the Mother Theresa College of Teacher Education, (MTCTE), Tamil Nadu Teachers Education University (TNTEU), All India Association for Educational Research (AIAER), and Kerala State Higher Education Council (KSHEC) during November 03-05, 2022.

During Inaugural Session, Organising Secretary, Dr. Bindu T V, Principal, Mother Teresa College of Teacher Education delivered the Welcome Address. Rev. Fr. Thomas Thekkel CMI, Provincial, St. Thomas Province, Kozhikode delivered the Presidential Address. The inaugural address was delivered by Prof. M K Jayaraj, Vice Chancellor, University of Calicut. A special address was delivered by Prof. N Panjanatham, Vice Chancellor, Tamil Nadu Teachers Education University, Chennai. Prof. Satish Kumar, Deputy Director, Ministry of Social Justice and Empowerment was the Guest of Honour at the event. Sri V K Pramod, President, Perambra Gram Panchayat; Sri K K Haneefa, Syndicate Member, University of Calicut; Prof. V Reghu, Former Controller of Examinations, RGNIYD, Government of India and Vice President, AIAER; Prof. K Sivarajan, Former Dean, Faculty of Education, University of Calicut; Rev. Fr. Joseph Vayalil CMI, The Manager of Mother Teresa College of Teacher Education; and Sri. K C Karunakaran, PTA President, Mother Teresa College of Teacher Education delivered the felicitation address. Sr. Gracelin K Joseph, Assistant Professor, Mother Teresa College of Teacher Education proposed the Vote of Thanks.

The Plenary Session was conducted by Dr. Geethanjali Narayanan, Coordinator of Examinations, Faculty of Education, University Teknologi MARA, Malaysia. She spoke on 'Transformation of Pedagogical Approaches in the Teacher Training Program: A New World Order'. The session was more informative, interesting, and interactive covering the changes in the education system and clarifying the recent trends in pedagogical approaches such as cooperative learning and collaborative learning.

The next session was handled by Dr. S Mani,

Former Professor and Head, Department of Educational Planning and Administration, Tamil Nadu Teachers Education University. He deliberated on 'Realigning Pedagogies for Sustainable Development'. He mainly covered the area of student-centered education system which encourages children to take up the responsibilities of planning, setting up, and practicing learning activities.

The Technical Session was conducted in four parallel sessions. The paper presentation sessions were conducted in hybrid mode. The online sessions were chaired by Dr. Niranjana K P, Assistant Professor, Farook Training College, Kozhikode, and Dr. Mohammad Sareef. K, Assistant Professor, Farook Training College, Kozhikode. Under the chair of Dr. Mohammad Sareef, four papers were presented, out of which two were thematic papers and two were research papers. Under the chair of Dr. Niranjana K P, four papers were presented. One paper was a research paper and the other three were thematic papers. The next parallel session was through offline mode. The chairperson was Dr. Fathima Jaseena MPM, Assistant Professor, Farook Training College, Kozhikode. In this session, six papers were presented. In the session, chaired by Dr. M. Omanasheelan, Associate Professor, Government Brennen College, Thalasserry six papers were presented.

Further, a technical session was conducted in which there were four parallel sessions. Dr. Rages John, Assistant Professor, Government College of Teacher Education chaired the first parallel session and three papers were presented in this session. Dr. Rahul V R, Assistant Professor, Government College of Teacher Education, Trivandrum chaired the session and only four papers were presented in the session. Two papers were presented in the session which was chaired by Dr. V Reghu, Former Controller of Examinations, RGNIYD, Government of India. Dr. Geetha Gopinath, Assistant Professor, Department of Education and Education Technology, University of Hyderabad chaired the session in which four papers were presented.

The plenary session was handled by the Resource Person, Dr. P D Subhash, Associate Professor, Planning and Monitoring Division, NCERT, New Delhi. He deliberated on the 'Structural and Functional Changes in Education' covering the holistic development and

overall aim of education and concluded the session by explaining the importance of our educational system to adapt with new changes.

The next plenary session was handled by Dr. Kriscentti Exzur P Barcelona, Dean, Teacher Education Program, Lourdes College, Cepistrano-Hayes, Republic of Philippines. He focused on the topic 'Educational Technology in Post-Pandemic Opportunities and Innovations'. He explained the responsibilities and duties of the learners and also emphasized the importance of a blended method of play and working together.

The Panel Discussion dealt with the National Education Policy 2020: Cutting Edge Issues and Implementation Realities and was moderated by Dr. V Raghu, Former Controller of Examinations, RGNIYD, Government of India. Panelists of this discussion were Professor, Dr. Abdul Gafoor, Professor and Head, Department of Education, University of Calicut. Dr. K P Anil Kumar, Principal, Devaki Amma Memorial College of Teacher Education, Kozhikode. Dr. Mridula K, Assistant Professor, NSS Training College, Ottapalam. The panelists discussed different facts related to the implementation reality of the National Education Policy-2020.

The online session was handled by Dr. Mahmud Mehrmohammari, Emeritus Full Professor, Department of Education, Tarbiat Modares University, Tehran, Iran, and Dr. Esmaeil Azimi, Department of Educational Science, Tarbiat Modares University, Tehran, Iran. The session was moderated by Dr. Kennedy Andrew Thomas, Professor of Education, Christ University, Bangalore. The speakers mainly focused on the 'Educational Technology and Transformation of Teacher Education'.

Dr. Isaac Paul, Associate Professor, GCTE, Thiruvananthapuram chaired the session in which three papers were presented. Another session was chaired by Dr. A R Saravanakumar, Assistant Professor, Alagappa University, Karaikudi, Tamil Nadu. Five papers were presented in this session. The next offline parallel session was chaired by Dr. K P Anil Kumar. There were six papers presented in this session. Four of them were research papers and the other two were thematic papers. The next session was chaired by Dr. Rajeshwari K, Former Principal, IASE, Thrissur. Only five papers were presented in this session.

The plenary session was handled by Susan Crichton, Executive Director, Design, Innovation, Creativity and Entrepreneurship, Crichton Consulting

Emeritus Associate Professor, The University of British Columbia/ Okanagan Campus/Sylix Okangan, National Territory Canada. She focused on the topic 'Considering Design Principles among Standards and Policies When Considering Institutional and /or Curricular Change and Renewal'.

During the technical session, a parallel offline session was chaired by Dr. V Raghu, Former Controller of Examinations, RGNIYD, Government of India and Dr. Mridula K, Assistant Professor, NSS Training College, Ottapalam. Eight papers were presented in this session. The session was chaired by Prof. Srinivas Kumar, Dean School of Education and HRD, Dravidian University, Kuppam, Andhra Pradesh. Total of 14 papers were presented in this session. The next parallel session was chaired by Dr. M .Govindan, Former Professor and Head Department of Educational Psychology, Tamil Nadu Teachers Education University, Chennai. Four papers were presented in this session. Dr. Munir V, Assistant Professor, Farook Training College chaired the next session. Four papers were presented in this session. All four were thematic papers. Dr. V M Suneela Shyam, Assistant Professor, Ethiraj College for Women, Chennai chaired the next parallel session. Seven papers were presented in this session. Another session was chaired by Dr. Niranjana K P Assistant Professor, Farook Training College, Kozhikode. Out of three papers presented in the session, two were research papers and the other one was a theory paper.

