# **GECE-2020**

The 1st Global E-Conference on Education

# Human Cognition in Learning: An Educational Perspective

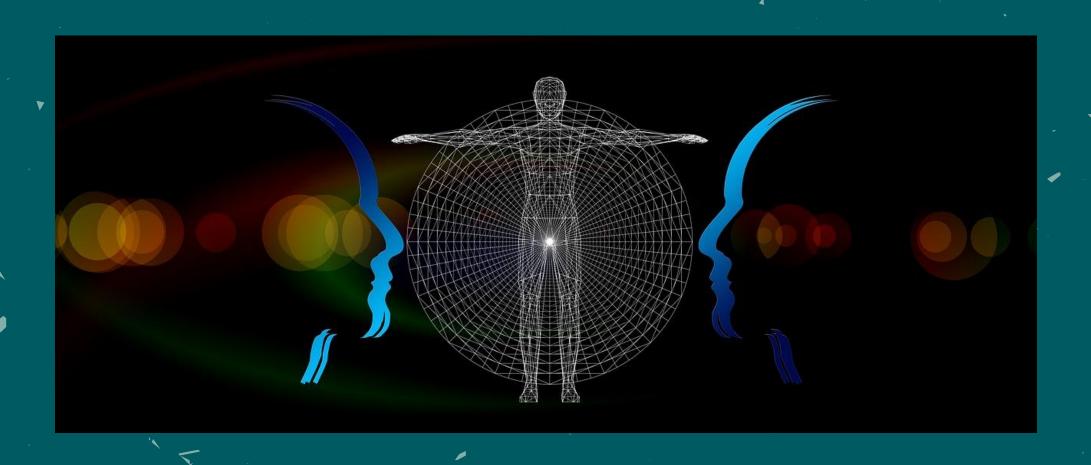
Organisers:



Department of Education, Jadavpur University, Kolkata, West Bengal, India



Department of Education,
Dinabandhu Mahavidyalaya,
North 24 Parganas,
West Bengal, India.



AUGUST 22-23, 2020 | KOLKATA 10:00 A.M.-05.00 P.M. IST VIRTUAL PLATFORM

## **CONTACT US AT**

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#### **Concept Note**

Human has evolved a unique suite of cognition for living collaboratively, learning socially, and exchanging knowledge in cultural groups and which makes him/her more adaptive. The word "cognition" comes from the Latin root "cognitio", which means "to know". Cognition is a mental process of acquiring, processing and understanding the information and knowledge through senses, perceptions, thoughts, beliefs, and experiences. It includes functions like learning, attention, perception, memory, thinking, language, reasoning, problem-solving, decision making, judging, and information processing. Each of these works together to integrate the new knowledge and create an interpretation of the world around us. Learning as a cognitive process involves the acquisition of new knowledge and skills. Piaget and Vigotsky revolutionized the scientific panorama with their theories about development and cognitive learning. Cognitive aspects affect every aspect of our life including learning and education. To investigate the educational perspectives of cognition in learning, we should understand cognitive psychology and cognitive science as well.

Cognitive psychology refers to the study of human mental processes and their role in thinking, feeling, and behaving and includes studies of perception, memory, knowledge, language, problem-solving, creativity, decision making, and reasoning. Further cognitive psychology, neuroscience, developmental psychology, evolutionary biology, anthropology, linguistics, philosophy, computer science, and other research programs together make up the broad interdisciplinary field of cognitive science. It focuses on the process of recognition or cognition, decision-making, and learning with interactions between conscious and subconscious processing in the human brain. The 1990s were declared as the "Decade of the Brain" by the U.S. Congress which symbolize the hope that the mysteries of brain, mind, and behaviour are within our grasp. Cognitive Science assumes that the mind and brain are systems that emerged through evolution and systems of perceiving, remembering, thinking, and learning have evolved in a manner that allows us to adapt to our environment. It pledges a scientific understanding of the human mind and strongly influences learning and education. Now, due to the cognitive revolution, cognitive researchers are spending more time working with teachers, testing and refining their theories in real classrooms where they can see how different settings and classroom interactions influence applications of their theories (Bransford, Brown, & Cocking, 2001). As cognition and learning are inseparable, through our understandings of brain, mind, and learning could be modified by cognitive science, and the educators and educationists could benefit from cognitive sciences, thereupon, educational practitioners and researchers should contribute actively to the research agenda of future cognitive and educational science researches. Hence, it is very essential to understand cognitive processes involved in learning in both formal and informal education settings to improve educational practices.

