







ICSSR-ERC Sponsored **One-Day National Level Seminar on**

EDUCATION FOR THE 21st CENTURY : MEETING THE CHALLENGES OF THE CHANGING WORLD

Department of Education Organized by West Bengal State University

IQAC, West Bengal State University In Callabaratian with Berunanpukuria, Malikapur, Barasat, 24 PGS(N), Kol-700126



This is to certify that Professor / Dr. / Mr. / Ms.

Participated in the National Level Seminar on "Education for the 21st Century: Meeting the Challenges of the Changing World" held on 28th April, 2023 at the University Auditorium Hall, West Bengal State University, Barasat, Kolkata.

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Praf. Abhijit Kumar Pal ad. Department of Education

Dr. Shnaali Chakrabartu Acharu Assistant Professo Department of Education West Bengal State University

Dr. Ajit Mandal Assistant Professor Department of Education West Bengal State University &



EXECUTIVE SUMMARY OF THE SEMINAR

In today's knowledge-based, globally-competitive economy, education is seen as a key driver of national success. Education is also considered as crucial to modernizing society and competing economically. In the twenty-first century, there is an unprecedented demand for a system of education which will enable the younger generations equipped with new skills. knowledge and ideals. Everywhere education system at all levels is faced with great challenges and difficulties related to financing, equity conditions at access into and during the course of studies, skillsbased training, enhancement and maintenance of quality in teaching-learning process, research and services, relevance of programmes, employability opportunities etc. At the same time, the whole spectrum of Indian education is being challenged by new opportunities relating to technologies that are improving the ways in which knowledge can be produced, managed, disseminated, accessed and controlled. Equitable access to these technologies should be ensured at all levels of education systems.

Today's education system needs not just to educate youth but bequeath them with relevant skills. The traditional system of human resource development requires newer orientation so that it can prepare youth with desired levels of skills and competencies to harmonise education with gainful employment across the globe. Education is a fundamental pillar of human rights, democracy, sustainable development and national progress, and should therefore become accessible to all throughout life and that measures are required to ensure co-ordination and co-operation across and between the various sectors, particularly between general, technical and professional secondary and post-secondary education as well as between universities, colleges and technical institutions. It requires a shift from conventional educational system to skill-based qualification system.

28 April, 2023





The need of the hour therefore is to make the education system reorient in a manner that it conforms to the requirements of the empowering the students for livelihood and making them employable for the industry. Industry-Academia interface, in the present times of knowledge economy, is a necessity. In addition, there are significant inequalities in the students' academic achievements at all stages of education from socially and economically disadvantaged backgrounds across India. The development of 21st century skills is thus a stated priority in many countries across the globe. 21st century skills are tools that can be universally applied to enhance ways of thinking, learning, working and living in the world. The skills include critical thinking/reasoning, creativity/creative thinking, problem solving, meta-cognition, collaboration, communication and global citizenship. 21st century skills also include literacy such as reading literacy, writing literacy, numeracy, information literacy, digital literacy, communication, etc. Every student in the 21st century needs to be able to critically think, problem solve, collaborate, communicate, innovate, be globally aware, and be technically literate. Accordingly, all the schools, colleges and universities have to prepare students for the workforce of the future.

India realizes the same need in order to develop competitive future workforces. Accordingly, the National Education Policy (NEP) 2020 has put emphasis on the aim of education not only towards cognitive development, but also building character and creating holistic and well-rounded individuals equipped with the key 21st century skills. To this end, Government of India has made a series of policy



reforms in the landscape of education since the enactment of the new National Educational Policy 2020. The NEP 2020 proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including Sustainable Developmental Goals 4 'ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all' with focus on India's traditions and value systems. These reforms include broader access to equitable and quality education, changes in curriculum and pedagogy, equitable use of technologies, and rethinking how teachers are selected, trained, and assessed, e-imagining Vocational Education, Restructuring higher education institutions (HEIs), Catalyzing Quality Academic Research etc. The entire educational system in India is in the process of being restructured. It is about how to reconfigure all the institutions from KG to PG so as to bring about better educational outcomes. Vocational orientation to education right from school level to higher education as envisaged in the New Education Policy 2020 is need of the hour in the context of boosting the employability skills and shaping socioeconomic landscape in India.