During Valedictory Function, Rev. Fr. Joseph Vayalil CMI, Manager, Mother Teresa College of Teacher Education delivered the welcome note. The report of the event was presented by Dr. Bindu T V, Principal and Organizing Secretary, Mother Teresa College of Teacher Education. The Presidential Address was delivered by Prof. M N Muhammedunni Alias Musthafa, Professor and Head, Department of Education, Central University of Kerala, Kasaragod. Dr. B S Ponnudiraj, Advisor, National Assessment and Accreditation Council, Bangalore delivered the Valedictory Address. The Guest of Honour was Rtd. Rev. Dr. Joseph Mar Thomas, Bishop Diocese of Bathery, Wayanad. The Felicitation Addresses were delivered by Sri. K M Abdullah, PTA Vice President, MTCTE, Mr. Kevin Jose, Student-teacher, Mother Teresa College of Teacher Education and Mr. Kiran Ramesh, Student-teacher, Mother Teresa College of Teacher Education. Later, the participants shared their reflections on the three-day international event, and the Vote of Thanks was proposed by Ms Shiny, Assistant Professor, Mother Teresa College of Teacher Education.

About 350 delegates participated in the event from across the world. The guests and other special invitees, resource persons including the delegates have deliberated on the various aspects of transforming the educational system in general and other fields of education in particular throughout the world. There were many takeaways to the delegates and other stakeholders of education, to think globally and act locally to bring out necessary changes in curriculum, mode of transaction of the curriculum, evaluation process, and preparing our national system of education to meet the global demands and also to edge over our system of education with that of the developed countries to create a new world order.

National Conference on Industry- Institute Linkage through the Implementation of National Education Policy- 2020

A two-day National Conference on 'Industry-Institute Linkage through the Implementation of National Education Policy- 2020' is being organized by the Savitribai Phule Pune University, Pune and MES Garware College of Commerce, Pune during January 06-07, 2023.

The Indian education sector in general and higher education, in particular, have been witnessing a massive transformation recently with technological disruptions, demand for quality education, and the implementation of the National Education Policy-2020. In order to cope with these changes, the National Conference 2023 focuses on industry-academia linkages, skill-based learning, emphasis on the quality teaching process, Industry requirements, and Internships, so that the output of academia improves in quality and the industry benefits from a steady supply of high caliber human resource. The event aims to highlight the needed connection between 'Industry and academia partnership'. Research clusters and industry participation is also playing a very important role in the development of the linkage.

The event highlights the industry and academia partnership which needs to be encouraged more than ever before in today's fast-changing corporate and education era. It is considered that several factors such as lack of social awareness, non-availability of funding or scholarships, the attitude of the industry to academic research and vice versa, and research findings that are not relevant to the existing environment are responsible for slow movement on the front of building a linkage between industry and academia. Educational

institutions need to enhance their research potential and must recognize numerous opportunities from Industry to build a constructive framework for collaboration. The Topics of the Event are:

- Need for Industry-Academia Collaboration.
- Barriers to Industry-Academia Interaction.
- Roadmap to Industry-Academia Collaboration.
- Need for Centre of Excellence and Relevance.
- Adaptation of Academic Curriculum to Meet Industrial Challenges.
- Enhancing the Skill Sets and Fulfilling the Industry Requirements.
- Helping SSI / Budding Entrepreneur Industry to Minimize their Issues or Challenges.
- Enhancing the Ecosystem between Industry and Academia Collaboration.
- Enhancement of Technology and Innovation towards Commercialization.
- Entrepreneurship Development and Technology Incubation.
- Flow of Technology from Academic Research to Industry and Vice-Versa.
- Role of Industry in Enriching Academic Research Inputs.

For further details, contact;

Dr. Ganesh Patare: Coordinator, Department of Research, Innovation and Consultancy and Professor of Commerce, MES Garware College of Commerce, Pune -411004 (Maharashtra), Mobile No: +91 99236 07054, E-mail : webgcc@mespune.in

Shri Saurabh Joshi: Incharge, Conference Inquiry, Mobile No: +91 98501 85069.

Shri Kaustubh Divekar: Member, Department of Research, Innovation, and Consultancy Mobile No: +91 92258 86675.

For updates, log on to: www.gcc.mespune.in

High-end Workshop on Geoinformatics Applications in Environmental Research

The One-week High-end Workshop on 'Geoinformatics Applications in Environmental Research' is being organized by the ICMR-National Institute for Research in Environmental Health Bhopal, Madhya Pradesh during January 18-24, 2023. The Doctoral/Master's students/ currently enrolled in Environmental Science / Public Health /Community Medicine/Developmental Studies/Planning and Architecture/Population Studies or pursuing research

in Geoinformatics and Environmental Health may participate in the event.

Geoinformatics is the art, science, or technology dealing with the acquisition, storage, processing production, presentation, and dissemination of geoinformation. Geoinformatics have tremendous scope in environmental research which demands analysis of complex geotagged data from a wide variety of sources ranging from GPS coordinated up to remote sensing images. The present event aims to provide in-depth knowledge along with hands-on training on applied aspects of geoinformatics applications in the field of environmental sciences. The event will cover the following important topics:

- Global Positioning System (GPS).
- Satellite Image Processing and Information Extraction.
- Remote Sensing and Machine Learning for Disease Prediction.
- Digital Image Processing.
- 3 D Modelling.
- Change Detection Analysis.

For further details, contact Coordinator, Dr. Yogesh Sabde, Scientist F and Head, Environmental Health and Epidemiology, ICMR - National Institute for Research in Environmental Health, Bhopal- 462 030, Madhya Pradesh, Phone No: 0755 2533106. For updates, log on to: <https://nireh.icmr.org.in>

International Conference on Emerging Aspects of Manufacturing, Thermal and Design Engineering

A three-day International Conference on 'Emerging Aspects of Manufacturing, Thermal and Design Engineering' is being organized by the Department of Mechanical Engineering, National Institute of Technology (NIT), Hamirpur, Himachal Pradesh during February 15-17, 2023. The conference intends to provide a general platform to various academicians, scientists, researchers, research scholars and industry persons throughout the globe working in the broad areas of Mechanical Engineering (Design, Thermal, and Manufacturing Engineering) and allied areas to exchange and share their experiences and researches with the world. The Topics for the event include three different core streams of Mechanical Engineering with Fundamental, Numerical / Computational and Application, but are not limited, to the following:

Manufacturing

- Artificial Intelligence Applied, Optimization Methods in Manufacturing.
- Automation and Production Control.
- Computer-based Manufacturing Technologies: CNC, CAD, CAM, FMS and CIM.
- Machining (traditional and nontraditional processes)
- Manufacturing Design for 3r 'Reduce, Reuse, Recycling'.
- Mechatronics and Robotics.
- Nanomaterials and Nanomanufacturing.
- Rapid Manufacturing Technologies and Prototyping
- Real-time Enterprise Control.
- Robust Design and Quality Engineering.
- Stochastic Models and Decision Analysis.
- Supply Chain Systems.

