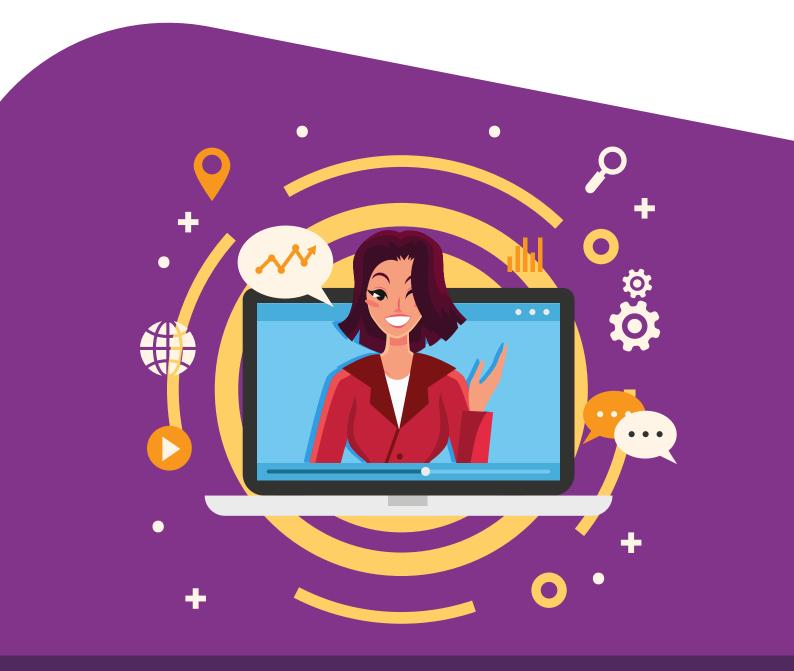


# **WEBINAR HANDOUT**







### **GIST OF YOJANA - February 2020**

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Webinar Link: <u>https://attendee.gotowebinar.com/recording/7606608764364794882</u> Note : Please open the above link using Google Chrome.



#### **1. KEY INITIATIVES IN EDUCATION**

#### Context

The Government of India **initiated the process of formulating a New Education Policy**. It aims to meet the changing dynamics of the requirements of the population **with regard to quality education**, **innovation and research to make India** a knowledge superpower by equipping its students with the necessary skills and knowledge.

**Key Reforms in School Education** 

#### NISHTHA

A National Mission to improve learning outcomes at the elementary level through an Integrated Teacher Training Programme called NISHTHA - National Initiative for School Heads' and Teachers' Holistic Advancement was launched. This integrated programme aims to build the capacities of around 42 lakh teachers and heads of schools, faculty members of SCERTs and DIETs, Block Resource Coordinators and Cluster Resource Coordinators.



The initiative is first of its kind wherein **standardised training modules are developed at national level for all states and UTs.** However, states and UTs can contextualise the training modules and use their own material and resource persons also, keeping in view the core topics and expected outcomes of NISHTHA.

#### DHRUV

The **Pradhan Mantri Innovative Learning Program (DHRUV)** was launched to **identify and encourage talented children to enrich their skills and knowledge.** The Programme 'DHRUV will act as a platform **to explore the talent of outshining and meritorious students**, and help them achieve excellence in their specific areas of interest may it be science, performing arts, creative writing, etc.

#### SHAGUN

One of World's largest Integrated Online Junction for – School Education **'Shagun' is an overarching initiative to improve school education system by creating a junction for all online portals and websites** relating to various activities of the Department of School Education and Literacy.



Report cards of 15 lakh schools all over the country **will be available on the newly created junction.** Common people **can directly give their feedback about schools which will further increase the public participation** and will ensure accountability and transparency.

#### DIGITAL INFRASTRUCTURE FOR KNOWLEDGE SHARING (DIKSIIA) 2.0

DIKSHA Portal was launched in 2017 for providing digital platforms to teachers giving them an opportunity to learn and train themselves and connect with the teacher community. This initiative has been taken forward to enhance coverage and improve the quality of e-content for teachers.

### UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION PLUS(UDISE+)

To ensure quality, credibility and timely availability of information from all the schools in the country, the revamped UDISE+ has been launched. The Data Analytics portal gives information about the aggregated position of the school.

#### **OPERATION DIGITAL BOARD (ODB)**

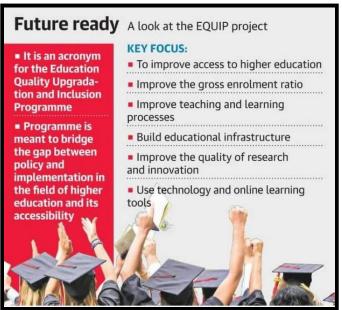
The aim is to provide, by March 2023, two smart classrooms for every Secondary/Senior Secondary school.

#### Key Reforms in Higher Education Five-year vision plan

#### Education Quality Upgradation and Inclusion Programme (EQUIP)

The Department of Higher Education of MHRD has released a five-year vision plan named 'Education Quality Upgradation and Inclusion Programme (EQUIP). This report sets out to deliver further on principles of access, inclusion, quality, excellence and enhancing employability in Higher Education.

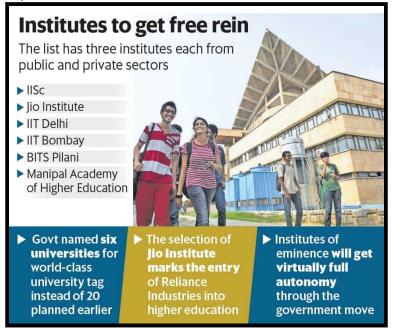
EQUIP is a vision plan aiming at ushering transformation in India's higher education system by implementing strategic interventions in the sector over five years (2019-2024).





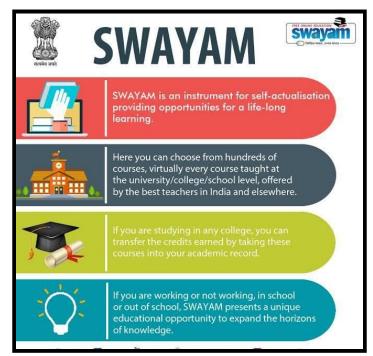
#### Institution of Eminence (IoE)

Ten institutions in the public sector and 10 institutions in the private sector have to be declared as IoE. Each public institute (IoE) will be eligible to receive Rs. 1000 crore during the next 5 years.

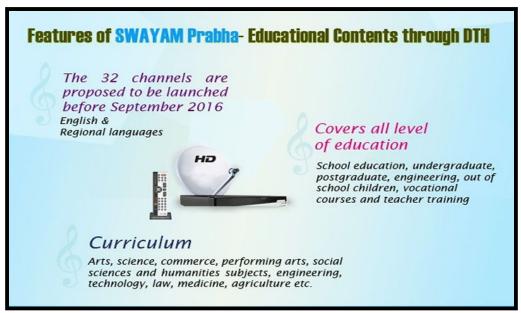


#### SWAYAM 2.0

SWAYAM 2.0 is initiated with enhanced features and facilities to offer online degree programmes through SWAYAM by top ranking universities.



**SWAYAM PRABHA- DTH Educational Channels** is a project **to telecast high quality educational programs through 32 DTH channels on 24x7 basis to reach out to students/learners of India** with wide reach and minimal cost.



It aims to support those students who do not have good learning options like lack of teacher or internet etc. It also aims to provide dedicated channels 'IITPAL' to assist the students of XI and XII standards aspiring to join premier educational institutions in the country.

### **Implementation of Quality Programme**

- **Deeksharambh**: A guide to the Student Induction Programme has been launched. Total 319 HEIs have implemented the Student Induction Programme.
- Learning outcomes based curriculum framework (LOCF) revision: New curriculum in 16 subjects which is based on LOCF has been uploaded on UGC website to facilitate universities to revise the curriculum.
- Use of ICT based learning tools for effective teaching learning process: 125 universities have come on board for accepting credit transfer done through SWAYAM platform.
- Scheme for Trans-disciplinary Research for India's Developing Economy (STRIDE): Launched for promoting quality research by faculty and creation of new knowledge.
- **PARAMARSH:** A scheme to mentor institutions seeking National Assessment and Accreditation Council accreditation.



