Reorienting Indian Education System

This editorial is based on "Education in India: Why NEP has so far failed to move the needle" which was published in Hindustan Times on 15/03/2024. The article brings into focus the deep crisis in India's education system that despite NEP 2020, both public and private sectors struggle with poor outcomes and systemic inefficiencies.

For Prelims: India's education system, New Education Policy of 2020, PM eVidya, Skill India Mission, Atal Innovation Mission, Anusandhan National Research Foundation , Eklavya Model Residential Schools, United Nations Children's Fund

For Mains: Key Developments in India's Education System, Key Issues Impeding the Effectiveness of Educational Reforms in India.

India's education system faces a crisis with alarming statistics: **75% of Class 3 students are unable to read Grade 2 texts**. Despite the **New Education Policy of 2020,** improvements remain marginal. The **government school system continues to be hampered by systemic inefficiencies, inadequate resources,** and poor learning outcomes. Meanwhile, the **private education sector operates under regulatory constraints** that often lead to questionable practices rather than quality improvements. India must urgently address these fundamental structural challenges to transform its education landscape and secure its future human capital.

What are the Key Developments in India's Education System?

- **Growth of Digital and Online Education:** India's education system has rapidly **embraced digital learning, especially after the pandemic.**
  - The move towards **online platforms and blended learning models** has democratized access to education, particularly for students in remote areas.
  - The rise of edtech companies and government initiatives like **PM eVidya have significantly expanded educational reach**.
    - As of FY22, the **Indian edtech market saw an investment of US$ 3.94 billion,** and the online education sector is expected to grow by **US$ 2.28 billion between 2021-2025, with a CAGR of 20%.**
- **Integration of Vocational Education and Skills Development:** The National Education Policy (NEP) 2020 places **significant emphasis on skill development and vocational education** to address India's employment challenges.
  - By integrating **skill-based learning into mainstream education**, India aims to align its youth with industry needs.
  - Moreover, the Skill India Mission has trained millions, with the **Union Budget 2025-26 allocating Rs. 500 crore to a Centre of Excellence in AI for Education,** promoting advanced tech skills.

- **Policy Support for Private Investment and FDI:** The Indian government has actively **encouraged private investment in education,** which has significantly strengthened the sector's infrastructure and innovation.
    - The allowance of **100% FDI in the education sector** has attracted international players, promoting a competitive landscape.
    - The education market in India is projected to reach **US$ 225 billion by FY25**, and **foreign direct investment (FDI) inflow in education** between April 2000 and September 2024 stands at **Rs. 83,550 crore.**
- **Expansion of Higher Education Institutions:** India has significantly expanded its **higher education sector** in recent years, with **an increase in both the number of universities and students enrolled.**
    - In FY25, **India had 52,538 colleges and 1,362 universities,** showing a **10% increase over the past five years**.
    - **The Gross Enrollment Ratio (GER) in higher education has also risen to 28.4%,** reflecting growing opportunities in the sector.
- **Rise of Regional Language Education:** The NEP 2020's push for multilingualism and regional language education has been a transformative stride in India's educational landscape.
    - **Encouraging the use of regional languages as a medium of instruction,** the policy addresses regional disparities and strengthens cultural identity.
    - The government has **allocated Rs. 500 crore under the PM Vidya initiative to develop multilingual resources** and digital learning tools in multiple regional languages, helping bridge the gap between urban and rural students.
- **Increased Focus on Research and Innovation:** India is gradually transitioning towards a **research-driven education model** with an emphasis on innovation and industry collaboration.
    - The government's push for **research in higher education institutions** has been supported by initiatives like the **Atal Innovation Mission (AIM)** and funding through the **Research and Innovation in Higher Education (RISE) program**.
    - **Anusandhan National Research Foundation (ANRF)** has been established to promote research and development and foster a culture of research and innovation
- **Investment in STEM Education: STEM (Science, Technology, Engineering, and Mathematics)** education is gaining momentum in India, with a growing number of initiatives focusing on skill development and creating a talent pool for future industries.
    - Initiatives like the **Atal Tinkering Labs (ATL), sponsored by NITI Aayog**, have already established over 8,000 labs across India, aiming to foster creativity and innovation.
    - Moreover, **the Indian edtech market, particularly in STEM education,** saw substantial investments in FY22, with a total of US$ 3.94 billion.

What are the Key Issues Impeding the Effectiveness of Educational Reforms in India?

