LONDON SCHOOL® OF MANAGEMENT EDUCATION

# CONFERENCE PROCEEDINGS

9th LSME INTERNATIONAL RESEARCH CONFERENCE ON

# GLOBAL EDUCATION AND THE GREEN ECONOMY

**DATES**
18-19 August 2022

**VENUE**
Hybrid

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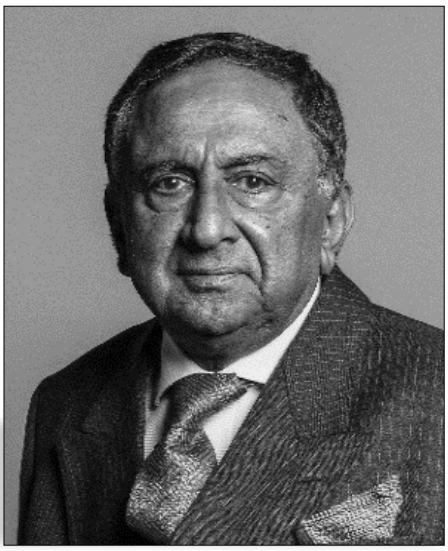
# SPECIAL DEDICATION OF THE 2022 CONFERENCE PROCEEDINGS

## LATE BARON LORD SHEIKH OF CORNHILL



Baron Lord Mohamed Sheikh
1941-2022

It was with great sadness that we learned of the passing of our dear friend and long-standing supporter, Lord Mohamed Sheikh, on the 22nd of September 2022. For a number of years, Lord Sheikh was a regular visitor to LSME and a prominent participant in our external affairs, such as the International Conference series, International Seminars, Degree Convocations and many other celebrations of student outcomes and achievements. A great advocate for the power of education in all forms, Lord Sheikh offered deep insights into the formulation of education policy in the United Kingdom, and brought wisdom and experience gained from a long and successful career in business to those whose lives he touched.

Lord Sheikh contributed much to the evolution and development of the values and social conscience of LSME, imparting words of deep significance and personal relevance in his addresses at Conference and other LSME events. His character was testament to the struggles he personally faced and overcame in rising to a position of well-deserved prominence and influence in UK society and political circles. We owe a debt of gratitude to our dear departed friend, his family and those close to him, for the valuable support and encouragement given to LSME selflessly and tirelessly towards better educational and life chances for all.

We shall miss his influence, his charm and his insights into matters of significance as we continue our journey towards our own higher ideals.

In Memoriam

Late Baron Lord Mohamed Sheikh

# INTRODUCTION

Welcome to the Proceedings Report resulting from the delivery of the 9th LSME International Research Conference in August 2022. This document sets out key materials upon which the success of the event was built, with messages of support and affirmation from those responsible for its design, delivery and future development.

This booklet contains preliminary messages from our specially invited speakers, guests of honour and Conference Committee, and presents abstracts for each of the papers delivered during this year's event.

For those who were fortunate to take part in Conference 2022, the contents of this document will provide a vivid reminder of the experience enjoyed in August. The contents, we hope, will showcase the ideas, perspectives and phenomena shared at the Conference. In particular, we hope you will appreciate the endeavour, creative insight in research and narrative capabilities of the wide ranging academic and social community who took part this year. Their contributions represent valuable attempts to understand significant issues and seek practical solutions in order to improve conditions across our communities, nations and humanity in common.

## MISSION STATEMENT

The 9th Annual International LSME Conference was carefully aligned with the tenets of Responsible Research and Innovation, which have provided an overarching theme for each of our Conferences in the series since 2015. Through these we strive as a research community to:

- Promote social justice, inclusion and equity
- Increase the influence of research on policy and practice in key impact areas
- Increase the commitment of participants in research via active involvement in all stages of an open, principled and inclusive process of investigation and dissemination of findings

These principles are applied equally to all participants, including researchers, academic observers, delegates and the wider communities touched by research projects explored in the conference.

## OBJECTIVES OF THE CONFERENCE

The conference was felt to have met its key objectives, based upon the feedback of participants, which included setting out to:

- To provide an inclusive platform fostering an active community of researchers collaborating
- on issues of social significance and societal concern
- To advance the principles and practices of Responsible Research and Innovations (RRI) in support of researchers at all stages of their research journey
- To provide an open and accessible mechanism for sharing creative contributions to the research agenda across a range of subject matter and discipline areas
- To explore issues facing Education as a Global Human Endeavour, with special consideration of the imperatives arising from the Green Agenda

# MESSAGES

## MESSAGE FROM THE 2022 CONFERENCE CHAIR PROFESSOR STEPHEN MCKINNEY

Dear colleagues,

The 9th LSME International Research Conference addressed the topic of Global Education and the Green Economy on the 18th and 19th of August 2022. This was the first LSME international conference that was conducted on a hybrid basis. The LSME conferences of 2020 and 2021 were entirely online and both were very successful. These conferences were online as a result of the restrictions and lockdowns imposed because of the spread of the Covid-19 pandemic. We now aim to move back to physical face-to-face conferences and the hybrid model represented a transition period between online conferences and physical face-to-face conferences. This hybrid model meant that while many of our presentations were online and most of our participants were engaging with the conference online, there was a small group of people participating in the LSME building itself. While this posed some technical challenges (very efficiently resolved) this was a very enjoyable experience for those of us who were in the LSME building. We were able to discuss the papers and the themes that were emerging from the conference. We were also able to spend some time together and chat over a cup of tea and a biscuit. The aim for 2023 is to attract larger numbers of participants to physically attend the conference.

The conference commenced with two keynotes, most notably a very interesting and memorable presentation by Dr Alison Kitson of the UCL Institute of Education. She spoke about 'Balancing Honesty with Hope: Helping Young People Navigate a Climate-orientated Future'. On the second day, Dr Peter Gray presented a very thought-provoking special lecture on 'Global Education and the Green Economy'. The conference concluded with a very informative special lecture on 'Ethical Dilemmas in Research' by Professor Dr Asif Mahbub Karim of the Binary Graduate School, Malaysia. There were many papers presented at the conference and this proceedings book provides a wonderful overview of the conference and of the variety of papers. I take this opportunity to thank all of those who presented papers at the conference and thank all of those who participated in the conference as delegates. The conference committee was delighted with the quality of the papers and the high level of academic rigour demonstrated in the research. The quality of the papers has been improving every year – thanks to the commitment and application of the researchers.

As always, there was very strong representation from academics in India and a welcome return for some highly valued colleagues and friends. There were also papers from academics from Bangladesh, Brazil, Greece, Maldives, Nigeria, Philippines, Sultanate of Oman and the United Kingdom. The LSME International conference provided an opportunity for many early career researchers to present and discuss their research in a collegial academic setting. This is one of the great strengths, and a deeply satisfying dimension, of the LSME conferences – the practice of supporting capacity building of early career researchers and helping them to develop their thinking and progress their academic profile.

At this point, I would wish to record my personal sadness on hearing of the recent death of Lord Sheikh who died on September 22nd, 2022. He has been our chief guest at previous conferences and at some of our convocations. He was a very successful businessman and was the first Conservative Muslim peer in the House of Lords. He was a man who possessed many gifts. He had a great vitality and was a strong and kindly presence at any gathering. He was an energetic and inspiring speaker – there were always fascinating insights in his presentations, as well as wonderful flashes of humour. Above all, he was very loyal to the LSME, and he became a very good friend to many of us. We will miss him greatly.

I thank Dr Ibrahim Hassan, our Chief Guest, and the guests of honour for participating in the conference. I would like to acknowledge the enormous contribution of the members of the Conference Committee: Dr Ravi Kumar, Dr Peter Gray, Dr Sarita Parhi, Martin McAreavey, Hassan Shifau, Dr Dolly Jackson-Sillah and Dr Alexandra Okada.

The planning for any conference is complex and time consuming and there were further layers of complexity in the logistics when the conference was being planned as a hybrid event. The members of the committee worked very hard in the planning process sessions and all had a major part to play in helping with the daily operation of the conference. I offer them my heartfelt thanks. I offer a special word of gratitude to all those who helped with the review of abstracts. I am also grateful to the VIP guests and other guests (many of whom are long term friends and supporters of the LSME) for their presentations and greetings to the delegates of the conference. The staff of the LSME always provide an invaluable support for the conference and I thank them for their unfailing patience, courtesy and good humour.

The LSME conferences originated and continue to be organised because of the vision and dedication of Dr Ravi Kumar and Dr Sarita Parhi. Their leadership of the LSME is quite inspirational and exemplary. They are very hard working and are committed to the support and care of their students and staff. On behalf of the Conference Committee, I offer our sincere thanks to both of them.

I look forward to the 10th LSME International Research Conference and hope that we can meet face-to-face.

With very best wishes,

**Professor Stephen McKinney**
University of Glasgow and Conference Chairman

## SPECIAL MESSAGE FROM THE CONFERENCE CONVENER: DR RAVI KUMAR – LSME

Dear Friends and Colleagues,

I must start by offering my most sincere and heart-felt condolences to the family of our dear friend and long-time supporter of the LSME International Conference series, Lord Sheikh, whose untimely passing shortly after our 9th Conference event shocked and saddened all who knew and had worked with him. His loss will be felt for a long time to come, and we will miss his special enthusiasm and positive approach to all things dedicated to the bettering of the human condition.

Turning to the 2022 Conference held in August, I wish to extend warm greetings to you all, together with my thanks to all who made the 9th event in the series a resounding success!

Each year since 2015, stakeholders around the globe have dedicated their exceptional efforts, good will and unstinting support to ensure our International Conference delivers outstanding value to all who participate. I am delighted, therefore, to be able to report once again that this year the energy levels, engagement and enlightening inputs were hallmarks of the 9th LSME International Conference on 'Global Education and the Green Economy'. On behalf of the organising committee, I thank our distinguished guests, speakers, presenters, delegates and supporting staff for delivering to the high standards that have come to be associated with and expected of this annual event.

Following the loosening of restrictions associated with the global pandemic that had taken the Conference series online since 2020, we were able this year to offer the opportunity for participation on a blended / hybrid basis. This meant that some elements of the conference continued to be delivered via online platform, whilst other key elements such as Key-Note addresses, main 'Ceremonial' aspects and a number of Special Lectures could be delivered from the LSME campus in London. The blend worked extremely well in terms of enabling access from many distant countries and time zones, whilst also enabling the social and academic interactions that only face to face participation can provide.

As ever the work that went on behind the scenes was invaluable in making the visible aspects of the conference work seamlessly. Members of the Organising Committee worked tirelessly to secure specialist speakers, contributions from prospective presenters in many countries and to coordinate the many elements of the conference into a coherent and cohesive whole. Special thanks go too, to the excellent support given by colleagues and staff at LSME, who contribute their time consistently and selflessly so that everything comes together during the conference.

Our theme this year was one that continues to occupy attention on the world stage – we hope that our contribution through this conference, through sharing ideas anchored in education and driving new insight and energy into the Green Economy, will be valued for years to come. The strong messages in the Key Note addresses resonated clearly in many of the papers delivered across the eight themed streams, and were amplified and reiterated through the skilful chairing of sessions by our experienced team.

The reach and range of our Conference was once again demonstrated in the number of countries represented and the wide demographic profile of delegates, both as presenters and as attendees. This has always been a distinctive quality underpinning the success of our Conference series, and 2022 once again a featured a highly differentiated blend of participants.

The papers at Conference this year were also of a high standard and delivered with pride and enthusiasm by researchers working at all levels in education and industry. Our selected themes this year allowed us to stream papers aligned around common issues, which helped to bring a feeling of connectedness across the event. Of course there remains further work to be done, and In the coming months we will undertake peer review of the

full papers associated with individual presentations. We hope to publish the results of this process in an Open Access compendium early in 2023.

We look forward to your ongoing support and active involvement in our growing international conference. I commend the Conference Proceedings in this document to all who made this year such a success.

**Dr Ravi Kumar**
Executive Director of LSME & Conference Convener

## MESSAGE FROM DR SARITA PARHI – PRINCIPAL, LSME

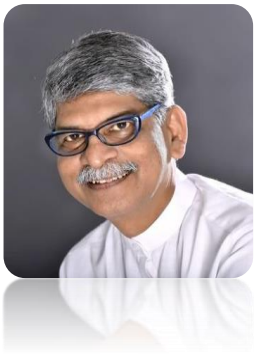
In my role as Principal of a growing and student-focused institution of Higher Education (HEI) I very much appreciate the need for order and commitment in getting things done. Thus it has been my great pleasure to be able to see the development of our International Conference over the past nearly eight years. During that time it has grown considerably in scale and scope, and without doubt the challenges of recent years have increased the complexities associated with staging this event. However, one thing remains constant throughout, from the first conference in 2015 to the present day, and that is the commitment of all stakeholders to make the conference a success.

We adapted well to the challenges brought by Covid, maintaining not only the quality of the programme, but also the ethos and atmosphere that make the conference such a pleasure to attend. During the past eight years the Organising Committee and our wonderful staff at LSME have stayed faithful to the original vision and values set out for the first conference and, even though the faces of participants may change over time, the feeling of belonging to an important and valued community remains the same.

This is partly due to the magnificent effort expended each year by the students and staff of LSME, and partly due to the clear vision, mission, values and ethos communicated by the Conference Team. It is great to see the continuing influence of order and commitment at the heart of the Annual LSME International Conference. We, at LSME, are proud to be at the heart of the ongoing commitment to the event.

**Dr Sarita Parhi**
Principal of LSME

## MESSAGE FROM PROFESSOR RAJAN WELUKAR (GUEST OF HONOUR)



Researchers at all levels and disciplines around the world understand that the journey to arrive at new knowledge is never as straightforward or simple as it may appear to those on the outside. Indeed, delivering a paper at an 'open access' and welcoming forum like the Annual LSME International Conference is only one small milestone of achievement for many, whose journeys continue well after the pomp and ceremony of the Conference are distant, if fondly remembered, history.

The platform for disseminating ideas, offered by the LSME conference, has evolved and adapted in recent years. Whilst the event has always been international in orientation, there is now a much wider international population taking an active part than in early conferences. This poses particular logistical and social challenges to the organising team, such as enabling access across multiple time-zones, integrating non-native English speakers into proceedings, adopting technologies affording participants universal and reliable access and so on. Suffice it to say that the delivery of the conference is built upon significant learning gleaned from experience gained over many years, but still representing something of a minor miracle, in that it seems to work so well for all concerned.

This year, in the 2022 LSME Conference, I was delighted to witness the seamless integration of ideas brought to conference by researchers at all levels of experience, through expertly chaired sessions and the superior technical skills and know-how of the LSME support staff in each stream. It was good to feel the direction of travel within the conference moving back towards face to face participation too. Perhaps we will continue to rely upon technology as an enabling factor in providing access for delegates and presenters in future conferences, but there is no doubt in my mind that direct face to face interaction with an audience including academic experts and peers is of vital importance in growing the next generation of first class researchers that our complex and rapidly changing world needs to secure human existence.

One thing that certainly helps researchers along the way is to have a supportive and critically positive environment within which to share their ideas. This Conference Proceedings Booklet is further evidence that this is something built into the LSME approach, as an extension of the already warm and welcoming community around which the conference is built. I am sure that the LSME International Conference series will be part of building that future. I commend the organisers for making these outputs available and look forward to seeing you at future events.

**Professor Rajan Welukar**
Vice Chancellor, ATLAS SkillTech University, India

## MESSAGE FROM DR PETER GRAY (CONFERENCE ORGANISING COMMITTEE)

It is always a pleasure to watch another LSME conference book unfold from the complex proceedings of the conference itself. This year, the event took place in a hybrid format, as many of you will know. Whilst holding conferences online is usually seen as a second –best mode of knowledge exchange, we should persevere with it, given the current economic circumstances around the world. We can also reflect on the massive amount of carbon saved by avoiding flights and hotel accommodation, even if we would all have preferred to meet in person.

This makes the Proceedings Book even more important than usual, because it comprehensively gathers our transactions in one place. We can read the book at leisure, and can appreciate the massive efforts made by all the authors, presenters and the LSME team. The proceedings can be the basis of something that rarely happens after conferences. By this I mean following up the discussion around papers, and substituting for the conversations that we missed, had we been present at the physical event.