Accordingly, all aspects of curriculum and pedagogy should be reoriented and revamped at each stage of learning, from pre-school to higher education with the aim of preparing well-rounded learners with 21st century skills. The 21st Century Skills are thus highly required to enable an individual to face the challenges of the 21st century world that is globally-active, digitally transforming, collaboratively moving forward, creatively progressing, seeking competent human-resource and quick in adopting changes. The development and reorientation of the entire education system in alignment with the aspirational goals of 21st century education is a necessary but challenging endeavour. The educational system has multiple stakeholders and is slow and difficult to change. Changes must be transformational and systemic rather than incremental, including the alteration of the entire educational paradigm through collaboration and community focus. New types of curriculum and pedagogy, instructional processes and assessment, governance, provision of equitable and quality education, quality academic research etc are necessary to successfully accomplish this effort.

In tune with the above stated thoughts, this seminar was arranged to discuss and scrutinize all the important aspects of educational policies in India with special reference to new NEP 2020, both at the national-level as well as at the state-level. At the seminar, participants, academicians and researchers across India have discussed how education can be aligned with the aspirational goals of the 21st-century that will prepare students for a globalized and evolving world so that they can take up leadership roles. This seminar has provided a platform for sharing knowledge and experience that can then be used by the stakeholders, academic administrators and the policy makers to implement the national education policy 2020 to revitalize the education system of our country. The seminar has also provided a platform for students, researchers and academicians across India to understand the changing paradigm of our education systems and recognize the problematic areas in the policy reforms that are embedded in the NEP 2020 in the context of various cultural and contextual milieus and federal governance in the



 WEST BENGAL STATE UNIVERSITY

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 Dr. Mahua Das

 Vice Chancellor

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Date: 26/04/2023



I am pleased to know that the Department of Education of West Bengal State University is going to organize ICSSR-ERC, Kolkata sponsored One-Day National Level Seminar on *Education for the 21st Century: Meeting the Challenges of the Changing World'* in collaboration with the IQAC, West Bengal State University on 28th April, 2023, and on this occasion they are publishing Seminar Abstract Volume also.

I believe that this national level seminar will provide a platform for discussing and scrutinizing all the important aspects of educational policies in India with special reference to new NEP 2020, both at the national-level as well as at the state-level. At the seminar, participants, educationists and researchers across India will discuss how education can be aligned with the aspirational goals of the 21st-century that will prepare students and teachers for a globalized and evolving world so that they can take up leadership roles.

I covey my warm wishes to all the participants and paper presenters and thanks to the ICSSR-ERC for providing financial support to organize the seminar. I wish a grand success of this seminar.

Machano Professor Mahua Das Vice Chancellor West Bengal State University Vice - Chancellor West Bengal State University Benunapukuta, P.O.: Malkapur

ICSSR-ERC Sponsored One-Day National Level Seminar on

EDUCATION FOR THE 21st CENTURY : MEETING THE CHALLENGES OF THE CHANGING WORLD



Date

Organized by Department of Education West Bengal State University

In Callabaratian with IQAC, West Bengal State University Berunanpukuria, Malikapur, Barasat 24 PGS(N), Kol-700126

Venue

28 April, 2023 12.00 Noon onwards

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WEST BENGAL STATE UNIVERSITY

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Message

Date 26 - 04.2023

I am glad to learn that the Department of Education, West Bengal State University is going to organize ICSSR-ERC Sponsored One-Day National Level Seminar on "Education for the 21st Century: Meeting the Challenges of the Changing World" in collaboration with IQAC, West Bengal State University at Berunanpukuria, Malikapur, Barasat, North 24 Parganas, Kolkata – 700126. The Seminar is scheduled to be held on 28th April, 2023 at the University Auditorium Hall. I am also delighted to know that to commemorate this occasion the Organizing Committee of the Seminar will publish a Seminar Abstract Volume.

The district of North 24 Parganas where the University is located has a rich legacy in education. Peary Charan Sarkar Government High School was established in 1846 by the efforts of Vidyasagar and Peary Charan Sarkar. Also, Barasat had a girls' school as early as the Bethune School of Kolkata (Kalikrishna Girls High School, 1847), the first nongovernment Girls' High School of British India. Nabinkrishna Mitra and Peary Charan Sarkar faced resistance but was able to sustain with the support of John Ellito Drinkwater Bethune.