- **Infrastructure Deficits in Rural and Remote Areas:** Despite significant policy push for inclusive education, **a vast gap remains in infrastructure between urban and rural schools.**
    - Rural schools, especially in remote areas, often **lack basic amenities like clean water, electricity, and functioning toilets**.
    - The government's efforts, such as the **Samagra Shiksha Abhiyan,** have made progress, but the **infrastructure in over 400,000 under-resourced schools still languishes**.
        - A 2023 report stated that **only 47% of schools in India have access to drinking water**, and **only 53% have separate toilets for girls.**
- **Teacher Shortage and Quality of Educators:** One of the most critical issues hindering effective educational reforms in India is the **shortage of qualified teachers, particularly in rural and disadvantaged areas.**
    - From 2021-22 to 2023-24, there has been a substantial reduction in sanctioned teaching positions across India, decreasing by nearly 6%.
    - Over **4,500 secondary school teachers** lack proper education, **with less than 25% receiving job training**, and there is an acute shortage of subject-specialist teachers in STEM fields.
- **Inadequate Funding and Resource Allocation:** While India's education sector has seen

increasing investments, the **level of funding remains inadequate** to implement the sweeping changes promised by the National Education Policy (NEP) 2020.
    - India is spending on education around 4% of GDP as a public expenditure and **just 2.5% of GDP as private expenditure.**
    - This funding gap affects **everything from teacher salaries to infrastructure development** and digital learning tools.
- **Socio-Economic Disparities in Access to Education:** Economic and social inequalities continue to be a barrier to achieving inclusive education.
    - Children from economically disadvantaged backgrounds**, especially those in rural and tribal areas,** often lack access to quality education.
    - For instance, tribal students in **Eklavya Model Residential Schools (EMRS) schools** are struggling with language barriers as teachers instruct in Hindi instead of English or Telugu., underscoring the persistent educational divide.
- **Rote Learning and Slow Curriculum Transition:** India's education system continues to focus excessively on **rote memorization,** which undermines critical thinking and problem-solving skills.
    - Despite the NEP 2020's push for **competency-based learning, schools and universities are slow to transition** from traditional examination systems.
    - Recent surveys indicate that **75% of Class 3 students cannot read basic Grade 2-level text**, showing that the focus remains on memorization rather than comprehension and application of knowledge.
- **Digital Divide and Technological Barriers:** Although the shift towards digital education has been accelerated by the pandemic, a significant digital divide continues to impede effective educational reform.
    - **Rural areas, in particular, lack reliable internet connectivity,** making online learning inaccessible.
    - While initiatives like **PM eVidya and the Skill India Digital platform** have attempted to bridge the gap, **only 47% of students in rural areas have access to high-speed internet.**
- **Political and Bureaucratic Resistance to Reform:** Despite strong political will at the central level, many educational reforms in India face resistance at the **state and local levels due to bureaucratic red tape.**
    - States and local authorities often resist reforms that they perceive as threatening to their power or that require additional resources. For instance, the **consolidation of schools**, a key component of the NEP 2020, **has seen low progress due to resistance from many state governments.**
- **Gender-Based Barriers in Education:** Although gender inclusivity is a key focus of the Indian education system, gender-based barriers still impede the effectiveness of educational reforms.
    - **Girls, particularly in rural areas**, continue to face higher dropout rates due to early marriage, family responsibilities, and safety concerns.
    - The ASER report found that while girls' enrollment increased in the last decade, the dropout rate for girls remains significantly higher than for boys, particularly in secondary education.
        - The survey of **United Nations Children's Fund (UNICEF)** in India states that in India, **33% of girls drop out of school due to domestic work.**

What can India Learn from Other Countries in terms of Education Reforms?

- **Teacher Autonomy and Professional Development (Finland)**: In Finland, teachers are **highly respected professionals who are given significant autonomy in the classroom.**
    - They have the freedom to design their curriculum and teaching methods based on student needs. India can learn from this by offering more autonomy to teachers and investing in continuous professional development.
- **Project-Based Learning (Singapore)**: Singapore's education system integrates project-based learning (PBL) across subjects, focusing on real-world challenges.
    - Students work on long-term projects that require critical thinking, creativity, and collaboration. India can adopt PBL to move beyond rote learning and enhance **students' problem-solving skills and creativity.**
- **Digital Learning Infrastructure (Estonia)**: Estonia has integrated digital tools and platforms in its education system, allowing for personalized learning experiences.
    - **All Estonian schools were provided with the Internet in 2001** already and Estonia continues upgrading the digital infrastructure of schools.

    - India can accelerate its digital transformation by ensuring equitable access to technology and incorporating online learning tools into the mainstream education system.
- **Dual Education System (Germany)**: Germany's dual system combines classroom education with hands-on training in industries.
    - It allows students to gain work experience while studying, improving their employability.
    - **India can adapt this model by integrating more vocational training programs** and apprenticeships, bridging the gap between education and industry needs.
- **Student-Centered Learning (South Korea)**: South Korea's education system focuses heavily on student-centered learning, where the needs and interests of the students guide their learning process.
    - India can incorporate more flexible and personalized learning paths to cater to diverse student strengths and interests, rather than following a one-size-fits-all model.