The collegial atmosphere of face-to-face conferences encourages us to talk and share our research or practice. LSME sees this sharing as one of its central missions in research. The Proceedings Book is part of this, as is the forthcoming Research Book in which we will present selected full papers. But we missed some of these conversations in the hybrid format.

I would therefore encourage all our friends and colleagues to pick up this book, read it thoroughly, and pick one presentation that really speaks to you. E-mail, or use whatever social media you choose, to pass your thoughts on to the author, whether these concern the content, the method, or the conclusions. If you cannot find the author online, pass your thoughts to LSME. This will help authors prepare for future events or for having a publication in the Research Book or elsewhere.

We should also reflect on how we can improve the whole conference experience, especially when the situation demands hybrid methods. The technology is out there, and perhaps some of you have suggestions for techniques or channels we could use to support participants, such as the use of whiteboards in Zoom. I think the comments feature has been incredibly useful and we should be looking at how to make better use of it. And of course, we hope that we will once more be able to hold a full face-to-face event in the near future.

Finally, the feature of the LSME conference that gives me most hope is that we have remained true to the original principles of responsible research in our conference themes over the years and in many of the selected papers. The Proceedings Book is an opportunity to demonstrate to the world how we, as a research community, are taking this forward. It is not just an opportunity for emerging or experienced researchers to gain another publication. It is actually something powerful in its own right, demonstrating commitment to change things for the better. I commend it to you!

**Dr Peter Gray**
NTNU, Norway

## MESSAGE FROM H.E DR DURGA BAHADUR SUBEDI, AMBASSADOR OF NEPAL TO JAPAN

Dear Friends and colleagues,

It is an honour for me to associate myself with the 9th LSME International Research Conference, the fourth one in a series that I had the good fortune to attend. My association with LSME and particularly with the International Conference series goes back to 2019 and I feel this affinity has only grown stronger in the past years.

It also gives me immense pleasure to interact with researchers and enthusiasts who lay the foundation of great research that shapes and reshapes our world and its future. Your research today may look like a drop in the ocean of knowledge with no tangible impression, but someday somewhere it is going to make a huge impact and a difference. Over the years, I can see the transformation and the evolution of LSME International Research Conference series – the themes are shifting closer to more practical and current trends and increasing in dynamism which the public would appreciate.

This year's Conference is focused on a critically important theme that, I believe should be on the global development agenda. 'Global Education and Green Economy' are pertinent to survive, sustain and thrive on the Earth.

The unfamiliar weather patterns and the natural disasters affecting thousands of lives has become almost daily news. Scientists and experts account the majority of these occurrences to Climate Change. We need to sustain our lives and our ways of life, which are gradually being threatened by these incidents. We as the generation placed at the tipping point of Climate Change, it is our responsibility to pass on a planet for our future generations to thrive. So LSME has opened up the chapter, let's fill it in with our work to make a difference. We shall make a difference in the lives of our future generations by setting up examples and through education and transitioning to greener economies.

I congratulate all the researchers whose work is featured in this Conference Proceedings Book. Also, I salute LSME and particularly the Conference Committee for the successful International Research Conference series and the efforts and resources invested in good faith.

Good luck and best wishes.

**Dr Durga Subedi**

## MESSAGE FROM THE MAYOR OF REDBRIDGE, COUNCILLOR THAVATHURAY JEYARANJAN

The emergence of the London School of Management Education (LSME) on the local, national and international stage is a source of great pride and encouragement for those of us close to the organisation in South East London. Our pride is gained from watching an institution grow organically, steadily and with great quality in the Borough, providing new jobs, new educational opportunities and new horizons for our citizens. Encouragement comes from the clear trajectory that LSME exhibits, of being an institution capable not only of real impact in today's turbulent conditions, but also of much more in the future.

As an observer at this year's conference, I was particularly struck by the immense variety of topics presented by delegates. It was fascinating to see the skills of the organisers in aligning these with the core theme of the conference, and we learned much about how shared challenges bring differentiated responses from others in different communities. I believe that the sharing of these perspectives is key to the rapid development of solutions to the challenges facing humanity, and I am delighted that many ideas originating around the world may bear fruit here in the Borough of Redbridge.

I look forward to taking part in future events, and extend my grateful thanks to the Conference Organising Committee for inviting me to share in the event in 2022.

**Councillor Thavathuray Jeyaranjan**
The Mayor of Redbridge, UK

## MESSAGE FROM MARTIN MCAREAVEY (MEMBER OF ORGANISING COMMITTEE)

For me, working with colleagues at LSME and the Conference Organising Committee is an affirmation of everything I value in Higher Education. From the diversity of perspectives that are embraced , through to the quality of the thinking and positive orientation in seeking the best from the event, the LSME International Conference series represents one of the most enjoyable and rewarding collaborative activities that I am fortunate to be part of in my academic role. This year, perhaps even more because I was delivering a paper as well as assisting with the organisation, I found the experience to be a real highlight and definitely something to be looked forward to. I can honestly say it is a privilege to be invited to work with such dedicated professionals, such a wide range of contributors and such amazingly positive support staff, especially when the results of the collective endeavour are as well formed as this year's Conference outputs are proving to be.

In my wider role at the University of Bolton I am always delighted to see the results of practical and applied research, where those undertaking it are passionate and proud of their contribution to knowledge. When I look at the achievements led by our good friends at LSME in coordinating and delivering such an enjoyable and worthwhile international conference series over the past 7 years, I am thankful for having been given the opportunity to be part of the team.

There is a great deal that is unseen and unspoken in successful research, as every student and professional academic knows – if we are lucky, we get to share meaningful and purposeful ideas resulting from the long hours expended in pursuing new knowledge. What is contained in this Proceedings Report is testament to the dedication and professionalism of a wonderful and eclectic community of practitioners, who do more behind the scenes than most of us would care to imagine. I can think of no better forum for like-minded researchers to come together in the true spirit of knowledge exchange, than the LSME International Research Conference series.

**Martin McAreavey**
University of Bolton, UK

# COMMITTEE MEMBERS

**Prof Stephen McKinney**
University of Glasgow
UK

**Conference Chairman**

**Dr Ravi Kumar**
London School of Management Education
UK

**Conference Convener**

**Dr Sarita Parhi**
London School of Management Education
UK

**Dr Peter Gray**
Norwegian University of Science and Technology
Norway

**Martin McAreavey**
University of Bolton
UK

**Hassan Shifau**
London School of Management Education
UK

**Dr Alexandra Okada**
Open University
UK

**Dr Dolly Jackson-Sillah**
London School of Management Education
UK

# CONFERENCE PROGRAMME

## DAY 1: 18TH AUGUST 2022 (THURSDAY)

| INAUGURAL SESSION<br>Chairperson: Professor Stephen McKinney | | |
|---|---|---|
| **08:00 – 09:00** | Technical Support to Delegates and Participants | Technical Co-hosts |
| **09:00 – 09:10** | House Keeping Announcements | MC |
| **09:10 – 09:20** | Recognition of the VIP Guests | Hassan Shifau, CRIO |
| **09:20 – 09:30** | Introduction to 9th LSME International Research Conference 2022 | Professor Stephen McKinney, Conference Chairperson |
| **09:30 – 09:35** | Welcome Address | Dr Ravi Kumar, Conference Convener |
| **09:35 – 09:40** | Special Remarks by Guest of Honour | Professor Mokgale Makgopa, South Africa |
| **09:40 – 09:45** | LSME and Responsible Research and Innovations | Dr Peter Gray, Former Research Adviser, NTNU, Norway |
| **09:45 – 09:50** | An Ambition of Supporting Early Career Research | Dr Sarita Parhi, LSME Principal |
| **09:50 – 09:55** | Special Remarks by Guest of Honour | Professor Rajan Welukar, Vice Chancellor, Atlas Skilltech University, Mumbai, India |
| **09:55 – 10:05** | Special Remarks by the Mayor of Redbridge | Cllr Thavathuray Jeyaranjan |
| **10:05 – 10:15** | Inaugural Address by the Chief Guest | H.E. Dr Ibrahim Hassan, Minister of Higher Education, Maldives |
| **10:15 – 10:30** | Vote of Thanks | Dr Dolly Jackson Sillah |
| **10:30 – 10:35** | Group Photo<br>Inaugural Session Ends | MC |
| **PLENARY SESSION: KEYNOTE** | | |
| **Chairperson: Dr Peter Gray**<br>**Rapporteur: Dr Dolly Jackson Sillah** | | |
| **10:40 – 11:10** | Keynote 1<br>**"Global Education and Gender Parity"** | Professor Stephen McKinney, University of Glasgow, UK |
| | Q & A Session | |
| **10 Minutes Comfort Break** | | |
| **Chairperson: Professor Stephen McKinney**<br>**Rapporteur: Dr Dolly Jackson Sillah** | | |
| **11:25 – 11:55** | Keynote 2<br>**"Balancing Honesty with Hope: Helping Young People Navigate a Climate-Altered Future"** | Dr Alison Kitson, UCL Institute of Education, UK |
| | Q & A Session | |

## PARALLEL SESSIONS

| 12:00 – 14:10 | **Parallel Session 1A: EDUCATION**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A per paper]***<br>**Chairperson: Martin McAreavey**<br>**Rapporteurs: Mrs Lydia Mireku and Dr Neelima Lakra**<br>**Technical Host: Andreja Plioplyte** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **12:00 – 12:15** | Sayantani Banerjee | India | Investigating the Relationship Between Occupational Stress and Work-Life Balance Among University Teachers |
| **12:15 – 12:30** | Debapriya Ghosh | India | Holistic Play Pedagogy for Budding Entrepreneurship and Green Economy: Adopting Sustainable Multidisciplinary Approach for Elementary Schools |
| **12:30 – 12:45** | Dr Mini K S | India | Attitude of Prospective Teachers Towards Global Education |
| **12:45 – 13:00** | Abhay Jaiswal | India | A Study of Disabled Students' Satisfaction towards E-Learning Education (with Special Reference to Ujjain City, India) |
| **10 Minutes Comfort Break** | | | |
| **13:10 – 13:25** | Dhanashree Kulkarni | India | Economic and Social Impact of Education |
| **13:25 – 13:40** | Dr Chandan Kumar Tiwari | Sultanate of Oman | Managing Education Using Blockchain Technology: Latest Developments and Future Prospects |
| **13:40 – 13:55** | Rajwinder Kaur | India | Life Skills Education: Paving Way to Socially Competent Individuals |
| **13:55 – 14:10** | Dr Jai Pratap Singh | India | Increasing Accessibility Through Distance Education: A Review of New Education Policy 2020 |

| 12:00 – 13:55 | **Parallel Session 1B: EDUCATION**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Professor Stephen McKinney**<br>**Rapporteurs: Mrs Amanda Babalola & Mr Ramzan Rasheed**<br>**Technical Host: Gabriele Sveiteryte** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **12:00 – 12:15** | Parminder | India | Lifelong Learning and Sustainable Development: In Context to Green Economy |
| **12:15 – 12:30** | Dr Minisha Gupta | India | Implementing Innovative Learning Model in Indian Educational Institutions: A Conceptual Framework |
| **12:30 – 12:45** | Dr Pettala Ramakrishna | India | Accessibility in Higher Education for Students with Disabilities |
| **12:45 – 13:00** | Dr R Subhashini Imran | India | A Vision of Nep 2020 for Universal Education: Foundational Literacy & Numeracy in India - By 2040 |
| **10 Minutes Comfort Break** | | | |
| **13:10 – 13:25** | Mrs Anitha S | India | Accessibility to Education for the Disadvantaged Sections of the Society with Special Reference to Slums of Bangalore Metropolitan City through Social Work Interventions |
| **13:25 – 13:40** | Ms Rajesh Kumari | India | Innovations in Learning and Education |

| 12:00 – 13:55 | **Parallel Session 1C: EDUCATION**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Alexandra Okada**<br>**Rapporteur: Dr Dolly Jackson Sillah**<br>**Technical Host: Sanjeevika Dissanayake** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **12:00 – 12:15** | Ms Paramjit Kaur | India | Significant Role of Blended Learning Approach in the Context of Teaching Learning Process |
| **12:15 – 12:30** | Sarada W | India | Global Education and Green Economy |
| **12:30 – 12:45** | Dr Shalini Singh | India | Challenges of Blended Learning in Management Education |
| **12:45 – 13:00** | Sasanka Sekhar Mahato | India | Teacher's skills in Using ICT in Government Secondary Schools in West Bengal |
| **10 Minutes Comfort Break** | | | |
| **13:10 – 13:25** | Dr Siraj K K | Sultanate of Oman | Open Educational Resources (OER) to Address Educational inequality: Prospects & Challenges in Higher Education |
| **13:25 – 13:40** | Ms Sanchika Taneja | India | Effect of Covid-19 Pandemic on Learning Styles of Adolescents |

| 12:00 – 13:55 | **Parallel Session 1D: ECONOMICS**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Tapati Mukherjee**<br>**Rapporteur: Dr Victor Muchemwa**<br>**Technical Host: Ramaraj Ramasamy & Vaibhavi Patel** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **12:00 – 12:15** | Dr Chandrima Goswami | India | Green Economy: Way to Sustainable Development |
| **12:15 – 12:30** | Dr Rimjim Borah | India | Green Economy Initiatives: Role of Women as Global Agents |
| **12:30 – 12:45** | Amit Kumar Das | India | Identification of Delay Factors and Assessment of the Cost Effectiveness of the Construction of Road Over Bridges in West Bengal, India |
| **12:45 – 13:00** | Anusree Bose | India | Relationship between Financial Knowledge and Financial Behavior: Is there any Mediating Effect of Financial Attitude? |

| 12:00 – 13:55 | **Parallel Session 1E: TECHNOLOGY**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Andrew Chimenya**<br>**Rapporteur: Mr Harsha Subhashana**<br>**Technical Host: Utkarsha Nalawade** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **12:00 – 12:15** | M K Ganeshan | India | Impact of Technology on Education Sector and Green Economy |
| **12:15 – 12:30** | B Bhuvana | India | Impact of Technology on Education and Green Economy Settings |
| **12:30 – 12:45** | Himanshi Joshi | India | A Study on the Positive and Negative Impact of Technology on Education During and After Covid 19 Pandemic |
| **12:45 – 13:00** | Ms Ambica Kumari | India | Digital Storytelling: Innovation in Inclusive Education |
| **10 Minutes Comfort Break** | | | |
| **13:10 – 13:25** | Sanjeevani Sudha Jena | India | Digital Divide among the Faculties of Higher Education amid COVID-19 |
| **13:25 – 13:40** | Muhammed Yazeed | Nigeria | Effect of Digital Orientation on Digital Supply Chain Adoption among SMEs in Nigeria |
| **13:40 – 13:55** | Nupur Nag | India | How Digital Education Empowered the Lives of Rural People |