I am hopeful that in this national level seminar, students, teachers, research scholars, academicians and resource persons will exchange their thoughts and views chiefly about the requirements and reforms in the landscape of education needed for the 21^{std} century in India. The challenges of education are multifaceted and require a comprehensive approach to address them. This is an opportunity for multi-departmental, multi-disciplinary interaction, which is always encouraging. It is a rare opportunity for our students to learn from and interact with subt stalwarts. In WBSU, our primary focus is to help students to think, create and grow. I convey my best wishes to all associated with the programme and thank ICSSR-ERC (Kolkata) for providing financial assistance to organize this seminar. I wish this seminar all success and hope that the teachers from the Department of Education will be able to organize more such events in future where academicians can meet for regular interactions frequently.

S.C. Sarkar Director, IQAC, West Bengal State University Barasat, Kolkata - 700126, West Bengal





University Auditorium Hall West Bengal State University

- 2) In the Technical Session 2 (Academic Block, 6th Floor, Room No. 716), Dr. Shnaoli Chakraborty Acharya, Organizing Secretary of the seminar and Assistant Professor, Department of Education, West Bengal State University and Meskat Kamal Molla, Guest Faculty, Department of Education, West Bengal State University chaired and co-chaired respectively.
- 3) In the Technical Session 3 (Academic Block, 6th Floor, Room No. 718), the Organizing Director of the Seminar & Head, Department of Education, West Bengal State University and Mr. Neloy Sarkar, Guest Faculty, Department of Education, West Bengal State University chaired and cochaired respectively.
- 4) In the Technical Session 4 (Academic Block, 5th Floor, Room No. 628), Professor (Dr.) Dulal Mukhopadhaya, Former Professor, Department of Education, University of Kalyani, Kalyani, West Bengal and Dr. Provashis Mondal, Guest Faculty, Department of Education, West Bengal State University chaired and co-chaired respectively

Participation in the Seminar

More than two hundred academicians, research scholars, students, teachers, resource persons, administration personnel and non-teaching staff participated in the seminar. More than forty research papers were presented during the post-lunch session. After the seminar, the Convener is planning to publish the selective papers presented in the seminars in a form of an edited volume from New Delhi.



Closing Session

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On completion of the technical sessions, we came back again to the University Auditorium Hall. Professor Abhijit Kumar Pal, HOD, Department of Education, WBSU delivered the vote of thanks to all

concerned and connected with this seminar. Then Seminar Certificates were distributed among the participants and paper presenters. The One-Day Seminar ended with the singing of National Anthem by all.

Recommendations Based on the Outcomes of the Seminar

- a) To meet the challenges in the context of the 21st century, Educational edifice in India must ensure equitable quality education for all. The Union Government and State Governments should implement the policy reforms envisioned by the NEP 2020 through a coordinated consultation between Union and States.
- b) Adequate financial fund for revamping the system is a prerequisite issue.
- c) The enhancement of quality and relevance of education in India requires the strong involvement not only of governments and of education institutions, but also of all stakeholders, including students and their families, teachers, business and industry, the public and private sectors of the economy, the media, the community, professional associations, nongovernmental organizations and society.
- d) Indian education systems should enhance their capacity to address social needs and to promote justice and equity as a basic prerequisite for attaining and sustaining an indispensable level of quality; and should place students at the centre of their concerns so as to allow their full integration into the global knowledge society of the coming century.
- e) For implementation of the policy propositions embedded in the NEP 2020, nationwide sensitization programmes should be organized and locate the areas where special attention should be taken. There is an uneven development of education across India. So, regional realities should be taken into consideration.
- f) State-sponsored education system should be revamped particularly in teacher education sector for preparing professional and humane teachers with 21st century skills to meet the challenges ahead.
- g) Curriculum at all levels of education should be newly framed in line with the present needs. Vocational education and training (VAT) should be renewed with robust and vibrant infrastructure.h) Etc.



country. It has critically reflected on the newness brought through innovations in the contemporary educational scenario. There was a need for deliberations in the form of seminar to address various issues of Indian education with a futuristic perspective in the light of the 21^{st} century.