Thermal

- Computational Fluid Mechanics.
- Micro, Nano-scale Transport.
- Turbomachinery.
- Propulsion and Power.
- Heat and Mass Transfer.
- Renewable Energy.
- IC Engines and Biofuels.
- Flow measurement and Flow Visualization.
- Circular Economy and Sustainability.
- Nanofluids.

Design

- Applied and Computational Mechanics.
- Finite Element Modelling and Simulations.
- Extended FEM, Meshfree Methods.
- Engineering System Design/CAD, Optimization.
- Fracture Mechanics/Solid Mechanics/Automotive Mechanics, Fatigue, and Failure of Components.
- Tribology and Contact Mechanics.
- Vibration, Acoustics, Noise and Control, and Condition Monitoring.
- Kinematics and Dynamics, Robotics.

For further details, contact Organising Secretary, Department of Mechanical, Engineering, National Institute of Technology, Hamirpur-177005, Himachal Pradesh, E-mail: mathed.med.nith@gmail.com. For updates, log on to: www.nith.ac.in □

THESES OF THE MONTH

HUMANITIES

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of Sep-Oct, 2022)

Geography

1. Bora, Amritee. **Land degradation vulnerability assessment in selected micro-watersheds of West Khasi Hills District, Meghalaya.** (Dr. B S Mipun), Department of Geography, North Eastern Hill University, Shillong.

2. Koren, Tumtin Sonmang. **Forest ecosystem and crop productivity dynamics in terrace farms of Senapati District, Manipur.** (Prof. A C Mohapatra and Prof. B S Mipun), Department of Geography, North Eastern Hill University, Shillong.

3. Patole, Bansi Rangnath. **Cage va Dharur Talukyateel gramin vastyanchya vitranacha bhogolik abhyas.** (Dr. Khakre R D), Department of Geography, Swami Ramanand Teerth Marathwada University, Nanded.

4. Rishi, Hiranmay. **Adaptive strategies associated with floods in Tal and Diara Regions of Malda District, West Bengal.** (Dr. S Purkayastha), Department of Geography, North Eastern Hill University, Shillong.

5. Shymbin, Baiaroihun War. **Political economy of resource conflicts in North East India.** (Prof. A C Mohapatra and Dr. P K Ryngnga), Department of Geography, North Eastern Hill University, Shillong.

History

1. Batt, Shahbaz. **The elevation of the status of women with the advent of Islam in North India: 5th century to 10th century.** (Dr. T.K.Mathur), Department of History, Bhagwant University, Ajmer.

2. Daimari, Jwngsar. **Assam-Bhutan frontier trade relations during the British colonial period: With special reference to the Duars of Kamrup and Darrang.** (Dr. Sudev Chandra Basumatary), Department of History, Bodoland University, Kokrajhar.

3. Dar, Gulzar Ahmad. **15th to 17th Century saints of Kashmir, known.** (Dr. T.K.Mathur), Department of History, Bhagwant University, Ajmer.

4. Jan, Aassy. **Mughal architecture during the period from Akbar to Shah Jahan (1556-1658).**

(Dr. T.K.Mathur), Department of History, Bhagwant University, Ajmer.

5. Kava, Rashmi Rasiklal. **Tata Chemicals (Mithapur) Company's establishment, development & contribution: A historical study: (1939 to 2014).** (Dr. Kalpa A Manek), Department of History, Saurashtra University, Rajkot.

6. Khanday, Shafi Ahmad. **Peasant and State: A study of peasant consciousness and peasant resistance in Kashmir (1846-1947).** (Prof. A K Thakur), Department of History, North Eastern Hill University, Shillong.

7. Kharat, Dhulsingh. **Paschimi Madhya Pradesh ke sandarbh mein Bhilolan ka 1740 isvi se 1947 tak etihask adhyayan.** (Dr. S L Vare), Department of History, Vikram University, Ujjain.

8. Khongdup, Babhador. **Buddhism and trade in Northeast India.** (Prof. A K Thakur), Department of History, North Eastern Hill University, Shillong.

9. Pachuau, Zoremsiami. **History of Gorkha Community in Mizoram from 19th-20 centuries.** (Dr. Hmingthanzuali), Department of History and Ethnography, Mizoram University, Aizawl.

Languages & Literature

Assamese

1. Hazarika, Rumi. **Namani Asamar Tolani Biya: Eti adhyayan (Darrang Jilar bisesh Ullikhanere).** (Dr. Bibhuti Lochan Sarma), Department of Assamese, Bodoland University, Kokrajhar.

Bodo

1. Basumatary, Bandana. **A study of ethobotanical terms used in Bodo language.** (Dr. Rupashree Hazowary), Department of Bodo, Bodoland University, Kokrajhar.

English

1. Barman, Subhash. **Race, history and sexuality: Negotiating the third space in Toni Morrison's**

Trilogy. (Dr. Zothanchhingi Khiangte), Department of English, Bodoland University, Kokrajhar.

2. George, Rinson. **A search for a grounding source in interpersonal relationships through metaxology in the select novels of Bernard Malamud.** (Dr. John Joseph Kennedy), Department of English, Christ University, Bangalore.

3. Krishna. **English language teaching in selected senior secondary schools of Bikaner District.** (Prof. Rekha Tiwari), Department of English, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

4. Manyu, Saini. **V S Naipaul's travel narratives: A study of civilization and culture in postcolonial perspectives.** (Dr. Bhagabat Nayak), Department of English, Rajiv Gandhi University, Itanagar.

5. Padmakumar, M M. **Cultural politics of sports and nationalism in Indian popular cinema.** (Dr. Sushma V Murthy), Department of English, Christ University, Bangalore.

6. Pradeep Kumar. **Father-daughter relationship in select literary and cinematic narratives: A study.** (Prof. Nikhilesh Yadav), Department of English, Indira Gandhi University, Meerpur.

7. Raghu, T. **Resistance to patriarchy in the short stories by Indian women writers: A study of Sarah Joseph, Volga and Vaidehi.** (Dr. B V Rama Prasad), Department of English, Kuvempu University, Shankaraghatta.

8. Roy, Padmini Vaikunth. **The new age paradigm in Aurobindo Ghosh's Savitri, Walt Whitman's Leaves of Grass, Marie Corelli's Life Everlasting and Edgar Allan Poe's Eureka: A prose poem.** (Prof. Sujata Gurudev), Department of English, North Eastern Hill University, Shillong.

9. Singha, Padumi. **The politics of 'Otherness' in select novels of John Maxwell Coetzee: A critical study.** (Prof. Sukalpa Bhattacharjee), Department of English, North Eastern Hill University, Shillong.