## DAY 2: 19TH AUGUST 2022 (FRIDAY)

| PLENARY: SPECIAL SESSION | | |
|---|---|---|
| **08:15 – 08:30** | Housekeeping announcements and technical briefings | |
| **08:30 – 09:00 BST** | Chairperson: Professor Stephen McKinney<br>Rapporteur: Dr Dolly Jackson-Sillah | |
| | Special Lecture 1<br>**"Global Education and the Green Economy"** | Dr Peter Gray,<br>Former Research Adviser,<br>NTNU, Norway |
| | Q & A Session | |

| **09:00 – 10:55** | **Parallel Session 2A: EDUCATION**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Peter Gray**<br>**Rapporteur: Dr Minakshi Kishore**<br>**Technical Host: Sanjeevika Dissanayake** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Dr Alexandra Okada 2 | United Kingdom | Green Economy Supported by Open Schooling with Digital Technologies and Inquiry Mapping |
| **09:15 – 09:30** | Dr Alexandra Okada 1 | United Kingdom | CONNECT-Science.Net Supported by the CARE-KNOW-DO Open Schooling Framework to Empower Girls with Science Actions for Sustainable Development |
| **09:30 – 09:45** | Dr Alexandra Okada 3 | United Kingdom | Internationalization for Global Education Supported by Four Pillars: Open Education, Open Schooling, Open Science, and RRI |
| **10 Minutes Comfort Break** | | | |
| **10:10 – 10:25** | Viviane Cristina Marques | Brazil | Intelligent Virtual Assistant in the Area of Nature Sciences for Elementary School |
| **10.25 – 10:40** | Dr Kuldeep Kaur Juneja | India | Blended Learning: An Innovative Approach in Teaching and Learning in Higher Education Institutions |
| **10:40 – 10:55** | Bikram | India | Attitude and Knowledge towards Fire Safety among Students of Higher Education |

| 09:00 – 10:55 | **Parallel Session 2B: EDUCATION**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Victor Muchemwa**<br>**Rapporteur: Mr Jean Serge Koffi**<br>**Technical Host: Vaibhavi Patel** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Styne Joseph | India | Cognitive Structure and Teaching Learning Process: A Systematic Review |
| **09:15 – 09:30** | Swati Raturi | India | Adopting Bloom's Taxonomy for Promoting Student's Life-Long Learning: A Vision of New Education Policy of India |
| **09:30 – 09:45** | Sartaj Ahmad Bhat | India | Inclusive Education in the Changing Scenario |
| **09:45 – 10:00** | Yogita Kushwaha | India | Creating Happy Classrooms through Innovation in Learning and Education |
| **10 Minutes Comfort Break** | | | |
| **10:10 – 10:25** | Martin McAreavey | United Kingdom | Invisible Walls or Open Doors? Real and Perceived Barriers to Collaboration Between Higher Education Institutions and Employers in Their Local / Regional Economies |
| **10:25 - 10:40** | Pooja Sharma | India | Effect of Social-Emotional Competence on Academic Achievement Among Elementary School Students in Relation to their Family Environment |
| **10:40 – 10:55** | Ellenor Joyce G. Bartolome | Philippines | Citizens' Participation in Local Education Governance: An Assessment of the Functionality and Spending Indicators of the City School Board of Caloocan |

| 09:00 – 10:55 | **Parallel Session 2C: SOCIOLOGY & MANAGEMENT**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Rasika Illeperuma**<br>**Rapporteur: Mrs Lydia Mireku**<br>**Technical Host: Utkarsha Nalawade** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Dr Shelly Aggarwal | India | Gender Queer Being Embraced Socially: Global Beacon of Cognizance for Trans Community Amid Adoption in Chandigarh |
| **09:15 – 09:30** | Neelu Jhanji | India | Teachers as Managers: A New Vision |
| **09:30 – 09:45** | Mrs Aparna Sanjay Ger | India | A Study on Factors Influencing Consumer Behaviour on Pre and Post Digitalization of Health Insurance Product in India |
| **09:45 – 10:00** | Dr Anjali Puri | India | Effect of Positive Life Orientation on Ecological Attitude and Cognition During Pandemic |
| **10 Minutes Comfort Break** | | | |
| **10:10 – 10:25** | Mohamed Mahid Shareef | Maldives | High Turnover: A Challenge to the Public Service in the Maldives |
| **10:25 – 10:40** | Dr Dhanonjoy Kumar | Bangladesh | Green Human Resource Management Practices in Public Universities of Bangladesh and its Impact on Sustainable Economic Development |

| 09:00 – 10:40 | **Parallel Session 2D: PURE SCIENCES**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Professor Mokgale Makgopa**<br>**Rapporteur: Dr Michal Lytovka**<br>**Technical Host: Ramaraj Ramasamy** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Kamaljit Kaur | India | Legal Provisions for Children with Learning Disabilities: Across Five Countries |
| **09:15 – 09:30** | Aditi Sharma | India | Quality of Life of Children with Intellectual Disability: Case Studies |
| **09:30 – 09:45** | Dr Rajshree S Rathod | India | Development of a Programme for Students with Hearing and Speech Impairment and its Effectiveness |
| **09:45 – 10:00** | Mangala K J | India | Potential of Boeravinones from *Boerhaavia Diffusa* L. as Hcv Ns3-Ns4a Protease (4a92) Inhibitors by Molecular Docking. |
| **10 Minute Comfort Break** | | | |
| **10:10 – 10:25** | Ms Janki Srivastava | India | A Study on Digital Hygiene Practices of Secondary School Teachers of Lucknow, India |
| **10:25 – 10:40** | Raquel P. G. Kowalski | Brazil | Connect and Participatory Science: The Simulated Jury as a Resource for Thinking About Science |

| 09:00 – 11:10 | **Parallel Session 2E: ENVIRONMENTAL SCIENCES & ECONOMICS**<br>***[Presentation time is 12 minutes and 3 minutes of Q&A]***<br>**Chairperson: Dr Dazy Zarabi**<br>**Rapporteurs: Mr Alfred Anim Agyeman**<br>**Technical Host: Gabriele Sveiteryte** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Adamu Ado Abubakar | Nigeria | Important of Environmental Educational on Eco-System in Third World Countries: Perspectives from Nigeria |
| **09:15 – 09:30** | Charalampidou Penelope | Greece | Global Warming and Chemical Pollution Effects on the Environment |
| **09:30 – 09:45** | Dr Chandrasekharan Praveen | India | Sensitizing Teacher Trainees to Green Economy Initiatives-A Study |
| **09:45 – 10:00** | | | |
| **10 Minute Comfort Break** | | | |
| **10:10 – 10:25** | | | |
| **10:25 – 10:40** | Dr Tapati Mukjerjee | India | Social & Economic Impact Through Green Economy A Look at India |
| **10:40 – 10:55** | Shamsudeen Muazu Salisu | Nigeria | Mediating Role of Competitive Advantage on the Relationship Between Access to ICT and Sustainability of Small and Medium Enterprise (SMEs) in Nigeria |
| **10:55 – 11.10** | Dr Mohd Imran | India | Serial Entrepreneurship Research: A Theoretical Framework |

| 09:00 – 10:40 | **Parallel Session 2F: EDUCATION & TECHNOLOGY**<br>***[Presentation time is 10 minutes and 5 minutes of Q&A]***<br>**Chairperson: Professor Stephen McKinney**<br>**Rapporteur: Ms Victoria Miroiu**<br>**Technical Host: Andreja Plioplyte** | | |
|---|---|---|---|
| **Paper Presentations** | | | |
| **Time** | **Name** | **Country** | **Title** |
| **09:00 – 09:15** | Regina Liberato Shibuta | Brazil | Teacher Development through Science Projects from Open Education |
| **09:15 – 09:30** | Klaus Schlünzen Junior | Brazil | Inclusion and Training Processes in Multicultural Environments |
| **09:30 – 09:45** | Professor Silvar Ribeiro | Brazil | Mobile App Production: Open Schooling and Responsible Innovation During the Covid-19 Pandemic |
| **09:45 – 10:00** | Paula Carolei | Brazil | Gamicity: Constructing A Concept from Transforming and Responsible Practices |
| **10 Minutes Comfort Break** | | | |
| **10:10 – 10:25** | Swati Yadav | India | Technology's Impact on Recruitment, Retention, and Reputation in the Education Sector |
| **10:25 – 10:40** | Paramjit Singh | India | Lifelong Learning in India |
| **10:40 – 10:55** | Ms Priyanka Bhaskar | India | Investigating Factors Affecting MOOCS Adoption Among Teachers of Higher Education Institutions in India |

## Health Break (20 Minutes)

| **PLENARY: SPECIAL SESSION** | | |
|---|---|---|
| **Chairperson: Dr Peter Gray**<br>**Rapporteur: Dr Minakshi Kishore** | | |
| **11:00 – 11:30** | Special Lecture 2<br>**"Ethical Dilemmas in Research"** | Professor Dr Asif Mahbub Karim, Binary Graduate School, Malaysia |
| | Q & A Session | |

## 19 AUGUST 2022 (FRIDAY)

| **VALEDICTORY SESSION** | | |
|---|---|---|
| **11:30 – 11:35** | House Keeping Announcements | MC |
| **11:35 – 11:45** | Recognition of the VIP Guests | Mr Hassan Shifau |
| **11:45 – 11:50** | Introduction to the Valedictory Session | Dr Sarita Parhi, Principal, LSME |
| | Special Remarks by Guest of Honour | Professor Rajan Welukar |
| **11:50 – 12:00** | Photo Presentation of LSME International Research Conference Series | MC |
| **12:00 – 12:10** | Overview of the Conference Proceedings | Professor Stephen McKinney, Conference Chairperson |
| **12:10 – 12:15** | Announcement of the 10th LSME International Research Conference | Dr Ravi Kumar, Conference Convener |
| **12:15 – 12:25** | Remarks by a Member of the Conference Committee | Dr Peter Gray, Former Research Adviser, NTNU, Norway |
| **12:25 – 12:35** | Valedictory Speech by the Chief Guest | H.E Dr Durga Bahadur Subedi, Ambassador of Nepal to Japan |
| **12:35 – 12:40** | A View of the Conference - Delegate | Amit Kumar Das |
| **12:40 – 12:50** | Vote of Thanks | Ms Lydia Mireku |
| | Group Photo & Closing of the Conference | |

# DIGNITARIES & FACILITATORS

| | | |
|---|---|---|
| **Chief Guests** | | |
| H.E. Dr Ibrahim Hassan | Minister of Higher Education | Maldives |
| H.E. Dr Durga Bahadur Subedi | Ambassador of Nepal to Japan | Nepal |
| **Guests of Honour** | | |
| Professor Mokgale Makgopa | University of Venda | South Africa |
| Professor Rajan Welukar | Vice Chancellor, Atlas Skilltech University, Mumbai | India |
| Cllr Thavathuray Jeyaranjan | Mayor of Redbridge | UK |
| **Keynote Speakers** | | |
| Professor Stephen McKinney | University of Glasgow | UK |
| Dr Alison Kitson | UCL Institute of Education | UK |
| **Guest Lecture** | | |
| Dr Peter Gray | Former Research Adviser, NTNU | UK |
| Professor Dr Asif Mahbub Karim | Binary Graduate School | Malaysia |
| **Chairpersons** | | |
| Professor Stephen McKinney | University of Glasgow | UK |
| Martin McAreavey | University of Bolton | UK |
| Dr Peter Gray | NTNU | Norway |
| Professor Mokgale Makgopa | University of Venda | South Africa |
| Dr Dazy Zarabi | Panjab University, Chandigarh | India |
| Dr Tapati Mukherjee | S.K Rai Degree College of Commerce | India |
| Dr Alexandra Okada | Open University | UK |
| Dr Andrew Chimenya | University of Bolton | UK |
| Dr Victor Muchemwa | London School of Management Education | UK |
| Dr Rasika Illeperuma | London School of Management Education | UK |
| **Rapporteurs** | | |
| Dr Dolly Jackson-Sillah | London School of Management Education | UK |
| Mrs Lydia Mireku | London School of Management Education | UK |
| Mr Jose Kattady | London School of Management Education | UK |
| Mr Alfred Anim Agyeman | London School of Management Education | UK |
| Mr Harsha Subhashana | London School of Management Education | UK |
| Dr Minakshi Kishore | London School of Management Education | UK |
| Mrs Amanda Babalola | London School of Management Education | UK |
| Dr Neelima Lakra | London School of Management Education | UK |
| Dr Victor Muchemwa | London School of Management Education | UK |
| Mr Ramzan Rasheed | London School of Management Education | UK |
| Mr Jean Serge Koffi | London School of Management Education | UK |
| Ms Victoria Miroiu | London School of Management Education | UK |
| Dr Michal Lytovka | London School of Management Education | UK |
| **Paper Reviewers** | | |
| Professor Stephen McKinney | Glasgow University | UK |
| Dr Peter Gray | NTNU | Norway |
| Martin McAreavey | University of Bolton | UK |
| Dr Andrew Chimenya | University of Bolton | UK |
| Andrew Kenny | University of Bolton | UK |
| Dr Alexandra Okada | Open University | UK |
| Dr Tapati Mukherjee | S.K Rai Degree College of Commerce | India |
| Dr Victor Muchemwa | London School of Management Education | UK |

# DELEGATES AND PAPERS PRESENTED

| Sr. No. | Name | Title of the Paper | Country |
|---|---|---|---|
| 1 | Abhay Jaiswal | A Study of Disabled Students' Satisfaction towards E-Learning Education (with Special Reference to Ujjain City, India) | India |
| 2 | Adamu Ado Abubakar | Important of Environmental Educational on Eco-System in Third World Countries: Perspectives from Nigeria | Nigeria |
| 3 | Aditi Sharma | Quality of Life of Children with Intellectual Disability: Case Studies | India |
| 4 | Amit Kumar Das | Identification of Delay Factors and Assessment of the Cost Effectiveness of the Construction of Road Over Bridges in West Bengal, India | India |
| 5 | Anjali Puri | Effect of Positive Life Orientation on Ecological Attitude and Cognition During Pandemic | India |
| 6 | Anusree Bose | Relationship Between Financial Literacy and Financial wellbeing: Is there any Mediating Effect of Financial Behavior? | India |
| 7 | B Bhuvana | Impact of Technology on Education and Green Economy Settings | India |
| 8 | Bikram | Attitude and Knowledge towards Fire Safety among Students of Higher Education | India |
| 9 | Charalampidou Penelope | Global Warming and Chemical Pollution Effects on the Environment | Greece |
| 10 | Debapriya Ghosh | Holistic Play Pedagogy for Budding Entrepreneurship and Green Economy: Adopting Sustainable Multidisciplinary Approach for Elementary Schools | India |
| 11 | Dhanashree Kulkarni | Economic and Social Impact of Education | India |
| 12 | Dr Alexandra Okada 1 | CONNECT-Science.Net Supported by the CARE-KNOW-DO Open Schooling Framework to Empower Girls with Science Actions for Sustainable Development | United Kingdom |
| 13 | Dr Alexandra Okada 2 | Green Economy Supported by Open Schooling with Digital Technologies and Inquiry Mapping | United Kingdom |
| 14 | Dr Alexandra Okada 3 | Internationalization for Global Education Supported by Four Pillars: Open Education, Open Schooling, Open Science, and RRI | United Kingdom |
| 15 | Dr Chandan Kumar Tiwari | Managing Education Using Blockchain Technology: Latest Developments and Future Prospects | India |
| 16 | Dr Chandrasekharan Praveen | Sensitizing Teacher Trainees to Green Economy Initiatives-A Study | India |

| Sr. No. | Name | Title of the Paper | Country |
|---|---|---|---|
| 17 | Dr Chandrima Goswami | Green Economy: Way to Sustainable Development | India |
| 18 | Dr Dhanonjoy Kumar | Green Human Resource Management Practices in Public Universities of Bangladesh and its Impact on Sustainable Economic Development | Bangladesh |
| 19 | Dr Jai Pratap Singh | Increasing Accessibility Through Distance Education: A Review of New Education Policy 2020 | India |
| 20 | Dr Kuldeep Kaur Juneja | Blended Learning: An Innovative Approach in Teaching and Learning in Higher Education Institutions | India |
| 21 | Dr Mini K S | Attitude of Prospective Teachers Towards Global Education | India |
| 22 | Dr Minisha Gupta | Implementing Innovative Learning Model in Indian Educational Institutions: A Conceptual Framework | India |
| 23 | Dr Mohd Imran | Serial Entrepreneurship Research: A Theoretical Framework | India |
| 24 | Dr Pettala Ramakrishna | Accessibility in Higher Education for Students with Disabilities | India |
| 25 | Dr R Subhashini Imran | A Vision of Nep 2020 for Universal Education: Foundational Literacy & Numeracy in India - By 2040 | India |
| 26 | Dr Rajshree S Rathod | Development of a Programme for Students with Hearing and Speech Impairment and its Effectiveness | India |
| 27 | Dr Rimjim Borah | Green Economy Initiatives: Role of Women as Global Agents | India |
| 28 | Dr Shalini Singh | Challenges of Blended Learning in Management Education | India |
| 29 | Dr Shelly Aggarwal | Gender Queer Being Embraced Socially: Global Beacon of Cognizance for Trans Community Amid Adoption in Chandigarh | India |
| 30 | Dr Siraj K K | Open Educational Resources (OER) to Address Educational inequality: Prospects & Challenges in Higher Education | Sultanate of Oman |
| 31 | Dr Tapati Mukjerjee | Social & Economic Impact Through Green Economy A Look at India | India |
| 32 | Ellenor Joyce G. Bartolome | Citizens' Participation in Local Education Governance: An Assessment of the Functionality and Spending Indicators of the City School Board of Caloocan | Philippines |
| 33 | Himanshi Joshi | A Study on the Positive and Negative Impact of Technology on Education During and After Covid 19 Pandemic | India |
| 34 | Kamaljit Kaur | Legal Provisions for Children with Learning Disabilities: Across Five Countries | India |