Having the above dialogue in vision and as cognition and learning are the bedrock on which education system is build up, the 1st Global E-Conference on Education entitled "Human Cognition in Learning: An Educational Perspective" is settled to discuss on cognitive processes and how these processes influence human development, curriculum and the teaching-learning process. This conference will provide a premier interdisciplinary platform to leading academic scientists, researchers, practitioners and educators to exchange and share their experiences and research results on the recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the field of Cognitive Sciences with relation to Learning and Education as a whole. The main focus of this conference is twofold: 1) to understand the human cognition by exploring both ancient and contemporary research methods, theories, findings and advancements of cognitive sciences; and 2) to explore various ways of facilitating human learning and education by applying concepts, principles, theories, methods and research findings of cognitive sciences. Simply, understanding the relationship of human cognition and his/her learning and the vibrant contribution of cognitive sciences to the field of education are the major objectives of this e-conference.

# Sub-themes of the Conference

- 1. Attention, Perception, Memory and Learning: Fundamentals of Cognition;
- 2. Thinking, Problem-solving, Reasoning, Decision making, Intelligence, Emotional Intelligence and Creativity;
- 3. Language Learning (Language Production, Language Comprehension, Language Acquisition), Culture, and Education;
- 4. Knowledge Representation, Mental Representation and Stages of Processing; Hierarchical Systems, Cognitive Architecture, and Consciousness;
- 5. Philosophy of Mind, Theory of Mind, Meta-cognition, and Epistemology;
- 6. Cognition, Instructional Design, Pedagogy, Andragogy, Heutagogy and Curriculum;
- 7. Social, Emotional and Cultural Cognition and Learning;
- 8. Cognitive Development Theories and Theorists in Education;
- 9. Cognitive Learning and Teaching Styles related Theories and Theorists;
- 10. Cognitive Neuropsychology, Neuroscience and Brain-based Education;
- 11. Computational processing and Modelling, Artificial Intelligence, Learning Analytics and Education; and
- 12. Research Trends and innovations in the field of Human Cognition in Learning and Education.

#### **Call for Contribution**

Prospective authors are kindly encouraged to contribute the conference through submissions of abstracts of 500 words with 5/6 key words of their unpublished research works for online oral or poster presentations in the conference. We welcome all types of papers like original research or review based or conceptual or short communication related to the theme or sub-themes of the conference. For the time being, on the basis of submitted abstracts, presenters will be invited for their respective presentation online. However, after completion of the conference and a thorough peer review process, final papers will be invited for publication in two categories i.e. 1. Edited Book from a National Publisher with ISBN or Special Issue of a Peer-reviewed Journal with ISSN; and 2. Edited Book from an International Publisher with ISBN or Special Issue of a CARE listed Journal subject to fulfilling the terms and conditions of the respective publication category. However, the timely detail guidelines for presentation and publication will be given in the conference website and will be intimated through email.

#### **Our Chief Guest**



**Prof. Hrushikesh Senapati,** Director, NCERT, New Delhi, India. Prior to this position, Prof. Senapati was the Principal of Regional Institute of Education (RIE), Bhopal (a constituent unit of NCERT). He is an alumnus of BJB College, Bhubaneswar and Devi Ahilya Bai University, Indore. He also worked with RIE, Bhubaneswar as a professor. His areas of specialisations are teacher education and information and communication technology in education (ICTE). He is an UNESCO expert on ICTE from India. He has more than 30 years of experience in teaching, training, research and extension activities. In addition to many areas concerning school education, he has also worked on integration of ICT into Constructivist Theory of Learning to bring a paradigm shift in the Teacher Education Practices. As an UNESCO expert, he has visited many countries especially for working on the area of ICTE.

#### **Our Guest of Honour**



**Prof. Amarendra Pani,** Deputy Director & Head, Research Division, Association of Indian Universities (AIU), and Editor, University News, New Delhi. He holds a Doctoral Degree in Education from Punjab University, Chandigarh. He is a specialist in the area of Research Methodology in Education. He has worked in some of the apex level agencies in education like NCERT, AIU and some of the premier institutions like Punjab University, Chandigarh and IGNOU, New Delhi, India.