10. Vasavada, Janma Dhirenbai. **A study of Imperial Gaze on colonial Western India through select memoirs.** (Dr. R B Zala), Department of English, Saurashtra University, Rajkot.

11. Singh, Yadavee. **The Portrayal of women in the works of Sahir Ludhianvi and Saadat Hasan Mento: A realistic study.** (Prof. Rekha Tiwari), Department of English, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

Hindi

1. Ajay Kumar. **Chandrakanta ke katha sahitye mein samajik chetna.** (Dr. Rajesh Kumar Sharma and Dr. Shivani Sharma), Department of Hindi, Bhagwant University, Ajmer.

2. Kamlesh. **Sunita Jain ke kavye mein samvedna aur shilp.** (Dr. Anil), Department of Hindi, Maharshi Dayanand University, Rohtak.

3. Pandey, Shikha. **Mohan Rakesh ka anuvad karm: Ek vivechan.** (Prof. Jagdish Sharma), School of Translation Studies, Indira Gandhi National Open University, New Delhi.

Marathi

1. Garad, Sudhir Laxman. **Sant Tukaram va Sant Kabir yanchya sahitateel samajik vicharancha tolnik abhyas.** (Dr. Mandakini Kulkarni and Dr. Jaydevi Pawar), Department of Marathi, Swami Ramanand Teerth Marathwada University, Nanded.

Nepali

1. Pradhan, Sapan. **Indrabahadur Rai ka Gadhyaakhyan ko lok-sanskritik adhyayan.** (Prof. Krishnaraj Ghatani), Department of Nepali, University of North Bengal, Darjeeling.

Pali

1. Sanghavi, Amita Sevantilal. **A critical study of the text on Shrivakachara with special reference to Canonical literature.** (Dr. Dinanath Sharma), Department of Prakrit, Gujarat University, Ahmedabad.

Sanskrit

1. Ashok, B. **Varahamihirena virachitayah Brihatsanhitayah Dakargalasya ayurvedeeyatattvanamcha sameekshatmakamadhyayanam.** (Prof. Manoj Kumar Mishra), Department of Jyothisha, Central Sanskrit University, New Delhi.

2. Hargovind. **A critical study and edition of titled Vedantasiddhantachandrikodgara.** (Prof. Vishwambharnath Giri), Department of Darshana, Central Sanskrit University, New Delhi.

3. Joshi, Vibha Prafulbhai. **A study of the philosophy as reflected in the available Sanskrit books of Gorakhnath.** (Dr. Jayshri S Joshi), Department of Sanskrit, Saurashtra University, Rajkot.

4. Jyoti Bala. **The Natya Shastra study of SnehasauveeradramawrittenbyMahamahopadhyaya Dr. Bhaskaracharya Tripathi.** (Prof. J Bhanumurthy),

Department of Sahitya, Central Sanskrit University, New Delhi.

5. Prasad, Devendra. **A critical analysis of philosophical elements in Harshavardhana's literature.** (Prof. K B Subbarayudu), Department of Sahitya, Central Sanskrit University, New Delhi.

6. Pratap, Mahendra. **Acharyaramashankarmishramadhup apraneetasya Aavantikam kavyasya saamikshikam parisheelnam.** (Prof. Ramkrishna Pandey Paramhans), Department of Sahitya, Central Sanskrit University, New Delhi.

7. Rashmi. **Negotiating suffering: A study of Gloria Naylor's selected novels.** (Dr. Anju Mehra), Department of Sanskrit Pali & Prakrit, Maharshi Dayanand University, Rohtak.

8. Saroj, Bindu. **A critical study of Vivekanandacharitamritam by Sri Ganeshadatta Sharma.** (Dr. Suresh Pandey), Department of Sahitya, Central Sanskrit University, New Delhi.

9. Suman. **Bhas se lekar 12v shatabadi paryant pramukh rupakaoan mein upnayak, upnayika evam pratinayakoan ka charitrik vishleshan.** (Dr. Asha), Department of Sanskrit Pali & Prakrit, Maharshi Dayanand University, Rohtak.

10. Vikash Kumar. **Sakand Puranaantargat Avanti Khand ke kriyapadoan ka arth-vaigyanik vishleshan.** (Dr. Asha), Department of Sanskrit Pali & Prakrit, Maharshi Dayanand University, Rohtak.

Performing Arts

Music

1. Ravinder Kumar. **Shastriye evam lok sangeet mein vrindvadan ke parampara evam naveen prayaog.** (Dr. Hukam Chand), Department of Music, Maharshi Dayanand University, Rohtak.

Philosophy

1. Basak, Priyanka. **Deconstructing the concept of body: A critical study.** (Prof. Debika Saha), Department of Philosophy, University of North Bengal, Darjeeling.

2. Pandey, Sarita. **Patanjalyogdarshan mein dhyam.** (Dr. Shobha Mishra), Department of Philosophy, Vikram University, Ujjain.

3. Parmar, Manju. **Swami Dayanand Saraswati ke vaicharik kranti dwara samajik uttathan evam Bhartiye darshan mein yogdan.** (Dr. Shobha Mishra and Dr. T B Shrivastava), Department of Philosophy, Vikram University, Ujjain.

4. Sharma, Kamini. **Shreemadbhagwatgeeta ke tatva mimansa evam gyan mimansa.** (Dr. T B Shrivastava), Department of Philosophy, Vikram University, Ujjain.

5. Thangeo, Lunneihoi. **The problem of evil in Christianity: A critical study.** (Prof. X P Mao), Department of Philosophy, North Eastern Hill University, Shillong.

Religion


Jainism

1. Jain, Alpna. **Aryika Vishuddhamati ke tikaoan ka anusheelan evam yogdan.** (Prof. Vipin Jain and Prof. Sheetal Chand Jain), Department of Jainology, Teerthanker Mahaveer University, Moradabad.

2. Muni, Mahaveer Kumar. **Jain aagamoan mein paryavarniye chintan: Ek adhyayan.** (Prof. B R Dugar), Department of Jainology and Comparative Religion, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

3. Pranavpragya, Samani. **Avashyak churni mein ankit poranik kathaoan ka parisheelan.** (Prof. Samani Chaitanya Prajna), Department of Jainology and Comparative Religion & Philosophy, Jain Vishva Bharati Institute, Ladnun, District Nagaur. □

Join the Top Ranked Private University in Eastern India & Cocreate the Future.


ADAMAS UNIVERSITY
KOLKATA
PURSUE EXCELLENCE

We are looking for Dynamic Professors, Associate Professors and Assistant Professors

Adamas University is QS-Igauge Platinum rated University in teaching and learning and ranked as the best private University in West Bengal by several national ranking agencies. The University is on an ambitious path of making a difference in the education and research landscape of Bengal with its 10 top-tier schools of study. The University offers a challenging, meaningful, and diverse working environment. We are looking for colleagues who shares our passion for nurturing and shaping the tomorrows of our students and the society at large.