| Sr. No. | Name | Title of the Paper | Country |
|---|---|---|---|
| 35 | Katiuscia da Silva Santos | Mobile App Production: Open Schooling and Responsible Innovation During the Covid-19 Pandemic | Brazil |
| 36 | Klaus Schlünzen Junior | Inclusion and Training Processes in Multicultural Environments | Brazil |
| 37 | M K Ganeshan | Impact of Technology on Education Sector and Green Economy | India |
| 38 | Mangala K J | Potential of Boeravinones from *Boerhaavia Diffusa* L. as Hcv Ns3-Ns4a Protease (4a92) Inhibitors by Molecular Docking. | India |
| 39 | Martin McAreavey | Invisible Walls or Open Doors? Real and Perceived Barriers to Collaboration Between Higher Education Institutions and Employers in Their Local / Regional Economies | United Kingdom |
| 40 | Mohamed Mahid Shareef | High Turnover: A Challenge to the Public Service in the Maldives | Maldives |
| 41 | Mrs Anitha S | Accessibility to Education for the Disadvantaged Sections of the Society with Special Reference to Slums of Bangalore Metropolitan City through Social Work Interventions | India |
| 42 | Mrs Aparna Sanjay Ger | A Study on Factors Influencing Consumer Behaviour on Pre and Post Digitalization of Health Insurance Product in India | India |
| 43 | Ms Ambica Kumari | Digital Storytelling: Innovation in Inclusive Education | India |
| 44 | Ms Janki Srivastava | A Study on Digital Hygiene Practices of Secondary School Teachers of Lucknow, India | India |
| 45 | Ms Paramjit Kaur | Significant Role of Blended Learning Approach in the Context of Teaching Learning Process | India |
| 46 | Ms Priyanka Bhaskar | Investigating Factors Affecting MOOCS Adoption Among Teachers of Higher Education Institutions in India | India |
| 47 | Ms Rajesh Kumari | Innovations in Learning and Education | India |
| 48 | Ms Sanchika Taneja | Effect of Covid-19 Pandemic on Learning Styles of Adolescents | India |
| 49 | Muhammed Yazeed | Effect of Digital Orientation on Digital Supply Chain Adoption among SMEs in Nigeria | Nigeria |
| 50 | Neelu Jhanji | Teachers as Managers: A New Vision | India |
| 51 | Nupur Nag | How Digital Education Empowered the Lives of Rural People | India |
| 52 | Paramjit Singh | Lifelong Learning in India | India |
| 53 | Parminder | Lifelong Learning and Sustainable Development: In Context to Green Economy | India |

| Sr. No. | Name | Title of the Paper | Country |
|---|---|---|---|
| 54 | Paula Carolei | Gamicity: Constructing A Concept from Transforming and Responsible Practices | Brazil |
| 55 | Pooja Sharma | Effect of Social-Emotional Competence on Academic Achievement Among Elementary School Students in Relation to their Family Environment | India |
| 56 | Rajwinder Kaur | Life Skills Education: Paving Way to Socially Competent Individuals | India |
| 57 | Raquel P. G. Kowalski | Connect and Participatory Science: The Simulated Jury as a Resource for Thinking About Science | Brazil |
| 58 | Regina Liberato Shibuta | Teacher Development through Science Projects from Open Education | Brazil |
| 59 | Sanjeevani Sudha Jena | Digital Divide among the Faculties of Higher Education amid COVID-19 | India |
| 60 | Sarada W | Global Education and Green Economy | India |
| 61 | Sartaj Ahmad Bhat | Inclusive Education in the Changing Scenario | India |
| 62 | Sasanka Sekhar Mahato | Teacher's skills in Using ICT in Government Secondary Schools in West Bengal | India |
| 63 | Sayantani Banerjee | Investigating the Relationship Between Occupational Stress and Work-Life Balance Among University Teachers | India |
| 64 | Shamsudeen Muazu Salisu | Mediating Role of Competitive Advantage on the Relationship Between Access to ICT and Sustainability of Small and Medium Enterprise (SMEs) in Nigeria | Nigeria |
| 65 | Styne Joseph | Cognitive Structure and Teaching Learning Process: A Systematic Review | India |
| 66 | Swati Raturi | Adopting Bloom's Taxonomy for Promoting Student's Life-Long Learning: A Vision of New Education Policy of India | India |
| 67 | Swati Yadav | Technology's Impact on Recruitment, Retention, and Reputation in the Education Sector | India |
| 68 | Viviane Cristina Marques | Intelligent Virtual Assistant in the Area of Nature Sciences for Elementary School | Brazil |
| 69 | Yogita Kushwaha | Creating Happy Classrooms through Innovation in Learning and Education | India |

# DAY 1 – KEYNOTES, SESSION SUMMARIES AND SPECIAL LECTURES

This section presents summaries of content presented across both days of Conference proceedings, including commentaries on Keynote Addresses and Special Lectures delivered by invited guests. The section also contains consolidated notes and commentaries written by session Rapporteurs responsible for observing each of the eight themes and eleven parallel sessions in which delegates delivered papers, nearly seventy in all over two days.

## KEYNOTE 1

**Chairperson: Dr Peter Gray**
**Rapporteur: Dr Dolly Jackson Sillah**

**Title: Global Education and Gender Parity**
**By Professor Stephen J. McKinney (School of Education, University of Glasgow, UK)**

Professor McKinney adopted an additional role at Conference 2022, using the opportunity to deliver the first of the Keynote addresses to delegates at the event. He began by exploring how Covid-19 has had a major and unprecedented impact on education throughout the world. This has meant that, for example, at the height of the pandemic, estimates suggest around 90% of schools across the world were closed, thereby impacting schooling for more than 1.6 billion learners. Other themes included concerns about the move to online education modes which raised questions around quality of learning experience and potential learning loss associated with this. This has led to a strong emphasis on 'pandemic' or 'crisis' proofing global education for future generations.

Professor McKinney noted that pandemic proofing and crisis proofing need to be understood within a wider context of global education. This requires taking into account serious challenges that existed pre-pandemic, during the pandemic and which continue remain in the post-pandemic era. Of these serious challenges, gender parity in education formed the focus for this keynote, delivered in four parts:

- Aim and scope of global education
- Contemporary context of global education post Covid-19
- Challenges to formal global education
- Gender parity in global education

**Part 1: What is Global Education?**

Citing UN Declarations, Global Conventions and academic thought-leaders, Professor McKinney set out a broad definition for the concept of contemporary global education and it's goals. In particular, attention was drawn to the convention, universally adopted, that education must be a right and not a privilege, especially in elementary and fundamental stages. Principles supporting this, according to Professor McKinney, exist across most developed and developing nations on the planet. It was noted that the aim for free education now extends to both primary and secondary levels of schooling, which is seen as a welcome and very ambitious development.

**Part 2: The Contemporary Context for Global Education**

Professor McKinney went on to explore the impact of these school closures during the recent pandemic on the education of children and young people. This has led, post pandemic to a movement towards ensuring future 'Pandemic proofing' of global education. The question was raised by Professor McKinney of whether this should be extended into 'crisis proofing' for different crises, for example to mitigate the impact of natural disasters such as hurricanes, tsunamis, earthquakes, or even armed conflicts on school education.

A number of examples were explored including conflicts in Syria, Myanmar, Ukraine and Afghanistan, where It is sometimes no longer safe to even travel to school. In other contexts, regime change has led to dramatic impacts on large sections of society, including restricted access to schooling based on gender, ethnicity and religion. Where such conditions arise, it is vital for educators are able to react accordingly and flexibly in order to meet the need for education despite prevailing crisis conditions.

**Part 3: Challenges to Formal Global Education**

Professor McKinney noted that even before the pandemic there were challenges facing formal global education. For example, the restricting of the concept to the elementary level but not necessarily beyond this stage. Another issue has been difficulties posed by cultural diversity and cultural rights and the need to view these as assets, rather than as obstacles. The issue of 'digital poverty' was explored, in particular the inequities inherent in a global context dominated by commercial interest. A strong statement was made around the difficulties in including those marginalised, disadvantaged, exploited, excluded and even self-excluded from education in fair and equitable assessment of outcomes. This places a strong focus on one of the most serious challenges, which is gender parity in education.

**Part 4: Gender Parity in Global Education**

There are seventeen goals underpinning the concept of the Universal Right to Education. One of the main aims of these is to eliminate gender disparity, or the gender gap, in elementary and secondary schooling. end all forms of gender discrimination towards girls and women, and in particular:

- to eliminate all forms of violence and exploitation,
- eliminate early or forced marriages and genital mutilation,
- recognise unpaid household work and care work,
- ensure opportunities to attain leadership roles,
- ensure access to sexual and reproductive rights,
- equal rights in economic resources,
- enhance the use of technology to empower women,
- strengthen legislation for the promotion of gender equality and the empowerment of women and girls.

Citing a UNICEF report, Professor McKinney stated that around 129 million girls are out of school in 2022: 32 million at the primary level, 30 million at the lower secondary level and 67 million at the upper secondary school level. Only 49% of countries have achieved gender parity in primary schools, 42% in lower secondary and 24% in upper secondary. This suggest there are significant issues for girls at all levels, but especially senior secondary level. It was noted that these issues are amplified in crisis situations.

Improving even basic conditions for girls in schools can make an enormous difference. For example, Improved levels of sanitation such as building more single-sex toilets, can increase enrolment and lead to a fall in the drop-out rate of adolescent girls. It was noted that other measure of success were also necessary, such as female progression through secondary schooling, equal access to resources and drop-out rates.

Professor McKinney drew attention to the impact of equal access to education on other important outcomes, such as life expectancy, child mortality and maternal death rates.

Other confounding influences on female participation in education cited during the keynote included enduring social phenomena such as reliance on females for a greater share of household chores than male counterparts, child marriage and early pregnancy. Overcoming some of these challenges will entail challenging power structures, according to experts cited by Professor McKinney. Because power structures in societies throughout the world mostly privilege boys and men, the disadvantages faced by girls and women must be addressed in order to advance gender equality.

According to Professor McKinney, achieving the right to education for girls and women through gender equality and empowerment, means it needs to be recognised, supported and realised, rather than idealised or Utopian. This will mean committing resources in order to realise the right to the education of girls and women. This may not be straightforward: It will require concerted effort to remove restrictions and barriers to girls and women, support for self-empowerment and agency amongst children and young people in accessing their education rights. Once empowered women must be able to use education and societies must recognise the value of their education. It is not simply about ensuring that the human right to education is recognised, supported and realised, those who are educated must be able to access genuine opportunities. There must be a relationship between processes and opportunities. This relationship between processes and opportunities must be realised and it must be realised for both boys and girls and it must involve gender equality and the empowerment of girls and women.

**Audience discussion**

Dr Shelly shared a thought-provoking picture of a poor child who is not interested in education and posed a question on how we can achieve global education when people are not willing to take up education. In response, the speaker indicated the need to explain the values of education to all societies to motivate people when opportunities are available and agreed it is a very complex issue that requires a multifaceted approach for a long-term solution.

Martin McAreavey posed a question on the fact that many countries like Afghanistan, China and even the USA and the UK and other countries across the world routinely defy human rights and wanted to know what should be the clarion call for those who have suffered any form of human rights abuse and discrimination and are disempowered in terms of education. Prof McKinney agreed that there are human rights problems in the UK and recognised that inclusion is a global issue although in the last 10 years governments are trying to withdraw from human rights issues. He stressed that people have perceived education as a means of encouraging social control. That is, when people are educated, we also teach them how to think in an attempt to gain conformity and compliance with the rules of the political system of our society. He indicated that young people should be made to understand that education is not a privilege but a basic human right principle for all and can empower individuals with the right skills for life and should not be used as political machinery as it occurs in the schools in the UK.

In response to another question on why UNICEF continues to give aid to countries that do not value education (for example Nigeria), Prof McKinney agreed it was a very valid question he will not be able to answer but hopes that things will change rapidly. He made reference to what is happening in Ukraine and highlighted the impact of the conflict on the children. The chairperson, Dr Peter Gray added that it is important to remember that education is not only the responsibility of governments and politicians and as such, the distribution of aid could also avoid the complexities of government policies and bureaucracy and directly channelled to the people who need them most. He highlighted that a clarion call such as ‘Teach me’, ‘Hear me’, ‘Free Me’ and ‘Include Me’ would be very powerful for children to chant. A clear distinction between formal and informal education was made at this point.

Dr Komal Sharma added a comment that education should be productive and should bring about peace, with more collaborations and scholarships and should be offered at the grassroots level. On this positive note, the session came to an end.

## KEYNOTE 2

**Chairperson: Professor Stephen McKinney**
**Rapporteur: Dr Dolly Jackson Sillah**

**Title: Balancing Honesty with Hope: Helping Young People Navigate a Climate-Altered Future**
**By Dr Alison Kitson (UCL Institute of Education, UK)**

Dr Alison Kitson introduced the keynote lecture with a discussion of her role as the Programme Director of the new UCL Centre for Climate Change and Sustainability Education (CCCSE). She indicated that the principle behind this centre is to support all teachers, regardless of their subject area, or the age range they teach to have a support system for professional development on climate and sustainability issues that is reliable, high quality and free. This will boost their confidence and provide them with the expertise to explore these issues in the classroom. The centre is currently conducting research in schools on what teachers are doing to educate their pupils, what young people know about climate issues and what they are doing about it. The aim of this research is to support the development of information for teachers to use in the classroom. Part of this research is the focus of her keynote lecture.

**Part one: Challenges of Climate Change**

This section discusses the importance of climate change and sustainability, education in the last 20 years, and particularly with reference to the more recent COP26 and COP27 in Egypt in November and the launch of the DfE's sustainability and climate change strategy.

The quote by Stephania Giannini, UNESCO's Assistant Director General for Education

*("For our very own survival, we must learn to live together sustainably on this planet. We must change the way we think and act as individuals and societies. So, in turn, education must change to create a peaceful and sustainable world for the survival and prosperity for current and future generations.")* encapsulates the importance firstly of working together to address climate change and sustainability and secondly of the role that education plays in the whole process.

This section also included information from the latest IPCC Sixth Assessment report which, provides a stark warning about the climate emergency (3.3 to 3.6 billion people will be affected by the devastating effect of climate change) and its significance for the school-aged children whose lives will be affected by climate change. The speaker emphasised that the future of our children will be shaped by our actions in the next ten years. The SDG-4: *To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all* and its *target 4.7 on Sustainable Development and Global Citizenship* was also discussed to stress the importance of sustainable education. This target is to ensure that all learners acquire the knowledge and skills needed to promote sustainable development by 2030.

The speaker suggested an acute need for school students to deepen their understanding of the environment, of our place within it, understand climate change and climate justice, and also consider a range of alternative narratives about sustainable lifestyles.

However, these ideas were perceived by the speaker as complex and potentially quite overwhelming as they include, but also extend beyond the science of climate change and can lead to eco-anxiety or even fatigue and indifference.

And for this reason, there is a very urgent need to support all teachers at all stages of their development so they can better support young people in ways that are honest but also empowering.

To forge ahead with research, some of the questions and debates going on are

- How do we define climate change and sustainable education?
- Should it be part of the formal and informal curriculum?
- Is it a curriculum issue or something bigger?
- Do young people need to develop knowledge, skills, agency or values in relation to climate change and sustainability education?
- What are the emotions?
- How do we balance honesty with hope for the future?
- Who are the experts in the schools?
- What does it mean to be an expert?

The aims of the CCCSE research are based on four fundamental principles, and the first of those relates to the fact that environmental issues and the need to live more sustainably affect all dimensions of our life and are therefore relevant to all subjects. Hence the firm commitment to supporting teachers across the whole educational curriculum. This means that offering subject-specific professional development which respects particular subject characteristics is crucial and that is represented by the second principle.

Thirdly, we know from research that young people need teachers who are knowledgeable, not just about climate change itself, but about the ways to frame these issues carefully, to avoid too much repetition or to exacerbate levels of student anxiety. And finally, students need to feel empowered to act. So acquiring skills which will help them adapt to a changing world is also key. Achieving this will require attention to how students are taught as well as what they learn and might, for example, involve more outdoor learning and an emphasis on problem-solving.

In line with these principles, the research findings that were shared were categorised into three target groups; Young People, Teachers and Parents.