#### 2. GLOBAL SYNERGY IN HIGHER EDUCATION

#### Context

India aims **to become a five trillion dollar economy by 2024-25**; the realisation of this goal is incumbent upon the **capability of its education and training institutions to equip young Indians with knowledge and skills** relevant to an evolving job market. It **needs quality, excellence, innovation and constant upgradation.** 

#### Aspiration in Higher Education

India's draft National Education Policy aims at increasing the gross enrolment ratio (GER) in higher education to at least 50% by 2035, which would mean that one in four graduates in the world would be a product of the Indian higher education system. The current GER stands at just 26.3%, and doubling it in the next 15 years will require significant reforms both at planning and execution level. India's GER is lower than the global average of 36.7%.

#### **Opportunities for India**

India enjoys a demographic dividend. It is the **world's youngest country with an average age of 29**. This comes at a time when the rest of the world is ageing. Average working age in the US is 40, Western Europe is 46 and Japan is 47 years.

Thus, India will not only have a young workforce to fulfil its domestic needs, it also has the opportunity to be the global hub for skilled workforce.

#### **Higher Education - Critical Challenges for India**

The above-mentioned opportunity also presents a challenge. If we fail to create a suitable environment, this dividend will be converted into demographic burden.

**Market forces have played a major role in the higher education landscape**. Of the 993 universities in India, nearly 39% are privately managed. Of the 39,931 colleges, 78% are from the private sector.

**Private colleges cater to 66.4% of the total enrolment in higher education, which means that a mere 22% of govt. colleges are catering** to a disproportionately large number of students who could not afford to seek higher education in private Higher Education Institutions (HEIs).

**Increasing social aspirations have made the education divide between urban and rural centres more obvious.** The college density (per one hundred thousand eligible population) is 28 nationally, it varies from 7 in Bihar to 53 in Karnataka.

The opportunity cost of higher education (commute, hostel fees etc.) **for disadvantaged sections is often too high and hinders the education process.** Low employability of graduates, poor quality of teaching, weak governance, insufficient funding, and complex regulatory norms continue to affect the Indian higher education sector.



The number of international students is generally **a reliable indicator of the quality and robustness of a higher education system.** As of 2018-19, only 47,427 foreign students were enrolled in the Indian higher education system (China – more than 400000, Germany – More than 3,00,000).

Globally India caters to less than one percent of all International students.

Indian institutes have **failed to feature in the top 100 of world university rankings published by reputed ranking frameworks.** The outflow of Indian students for education abroad is itself more than 15 times the inflow of international students to India.

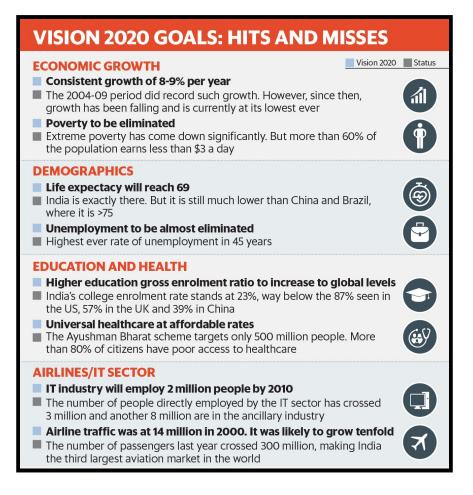
#### Why Do We Need Global Cooperation?

Getting the right education is critical for India **to maximise the potential of its demographic dividend.** India will not have the capacity to meet this demand on its own.

NITI Aayog and several other organizations have developed policy documents on higher education that have stressed on the need of international assistance in higher education. India's recently released draft National Education Policy 2019 proposes inviting the top 200 global universities to establish foreign branch campuses in India.

MHRD developed a five-year action plan named EQUIP (Education Quality Upgradation and Inclusion Programme). The initiative is **made to bring transformation in the higher education system in the upcoming 5 years.** 

NITI Aayog has more recently **favoured the development of Exclusive Education Zones (EEZs) akin to SEZs in a few select cities** in Bengaluru, Hyderabad, Ahmedabad, Pune, Chandigarh and parts of Sikkim, to boost growth in the flow of foreign students.