Objectives

The objectives of this seminar titled "Education for the 21st Century: Meeting the Challenges of the *Changing World*" is to deliberate various dimensions and issues related to the whole spectrum of Indian education for the 21st century and create awareness about the contemporary policy reforms and propositions. It aims critically to reflect on the newness brought through the National Education Policy 2020 in the contemporary educational scenario in India. The Seminar has been organised mainly to throw reflective note on the emerging areas in line with the policy recommendations embedded in the new policy like curriculum and pedagogical issues, preparation and professional development of teachers & teacher educators in the light of the 21st century, reimagining technical and vocational education, technology-enabled learning, ensuring equitable use of technology, MOOC for professional and continuing education, catalyzing quality academic research and innovations, ethics in research and publication, internationalization of Indian higher education, access, equity and quality: learning for all, financing in the context of affordable and quality

education for all, holistic and multidisciplinary approach in higher education. In brief, this seminar intends to analyse the prospects of these reforms and implementation challenges. It tries to explore data driven multipronged strategies to meet the challenges. **Sub Themes of the Seminar**

It's a one-day seminar. It is really difficult to cover all the aspects and issues related education in the context of the 21st century India. For the benefits of all the target groups, its scope has been extended. The Seminar has been organised mainly to focus on the following areas like –

- Policy Shift in the Educational Paradigm in the 21st Century
- 21st-century Learning and 21st Century Skills
- Equipping Students with 21st Century Skills: Curriculum and Pedagogical Issues
- Preparation and Professional Development of Teachers & Teacher Educators in the Light of the 21st Century
- Indigenous Knowledge and Skills
- Re-imagining Technical and Vocational Education
- Technology-enabled Learning and Assessment Tools
- Online and Digital Education: Ensuring Equitable Use of Technology
- Blended and Remote Learning

✤ Assistive Technologies for the Learners with

Disabilities

- ✤ MOOC for Professional and Continuing Education
- Holistic and Multidisciplinary Education
- ✤ Aligning Curriculum and Institutional Structure with the Multiple Entry and Exit in Higher Education
- Catalyzing Quality Academic Research and Innovations
- Internationalization of Indian Higher Education
- Transforming the Regulatory System of Higher Education
- ✤ Access, Equity and Quality: Learning for All
- * Financing in the Context of Affordable and Quality Education for All
- Ensuring SDG4 inclusive and equitable quality education and promote lifelong learning opportunities for all
- ✤ Holistic and Multidisciplinary Approach in Higher Education: Prospects and Challenges
- Language-in-Education Policy in India
- Holistic, Value-Based Education for Realising the Aspirations Articulated in NEP 2020
- Ethics in Research and Publication
- ♣ Etc.



Inaugural Session

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The Honourable Vice Chancellor Professor Mahua Das could not inaugurate the seminar due to unavoidable circumstances. On her behalf, Professor (Dr.) Abhijit Kumar Pal, the Organizing Director of the Seminar & Head, Department of Education, West Bengal State University with Dr. Sangeeta Angom, Associate Professor NIEPA, New Delhi, Dr. Shnaoli Chakraborty Acharya, Organizing Secretary of the seminar inaugurated the seminar by lightening the Lamp. Then the Opening Song and Felicitation of the honourable guests by our departmental students were done respectively. The IQAC Director, Professor

Sutapa Chatterjee Sarkar was the Patron of the seminar. In spite of her absence in the inauguration programme, Sarbani Mitra, Ph.D. Research Scholar (JRF), Department of Education, WBSU read out the Morning Speech written by Professor Sarkar. After that, Professor Abhijit Kumar Pal delivered the Welcoming Speech. The inauguration phase was ended with the deliberation on 'Overview of the Seminar' by the Convener of the seminar, Dr Ajit Mondal, Assistant Professor, Department of Education, West Bengal State University. Then Dr. Mondal requested Sarbani Mitra to proceed towards Plenary Session.