**Part 2- Young People**

The speaker presented international data from the PISA 2018 Test database of 600,000 students across 79 different countries published by OECD. This shows that young people feel that climate change is a big problem and there is a need to do something about it urgently. Over 79% of students thought looking after the environment is very important.

A survey on students' capacity to take action shows that young people are likely to take the immediate and tangible actions available to them rather than intangible actions.

In the UK, the Schools, Sustainability Survey of 4600, 10-18 year-olds suggests that young people are interested in learning about the environment from their schools. 58% say they have learnt a lot or quite a bit about the environment in school or college and 71% say they are interested in learning more. 80% say their school encourages them to recycle, 65% reduce litter, and 61% reduce plastic waste. Hence young people are galvanised to take action and their schools are in some way helping them to do so. 85% agree that all schools and colleges should do more to help the environment and 84% want their schools to encourage them to do more to help the environment.

So young people indicated that climate change is a major problem and there was a strong sense of helplessness. They didn't know how they could make a difference globally but there was a universal agreement among them that it should be talked about more in school. However, there was a strong feeling that teachers were not prepared and in many cases, the teachers actually knew less about climate change than them.

There is also a problem of climate anxiety which has left many people with psychological distress. The survey of 10,000 young people suggested that 27% of young people are extremely worried, 32% are very worried and 25%

are moderately worried. Hence climate change has now become a dimension of young people's mental health where over 60% are sad, afraid or anxious about climate issues.

**Part 3: Teachers**

This is another phase of the research designed to help CCCSE to understand how far schools are incorporating a focus on climate change and sustainability education holistically across the curriculum and beyond to help to understand the factors that hinder work in this area in schools to support future development of teacher education programs.

The research was survey-based but also with some focus group discussions and interviews to explore teacher understanding, knowledge and practices.

In contrast, the teachers wanted to be able to provide high quality climate change education for their students across all subjects. But they indicated that they don't have the time or the confidence or the resources to be able to do so. 92% of 503 teachers in the UK from the Teach the Future survey in 2020, feel that adequate training on the subject is a barrier for them.

Another research by Teach the Future in 2021, recently found that 70% of 7500 teachers surveyed said they hadn't received adequate training to educate students about climate change. 41% say climate change is rarely or never mentioned in their schools at all. And these findings were echoed in teacher and student focus groups and parent polling, which UCL commissioned earlier this year.

Similarly, 75% of 352 teachers surveyed by UNSCN/Oxfam in 2019, do not feel they have had adequate training.

**Part 4: Parents**

Fourteen countries involved parents in the PISA 2018 work. The results suggest that 90% of parents from these countries are likely to discuss climate issues with their children particularly to reduce the use of energy at home to protect the climate and about 60% choose certain products for ethical and environmental reasons even if they are a bit more expensive.

Polling was undertaken with over a thousand parents of school-aged children in the UK and the results are very significant for two reasons. Partly because it is the first time that parents have been asked in large-scale surveys about this and also because parents mentioned that climate change is hugely important for young people in their day-to-day life. When parents were asked whether their child has spoken to them about any issues or subjects, the need to protect our environment and climate was the top subject (50%) and was obviously more important than any other subject. So in a wider societal context of significant issues and stresses, for example, racial inequalities, and Brexit, parents are reporting that the environment and climate change are more important to their children than anything else.

**Part 5: Climate Change and Sustainability Education**

The speaker reverted to the question asked earlier '*How should climate change and sustainability education be?*'

This should encompass the science of climate change, biodiversity and ecosystems, people and lifestyle choices, social and climate justice, ethics and our relationship with nature and the possibilities that they can offer us.

Every subject has a role to play, from Psychology, Literature, Religion, STEM and History (the celebration of human civilisation, the relationship between humans and environments).

The speaker emphasised the need to have more porous boundaries between the human and the non-human world and the relevance of teaching history through an environmental lens. This is quite radical but very exciting for history teachers.

**Part 6: Green Careers**

We are supporting young people to think about green careers. In the UK for example there will be significant Job Creation. For example, there will be over 400,000 jobs in energy (National Grid). 30,000 new jobs will be needed every year from 2025 to 2030 to support retrofitting but the right skills are required. All jobs should be green and we need to prepare young people for this.

In a survey in 2014 young people between 14-25 years old were surveyed on their awareness of green careers. The responses suggest that 63% know this to an extent, 45% of these do not know what they need in order to pursue a green career, 20% did not know what a green job is but 79% are interested to know and 57% said they have never been told what a green job is at school.

**Audience Discussion**

In response to a question on how we educate ourselves to see through the pernicious of greenwashing when organisations (big businesses) say they are green but continue to destroy the planet, the speaker suggested the need to encourage children to be critical thinkers by giving them knowledge and skills to demand evidence and interrogate organisations. With this, the lecture came to an end with a lot of compliments from the audience and chairperson for an excellent and fascinating presentation.

# REPORTS FROM PARALLEL SESSION PAPERS AND DISCUSSION

## PARALLEL SESSION 1A: EDUCATION

**Chairperson:** Martin McAreavey
**Rapporteurs:** Mrs Lydia Mireku and Dr Neelima Lakra

**Title of the presentation:** India Investigating the Relationship Between Occupational Stress and Work-Life Balance Among University Teachers

**Name of presenters:** Sayantani Banerjee and Dr Anupama Verma

Investigating the Relationship between Occupational Stress & Work-Life Balance among University Teachers, Sayantani Banerjee and Dr Anupama Verma talked about the different roles a University teacher has to play. What are the challenges they face in playing these roles and how as an outcome this brings them stress in their real life? They highlighted that organisational stress leads to poor work-life balance, poor health and low productivity**.**

This study was based on research on the relationship between occupational stress and Sayantani Banerjee the work-life balance of university teachers, especially public university teachers in Jharkhand, India. The study was conducted with 414 lecturers, analysing the data with descriptive statistics, correlation, multiple linear regression and factor analysis (rotated factor matrix).

The research found that the factors for organizational stress for university teachers are lack of administrative support, recognition and appreciation, open communication with authorities and job autonomy. Thus, it concluded that a strong negative relationship exists between occupational stress and work-life balance.

During the question time, there were discussions about whether there are any differences in stress among school teachers and university teachers. The researchers responded that teachers at school and at university have different kinds of organizational stress and this study benefits in locating the realities of university teachers.

**Title of the presentation**: Holistic Play Pedagogy for Budding Entrepreneurship and Green Economy: Adopting Sustainable Multidisciplinary Approach for Elementary Schools

**Name of presenters:** Debapriya Ghosh and K. Sindhu Bhavani

Debapriya Ghosh and K. Sindhu Bhavani presented a paper on, 'Holistic Play Pedagogy for Budding Entrepreneurship and Green Economy: Adopting Sustainable Multidisciplinary Approach for Elementary Schools'. This was a study on 6 to 10 years' school going children. They emphasised on how this toy-based pedagogy is most recommended for the foundational and preparatory stage from a child of two to three years, that gradually progresses from functional play to symbolic play as the child starts drawing more and more upon her imagination. According to them this pedagogy triggers children to think critically, creatively, communicate, actively experiment, reflect, express themselves freely and solve problems. Also, with careful selection of resources by teachers, children's attention can be grabbed and aligned with holistic teaching-learning transactional processes to make them achieve the learning outcomes. This study also emphasised how toy as a teaching- learning resource has the potential to transform classroom pedagogy. The most important, during the discussions it was seen the children who had made the toys like any paper folding, cards and other related products were able to display them during their school exhibitions and could put them on sale. This supported them in developing their understanding to entrepreneurship a green economy. Also, there were discussions on what are the challenges the researcher faced using the play method in the school. To this they responded, it was difficult to convince the parents for this mode of teaching as they have their natural instincts of conventional mode of education, concerned more on the syllabus delivery rather than this play method. However, schools encourage for this method as today they are using experiential method of learning. And same was with the students, who were happy to look at this new method of learning.

**Title of the presentation**: Attitude of Prospective Teachers towards Global Education

**Name of presenter**: Dr Mini K S

Dr Mini introduced the paper with an explanation of 'attitude' as the summary evolutions of people, groups, ideas and other objects reflecting whether individuals like or dislike them. She added that our world is increasingly interconnecting every day, and students no longer only compete domestically. She pointed out that it is the responsibility of prospective teachers to think about the relevance of global education and develop a proper attitude towards it. The study investigated the attitude of prospective teachers and how it has affected global education. It highlighted how prospective teachers feel towards the promising trends of global education in the Education Sector and looked forward to the insights in the near future. The three hypotheses of the study are;

- The level of attitude of prospective teachers towards global education varies,
- There exists no significant difference in the attitude of prospective teachers towards Global Education with respect to gender, and
- There was no significant difference in the attitude of prospective teachers towards Global Education and the subject stream.

The researcher adopted a descriptive study and a normative Survey method was employed with 100 prospective teachers randomly selected. The collected data was analysed statistically and the findings indicated that there was a significant difference among prospective teachers with respect to gender and subject streams such as Arts and Science. The study suggested ways to promote proper attitude and understanding regarding the subject of "Global Education". It was found that the majority of prospective teachers have an average level of attitude towards Global Education. It was also found that male prospective teachers significantly differ from female prospective teachers in their attitude towards Global Education. It was also noted that Arts stream prospective teachers significantly differ from Science stream prospective teachers with respect to their attitude towards Global Education.

During the question time, the purpose of the research was highlighted further. When asked about one thing that teacher training education can adopt, the researcher answered that 25% of the student population is aware of global education. Therefore, it is the responsibility of prospective teachers to think about the relevance of global education and develop a proper attitude towards it.

**Title of the presentation:** A Study of Disabled Students' Satisfaction towards ELearning Education (with Special Reference to Ujjain City, India)

**Name of presenter:** Abhay Jaiswal

'A Study of Disabled Students' Satisfaction Towards E-Learning Education, With Special Reference to Ujjain City, India' was co-authored by Abhay Jaiswal, Dr. Dharmendra Mehta, and Ajay Jaiswal who accentuated education with e-learning. The study discussed the Rights of Persons with Disabilities Act, 2016 to explore the dimensions of satisfaction towards the use of e-learning for disabled persons in Ujjain, India.

This was an exploratory study conducted on 100 people. The factors looked at were quality of knowledge, innovative teaching aid, time-saving, economic or cost-benefit and accessibility. With the SWOT analysis method the study located, different attributes of e-learning for disabled students. To mention a few, the positives were innovative teaching aids, time-saving techniques, ease of accessibility for a person with a disability that gives the opportunity to be digitally self-independent, open for more career opportunities and being techno-savvy. However, the negative effect of e-learning for the disabled include, the extra cost burden, internet network connectivity issues, demanding costly support devices with threats to the hacking of personal data and technological dependency while losing the traditional approaches to learning.

During the question and answer session, a question on the generalisation of these factors to larger groups in different settings was asked. The researcher responded that he himself has been one among the group and as an insider has come across these factors at several events and more specifically during the Covid-19 pandemic situation. Another question on the different forms of disabilities that this research applied to was responded to. The author suggested that those with visual impairment have been able to use online platforms, and those with hearing impairment were able to use audio devices for their e-learning sessions, concluding that the quality of teaching and innovative teaching aids needs to incorporate the e-learning-based education system.

**Title of the presentation:** Economic and Social Impact of Education

**Name of presenter:** Dhanashree Kulkarni

Dhanashree Kulkarni commenced by giving an overview of what education is. She mentioned the role of education in the development of the nation economically and socially. She added that higher literacy of the state leads to higher income, a high standard of living, higher employment opportunities, a better health system and fulfilment of other development indicators. She mentioned how India has a strong educational system dating back to the ancient period. She proceeded to highlight the three sectors of education, which are Primary, Secondary and Tertiary and emphasised that a strong educational foundation should be built on primary education. The objectives of her study were to examine the impact of education on the economic and social structure of India, to explore the intensity of education with employment and economic growth, to identify the role and significance of education and finally to identify the challenges in the education sector in the 21st century.

The researcher used secondary sources such as newspapers, research articles, books, websites, magazines and documents published in national and international journals that are related to the impact of education.

The following Hypotheses were proposed:

- There is a positive correlation between education and social development,
- There is a positive correlation existing between education and the economic development of the nation
- Economic and social development are dependent on Education.

The researcher presented the challenges faced by the education system in India as quality, privation, cost, and inadequate facilities for infrastructure, especially in rural areas. It was concluded that there should be an awareness of digital education as India is currently moving into digital education. It was also mentioned that the quality of education should be improved and student-centred approaches should be adopted. It was also concluded that quality development strategies and policies must be put in place to ensure these work.

During the discussion time, a question on what approaches and time period the researcher used for her data collection was asked and she answered that a systematic approach was used and added that the education system has shifted from ancient to modern and now to digital, therefore, three system approaches were used in the data collection process. Another question that came up was how far did the researcher go into history? She answered that she delved into history from 2000 to 4000 years back.

**Title of the presentation:** Managing Education Using Blockchain Technology: Latest Developments and Future Prospects

**Name of presenter**: Dr Chandan Kumar Tiwari

Dr Chandan Kumar Tiwari, Dr Preeti Bhaskar and Dr Amit Joshi co-authored a paper on 'Managing Education Using Blockchain Technology: Latest Developments and Future Prospects, that was presented by Dr. Chandan Kumar Tiwari. This study emphasised managing education using blockchain technology. The study's objectives were to present the latest developments and contributions of blockchain technology in the academic literature. He highlighted the barriers associated with blockchain implementation as well as the present applications. The final objective was to suggest some future applications of this technology in education.

In this systematic review, the study used research conducted between 2017-2022. It found an increasing trend in all areas suggesting an increase in the relevance and usability of blockchain in education. Also, it was observed that several countries have come together to work in this area.

During the discussions of this paper, there were comments on how this technology may harness, Bitcoin and other cryptocurrencies to make people rich. In answer to this, the presenter reflected on how this might be easier in developed nations like UK or USA, however, might go comparatively slow in countries like Brazil, India or China. There were discussions on how bitcoin and cryptocurrencies can bring in massive unemployment. Also, there were insights into how there are still three to four years to go for the rampant use of this technological feature of blockchain and the acceptance of blockchain as one of the most significant and innovative technologies in recent years.

**Title of the presentation:** Life Skills Education: Paving Way to Socially Competent Individuals

**Name of presenter:** Rajwinder Kaur

Rajwinder Kaur started her presentation with the three basic theoretical perspectives of sociology; functionalism, conflict theory and symbolic interactionism, which according to her, provide the basis for the study of education from a sociological point of view. She proceeded to talk about the role of education in the fulfilment of societal needs, which is the basic assumption of functionalism. She further emphasised the social development of the child through various functions viz. socialisation, social integration, social placement and cultural innovations. She added that Life Skills help to enhance the quality of civic life and positive social relationships. She defined life skills from different perspectives and said it is the only answer to sustainable education. The researcher also explained that Life Skills based education is needed for the sustainable development of society and the development of humanity.

The researcher highlighted that across the globe these functions vary due to disparities in social norms and variations in culture. She said, despite all these disparities, education is the only vehicle, which can promote the development of societal norms, values and skills for the effective functioning of society and the socialization of the child. She further stressed that Life Skills based education is necessary for the development of skills among children in this technological and faster-growing era where the value system is deteriorating at the same pace at which society is growing economically and technically. Therefore, teaching life skills develops the capacity to deal with the problems of life in a positive way.

Using a literature review, her study revealed that research studies have supported that life skill education has resulted in a reduction in the usage of drugs, sexual abuse and HIV/AIDS among others. The researcher further stressed that many other social and mental problems, which can hinder the process of the development of the child, can be tackled in an effective way through the training, intervention and integration of life skills education. Therefore, life skills-based education can reform the social structure and may lead to the sustainable development of society.

It was concluded that life skills education is the way for the development of socially competent individuals that maintain the balance and equilibration in society and indirectly proceed towards sustainable development of the society. Further, conceptual understanding and practising of the skills occur through experiential learning in a non-threatening setting. Such provisions provide a wide range of options and creative ways of solving problems.

There was no time for questions in this presentation.