School of Liberal Arts and Culture Studies (SOLACS)	School of Basic & Applied Sciences (SOBAS)	School of Media & Communication (SOMC)
• English • Political Science • Sociology • History • Bengali • Psychology (Behavioural Science)	• Physics • Chemistry • Geography • Mathematics • Forensic Science (Under Chemistry) • Environmental Science (Under Chemistry) • Statistics and Data Science (Under Mathematics)	• Journalism and Communication
School of Life Science & Biotechnology (SOLB)	School of Medical Sciences (SOMS)	School of Law & Justice (SOLJ)
• Biotechnology • Microbiology • Biochemistry	• Pharmaceutical Technology • Allied Health Sciences	• Constitutional Law • Corporate Law • Criminal Law • International Law • Energy Law • Cyber Law • Intellectual Property Law
School of Smart Agriculture (SOSA)	School of Engineering & Technology (SOET)	School of Business & Economics (SOBE)
• Agriculture	• Computer Science & Engineering • Computer Applications • Mechanical Engineering	• General Management • Accounting & Commerce • Economics & Finance • Operations & Supply Chain Management • Business Analytics • OB & HRM • Quantitative Methods
School of Education (SOE)	How to Apply : Interested candidates should send their application in the prescribed 'Application Form' available at (http://adamasuniversity.ac.in/current-vacancies/), and resume along with scanned copies of self-attested testimonials and other academic credentials by e-mail to: recruitment@adamasuniversity.ac.in	
• B.Ed. • Education	Other Non-Academic Positions:	Academic Positions
• Assistant Registrar / Deputy Registrar – Academic, Admin & HR with relevant University experience	• Sports Officer – This is a Residential Position in AU Campus. Incumbent should have Masters in Physical Education with 5 to 7 years of relevant experience.	Mandatory Education Qualifications: • 60% marks or 1st Div. / 1st Class marks in Class X, Class XII. Graduation from reputed / recognised educational Institutions. • 55% marks in PG / NET / SET qualified • PhD is desirable • Excellent Communication Skill in English (both verbal & written) • Tech savvy / working knowledge in MS Office & LMS • For Education we are also looking for M.Ed

Adamas University Help Line Details
Office of the Registrar
Email ID: recruitment@adamasuniversity.ac.in
Contact No. +91 8240033652
Adamas Knowledge City, Barasat - Barrackpore Road, P.O. - Jagannathpur, District - 24 Parganas (North), Kolkata - 700 126, West Bengal, India

Salary will not be a constraint for talented and deserving candidate.

Mahatma Phule Shikshan Sanstha, Urun-Islampur
Karmaveer Bhaurao Patil College, Urun-Islampur,
A/P. Urun-Islampur, Tal. Walwa,
Dist. Sangli – 415409 (Maharashtra)

(Affiliated to Shivaji University, Kolhapur)
(Permanently Granted)

WANTED

Application are invited from eligible candidates for the following posts:-

Sr. No.	Subject	Approved Posts	Total No. of Posts	Reservation
Assistant Professor				
1.	Education	1	10	ST 01
2.	Physical Education	1		VJA 01
3.	Psychology	1		OBC 03
4.	Economics	1		ESW 01
5.	Geography	2		Open 04
6.	Commerce	1		
7.	Chemistry	2		
8.	Physics	1		

Note : For detailed information about post, qualifications and other terms and conditions, please visit university website : www.unishivaji.ac.in & www.kbpislampur.com

Place :Urun-Islampur
Date : 09/12/2022

General Secretary,
Mahatma Phule Shikshan Sanstha,
Urun-Islampur, Tal. Walwa, Dist. Sangli

 **JAWAHARLAL NEHRU MEMORIAL FUND**
TEEN MURTI HOUSE, NEW DELHI - 110011

**JAWAHARLAL NEHRU SCHOLARSHIPS
FOR DOCTORAL STUDIES**

Jawaharlal Nehru Memorial Fund, Teen Murti House, New Delhi - 110011 offers scholarships for Ph.D. studies in India for up to 2 years from January 2023 to Indian Nationals and Nationals of other Asian countries in *Indian History and Civilization, Sociology, Comparative Studies in Religion & Culture, Economics, Philosophy, Geography and Ecology & Environment*. Application forms can be downloaded from our website or obtained from the JNMF office. Duly filled in forms should reach the JNMF office latest by 31 May 2022. For further details such as stipend and other terms and conditions please visit our website: www.jnmf.in; Email: jnmf1964@gmail.com

Administrative Secretary



झारखण्ड केन्द्रीय विश्वविद्यालय

Central University of Jharkhand

(A Central University established under Central Universities Act, 2009)
Vill – Cheri-Manatu, PO – Kamre, Ranchi – 835 222



INDICATIVE ADVERTISEMENT FOR RECRUITMENT

TEACHING POSITION

Advt. No.: CUJ/Advt./2022-23/05

Date: 13th December, 2022

Online applications are invited from eligible Indian and Overseas Indian Citizens (OIC) who have strong commitment to teaching and high quality research for the following faculty positions in various departments on regular basis.

• **Professor** • **Associate Professor** • **Assistant Professor**

Detailed information regarding qualifications, specializations, instructions, terms & conditions for filling up online application form and the last date - visit the University **website: www.cuj.ac.in**.
The Corrigendum and/or Addendum shall only be published in the University website.

NON-TEACHING POSITION

Advt. No.: CUJ/Advt./2022-23/06

Date: 13th December, 2022

Online applications are invited from eligible Indian citizens for recruitment of various Non-Teaching positions on regular basis.

Detailed information regarding qualifications, specializations, instructions, terms & conditions for filling up online application form and the last date - visit the University **website: www.cuj.ac.in**.

The Corrigendum and/or Addendum shall only be published in the University website.

REGISTRAR



FORE SCHOOL OF MANAGEMENT
"Adhitam Kendra", B-18, Qutub Institutional Area, New Delhi - 110016



FULL TIME FELLOW PROGRAMME IN MANAGEMENT (FPM Batch 2023-2024) (Approved by AICTE)

To Know More:
www.fsm.ac.in/full-time-fpm

Application Deadline:
December 30, 2022
(Friday)

Programme Commencing:
June/July, 2023

To Apply:
<http://fpmadmissions.fsm.ac.in/register>



ADMISSION CRITERIA:

ELIGIBILITY:

Candidates must possess one of the following qualifications to apply for Fellow Programme in Management

First Class Master's Degree or equivalent/Professional qualifications such as CA/ICWA with degree/Five year Integrated Master's degree programme in any discipline Four year/Eight Semester Bachelor's Degree in Engineering (BE/B.Tech/B Arch).

SELECTION CRITERIA:

Valid score of CAT/ GRE/ GMAT/ GATE/ UGC-NET/ CSIR/ FORE Entrance test and Research Proposal (tentative) Presentation

The candidates will be short-listed for admission on the basis of their academic record, performance in the competitive examinations and Research Proposal (tentative) Presentation.

AREAS OF SPECIALISATION:

Communication, Economics & Business Policy, Finance & Accounting, Information Technology, Marketing Quantitative Techniques & Operations Management International Business, Strategy, Organizational Behaviour & Human Resource.