Plenary

After the Inauguration Session, in the first phase of the Plenary Session Dr Sangeeta Angom, Associate Professor, Department of Higher & Professional Education, National Institute of Educational Planning & Administration (NIEPA), New Delhi made a deliberation on "Exploring Access and Equity Concerns of Higher Education in India". In her deliberation, she pointed out that despite unprecedented growth, the expansion of higher education institutions (HEIs) in India has been extremely uneven and resulted in the neglect of quality, research and managements aspects. In the expansion of higher education, private sector has been playing an important role. Though privatisation has positive impacts on higher education in many aspects, however, concerns are also raised that privatisation harms educational equity and quality due to overemphasis on higher education as a tradable commodity. She also continued to highlight that this issue can be further discussed in terms of their marketoriented courses and higher fee structure. Moreover, lack of policy measures towards mushrooming growth of private higher education and commercialisation of higher education especially the professional courses are becoming important factor for social exclusion rather than facilitating social inclusion in the country. Dr. Angom addressed the role

of private sector in changing higher education In the last phase of the Plenary Session, Professor scenario in the country. She critically analysed the role (Dr) Dulal Mukhopadhaya, Former Professor, of public as well as private higher education Department of Education, University of Kalvani, institutions in India in the context of access and equity. Kalyani, West Bengal discussed the National Her deliberation must have policy implications and Education Policy 2020 from the policy perspective. At contributions to frame about the thinking of expansion the very outset of his deliberation, he mentioned all of higher education with equity. policy reforms embedded in the new policy particularly in the sectors of school education, higher In the second phase of the Plenary Session, **Professor** education and teacher education. Side by side, he pointed out the prospects and challenges of these reforms. Lastly, he emphasised that the increase in the state's financial responsibility is the primary requisite for proper implementation of the policy reforms. He concluded that the new policy has been framed for meeting the demands of the 21st century as well as ensuring the MDG4. In this connection, teachers, learners, researchers and academic personnel must be equipped with the 21st century skills. The State must be committed to provide equitable quality learning for all at all levels for building a robust and resilient education system in India.

(Dr.) KN Chattopadhyay, Department of Education, The University of Burdwan, Burdwan, West Bengal delivered an in-depth and resourceful talk on "Techno-Pedagogical Competency of the Teachers in 21st Century". According him, Liberalization, Globalization, Modernization and Digitalization in the Education system has made a paradigm shift in the methodology of teaching. It converts the conventional chalk-and-talk method to a digital pedagogical or techno-pedagogical approach through multimedia based technical devices. In the traditional education system, where only 3R (Reading, Writing, and Arithmetic) were emphasized, but the modern education system is giving importance to In the last phase of the Plenary Session, Dr. Shnaoli multidisciplinary, interdisciplinary and Chakraborty Acharya, Organizing Secretary of the transdisciplinary across subject boundaries. This seminar and Assistant Professor, Department of transformation helps in boosting the potentiality of the Education, West Bengal State University made a teachers, developing and expanding the information Reflective Note on the deliberations of Dr Sangeeta base of students. It makes the students more Angom, Professor (Dr.) K N Chattopadhyay and competitive in the international sphere. To face the Professor (Dr) Dulal Mukhopadhaya in a nutshell due challenges of the 21st century world every teacher to shortage of time. She also added some emerging should be globally active, digitally transformed, prospects and tensions to their discussions. She then collaborative, creative, competent human resources, invited the audience in the Auditorium to raise pertinent questions related to earlier deliberations. A and quick in adopting change. In his lecture, he discussed the most important competency i.e., technonumber of participants placed their quarries and the pedagogical competency of the teacher which is the respective resource persons in the Plenary Session minimum requirement to adopt the 21st century tried to meet their demands. This session thus ended teaching skills. He also discussed the multiple with give a great applause. pathways to enhance the techno-pedagogical **Technical Session** competency of the teachers. After lunch break, four Technical Sessions were



conducted in parallel for presentation of research papers based on the sub-themes of the seminar. Out of four, two sessions were in offline and two in online mode.

1) In the Technical Session - 1 (University Auditorium Hall), Professor (Dr) Javanta Mete, Department of Education, University of Kalyani, West Bengal & Dr. Tapan Kumar Chand, Guest Faculty, Department of Education, West Bengal State University chaired and co-chaired respectively.