**Title of the presentation**: Increasing Accessibility through Distance Education: A Review of New Education Policy 2020
**Name of presenter:** Dr Jai Pratap Singh

Dr. Jai Pratap Singh presented the paper 'Increasing Accessibility Through Distance Education: A Review of New Education Policy 2020'. He began with the importance of the education system and how it has the power to develop any country's socio-economic condition through inclusive education. Dr. Singh highlighted the evolution of the education system in India from the ancient Gurukul system that was appreciated worldwide for providing high-quality Education in India to the existing Open University system that is today established as the world's largest university education through distance mode. Further, the paper also discussed various commissions and policies since 1948 and questioned if India today has been able to attain an education that is inclusive and accessible.

While having an intense discussion on the New Education Policy 2020, the study concluded the policy has made attempts to make the education system of India more inclusive and accessible by taking decisions on providing funds, scholarships, support, and encouragement for students who belong to Socio-Economically Disadvantaged Groups across genders, and, promoting lifelong learning opportunities. Other than this, the policy also talks about the accessibility of education through the distance mode while keeping quality in mind.

During the question and discussion session, a question on if the policy has made any provisions for ensuring the quality of distance education is as good as in-person education was raised. The presenter emphasised that every kind of education has its own attributes, and, therefore different parameters should be used to look at different modes of education. So, rather than looking at the individuality of distance education, we should rather talk about developing distance education as a unique and full fledge type of education to attain 100 % gross enrolment ratio.

## PARALLEL SESSION 1B: EDUCATION

**Chairperson:** Professor Stephen McKinney
**Rapporteurs:** Amanda Babalola and Ramzan Rasheed

**Title of presentation:** Lifelong learning and Sustainable Development: In Context to Green Economy

**Name of presenter**: Parminder - Research Scholar, Department of Education and Community Service, Punjabi University, Patiala, India

Ms Parminder commenced her session by stating that lifelong learning is considered to be an essential process of development. She stressed on integration of learning and living, covering learning activities for people of all ages including children, young people, adults and the elderly, girls and boys, women and men in all life-wide contexts (family, school, community, workplace, etc.) through a variety of modalities (formal, non-formal and informal) which together meet a wide range of learning needs and demands.

She stressed that the development strategy called the green economy is needed to synergize both economic development and ecological sustainability. The green economy is one that aims at reducing environmental risks and ecological scarcities and aims for sustainable development without degrading the environment. She further exemplified that today's world faces economic, social, cultural, and environmental challenges which can benefit from a lifelong learning education approach. She affirmed that lifelong learning provides a strong framework for the implementation of the Sustainable Development Goals (SDGs) and can be a good tool for stakeholder engagement, international cooperation, partnerships creation, social inclusion, gender equality and poverty alleviation. She asserted that in a world where outsourcing takes place, there can be no doubt that the need to protect our planet, and the resources it provides, is imperative.

It thus makes sense that as we switch to a more resource-efficient and Green Economy – one in which economic growth, social equity and human development go hand-in-hand with environmental security, business and industry will be key driving forces. People, planet, and profit is the mantra already adopted by many companies in the pursuit of corporate sustainability. The role of lifelong learning in promoting a green economy for sustainable development is to create education for people and the planet.

She concluded by saying, the main challenges for lifelong learning in global education for sustainable development are the inducement of informal learning opportunities; stimulation of self-motivated learning; acceptance of self-funded learning; and stimulation of universal participation in the learning process. Learning throughout life appears in the centre as an important tool to help societies constantly move toward the achievements of the SDGs.

There were no questions from the audience, however, the chairperson Professor Stephen McKinney asked about the difference between formal and informal education. The response suggested that formal education is structured education in the classroom setting or online with teachers and non-teaching members of staff, using a standardized curriculum. Informal education is the learning we gain from society without any academic structure. Hence lifelong learning is not restricted to the academic setting but goes beyond that to settings where all people share experiences to enable informal learning.

**Title of the presentation**: Implementing Innovative Learning Model in Indian Educational Institutions: A Conceptual framework

**Name of presenter**: Dr. Minisha Gupta

Dr Minisha began her session by stating that the wide spread of Covid-19 and the fourth industrial revolution (Industry 4.0) has impacted educational institutions but inspired both teachers and students to be more innovative in their ways of teaching and learning. She added that the resistance to change in India has made it difficult for institutions to implement innovative learning models in most educational institutions. The study aims to propose a conceptual framework for innovative learning models which can be implemented in Indian educational institutions.

Using an interpretative phenomenological analysis (IPA) technique she selected 25 teachers working in HEIs of the Delhi-NCR region, India and conducted semi-structured interviews for 60 to 130 minutes and analysed their responses with ATLAS. ti (Version 8).

The findings suggested barriers such as organisational, psychological, personal, technological and also financial barriers as the factors that contribute to the resistance to change and acceptance of innovative learning models by the teachers and students in Indian educational institutions.

In conclusion, Dr Minisha stated that constraints must be handled in order to ensure the smooth implementation of the Ed-Tech model in Indian educational institutions. She also added that measures taken to stop resistance would also be helpful in meeting the expectations of the industries that always look for talented individuals in order to face the challenges of the fourth industrial revolution.

When asked how the researcher sees the implementation of the Innovative Learning Model in higher education in general, Dr Minisha answered that with government support and training, this innovative way of teaching and learning could be embraced in India not only in Higher Education but across various educational institutions. She added that the high level of poverty in India hinders access to technology and innovative teaching models. Hence government intervention through the provision of resources would be of significant value to Innovative Learning.

**Title of the presentation:** Accessibility in Higher Education for Students with Disabilities

**Name of presenter:** Dr P. Ramakrishna PhD, Assistant Professor of Spl. Edu (HI), Dept. of TT & NFE (IASE), JAMIA MILLIA ISLAMIA, New Delhi, INDIA.

Dr Ramakrishna opened the session by suggesting that a student with a disability, namely intellectual, emotional, or physical, requires assistance to access the educational environment. Higher education is very critical to such persons in their employment and also to live independently in society. Taking this into account, stakeholders are focusing on creating an inclusive educational environment. Hence, Dr Ramakrishna illustrated this with simple questions backed by statistics which was the focus of most of the research presentations in his session.

The investigator adopted the descriptive research method through a statistical data representation depicting a sample of 100 students. These students were studying at the UG to PhD level and had a range of disabilities. They were selected from four major metropolitan cities across India. The type of disability and the problems were divided into four categories with an equal number of students in each category of 25 students.

It came to light from the data analysis that the majority of Students With Disabilities (SWDs) (94%), requiring additional learning support were from the SwHI category – with Interpretation/ALDs problems and by comparison, the least (68%) were students with Locomotor Disabilities (wheelchair users). From the other two categories, 87% of SwVI students had Tactile Path/Aids problems, whereas 72% of students with 'other' disabilities had Scribe problems.

He concluded by emphasising that this data interpretation was food for thought on which areas to focus on when providing higher education to students with disabilities and when formulating plans for additional learning support.

During the question and answer, Professor McKinney enquired about the main barriers to higher education for disabled people. The response suggested that the barriers vary from one type of disability to another whether entering into school or any other type of educational organisation. Those with mobility issues experienced accessibility challenges. They will be given orientation mobility practice. Those with intellectual impairment had difficulties with interpretation and required additional support for comprehension.

**Title of the presentation:** A Vision of NEP 2020 For Universal Education: Foundational Literacy & Numeracy In India --By 2040

**Name of presenter:** Dr R. Subhashini Imran

Dr Subahashini Imran opened his session with his view on Global Education. He stated that education should be a fundamental resource that should be available to all individuals. In most countries, basic education is seen not only as a right but also as a duty to which the government is expected to ensure its citizens have access. He highlighted the fact that literacy and numeracy are significant requirements for education as it helps to develop fundamental understanding and competencies among young learners and also help to develop skills in learners to integrate their outside-of-school experiences into their classroom. He added that pedagogy in education must evolve to make learning more learner-oriented with an opportunity for collaborative learning with discussions, interactions and activities that makes learning more pleasurable.

Dr Imran mentioned a number of activities that can produce appropriate pedagogical interventions in primary grade courses such as the introduction of Multiple Classroom Processes, Interaction with Teachers of Other Classes, Research in the Field of Pedagogy, Restructuring of Teacher Education Programs, Reconstruction of Existing Pre-service Programs, Development of New Pre-service Programs, Capacity Building Programs for the Existing Teachers Development of Modules for Teachers, Revisiting Assessments, A diversity of Assessment Tests and Techniques, Development of Model Assessment Test based on Learning Outcomes, Development of Question Bank, Creation of Audio-Visual tools for Assessment, Administrative Support, Recruitment of Quality Teachers regularly, Assuring the Health of children and also the Development of Community Participation.

In conclusion, Dr Subahashini Imran acknowledged that global education plays a significant role in the literacy world. Children must be taught from the early learning stage how to be critical thinkers and problem solvers. He also mentioned that the ethos of the National Education Policy in India stems from the ambition to convert India, or Bharat into a sustainable and thriving knowledge society which is being achieved by offering high-quality education to all so as to transform India into a global knowledge superpower.

**Title of the presentation:** Accessibility to Education for the Disadvantaged sections of the society with special reference to slums of Bangalore Metropolitan city through Social Work Interventions.

**Name of presenter:** Mrs Anitha S. – Faculty, Department of Social Work, Ramanagara PG Centre, Bangalore University.

Mrs Anitha's session was based on a research study done by BIRDS NGO on the disadvantaged sections of the slums of Bangalore metropolitan city. The study was limited to 6 slums namely HennurBunde, Nagenahalli, ByrathiBunde, Bagalur, Doddagubbi and HRBR Layout. These slams were targeted to tackle the issue of migration and challenges faced by unskilled labourers consisting of caste, tribe and other backward classes. Fifty Children in total were selected for the study. The primary data was collected through structured interviews, observation and focused group discussion integrating the geriatric social workers as well. Secondary data was collected through research articles published, edited books and through government publications.

The intention of the study were to identify and assess the problems faced by these children, especially children who were school drop-outs; to investigate the various ways in which the children of these construction workers can gain access to education; to provide awareness by convincing their family members to send their illiterate children to get a formal education and vocational training to become skilled and educated.

The finding suggested that education is the most effective instrument to empower them for social mobility. Furthermore, their children lack basic amenities such as food, clothing and shelter, and as education is out of their reach, they spend their time playing at the construction site where their parents work, often in very unsafe and unhygienic conditions. In some construction worksites, older children take care of small babies too.

In conclusion, Mrs Anitha highlighted that it was recommended that these children be referred to the trustee of the Ananda Sagara Bluetent NGO where they could get basic amenities along with education; free food, clothing and shelter. Moreover, social workers intervene through focused group discussion to suppress the oppression and empower these poor people as they were socially stigmatized and discriminated against by the upper-class sections. The Social workers organize alcohol awareness sessions inside slums to improve the health conditions of these disadvantaged sections of society.

There were no clear questions at the end of the presentation due to time constraints.

**Title of the presentation:** Innovation in Learning and Education

**Name of presenter:** Mrs Rajesh Kumari

Mrs Rajesh Kamari set off the research paper by accentuating innovation in connection to learning. She expressed that it is through innovative learning that creative leaders could be developed. She expressed that it has become natural for our generation to associate innovation with using the power of technology to reduce effort. However, although innovation is often linked to technological advancement, an important aspect goes beyond the use of new technology. Innovation was thus defined as the ways in with an institution would make a conscious effort to update, change, and also improves its internal processes and helps introduce new concepts and knowledge.

The presenter went further to express that innovation in education is an introverted phenomenon that is not fully utilized. Some decades ago, teachers were of the opinion that their students could retain information provided to them in class for a lifetime. However, in today's fast-paced society, schools need to prepare students for more rapid economic and social change than ever before. Training should consider jobs that have not yet been created and the use of technologies that have not yet been invented to solve social problems that we do not yet know will arise. Then she expanded on innovations in teaching methods like the use of smart boards, teacher blogs, online teaching, creating real-life examples, flipped classroom teaching and cloud computing.

The researcher's paper was built on previous documented work done by exploring new forms of pedagogy for an interactive world. An integrated framework was adopted to select pedagogies for inclusion in the presented paper.

The presenter added it is disappointing to find that technology seems of little help in bridging the skills gap between advantaged and disadvantaged students and ensuring that every child attains a baseline level of proficiency in reading and math seems still to do more to create equal opportunities in a digital world than subsidising access to high-tech devices and services. The use of technology in education needs to be combined with an understanding of how students learn, how skills and competencies are developed, how knowledge is represented through different media, and how learners use different senses for learning. She added that there is a widespread notion that educational systems should empower learners with skills including critical thinking, digital literacy, collaborative skills, and problem-solving skills in addition to innovative skills. She opined that, without such basic understanding, innovation in teaching will not be valid or successful.

Mrs Kumari concluded by pointing out that innovation is a driver of growth and wellbeing. She also confirmed that continuous improvement among stakeholders will undoubtedly nurture people's innovative skills.

The presenter was asked about the method that could be best recommended for innovative education. She responded that allowing an inclusive method and encouraging digital literacy are very important in schools. In addition to this, the use of 3d printing, social media and smart boards will improve social interaction among students.

## PARALLEL SESSION 1C: EDUCATION

**Name of Chairperson:** Dr Alexandra Okada
**Name of Rapporteur:** Dr Dolly Jackson Sillah

**Title of the presentation:** Significant Role of Blended Learning Approach in the Context of Teaching Learning Process

**Name of presenter:** Ms Paramjit Kaur, Assistant Professor, Department of Education, Sant Baba Bhag Singh University, Jalandhar, Punjab, India**.**

The presenter highlighted the importance of student-centred active learning in the 21st century with the use of technology to facilitate blended learning as a means of enhancing learning outcomes. Blended learning was defined as a combination of traditional face-to-face learning with distance learning with the use of appropriate technology. The majority of academics (77%) perceived the blended learning approach as superior to the traditional learning methods as it increases active learning skills, prepares learners for the tech-centred world, improves access to information and enhances the achievement of learning outcomes.

Her study aims to explore the justification for the use of blended learning in education and the different models of blended learning and their impact on education. The author drew the following conclusions from a thorough review of existing literature from journals, books and websites. The review discussed the relevance of different models of blended learning including, Face-to-face model of blended learning, the online driver model, the rotation model, the flipped classroom model, the flex model, the individual rotation model, the gamification model and the online lab.

The specific justifications for the use of blended learning included facilitating instantaneous communication & collaboration, flexibility and ease of access (Avazmatova, 2020). It also provides individualised support and a fun-filled educational experience that supports achievement, engagement, involvement and student retention (Romli (2019). However, the high cost of infrastructure set-up and the huge technological dependence and IT literacy make the use of blended learning a burden for many teachers. Others are discouraged because of the lack of supervision and increase workload for students.

The author concluded by recommending effective training of teachers on the use of hybrid teaching technology and the provision of infrastructure to support its use. Unfortunately, time did not allow for further discussion on this interesting topic.

**Title of the presentation:** Global Education and Green Economy

**Name of presenter:** W. Sarada, Assistant professor, RBVRR Women's College, Hyderabad, Telangana, India,

The speaker introduced the topic of Global Education and Green Economy, focusing on the use of already published research for future development and planning around the topic. A definition of global education and the green economy was provided in line with a detailed account of what needs to be done and how various strategies can be shared in the classroom.

He highlighted some strategies such as Schoolteacher-directed instruction, interactive guidance and student-centred instruction where the educationist is a facilitator, who provides learning opportunities to the learner to get involved through case studies, problem-solving and discussion. Other educational strategies of note included fostering the development of a learner with planned assignments and computer-supported instruction experiential erudition where the learner learns through experience and formulate plans to apply knowledge to other surroundings in new situations or with simulations and games.

The presenter further went on to discuss sustainable development and how this can be achieved when we develop better educational quality for all.

Although time did not permit further discussions, the presenter managed to respond to questions posted in the chat. One question indicated that achieving a green economy is very broad and involves all sectors. Hence, the presenter should summarise how they think a topic of this nature can be embedded holistically in an existing curriculum. In response, it was suggested that this concept can be embedded in renewable energy, waste management, water management, green buildings, sustainable transport, agriculture, fisheries and forestry which are different sectors of the economy where major changes are required.