### **Our Special Guest**



**Prof. Basab Choudhury,** Honourable Vice Chancellor, West Bengal State University, Barasat, North 24 Parganas, West Bengal, India. Prior to this position, Prof. Choudhury, Ph.D. (Tech) in Chemical Engineering from UDCT, Mumbai (now ICT) was a Lecturer, Senior Lecturer, Reader, Professor and Registrar of the University of Calcutta, spanning a period from 1991 to 2015. During his academic career, he was an active researcher and worked in various capacities in Netherlands, USA, South Korea, and other places. He was an INSA-KOSEF research scientist. He was a Fulbright-Nehru Academic Administration awardee.

## **Our Key Note Speakers**



**Prof. R. M. Matthijs Cornelissen**, Director, Indian Psychology Institute, Puducherry, India and also teaches Integral Psychology at the Sri Aurobindo International Centre of Education in Pondicherry. He is a Dutch physician who settled in India in 1976. From 1977 to 1992 he worked in the Delhi Branch of the Sri Aurobindo Ashram, where he co-founded, together with Neeltje Huppes, Mirambika, a research centre for integral education. Presently, he is involved in a variety of projects concerned with the development of a new approach to psychology based on the Indian tradition. He founded the Sri Aurobindo Centre for Consciousness Studies in 2001, and the Indian Psychology Institute in 2006. He edited three books namely Consciousness and Its Transformation (2001), Indian Psychology, Consciousness and Yoga (2004), and Foundations of Indian Psychology (in 2 volumes) (2010).



**Prof. Mousumi Guha,** Professor, Department of Philosophy, Jadavpur University, Kolkata, India. She is also a regular member of the teaching and research faculty at the School of Cognitive Science at Jadavpur University. She has done her M.Phil. in Philosophy from the University of Cambridge, England and, Ph. D. from Jadavpur University, Kolkata. Theory of Mind Domain is her primary research area and her areas of teaching and research interests are Cognitive neuroscience, Cognitive Psychology with a special interest in Developmental Cognitive Psychology, Imitation, Mindreading/Theory of Mind in typical and atypical cases with a special interest in the theory of mind of blind persons, Studies in False-Belief Understanding and Philosophy of Mind.



**Dr. Aytekin Demircioğlu,** Associate Professor, Department of Philosophy and Related Sciences, and an Academic Member of Literature Faculty, Kastamonu University, Turkey. He has done his PhD in Philosophy and Related Sciences. He is the Editor-in-Chief of International Journal of Social and Educational Sciences (USBED). He published 7 Books, 3 Chapters, 20 Articles in nationally and internationally. His fields of studies are Philosophy of Education, Value Education and Islamic Philosophy.



**Dr. Muktipada Sinha,** Associate Professor & Head, Dept. of Education, Jadavpur University. He is also Joint Director, Centre for Studies in Cultural Diversity & Well-being, Jadavpur University. He, apart from being a Teacher Educator, also serves as a Mental Health & Life-skill Educator. He has coauthored the book 'Mental Health Problems of School Going Children' that fetched the attention of thousands of parents and educators towards the need for mental health & well-being.



**Prof. Duncan Pritchard,** Professor of Philosophy, University of Edinburgh Scotland, UK. He joined the Edinburgh Department of Philosophy in 2007 as the new Chair in Epistemology. Before that, he was Professor of Philosophy at the University of Stirling. He is also the Director of the Eidyn research centre. His research is mainly in epistemology, and his books include Epistemic Luck, The Nature and Value of Knowledge, Epistemological Disjunctivism, Epistemic Angst and Scepticism: A Very Short Introduction. He is currently leading several externally funded Eidyn research projects, including two major collaborative and interdisciplinary Templeton-funded projects and also the Edinburgh wing of a Marie Skłodowska-Curie European Training Network.



**Prof. Nandita Babu,** Professor, Department of Psychology, University of Delhi. She did her Ph.D. from OISE, University of Toronto, Canada and M.Phil. from CAS in Psychology, Utkal University, Bhubaneswar. She was a recipient of the Canadian Commonwealth Scholarship award and Fulbright Nehru Visiting Teacher Fellowship. She is teaching for more than 31 years at the Masters and PhD level. Her major research and teaching areas are Cognitive and language development, Socioemotional Development, Socio-cultural context and human development, Application of cognitive and social developmental research in education, Intervention research for enhancing positive growth in children and youth, and development of atypical children. Her areas of specialization are Applied Cognitive Psychology and Developmental psychology. She has either authored or edited books like Development of mental state vocabulary and theory of mind in children; Cognitive Processes: Attention, Perception and Thinking. 5th ICSSR Review, and Discovering the life Span. She is reviewing Psychological Studies, Springer-Verlag and remained member to various prestigious boards and associations including National Academy of Psychology and International Association of Crosscultural Psychology.