FINANCIAL SUPPORT:

FPM scholars will receive financial support including scholarship (Rs. 46,355/- per month for the first and second year and Rs. 52,705/- per month for third and fourth year), contingency grant (Rs. 30,000), conference support (Rs. 1.5 lakh), etc.

For any queries, please call us on 011- 41242433 , +91-8447255049
(Between Monday to Friday during 10:00 AM to 0 5:00 PM) or send an
email to: fpmadmission@fsm.ac.in mentioning your name and contact details.

Shri Venkateshwara Shikshan Sanstha's Nanasaheb Mahadik College of Engineering (Permanent Non-Grantable)

Gat No. 894/2665, Pune - Bangalore (NH-4) Highway
At/Post: Peth Naka, Tal: Walwa, Dist. Sangli, Pincode - 415 407
www.nmcoe.org.in • Contact : 9604856750

Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere 402 103

RECRUITMENT

Applications are invited from eligible candidates for the following Permanent Non-Grantable positions:-

Designation of the Position	Total Vacancies	Category wise Vacancies
Principal	01	—

Conditions:

- 1) Educational Qualifications, Experience, Pay Scales etc. applicable for the post are as per the norms specified by AICTE/PCI/COA, Govt. of Maharashtra & Dr. Babasaheb Ambedkar Technological University, Lonere, Dist. Raigad & as modified from time to time.
- 2) Those who are in service should apply through proper channel.
- 3) In case of the post of Principal, the appointment is on tenure basis for a period of five years or date of superannuation, whichever may be earlier, and may be extended by one more year.
- 4) Application received after the last date will not be considered. The College will not be responsible for any delay including postal delay, if any.
- 5) Incomplete applications or applications without the attested copies of supporting documents will not be entertained.
- 6) No T.A., D.A. will be paid for attending the interview.
- 7) The applications giving full particulars and attested copies of all the supporting documents should reach to the undersigned **within 21 days** from the date of publication of this advertisement.

Place: Peth
Date: 10/12/2022

Sd/-
SECRETARY
Shri Venkateshwara Shikshan Sanstha

Dhareshwar Shikshan Sanstha Aurangabad Sanchalit
Arts and Science College, Chincholi (Limbaji),
Tq. Kannad, Dist. Aurangabad (MS) (Granted)
NAAC Accredited 'B' Grade
E-mail : dhareshwar_kmc@rediffmail.com • Phone No. : (02435) 235059

WANTED

The eligible Candidates are invited for the interview for the following posts on **Clock Hour Basis** for Academic Year 2022-2023:

Assistant Professor Clock Hour Basis (Granted)

Sr. No.	Subject	No of Posts (CHB)	Reservation	Date of Interview
1	English, History, Pol. Sci, Sociology, Pub-Admin	One (1) Post for Every Subject	SC-01, ST-01, VJ-A-01, OBC-01, EWS-01, Open-03	31.12.22 above Address
2	Physical Education	Three (3) Posts		

Applications are invited for the post of **Assistant Professor** in Senior College specified above. Applications should reach to the Secretary on above address **within 15 days** from publication of this advertisement.

Assistant Professor Full Time (Permant Non-Granted)

Sr No.	Subject	No of Posts (Full Time)	Reservation
1	English	01	SC-02, ST-01,
2	Marathi	01	VJ-A-01,
3	Chemistry	04	NT-B-01,
4	Physics	03	NT-C-01,
5	Botany	02	OBC-3,
6	Zoology	02	EWS-02,
7	Computer	02	Open-06
8	Mathematic	02	

Qualification: Education Qualification, Pay Scale & Service conditions are as prescribed by the UGC, Govt. of Maharashtra and Dr. Babasaheb Ambedkar Marathwada University, Aurangabad from time to time. Reservation Candidate send one copy to Deputy Registrar, Special Cell, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Note : No TA/DA will be paid to attend the interview.

Secretary

President

SANJAY CENTRE FOR SPECIAL EDUCATION GOA
(An Organization of Government of Goa & Autonomous Society Registered under Indian Societies Act)
Pundalik Nagar, Porvorim, Bardez, Goa – 403 521, INDIA
ISO 9001: 2015 Certificate No: 11918102040 • Phone No: (0832) 2413120 /2412880
Email: scseg.porvorim@yahoo.in

Ref.No: SCSEG/Admn/B.Ed (MR/ID)/2022-23/1106

Date: 08.12.2022

APPOINTMENTS

Applications with full Bio-Data are invited for the following posts mentioned below by Direct Recruitment in DNYANVARDHINI DIVYANG TRAINING COLLEGE, BOGDA, VASCO, GOA.

Sr. No	Name of the Posts	No of Posts	RESERVATION CATEGORY			
			UR	OBC	EWS	PwD
1	Principal	1	1	---	---	---
2	Assistant Professor in Special Education	3	2	---	---	1 (Visually Impaired)
3	College Director of Physical Education	1	1	---	---	---
4	College Librarian	1	1	---	---	---

- Application along with photograph should contain full Name, Address, Mobile No, Email address, Date of Birth, Designation of the post held, Academic Qualification with percentage of Marks scored from SSC Exam till date, Teaching & Administrative experience, certified true copies of statement of marks secured at SSC to Master Degree & any other degree/higher degree, experience certificate, residence certificate, aadhar card and other achievements in academics and administration.
- Candidate should have 15 years' residence in Goa.
- The candidate fulfilling the Educational Qualifications shall submit their application forms duly addressed to the Member Secretary, Sanjay Centre For Special Education, Pundalik Nagar, Porvorim, Goa **ON or BEFORE 30.12.2022** during office hours ie 10.00 am to 5.00 pm.
- For details of Educational Qualifications, remuneration and other details, refer on **website: <https://scseg.goa.gov.in>**
- The Member Secretary, Sanjay Centre For Special Education reserves the right to cancel the recruitment process without any further notice and without assigning any reasons thereof.

Sd/-
Member Secretary

WANTED

Applications are invited for the post of Professor, Associate Professor and Assistant Professor (M.Ed.), & Perspectives in Education, Pedagogy Subjects, Health & Physical Education and Performing Arts (B.Ed) to be filled in **Mahatma Phule Gramin Vikas Sevabhavi Sanstha Sonwala's Mahatma Phule B.Ed/M.Ed College, Jalkot, Tq. Jalkot, Dist. Latur** (Permanent Non-Granted). Eligible Candidates should submit their application along with all necessary documents **within 15 days** from date of publication of this Advertisement by registered post only.

Sr. No.	Position	No. of Posts	Nature	Reservation
M.Ed.				
01	Professor	01	Regular	Unreserved
02	Associate Professor	01	Regular	Unreserved
B.Ed.				
Assistant Professor				
01	Perspective in Education	18	Regular	Open 07 SC 02 ST 01 VJ(A) 01 NTC-1 NTB-1 OBC 03 EWS- 02
02	Pedagogy Subject (Math., Science, Social Science, Language)			
03	Health & Physical Education			
04	Performing Arts (Music/Dance/Theatre) Fine Arts			

Qualifications :- As per UGC & NCTE (2014 Rule).