**Title of the presentation:** The Challenges of blended learning in Management Education

**Name of presenter:** Dr Shalini Singh, Assistant Professor, School of Management, IMS Unison University, Dehradun, India

The presentation started with a brief description of blended learning and how it has been used since 1990 in language training and the development of other skills. Using an extensive literature review, a qualitative interview with 30 Management students and content analysis, the researcher obtained, information on the challenges of blended learning. Twelve main themes emerged from the analysis. These are the lack of ICT infrastructure, lack of technical skills of learners and teachers, lack of practical exposure, inconsistent attentiveness and boredom, lack of monitoring, absence of gestural communication, improper content or structure of learning, inappropriate number of classes and students (up to 200 students per class), inefficiency to develop managerial and analytical skills, ambiguous evaluation, unavailability of the learning environment at home and the negative effect of the prolonged use of technology on their health (posture problems and repetitive strain injuries.

The presenter concluded with the following recommendations; introduction of a more specialized management curriculum for blended learning; improve ICT infrastructure; empower technical training of students, rationalise class size and student numbers and provide sessions and aids for health.

Due to time constraints, there were no questions at the end of the presentation.

**Title of the presentation:** Teacher's skills in using ICT in Government Secondary Schools in West Bengal

**Name of presenter:** Sasanka Sekhar Mahato, Research Scholar, RIE(NCERT), BBSR

The presenter started by highlighting the importance of the ICT skills of teachers to achieve global education and some of its uses in Indian education. The rationale of the paper was to assess how government secondary school teachers in a rural area in India can use the available ICT effectively.

The research involved descriptive research of 90 individuals (15 were HoDs, 60 Teachers and 15 students) from 15 Government Rural Secondary Schools from the Purulia district in West Bengal, India using well-structured questionnaires (teachers), interviews (HoDs) and focus group discussion (Students).

Key findings suggest that only 9% of teachers always prepared materials and encouraged classroom transactions with the use of ICT while 28% never used ICT and 63% sometimes use different devices and web applications to prepare materials or for classroom transactions. These proportions were also true in the evaluation of skills for ICT use. The presenter highlighted potential challenges with the use of ICT and the lack of ICT infrastructure in the school, lack of pedagogical knowledge of using ICT and skills for ICT use, lack of internet, electricity and computer labs, and the lack of training and technical assistance. The findings also suggested that 100% of school Heads are very interested in the use of ICT in schools and agree with the lack of funding (33%) and the lack of resources (67%) The majority (73%) of the Heads have sent a proposal to the higher authority. Although all the students interviewed would like to improve the use of ICT, only 10% have mobile phones/PC/laptops.

The presenter concluded by suggesting that the findings have poor implications for the educational sector of rural Bengal and an in-depth case study is required to ascertain the teachers' opinions, and their competency in using ICT in school education and to make further recommendations for improvement.

Responding to a question on whether the findings of the paper, considering the small sample sizes, can be generalised to other rural areas in India, the presented concluded that further research is required.

**Title of the presentation**: Open Educational Resources (OER) to address Educational Inequalities: Prospects and Challenges in HE.

**Name of the presenter:** Dr Siraj K.K

The presenter described OER as an alternative to the high cost of textbooks and several empirical research have demonstrated its importance. His research is more interested in the level of implementation of OER in Oman Higher Education and understanding the perception of faculty on availability, quality and trust, HEI support, and knowledge of OER.

In a descriptive study that deployed structured questionnaires via google forms, 110 faculty members in Business Management schools/ colleges provided data for analysis. One-way ANOVA was used for statistical analysis to identify real differences between faculty members.

The findings suggested that the knowledge of OER was rated as good by 54.55% of respondents, while 13.64% rated it as very good. However, the remaining 25%, have either no knowledge or moderate knowledge of OER. In terms of the use of OER, 60% of the faculty responded that they are not using OER in classrooms. Of those who used OER, 70% utilized reference books available in OER repositories, such as bookboon.com, in their courses and 85% of the faculty utilized open education resources for their assessments. The reasons for not using OER included the lack of time to review OER materials or redesign the syllabus to include their use, lack of suitable OER resources, not being aware of the availability of OER and the need for institutional approval to promote its use.

The presenter concluded that the implementation of OER should go beyond individual action to departments, colleges, and institutions. They should devise policies to support, incentivize, and reward the adoption of OER and open practices through the allocation of time and resources. He suggested that three broad questions to be answered before integrating OER into the curriculum should include (1) Who creates OER? (2) Who is and who is not represented in OER? And (3) Who is cited in OER?

Due to time constraints, we were not able to invite questions from the audience.

**Title of the presentation**: The Effect of the Covid-19 Pandemic on Learning Styles of Adolescents.

**Name of presenter**: Ms Sanchika Taneja

The presentation commenced with a description of the implication of Covid-19 which led to school closures and the proliferation of digital learning which affected about 1.2 billion children globally and about 320 million children in India alone. She further went on to explain the different types of learning styles including, visual, kinaesthetic, logical, auditory and linguistic learning styles. The main objective of the research was to highlight the effect of the pandemic on the learning styles of students and the challenges faced by adolescents during the pandemic. Data were obtained through a literature review and document analysis.

The key findings suggested that, in terms of digital connectivity, 58% had unlimited access, while 41% faced limitations in speed, 50% of adolescents spent more than 6 hours on computers each day while 27% spent over 8 hours a day. In terms of the online experience, it was agreed that home confinement affected both the physical and mental health of adolescents. Other challenges included the lack of consultations in learning, inadequate access to technology and the internet and the decline in physical health and the increase in time spent online also exposed young people to harmful content. The author made a few recommendations including the use of open-research platforms, flexibility in higher education and reconstruction of sustainable learning. There were no questions at the end of the presentation due to time constraints.

## PARALLEL SESSION ID: ECONOMICS

**Name of Chairperson:** Dr Tapati Mukherjee
**Name of Rapporteur:** Dr Victor Muchemwa

**Title of the presentation:** Green Economy: Way to Sustainable Development

**Name of presenter:** Dr Chandrima Goswami

The presenter started with an introduction to the green economy with the influence it has on sustainable development. It was discussed that various countries have focused on abating pollution, reducing the degradation of the environment and restructuring societal development.

The main areas of concern highlighted by the presenter were sustainable tourism, green banking, green entrepreneurship and solid waste management. In order to make the mentioned sectors sustainable, the presenter indicated the need for a huge shift with changes in environmental policies, the use of technologies and further innovations necessary for a green economy.

The main findings focused on sustainable development`s potential of generating employment opportunities thereby improving human development and raising living standards, and contributing positively to economic growth. A question was asked on the importance of solid waste management to the green economy and sustainable development. In response, the presenter indicated that proper management and segregation of mixed waste would promote awareness of facilities required to enhance green economy education. When asked how the study will contribute to the current mitigation measures for the green and sustainable economy, the presenter responded by indicating the need for transformation of the traditional economy into a sustainable green economy by preventing damage to natural resources and leading the way to growth and development of economies

The presenter concluded there were limited resources on the earth despite the needs in different sectors being unlimited. It was further emphasised that sustainable strategies must be adopted with a focus on initiatives and studies that have immense potential to achieve sustainable growth and improved livelihood of people. The presenter lamented on sustainable resource consumption, proper management of waste and cooperation, between the educational institutes, government and business sectors. With the practice of environment-friendly waste processing, human health and ecosystem services would definitely be saved.

**Title of the presentation:** Green Economy Intiatives: Role of Women as Global Agents.

**Name of presenter:** Dr Rimjim Borah

The presenter started with an introduction by indicating the importance of natural resources to human survival as well as maintaining a good quality of life. The main objective was the analysis of the role of women in addressing matters of the green economy. This was secondary research focusing on women as global agents. The presentation considered six main sectors namely renewable energy, green buildings, sustainable transport, water management, waste management and land management.

Some questions were asked on clarifying the root causes of the environmental problem and the most effective solution for solving various environmental problems which arise because of the economic development of every country. The presenter responded that sustainable development and the green economy are the best concepts for transforming an economy to be green through the consideration of the equitable distribution of resources for today and the future. The biggest challenge noted was adopting an equitable distribution of resources to mitigate the risk of effects of inequality in different economies.

It was concluded that if there is no gender gap between men and women in the workforce, global GDP could increase by 26 % ($28 trillion). Integrating gender in policy programmes of the government will help to achieve the Sustainable Development Goals (SDGs) as well as the green transformation of the economy. The presenter further indicated that gender mainstreaming needed to be prioritised in all policies and welfare programmes of the government to develop all the human resources needed for a green economy.

**Title of the presentation:** Identification of Delay Factors and Assessment of the Cost Effectiveness of the Construction of Road Over Bridges in West Bengal, India.

**Name of presenter:** Amit Kumar Das

The presenter introduced the classification of the economy focusing on primary, secondary and tertiary sectors. The main objective was to identify the delay factors for cost overrun and to assess the role of management in meeting critical factors in road and bridge project construction.

A hypothesis was included in the presentation as follows: H0- Management does not play a significant role in meeting up the critical factors. H1- management plays a significant role in meeting the critical factors. This was primary and secondary research that used a mixed methodical approach (both quantitative and qualitative approaches). In the analysis of data, construction-related factors were discussed with quantitative expressions of the comparisons of the two areas of focus. Questions were raised concerning the post-hypothesis results and also missing assessment of cost comparisons of the road and bridge construction. The present responded by acknowledging that information was not indicated and will be included in the revised and improved document. The presenter went on to explain more about road construction, bringing out the comparison in project approaches of roads and bridges as suggested in the title of the study.

It was concluded that timely completion should be an area of interest considering the price of materials, labour charges, overhead expenses, management costs and cost of supervision. Areas to be avoided were indicated as negligence of site visits, poor project management policy, shortage of material and delayed payments for different project services.

**Title of the presentation:** Relationship between Financial Knowledge and Financial Behaviour: Is there any Mediating Effect of Financial Attitude?

**Name of presenter:** Professor Anusree Bose

The presenter introduced financial literacy as an essential factor for enabling people to make the right financial choices that are not only related to education but also to the development of financial attitudes which ultimately leads towards financial well-being. The main factors contributing towards financial literacy were noted as financial knowledge, financial behaviour and financial attitude. The main objective of the presentation was to analyse the variation in the level of financial literacy and its components across different zones in India and to assess how financial knowledge influences financial behaviour by considering the mediating influence of financial attitude.

The presenter included a conceptual framework and demonstrated the interaction of the main attributes/variables namely financial attitude, financial knowledge and financial behaviour. The methodology indicated a mixed method. The OECD tool kit was applied to identify the questions relating to financial knowledge, financial attitude and financial behaviour from the survey obtained using a stratified sampling technique. Questions were posed to the presenter on giving a clear relationship between financial knowledge, financial attitude and financial behaviour. In answering the questions, the presenter gave a full analysis of the findings using descriptive summary statistics. There was a continuation in the explanation indicating that the effect of financial knowledge on financial behaviour through mediating effect of financial attitude was indicated to be significant showing a total effect of 25% on financial behaviour with a direct effect of 15% while that of indirect effect was 10%. The presenter also explained that 22.40% of the total participants had high financial literacy, whereas, 55% had a low level of financial literacy.

The presenter concluded that having good financial knowledge is not enough because financial attitude i.e., the mental disposition of using that knowledge also has a great effect on behaviour. It was further concluded that expansion of financial literacy among individuals was necessary to focus not just on the financial knowledge but also on the psychological ground of the individuals through various training for the development of their financial behaviour.

## PARALLEL SESSION 1E: TECHNOLOGY

**Name of Chairperson:** Dr Andrew Chimenya
**Name of Rapporteur:** Harsha Subhashana

**Title of the presentation**: Impact of Technology on Education Sector and Green Economy Session time: 18/8/2022 12.00 to 14:00 (British Summer Time (BST)

**Name of presenter**: M K Ganeshan

Introducing his topic, the presenter suggested that technology has made a lot of positive changes in our lives and could be used in the education sector towards creating a greener economy as found in various literature. However, despite the widespread use of technology, organisations are finding it difficult to rapidly adapt to the current fast-paced technological environments.

In light of the background study, the objectives of the study were

- To study the core concepts of technology in the education sector and green economy,
- To learn about the impact of technology on the education sector and the green economy and
- To understand the significance of sustainability in the economy, ecology, and equity.

Analysis of secondary published sources such as articles and websites is used to achieve the objectives of the research. Technology-aided learning and teaching, global educational partnerships, educational games, facilitation of distance education, storage of information, and online qualifications have been identified in the search. The presenter further explained the three E's of sustainability (Economy, Ecology and Equity) and said a delicate balance is required between the three for a sustainable world. In concluding his presentation the researcher said that technology-aided education could catalyst the journey towards success of the green economy.

Answering a question raised by a member of the audience, the presenter said the Smart India project can be used to capitalise on the benefits of technology toward a greener economy.

**Title of the presentation:** Impact of Technology in Green Economy Settings

**Name of presenter**: B Bhuvana

The presenter started the session with definitions of green economy, sustainable development, green technology and the impact of technology on education. The researcher used a secondary document review to address the impact of Technology in Green Economy settings.

As part of her findings researcher presented the principles of the green economy which included the wellbeing principle, justice principle, planetary boundaries principle, efficiency and sufficiency principle and good governance principle. She also explained the impact of green technology on education. She also said technology is a driving force for educational reform, as well as a means of promoting shared knowledge in society. The author also suggested the new revolution in Artificial Intelligence (AI), big data, and the so-called Internet of Things are all changing the way the world works and lives in almost every area of life. In her recommendations, she said schools need to undergo a similar transformation. Schools, Colleges and Universities must establish and expand the green technology concept to the societies in which they are located and bring the green economy for the development of the nation and Human beings.

Concluding the presentation, she suggested that educational aims and objectives needed to be changed to accommodate green technology in future. Also, changes in educational ecologies, learning processes, teaching processes and educational governance and policy are equally important to adopt green technology in future.

During the question time, the author was asked to elaborate more on the methodology of the paper indicating whether she performed any thematic analysis in her secondary research. Although this was used in the research it had not been fully reported.

**Title of the presentation**: A Study on the Positive and Negative Impact of Technology on Education During and After Covid 19 Pandemic

**Name of presenter**: Himanshi Joshi

The presenter started with an overview of what happened in her locality during the Covid-19 pandemic and discussed the impact of technology in rescuing learning and teaching in the education sector. This situation also brought to light the gaps in resource utilisation in the education sector during the pandemic.

Referring to her findings from the review of the literature, the researcher highlighted the positive impact of technology on education. Though the emergence of COVID-19 has had several detrimental effects on schooling, worldwide educational institutions have acknowledged that they have done their best to provide good education to students during the pandemic because of the use of technology. Elaborating on the positive impact of the pandemic further she said the technology provides ease of access to information, makes learning easier, enhances creativity, uses of technology in classrooms to enhance teaching and learning, increased student motivation, engagement, collaboration and increased hands-on learning opportunities. Technology she said, allows for learning at all levels, increased confidence in students and increased technical skills. On the other hand, the overuse of technology has sometimes had a negative impact on students' and teachers' physical and mental health. Technology kills social skills, it can be a distraction and may hinder students' interpersonal skills. Technology affects health, creates depression, anxiety, and obesity and could be time-wasting for children.

Talking about the advantages of digital learning, the author indicated that education is evolving to become more engaging, efficient, and personalised. Raising the standard of education, teachers are improving their e-learning skills, e-learning is economical, and presents no geographical boundaries to learning. There are no time limits in education because of the ability to have synchronous sessions. Disadvantages of digital learning are resource limitations for students in remote locations, lack of technology awareness of parents, addiction to social networking, gaming, and so forth. Further, there are differences in IT skills among students and this could trigger training for them at different levels and digital platforms do not facilitate effective assessments.

Concluding the session she said education has been significantly impacted by technology. Massive amounts of knowledge (books, music, images, and videos) are now available at the touch of a button thanks to the Internet, and traditional online courses, MOOCs, podcasts, and other formal learning opportunities are available online globally. The traditional four-wall classroom with desks, benches, blackboards, and textbooks has been mostly replaced by technology. Accordingly, technology has positive and negative impacts on teachers' and students' lives.

**Title of the presentation:** Digital Storytelling: Innovation in Inclusive Education

**Name of presenter**: Ms Ambica Kumari

Explaining the topic as part of the introduction, the presenter explained digital storytelling as using computer-based tools to tell a story. This technique is mostly used to elaborate on a difficult idea or a concept for students. Some of the tools used for this purpose are still images, audio, video, music, sound, text, animation and web publishing. The research was based on a literature review. Explaining her findings on the qualities of good digital stories, the author suggested they are personal, began with a story/script, are concise, use readily-available source elements, include universal story elements and involve collaboration.