**Dr. Asma Sobaih,** Instructor at IT Department in Palestine Aliyah University, Palestine. She has done her PhD on neuroscience and data analytics from Germany. Her teaching and research areas are Image processing, Artificial intelligence (AI), Security Algorithm, Database, MS Office, SPSS, and Machine Learning and Computational Neuroscience Educational Projects based on AI and deep learning approaches such as (autism disorder, Alzheimer, and most brain disorders). She has deep experience in Python, statistical analysis using python, data processing and analysis for EEG, MEG and MRI neuroimaging, and received training in data and methods of image analysis and processing using advance techniques from "Istituto di bioimmagini e fisiologia" of the Italian national research" in 2017. Besides, she has been working on developing EU projects for 7 years.



**Dr. Tapan Kumar Basantia,** Associate Professor, School of Education, Central University of South Bihar, Gaya, Bihar.He has more than 15 years of experience in teaching to both undergraduate and post graduate (including M. Phil. and Pre-doctoral) students in many universities. He has already awarded fifteen Doctoral students and nine M. Phil. students under his direct supervision. He has published more than thirty five papers (including edited volumes) in national and international journals and published a book in his area of Doctoral research. His areas of interest and work are research methodology in education and social sciences, psychology of education, creativity, elementary and secondary education, curriculum and pedagogy, educational measurement and evaluation, distance education and educational technology, teacher education and social science education.

# **Our Conference Organising Team**

#### **Advisory Committee**

**Prof. Kunal Chattopadhyay,** Dean, Faculty of Arts, Jadavpur University, Kolkata, India **Prof. C.B. Sharma,** Professor, School of Education, IGNOU & Former Chairman, NIOS, New Delhi, India

**Prof. Abhijit Kr. Pal,** Professor & Head, Dept. of Education, West Bengal State University, WB, India

**Dr. Saber Ahmed Chowdhury,** Associate Professor, Dept. of Peace and Conflict Studies, University of Dhaka

**Dr. Muktipada Sinha,** Associate Professor & Head, Dept. of Education, JU, Kolkata, WB, India

**Dr. Amulya Kumar Acharya,** Associate Professor & Head, Dept. of Education, F.M. University, Balasore, Odisha, India

**Dr. Rajnish Ratna,** Associate Professor, Gedu College of Business Studies, Royal University of Bhutan, Bhutan

Dr.Sujit Kar, IQAC Advisory Committee,
DBM, North 24 Parganas, WB, India
Dr.Zenith Roy, Co-ordinator, IQAC, DBM,
North 24 Parganas, WB, India
Dr.Puja Pal, Co-ordinator, NAAC, DBM,

#### **Organising Committee**

1. All faculty Members, Dept. of Education, JU

North 24 Parganas, WB, India

- 2. **Dr. Ajoy Mallik,** Assistant Professor, Dept. of Zoology, DBM
- 3. Smt. Monorama Dey. SACT, DBM
- 4. **Sharif Khan,** PhD Scholar, Dept. of Education, JU

#### Important Dates

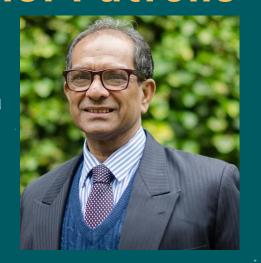
Online registration and submission of abstract: 20th August 2020 upto 4.00 PM IST

Intimation of programme schedule and acceptance of abstract : 21st August 2020

Final submission of selected paper: After the conference (visit conference website) Issue of E-Certificate: 23rd to 30th August 2020

#### **Chief Patrons**

Prof. Suranjan Das, Hon'ble Vice-Chancellor, Jadavpur University(JU), Kolkata, India



Prof. Biswajit Ghosh,
Principal,
Dinabandhu Mahavidalaya (DBM), North
24 Parganas, West Bengal (WB), India



### Conveners

Dr. Lalit Lalitav Mohakud,
Assistant Professor
Department of Education,
JU, Kolkata, India



Smt. Biswajita Mohanty,
Assistant Professor & Head,
Department of Education,
DBM, North 24 Parganas, WB, India





For free online registration please visit: https://forms.gle/uRAxfZtGHkKt1V4s5

For more information please visit: www.gcedu.co.in (14th August 2020, 07.00PM IST onwards)