What Measures can be Adopted to Strengthen the Effectiveness of India's Education System?

- **Enhanced Teacher Training and Professional Development:** To elevate the quality of education, there must be a **systematic overhaul of teacher training programs**, e**nsuring that educators are equipped with modern pedagogical skills.**
    - Continuous **professional development, including exposure to new teaching methods, technology integration, and subject expertise,** should be made a mandatory component of the teacher career progression.
- **Infrastructure Development in Rural and Remote Areas:** A key measure to improve the educational landscape is **substantial investment in upgrading infrastructure in rural and underdeveloped regions.**
    - This involves providing basic facilities like **clean water, electricity, functioning toilets, and digital learning resources in schools.**
    - Additionally, creating student-friendly environments, such as safe playgrounds and proper classrooms, will enhance the learning experience and reduce dropout rates.
- **Bridging the Digital Divide:** To ensure equitable access to education, bridging the digital divide is essential.
    - This requires **expanding broadband connectivity to rural and underserved areas,** coupled with providing affordable digital devices to students from economically weaker backgrounds.
    - Furthermore, **enhancing digital literacy among both students and teachers will enable effective usage of e-learning platforms**, fostering an inclusive and technologically advanced education system.
- **Integration of Vocational and Skill-Based Education:** The future of education should be **geared towards developing practical skills** that align with industry needs (Finland Model).
    - **Incorporating vocational training and skill-based learning** into the mainstream curriculum will equip students with competencies that increase their employability.
    - **Collaborations with industries to design relevant curricula,** internships, and apprenticeship programs will ensure that students are workforce-ready upon graduation.
        - This approach will not only reduce unemployment but also foster an entrepreneurial mindset among the youth.
- **Strengthening Public-Private Partnerships:** To address gaps in funding, infrastructure, and innovation, fostering **effective public-private partnerships (PPPs) in education is crucial**.
    - These partnerships **can help create high-quality educational content,** improve school infrastructure, and introduce modern teaching methodologies.
    - The government **should incentivize private entities to invest in education through clear regulatory frameworks**, ensuring that profit motives do not compromise educational standards.
    - Engaging community participation in the development of government schools and **tied corporate social responsibility (CSR) programmes.**

- **Revision of Curriculum to Encourage Critical Thinking:** The traditional rote-learning system needs a paradigm shift towards competency-based education.
    - **Updating and revising the curriculum** to focus on critical thinking, problem-solving, creativity, and interdisciplinary learning will better prepare students for the challenges of the modern world.
    - The **curriculum should be flexible and adaptive,** allowing students to engage in practical applications of theoretical knowledge.
- **Improvement in Educational Governance and Accountability:** Strengthening the governance structures within educational institutions is crucial for ensuring effective implementation of reforms.
    - **Clear guidelines, transparent processes, and decentralized decision-making** can lead to more localized accountability.
    - Regular audits, performance assessments, and feedback mechanisms will help identify gaps and improve the quality of education.
- **Reforming the Examination and Assessment System:** The existing examination system needs to be overhauled to reduce the undue pressure on students.
    - **A shift from high-stakes exams to continuous, formative assessments (PARAKH under NEP 2020)** that focus on practical skills and project-based learning will better reflect a student's abilities.
    - Introducing multiple assessment methods, including peer reviews and self-assessment, will encourage holistic development.

Conclusion:

India's education system stands at a pivotal crossroads, where digital strides and policy reforms show promise, but deep-rooted challenges persist. From **inequity and infrastructure gaps to teacher shortages and rote learning,** systemic transformation is imperative. Harnessing innovation, inclusivity, and skill-based learning can shape a **resilient, future-ready Bharat.** A spirit of **"□□□□□□□□□" (Navonmesh – innovation and renewal)** must guide the journey ahead.

Drishti Mains Question:

Examine the key challenges hindering the effectiveness of educational reforms in India, particularly in light of the National Education Policy 2020.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. Which of the following provisions of the Constitution does India have a bearing on Education? (2012)

1. Directive Principles of State Policy
2. Rural and Urban Local Bodies
3. Fifth Schedule
4. Sixth Schedule
5. Seventh Schedule

Select the correct answer using the codes given below:

(a) 1 and 2 only

(b) 3, 4 and 5 only

(c) 1, 2 and 5 only

(d) 1, 2, 3, 4 and 5

Ans- (d)

Mains

Q1. How have digital initiatives in India contributed to the functioning of the education system in the country? Elaborate on your answer. (2020)

Q2. Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. (2021)