### **Opportunity for Deeper Engagement**

International education is **Australia's third largest export industry**. As a world class provider of education and training, Australia is well positioned to partner with India in the higher education sector.

**Linkages between HEIs and industries** with diversified course offerings can prepare students for the job market.

Global education institutes may also consider looking at building partnerships, beyond HEIs in metro cities of tier 2 and tier 3 cities and regional/state institutions, which offered tremendous possibilities because of large numbers of students with untapped potential and lack foreign collaborations currently.

The joint student-academic mobility programmes, joint research, international **collaborations boost rankings**.

India is also **seeking to attract international faculty** into the country for short-term research and teaching visits. Indian government initiatives like the **Global Initiative of Academic Networks (GIAN)**, which provides funding for teaching at selected Indian higher education institutions and **Scheme for Promotion of Academic and Research Collaboration (SPARC)** are opportunities to be explored.

Global Initiative of Academic Networks (GIAN)

- It aims at improving the quality of higher education in the country through international collaboration
- Facilitate participation of high quality international academicians for delivering short-term courses and programs in Indian institutions
- Initially 500 international faculties will be engaged in conducting courses and later in subsequent years 1000 faculties would be engaged under GIAN throughout India
- These courses will be webcasted live for students across the country through a web portal designed by IIT Kharagpur.

However, **lack of knowledge** of India's higher education sector, including how to address **regulatory issues**, contributes to low faculty participation in mobility schemes.

#### Way Forward

**Partnership may look beyond silos** and into areas where Australia has an advantage and India has a need, for instance, in mining safety, bioengineering, signal processing, AI, cyber security, climate change etc.

Increasing the **level of mutual cultural understanding** and **developing a strong knowledge base** for India and Australia can further bolster these relations.

**Increased focus on vocational and professional led education can help India** find ways to up-skill 400 million workers by 2022.

However, what is needed is targeted and granular advice from governments to assist providers to identify, from the mass of possibilities, viable opportunities that match Australian strengths with Indian needs. Also, Indian students' expectations around cost and employment outcomes need to be understood carefully.

#### 3. INNOVATION IN HIGHER EDUCATIONAL INSTITUTIONS

#### Context

The **Innovation centres in institutions fosters team spirit and the ability** to work beyond classroom lectures. They prepare the students **to take collective ownership of outcomes and work on multigenerational products.** Centre for Innovation (CFI) is one such platform for students in Madras which encourages them to generate ideas to innovate and invent.

**Premier higher educational institutes in India have always been a gateway** to secure and prosperous life for many. However, over the last decade a cultural change has begun in these institutes.

These institutes have been **transforming themselves to produce the next generation leaders** who are willing to take up entrepreneurship, foregoing assured income; thereby creating multiple jobs for the society.

With a vision to produce leaders, such institutes are undergoing paradigm shifts. In this article, an attempt is made to trace this transformation at institutes like where transformative start-ups were initiated from solutions developed through research and student projects.

#### **Catalysing Student Innovation and Entrepreneurship**

Atal Tinkering Lab (ATL) is an initiative started by Government of India under Atal Innovation Mission (AIM) to instill scientific temperament, innovation and creativity among Indian students. It is a workspace where young minds can give shape to their ideas with a do-it-yourself approach as well as learn new innovative skills. Young children will get a chance to work with tools and equipment to understand what, how and why aspects of STEM (Science, Technology, Engineering, and Math).

### ATAL INNOVATION MISSION: IN A NUTSHELL

The government is looking to set up tinkering and incubation labs besides providing a leg-up to established incubation centres.

### 500 TINKERING LABS

#### **100** INCUBATION CENTRES

AIM will provide grant-in-aid that includes a one-time establishment cost of Rs 10 lakh and operational expense of Rs 10 lakh for five years to each lab.

AIM will provide a grant-in-aid of Rs 10 crore to each incubation centre for five years to cover the capital and operational expenditure cost in running the centre. The applicant would have to provide a

built-up space of at least 10,000 sq ft to qualify for financial support.