A) Professor and Associate Professor shall possess the following Qualification:

- i) Post Graduate degree with minimum 55% marks in the discipline relevant to the area of specialization.
- ii) Post graduate degree in Education (M.Ed./M.A. Education) with minimum 55% marks.
- iii) Ph.D. degree in Education or in the discipline relevant to the area of specialization.
- iv) Any other qualifications prescribed by UGC like NET qualification or length professional teaching experience as per UGC or state government norms for the positions of Professor and Associate Professor.

B) Assistant Professor: shall possess the following Qualification:

A) Perspectives in Education or Foundation Courses

- i) Post Graduate degree in Social with minimum 55% marks.
- ii) M.ED degree from a recognized university with minimum 55% marks.

OR

- i) Post Graduate (M.A.) degree in Education with minimum 55% marks.
- ii) B.Ed./B.E.L.Ed. Degree With minimum 55% marks.
- iii) SET/NET/Ph.D in Education.

B) Curriculum and Pedagogic Courses

- i) Post Graduate degree in Sciences/Mathematics/ Social Sciences/Languages with minimum 55 % marks.
- ii) M.Ed degree with minimum 55% marks.
- iii) SET/NET/Ph.D in Education.

C) Health & Physical Education

- i) Master of Physical Education (M.P.Ed.) with minimum 55% marks.
- ii) SET/NET/Ph.D. in Physical Education.

D) Performing Arts (Music/Dance/Theatre) Fine Arts

- i) Post graduate degree in Fine Arts (MFA) with minimum 55% marks.

OR

- i) Post graduate degree in Music/Dance /Theatre Arts with minimum 55% marks.
- ii) SET/NET/Ph.D. in Fine Arts.

Salary and Allowance Pay : Scale as per UGC, State Government & Swami Ramanad Teerth Marathwada University, Nanded rules from time to time.

NOTE:

- 1) Prescribe application form is available on the University **Website : (srtmun.ac.in)**.
- 2) No. T.A./D.A. will be paid to attend the interview.
- 3) Eligible candidates those who are already in services should submit their application through proper channel.
- 4) 3 % Reservation for handicapped and 30% for woman candidates.
- 5) All attested Xerox Copies of certificates and other relevant documents should be attached to the application form.

Address of Correspondence:

Mahatma Phule B.Ed. & M.Ed. College, Opp. GOV. ITI College, Kunki Road, Jalkot, Tq. Jalkot, Dist. Latur

Pin Code:- 413532 • Contact. No. 9881915083, 9764744602

Principal

Secretary

SHRI SHIVAJI MOFAT EDUCATION SOCIETY, KANDHAR
Shri Shivaji College of Arts, Commerce & Science, Kandhar, Tq. Kandhar, Dist. Nanded
&

Shri Sant Gadge Maharaj Mahavidyalaya, Loha, Tq. Loha, Dist. Nanded

FOUNDER & ADMINISTRATION HON'BLE DR. KESHAVRAOJI DHONDGE (EX. MP & MLA)

WANTED

Applications are invited from the Eligible candidates for the following posts in Shri Shivaji Mofat Education Society's Shri Shivaji College of Arts, Commerce & Science, Kandhar, Tq. Kandhar, Dist. Nanded and in Shri Sant Gadge Maharaj Mahavidyalaya, Loha, Tq. Loha, Dist. Nanded (Granted). The applications duly completed should reach to the following address **within 15 days** from the date of advertisement. The candidates of reserve category should submit their copy of application to the Assistant Registrar, Special Cell, S.R.T.M.U. Nanded.

Sr.	Subject	No. of Vacancy	Reservation
1	English	1	SC-2
2	Sociology	1	ST-2
3	Political Science	1	NTB-1
4	Chemistry	3	NTC-1
5	Zoology	2	SBC-1
6	Botany	2	OBC-5
7	History	2	OPEN-3
8	Commerce	1	EWS-2
9	Physics	2	
10	Mathematics	2	
Total		17	

Permission as per NOC No. : JDHE/NANDED/NOC/2019/04/Dt.23.11.2022.

Educational Qualification : (Assistant Professor)

1. Minimum educational qualification for the Post of Assistant Professor will be as per Regulations of UGC (2018), G.R. of Govt. of Maharashtra Dt. 08 March, 2019.
2. A Master's degree with 55% marks (or an equivalent grade in a Point-Scale wherever the grading system is followed) in a concerned/relevant/allied subject from an Indian University, or an equivalent degree from an accredited foreign university.
3. Besides fulfilling the above qualifications, the candidate must have cleared the National Eligibility Test (NET) conducted by the UGC or the CSIR, or a similar test accredited by the UGC, like SET or who are or have been awarded a Ph.D. Degree in accordance with the University Grants Commission (Minimum Standards and Procedure for Award of M.Phil/Ph.D. Degree) Regulations, 2009 or 2016 and their amendments from time to time as the case may be exempted from NET/SET:

Provided the candidates registered for the Ph.D. programme prior to July 11, 2009, shall be governed by the provisions of the then existing Ordinances / Bye-laws/Regulations of the Institution awarding the degree and such Ph.D. candidates shall be exempted from the requirement of NET/ SET for recruitment and appointment of Assistant Professor or equivalent positions in Universities/Colleges/Institutions subject to the fulfillment of the following conditions:

- a) The Ph.D. degree of the candidate has been awarded in regular mode only;
- b) The Ph.D. thesis has been evaluated by at least two examiners;

(cont'd. to page 43)

- c) An open Ph.D. viva voce of the candidate has been conducted;
- d) The candidate has published two research papers from his/her Ph.D. work, out of which at least one is in a refereed journal; and
- e) The candidate has presented at least two papers, based on his/her Ph.D. work in conferences/seminars, sponsored/funded/supported by the UGC/ICSSR/CSIR or any similar agency.

Note :

- 1) *The fulfillment of these conditions is to be certified by the Registrar or the Dean (Academic Affairs) of the University concerned.)*
- 2) NET/SET shall also not be required for such Masters Programmes in disciplines for which NET/SET is not conducted. However, Ph.D. degree shall remain the minimum eligibility for appointment of Assistant Professor in such disciplines.

OR

B.

The Ph.D. degree has been obtained from a foreign university/institution with a ranking among top 500 in the World University Ranking (at any time) by any one of the following:

- (i) Quacquarelli Symonds (QS);
- (ii) The Times Higher Education (THE) or
- (iii) The Academic Ranking of World Universities (ARWU) of the Shanghai

Note: *The Academic score as specified in Appendix II (Table 3A) for Universities, and Appendix II (Table 3B) for Colleges, shall be considered for short-listing of the candidates for interview only, and the selections shall be based only on the performance in the interview.*

Salary & Allowances: Pay Scale as per UGC, State Govt. & S.R.T.M. University, Nanded rules from time to time.