SCALE-UP SUPPORT TO 10 ESTABLISHED INCUBATION CENTRES | Grant-in-aid support of Rs 10 crore will be provided in two annual instalments of Rs 5 crore each.

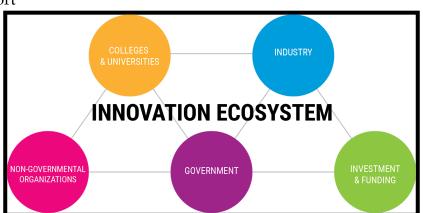
### Innovation as a Catalyst

These innovation centres also fosters team spirit and the ability to work beyond classroom lectures. It prepares the students to take collective ownership of outcomes and work on multi-generational products. While individual merit brought them to these institutes, working on innovation and bringing complete products to life prepares these students for the real world. Innovation comes to life when their inventions are developed further in the context of societal needs and wants.

### **Innovation Ecosystem**

The innovation ecosystem can be divided into four buckets:

- Ideate
- Pre-incubate
- Incubate
- Support



Among these, the incubation and support ecosystem are highly instrumental.



#### **Issues with Innovation Ecosystem**

The challenge for our higher educational institutions is to **enable routine transformation of these intellectually stimulated individuals** to deep tech entrepreneurs and innovators solving societal problems of today and tomorrow.

It is often very hard to take a step back from a narrowly defined academic problem definition to identify broad opportunities where the **research or technology developed might meet a market need.** 

#### Learning from United States

In the United States, the National Science Foundation (NSF) had pioneered the concept of a lab to market through the Innovation Corps (I-Corps) program.

I-Corps **accelerates the economics and societal benefits** of NSF funded basic research programs **by training scientists and engineers** to extend their focus beyond the university laboratory and look at commercialization.

#### Way forward

Institutes of higher education, such as the IITs, are **adapting to the evolving trend of rapid experimentation and development of technology for the society** where it is embedded in. For these institutions, it is **no longer sufficient to train and produce good employees.** 

It will be the mandate of these institutions to produce good employers in large numbers that will cater to the aspirations of the next generation India.

Our institutions will have **to imbibe the spirit of entrepreneurial thinking**, which includes rapid adaptation to the societal needs, **developing and scaling in resource constrained environments** and serving as local points or nodes of innovation and entrepreneurship, **to reach our national goal of a \$5 trillion economy.** 

#### 4. OPEN & DISTANCE LEARNING: A FUTURISTIC APPROACH HOW ODL IS DISTINCT?

#### Context

**Open and Distance Learning (ODL) system** is a system wherein teachers and learners need not necessarily be present either at same place or same time and is flexible in regard to modalities and timing of teaching and learning as also the admission criteria without compromising necessary quality considerations.

The ODL system of the country consists of Indira Gandhi National Open University(IGNOU), State Open Universities (SOUs), Institutions and Universities offering education and includes Correspondence Course Institutes (CCIs) in conventional dual mode universities. This is becoming more and more significant for continuing education, skill updation of in service personnel and for quality education of relevance to learners located at educationally disadvantageous locations.

#### How ICT Can be More Useful in ODL?

ODL can be made **more interactive** through the use of technology like managing the virtual classroom with the use of the internet, development of web-based hypermedia, use of interactive teleconferencing and radio counselling etc.

In the virtual classroom the **learners and the teachers meet in cyberspace**, a **question and answer session follows**.

The web-based study **helps the learners and teachers to access the information at their own choice of time and convenience.** In addition, regular interactive teleconferencing, which is one-way video and two-way audio satellite- based learning facility and radio counselling sessions may be used for the learners.

#### Importance of IT

- IT can promote the opportunities of restructuring the teaching-learning process and transform it by offering alternatives to the teacher in providing information, access to virtually unlimited resources, and opportunities for real world communication, collaboration and competition.
- Web can enrich the learning resources and help institutions refocus from teaching to learning, from teacher to learner. It can create learning environments throughout the world by networked learning communities.
- Networks may create educational environments embedded in democratic philosophy of instruction and helping learners learn.
- ICT is a potentially powerful tool for extending educational opportunities, both formal and non-formal. For developing countries ICT has the potential for increasing access to and improving the relevance and quality of education.
- The use of computers in ODL has provided new pedagogical strategies in distance learning as well as giving more autonomy to the distance learners.