Note :

1. Prescribed application form is available on the University **website : www.srtmun.ac.in**
2. No. T.A. / D.A. will be paid to attend the interview.
3. Eligible candidates those who are already in service should submit their applications through proper channel.
4. All attested Xerox copies of certificates & other relevant documents should be attached with the application form.
5. According to Govt. rules, 30% and 3% seats will be reserved for women and differently-abled persons respectively.
6. Relaxation of 5% marks at P.G. level for SC/ST candidates only.
7. The vacancies of Assistant Professors will be filled in subject to condition of the decision in Writ Petition No.12051/2015 pending in Hon'ble High Court of Judicature of Bombay, Bench at Aurangabad.

Address for Correspondence :

**The Principal,
Shri Shivaji College of Arts, Commerce & Science, Kandhar,
Tq. Kandhar, Dist. Nanded 431 714**

Secretary,
Shri Shivaji Mofat Education Society, Kandhar

WANTED

Application are invited for the post of Perspectives in Education, Pedagogy Subjects, Health & Physical Education and Performing Arts to be filled in **Saraswati Bahuuddeshiya Sevabhavi Sanstha, Gojegaon, Rajeshwarro Patil B.Ed. College, Mukramabad, Tq. Mukhed, Nanded- 431 719** (Permanent Non-Granted). Eligible, Candidates should submit their application along with all necessary documents **within 15 Days** from date of publication of this Advertisement by registered post only.

Sr. No.	Position	No. of Posts	Nature	Reservation
1	Perspective in Education	5	Regular	SC.-01
2	Pedagogy Subject (Math, Science, Social Science, Language)			ST.-01
3	Health & Physical Education			VJA-01
4	Performing Arts (Music/Dance/ Theatre) Fine Arts			OBC-01 EWS-01

Qualification As per UGC & NCTE (2014 Rule).

The faculty shall possess the following qualification :

A) Perspectives is Education of Foundation Courses

- i) Post Graduate degree in Social Science with minimum 55% marks.
- ii) M.Ed. Degree from a recognized university with minimum 55% marks.

OR

- i) Postgraduate (M.A.) degree in Education with minimum 55% marks.
- ii) B.Ed. / B.El.Ed. degree with minimum 55% marks.
- iii) SET/NET/Ph. D in Education.

B) Curriculum and Pedagogic Courses

- i) Postgraduate degree in Science/ Mathematics/ Social Science/Languages with minimum 55% marks.
- ii) M.Ed. degree with minimum 55 % marks.
- iii) SET/ NET/Ph.D. in Education.

C) Health & Physical Education

- i) Master of Physical Education (M.P.Ed.) with minimum 55% marks.
- ii) SET/NET/Pd.D in Physical Education.

D) Performing Arts (Music/Dance/Theatre) Fine Arts

- i) Post graduate degree in Fine Arts (MFA) with minimum 55% marks.

OR

- ii) Post Graduate degree in Music/Dance Theatre Arts with minimum 55 % marks.
- iii) SET/NET/Pd.D. in Final Arts.

Salary and Allowance Pay : Scale as per UGC, State Stale Government & Ramanand Teerth Marathwada University Nanded rules from time to time.

NOTE :

- 1) Prescribe application form is available on the University **Website: (srtumun.ac.in)**.
- 2) No. T.A./ D.A. will be paid to attend the interview.
- 3) Eligible candidates those who are already in services should submit their applicable.
- 4) 3% Reservation for handicapped and 30% for woman candidates.
- 5) All attested Xerox copies of certificate and other relevant documents should be attached to the application form.

Address of Correspondence:

**Secretary,
Saraswati Bahuuddeshiya Sevabhavi Sanstha, Gojegaon,
Rajeshwarro Patil B.Ed. College, Mukramabad,
Tq. Mukhed, Nanded- 431 719**

**International Institute for Population Sciences**

(Deemed to be University)

An Autonomous organization of Ministry of Health & Family Welfare,

Govt. of India

Govandi Station Road, Deonar, Mumbai 400 088

Advertisement Notification No. Admin/04/2022

IIPS invites applications from eligible Indian Nationals for the following posts

Sr. No.	Name of the Post, Category, Number Group and Pay Scale	Department	/Qualification	
1	Professor, UR 1 Post, Group 'A', Level - 14	Migration & Urban Studies	Eligibility (A or B): (A) (i) An eminent scholar having a Ph.D. degree in demography / Population Studies or Bio Medical Sciences / Environmental Sciences / Life Science / Statistics / Mathematics / any Social Sciences Subjects with specialization in Demography / Population Studies. And published work of high quality, actively engaged in research with evidence of published work with, a minimum of 10 research publications in the peer-reviewed or UGC-listed journals and a total research score of 120 as per the criteria given in Appendix II, Table 2 as per the UGC Gazette Notification dated 18-07-2018. (ii) A minimum of ten years of teaching experience in university/college as Assistant Professor/Associate Professor/Professor, and / or research experience at equivalent level at the University/National Level Institutions with evidence of having successfully guided doctoral candidate. OR (B) An outstanding professional, having a Ph.D. degree in the relevant/allied/applied disciplines, from any academic institutions (not included in A above) / industry, who has made significant contribution to the knowledge in the concerned/allied/relevant discipline, supported by documentary evidence provided he/she has ten years' experience.	
2	Professor, SC 1 Post, Group 'A', Level - 14	Family & Generation		
3	Professor, UR 1 Post, Group 'A', Level - 14	Centre for Online and Distance Education		
4	Hindi Officer	B	Level 7	Essential 1. Master degree from a recognized University in Hindi with English as a subject at the degree level. 2. 5 years experience in translation work preferably in Government/Educational Institution
Applications form and Recruitment Criteria, General Conditions, etc., are available on the Institute's website. i.e., www.iipsindia.ac.in . The last date for receipt of application is December 30, 2022 .				
CAO-CUM-REGISTRAR, IIPS				

Announcement

Themes for Forthcoming Special Issues of the University News

Special Numbers of the University News being brought out on the occasion of AIU Zonal Vice Chancellors' Meets during November, 2022—March, 2023 are on the following themes:

1. ***Transformative Curriculum for a Holistic and Multidisciplinary Higher Education*** to be published on January 09, 2023 on the occasion of Central Zone Vice Chancellors' Meet to be held at Symbiosis University of Applied Sciences, Indore. Last date for receipt of Article is **December 30, 2022**.
2. ***Research & Excellence for Transformative Higher Education*** to be published on January 30, 2023 on the occasion of South Zone Vice Chancellors' Meet to be held at Andhra University, Visakhapatnam, Andhra Pradesh. Last date for receipt of Article is **January 15, 2023**.
3. ***Evaluation Reforms for Transformative Higher Education*** to be published on February 20, 2023 on the occasion of West Zone Vice Chancellors' Meet to be held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra. Last date for receipt of Article is **February 10, 2023**.
4. Special Issue on the theme '**Transformative Higher Education for *Atma Nirbhar Bharat***' will be brought out in the month of March, 2023. Last date for receipt of Article is **February 20, 2023**.

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Chapter in a Book

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