#### Way Forward

In using technology which can be integrated into the distance education system, the following factors should be considered: accessibility, cost effectiveness, human acceptance, and pedagogical suitability.

In the era of information technology teachers will be spending more time in facilitating students rather than delivering lectures in the classrooms. They would be working in groups: preparing and evaluating instructional materials and organizing data into meaningful information and accessible forms. They will also be demonstrating the potential of skill development in students by using information in problematic situations.

Certain skills and capabilities of using **different information technologies are necessary for the students and teachers.** 

We have to think about the uses of media and technology in regard to appropriateness and acceptability in the society as well as on the ability of the institution offering the programme.

The **socio-economic and cultural background of a person influences their ability to learn** from different media technology.

#### 5. QUALITY EDUCATION FOR WEAKER SECTION AND DISADVANTAGED GROUPS

#### Context

- The **Right of Children to Free and Compulsory Education (RTE) Act, 2009**, entitled every child of age 6 to 14 years to a **right to free and compulsory** education in a neighbourhood school till completion of elementary education.
- Section 8(c) of the RTE Act, 2009 provides that the appropriate government would ensure that the child belonging to the weaker section and the child belonging to the disadvantaged group are not discriminated against and prevented from pursuing and completing elementary education on any grounds.
- Further, Section 12 (1) (c) of RTE Act, 2009 provides that all specified category schools and unaided schools shall admit at least 25% children belonging to weaker section and disadvantaged group in the neighbourhood in class I and provide free and compulsory elementary education till its completion.

#### Steps Taken to Ensure Education of Children with Disability

- Samagra Shiksha, an overarching programme for the tire school education sector extending from pre-school to class XII, aims to ensure inclusive and equitable quality education at all levels of school education.
  - It envisages the 'school' as a continuum from preschool, primary, upper primary, secondary to senior secondary levels. Bridging gender and social category gaps at all levels of school education is one of the major objectives of the scheme
- The 'Padhe Bharat Badhe Bharat' (PBBB) is a sub-programme of erstwhile Sarva Shiksha Abhiyan (SSA) which is continued under the new integrated scheme Samagra Shiksha to ensure quality at the foundational years of schooling. The objectives of the programme are to promote early reading and writing with comprehension skills in children, and also basic numeracy skills. States/UTs are implementing PBBB in their respective States/UTs using multiple strategies and approaches. These include adoption of NCERT model of early reading, provision of supplementary reading material, and development of State specific models for early Maths and early reading.
- The Navodaya Vidyalaya Scheme provides for the opening of one JNV in each district of the country to bring out the best of rural talent. Its significance lies in the selection of talented rural children as the target group and the aim to provide them with quality education comparable to the best in a residential school system.
- The **Draft National Education Policy 2019 is presently under consideration.** The revision of curriculum, syllabi and textbooks for school education would depend on the finalization and approval of the New Education Policy.

#### **Promoting Vocational Education in Backward Regions**

The government has **recognised the requirement for spreading vocational education throughout the country including backward regions**. State governments can **offer vocational education** through their institutional network as per UGC guidelines.



There are various steps already being taken by the government **to promote vocational education throughout the country, including backward regions.** 

- Developing internship/apprenticeship based degree courses in sectors like Retail, Logistics, Media and Entertainment, etc.
- Increasing number of institutions offering B.VoC courses in the country.
- Aligning the content of **existing skill courses with National Skill Qualification Framework (NSQF)**.

#### 6. SUBJECTIVE TYPE QUESTIONS

- 1. Discuss the various steps taken to ensure education of children with disability?
- 2. Briefly discuss what kind of innovation would improve the status of education in our country?
- 3. Discuss the specifications of Open & Distance Learning? Examine the importance of Information Technology in imparting Open and Distant learning Education?
- 4. Highlight and briefly describe all the major problems affecting India's higher education?