In the concept of inclusive education, the author explained the benefits of digital storytelling for visually impaired and deaf children. According to her, technologies such as multisensory Tangible User Interface (TUI) could sustain innovative educative and cognitive interventions to listen to and stimulate narratives of children with visual impairments. For children with hearing impairment, developing an app with multiple sign languages will influence learners' participation and motivation success.

Digital storytelling could also encourage collaborative learning, students could learn and present in their individual learning styles, allowing students to share work with an outside audience which increases writing skills and helps students practice presentation skills and provide a meaningful way to learn with technology.

In conclusion, digital storytelling can enhance education in a variety of ways. However, she is hoping that the few benefits highlighted in the article will encourage teachers to incorporate digital storytelling into their lesson plans. This is because the power of digital stories goes beyond simply spreading knowledge and information; it also includes having an impact on students' ability to maintain their literacy in the face of an ever-expanding digital world.

A question from her audience was on how digital technology could be linked to the global perspective. She suggested that in sustainable development, digital storytelling could reduce the use of resources by students and can be applied globally.

**Title of the presentation:** Digital Divide among the Faculties of Higher Education amid COVID-19

**Name of presenter**: Sanjeevani Sudha Jena

The author started by referring to sustainable development goal 4 stated as “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” which is currently nowhere near reality in India. This was expanded further to suggest that from the global perspective 63% of urban households had access to computers compared to 25% of rural households in 2020. In the same year, 72% of urban households had access to the internet compared to 37% of the rural population.

The objective of this research is to identify the digital divide among faculties of higher education with regard to their gender, locality and teaching experience. Using online surveys to gather data, the participants were categorised by namely gender, locality, teaching experiences and age. There has been a good distribution of numbers in all categories.

The findings suggested that most of the faculties of higher education have had access to very few technological devices/ facilities in their homes such as laptop computers (82.9%), the internet (70%) and smartphone (96.3%) but a few of them have other technological devices/ materials. More than 40% of the faculties have had a desktop computer, printer and office software in the office whereas most of the faculties don’t have iPad/Tablet (72%), video editing software (58.5%), and photo editing software (50%). The presentation went on to explain access to such facilities in the selected sub-categories of the sample.

The presentation concluded that most of the faculties of higher education have access to very few technological materials in their homes such as laptop computers, the internet and smartphone but few of them have access to other technological materials. Therefore, it is recommended that the faculties of higher education need to be encouraged to use ICT materials for a successful teaching-learning process. Also, she suggested providing sufficient, appropriate and need-based technological materials for every higher education institution.

The presenter was asked how to connect her study to the green economy. She said if the digital divide could be reduced that will support students to learn better about the green economy. She was asked to elaborate on her sampling methods further and whether students were included in the research. Her response suggested that the study was limited to only faculty members due to resource limitations. Clarifying her sampling methods, the author suggested she had access to some whole India WhatsApp groups for faculty members and she disseminated the questionnaire via those and received 82 responses that were analysed quantitatively with SPSS. The audience recommended a much larger sample size and future research to ensure the generalisation of her findings.

**Title of the presentation:** Effect of Digital Orientation on Digital Supply Chain Adoption among SMEs in Nigeria

**Name of presenter:** Muhammed Yazeed

The presentation started with a definition of digital orientation as a company's attitude and strategic posture in terms of digital curiosity (DC), digital alertness (DA), digital openness (DO), and digital innovative passion (DIP) in decision making and activities.

His hypotheses were as follows:

- Digital Curiosity significantly affects Digital Supply Chain Adoption,
- Digital awareness significantly affects digital supply chain adoption,
- Digital openness significantly affects digital supply chain adoption and
- Digital Innovative Passion has a significant effect on Digital Supply Chain.

The conceptual framework for the literature review suggested a direct positive relationship between the dependent variable (digital supply chain adoption) and independent variables (digital alertness, digital curiosity, digital innovative passion and digital openness).

Using the quantitative approach, he has randomly identified 273 small and medium-scale companies from a population of 457 and used the questionnaire method to collect data. This was analysed with SPSS V22 and PLS V3. His findings were reported as follows

Composite Reliability (Int. Consist.) >.7, Convergent Validity (AVE) >.5 and Discriminant Validity (HTMT) <.85. In the hypotheses test the researcher has identified a positive relationship between independent variables (DA, DC, DIP and DO) and dependent variable (DSA).

Concluding his findings, Mr Muhammed said SMEs are more likely to adopt a digital supply chain if they have the necessary digital orientation in terms of Digital Curiousness, Digital Alertness, Digital Openness, and Digital Innovative Passion.

Answering a question from the audience the presenter said his population was a list of small and medium-scale businesses from a state in Nigeria. He has individually analysed the literature to find out existing information in relation to his study. He was also asked what made him not use statistical techniques such as mean and regression. He said due to some constraints he did not use them in the first stage but later in the second stage, he is expecting to use more comprehensive statistical techniques to analyse the data. He was asked why there is a mismatch between the hypotheses and his conceptualisation model. He acknowledged that this has happened due to an error and agreed to make the necessary rectifications.

**Title of the presentation**: How Digital Education Empowered the Lives of Rural People

**Name of presenter**: Nupur Nag

The presenter introduced the research by explaining the need of technology as an integral part of every sector including healthcare, medicine, education, transportation, tourism, industry, business, management, administration, banking, and rural development are all areas where technology has become essential in today's globe. She also stressed the importance of digital education for the public to survive in this digitally driven world.

The objective of the study was to study how digital education is being used to benefit rural development. The presenter has identified four sectors for her study. They are agriculture, animal husbandry, rural and cottage industries and health. According to her findings ICT is important to provide accurate and timely information at a reasonable cost. ICTs may provide farmers with useful agricultural information such as crop care and animal husbandry, fertilizer and feedstock inputs, insect control, seed sourcing, and market prices. According to the researcher education and literacy rates are crucial development determinants in rural communities. Appropriate use of ICTs in classroom teaching improves overall education delivery. She said the employment of ICT-enabled practices should be emphasized in rural schools as well.

Making recommendations, she indicated that the Public-Private partnership models must be explored for infrastructure development, especially in rural and remote areas. The most important recommendation is to develop an exclusively fully firewalled Indian Internet Cloud that can provide a secure internet network and connectivity for the various needs of the country. People must be assured that their data will be safe and will not be used/misused for any other purpose.

In conclusion, she said science and technology have gained importance in the implementation of many duties and activities in a variety of disciplines in the modern day including education, administration, management, marketing, environmental preservation, production, and so on. Therefore, it is critical even for rural communities to get technological skills in order to increase productivity and profitability. Rural residents must be given appropriate information on how to use technology in schools and training centres. In addition to seeking support from other agencies and organisations, these communities must be enabled to use technology to improve their living situations. Answering a question regarding government policy perspective on the topics such as home learning and online learning the presenter said the study is about rural development.

# DAY 2 – KEYNOTES, SESSION SUMMARIES AND SPECIAL LECTURES

## SPECIAL LECTURE 1: GLOBAL EDUCATION AND THE GREEN ECONOMY

**Chairperson:** Prof Stephen McKinney
**Rapporteur:** Dr Dolly Jackson Sillah

**Presented by Dr Peter Gray**

**Education and Economy**

The speaker introduced the topic by taking a closer look at the relationship between education and the economy as two parallel ontologies. However, in the political systems, this is not the case. Political systems regard education as a component of the economy whereby it contributes to the economy as the cost of doing business. He argues that the economy as we see it now is a consequence of education. Hence the way we do things and make decisions is all a consequence of the education we had. Therefore education does not just support the economy but it's fundamental to it**.**

He used the Chernobyl nuclear accident as an illustration. The original idea of the nuclear station was for a green economy. When it blew up, it became a red economy that is wrecking the planet and now it is a brown economy if we carry on with the red economy as it is and do nothing about it. Hence green economy is reduced carbon, and reduced activity, while the red economy is if we leave everything the way we do things currently and the brown economy is the final consequence of a red economy which is a scorched earth and salvage operation to make something out of what we have.

He suggested the importance of making choices to address climate change and social justice in and between the economic models. To make these choices we also need to use education systems. This means we also need to make the right choices in education as a right protected by UDHR.

**Educational Choice**

The speaker further suggested that the choice of education unfortunately is prescriptive and people do not have many options to choose from. In many countries, education is based on a standardised system and a range of metrics like the league tables and the actual outcomes of education can only be assessed over a lifetime. Hence the use of standardised systems cannot be applied to people. Exam results for example cannot predict what a pupil will become over a lifetime but can only influence their choice in institutions. With the influence of the green and brown economy, things should change very fast and people should change the way they do things over their lifetime to achieve societal change. The current system of education does not completely support this level of change in a lifetime.

He gave an example from Prof McKinney's talk which indicated that UDHR separates vocational and higher education, thus reinforcing a two-tier education system which addresses the demand side (right to education) without mentioning the supply side (the duty of institutions to supply education as a public good) or open education.

In his suggestion, there should be no split between vocational education and higher education. University students should learn more practical skills and vocational students should also be encouraged to understand the theoretical bases of the practical skills they acquire.

**Global Education as Ontology**

He made reference to a group of Ethiopian potters who make beautiful pots and carry them to the markets to sell them after walking long hours. When the pots don't sell they are destroyed because they are too heavy to

carry back. Hence these local people are educated but require support to build a good business model. Hence the absence of formal education is not an absence of any education.

From a global perspective, normative values that we try to propagate (such as gender parity) may be lacking or actively resisted as in the example of Boko Haram in Nigeria. The international community would need to work out how global education is going to work in these situations.

**Is global education an economy or ontology?**

The speaker indicated that education in its current form is a massive industry that is worth billions, it is competitive and hierarchical and increasingly export-oriented and vast amounts of income is generated by establishing campuses abroad or by bringing in international students. For example, he posed a question on why Oxford University is worth more than $8.12 billion and the entire educational expenditure in Nigeria is around $3.68 billion.

**Global Green Education**

The speaker suggested that this means valuing all students equally and sharing resources across subject areas, sharing knowledge across international boundaries and establishing student and teacher/school leader networks through the use of digital media. He mentioned that some global networks do exist such as GUNI (Global University Network for Innovation), WERA (World Education Research Association), EWF (Education World Forum) and several others creating real global structures for education. He indicated that LSME should join such global forums.

He highlighted the current system of education being borrowed from historical times and being formal, with fixed time scales and curricula and professional teachers with measured outcomes. Although these are all important, we need to also consider informal education with open timescales and traditions with problem-solving context and family or community oriented and outcomes that initiate individuals into communities. The current system is missing in personal growth, happiness, serious career induction and continuity of learning into adulthood. In conclusion, the speaker emphasised the need to promote a national green economy based on global green education, sharing of resources, and promoting social justice and wellbeing.

**Audience Discussion**

The chairperson commended the speaker for his outstanding insights and for raising important questions in his talk. A comment from the audience suggested that humans are innately competitive and our educational system is set up to facilitate that, and until we get to a situation where the educational system is rearranged to improve the individual rather than competition, education will always be a slave to the economy. In response to that, Dr Peter Gray suggested that he is part of a large and diffuse network and has been successful because of what the network has achieved collectively. This is more of a success that surpasses individual competitiveness.

Another question was on how green education can be implemented in a developing country such as Nigeria. In response, Dr Gray suggested education can introduce school projects with practical activities. He knows of situations where students are asked to plant crops and use that to learn about the science behind the growth of plants or be involved in a project to learn about how the school building works. Teachers can always use simple activities to get children out of the classroom to do things that are more practical and useful to society.

# REPORTS FROM PARALLEL SESSION PAPERS AND DISCUSSION

## PARALLEL SESSION 2A: EDUCATION

**Chairperson:** Dr Peter Gray
**Rapporteur:** Dr Minakshi Kishore

**Title of the presentation:** Green Economy Supported by Open Schooling with Digital Technologies and Inquiry Mapping.

**Name of presenter:** Dr Alexandra Okada

Dr Alexandra in her presentation on the Green Economy Supported by Open schooling with Digital Technologies and Inquiry Mapping, emphasised human wellbeing and social equality. She explained the green economy in the context of the UNFCCC of 1992 and the Paris Agreement in 2015. She indicated that despite all the efforts, countries are slow in their commitment for a green economy. She proposed a more innovative approach to meeting these goals by using the open schooling approach to improve global education for the green economy. Open schooling promotes cooperation among representatives of societies to empower young people with knowledge, skills, attitudes, and values. Through open schooling, students are supported by teachers, scientists, professional experts, and civil society organisations to solve real-life problems that are relevant at the local and global levels.

The methodology for her research was based on multi-case studies and inquiry mapping to bring together innovative ways to explore open schooling to support learners, educators, practitioners and policymakers and Civil Society at the local and global levels. It is supported by the CONNECT-SCIENCE self-assessment instrument and CARE-KNOW-DO pedagogical framework of best practices.

The finding of her research was centred on meeting the less presented communities where no internet connections are found. She mentioned that many students feel excited about open schooling and also about the knowledge of Science. She further recommended that to help develop confidence, teachers must appreciate science in day-to-day life. She further suggests that inquiry mapping should be done for students to connect various facts to decision-making.

**Title of the presentation:** CONNECT-Science.Net Supported by the CARE-KNOW-DO Open Schooling Framework to Empower Girls with Science Actions for Sustainable Development

**Name of presenter:** Dr Alexandra Okada

Dr Alexandra in her second presentation emphasised the concept of open schooling and suggested that science education promotes open learning with real-life problems and integrates the curriculum supported by the expert partnership to empower students with science knowledge skills and values to build better lives and a sustainable world. She referred to the expert partnership among policymakers, teachers, communities and scientists to empower the next generation to build better lives. Her research questioned whether students care about science. How confident are they with their knowledge of science? What open schooling activities do they feel engaged with science? With regards to this, the Care-Know-Do resource platform to create open science website where self-assessment tools for teachers and students were created to activate real-life discussions, acquire hands-on activities, apply the context-based task and analyse science-action was introduced. Open schooling helps teachers make the curriculum more relevant and fun for students as the teachers could come up with new strategies, real-life contexts, easy-to-use resources for partners and evidence-based practices around some prominent issues like reaching carbon zero, Covid prevention, white pollution, promoting energy saving and so on. This allows the students to reflect on how to learn in cooperation with others to solve real-life problems and fully develop their competencies.

Her studies concentrated on the girl student and whether they cared about science, how confident were they with their knowledge in science. And what open schooling activities do they feel engaged with science? The research findings reflect that a large population of girls are not very confident about Maths and Science. The recommendations of the researcher were to involve students beyond school and teachers must take up the responsibility to help activate curiosity, acquire understanding, apply knowledge and transfer skills to solve real-life problems.

To end the presentation, the researcher discussed the content of connect-science.net/ best practices for engaging girls across the UK, Romania, Spain, Greece and Brazil and urged others to partner for a greater benefit.

**Title of the presentation:** Internationalization for Global Education Supported by Four Pillars: Open Education, Open Schooling, Open Science, and RRI

**Name of presenter:** Dr Alexandra Okada

In her third presentation, Dr Okada elaborated that the Internationalization of higher education is the process of integrating the international and intercultural dimensions into the teaching, research and service functions of an institution. The motivation for internationalisation includes commercial advantage, knowledge and language acquisition, and enhancing the curriculum with international content. She says that studies on Internationalization research and innovation are still very scarce in education.

The purpose of the study was to understand how to design and evaluate the impact of internationalization to enhance knowledge exchange supported by four pillars namely open education, open schooling, responsible research and innovation and open science. The methodology focused on descriptive case studies supported by participatory action research, including the partnership and production of various networks namely, open learn, connect, RRI data & ORDO platform. The findings elaborated on global education, and open schooling which should lead to sustainable development.

To conclude she said that internationalization needs to evolve into a more comprehensive process, supported by diversity, inclusion and sustainability and open to all citizens and professionals to enhance a green economy.

In the question and answer session, a question was asked about why open schools emphasise only science rather than being more holistic. In response, she indicated that awareness must come together with other forms of subjects like Maths, social studies and so on however the key to change promoted more of science than broader knowledge. Another question was whether an ethical framework should be included. In response, Dr Okada indicated that science is the key component of ethics. The component of ethics holds importance in the social context. Students who are critical thinkers, policymakers and decision-makers and are also from communities. The last question was on the relationship between open schooling and the green economy. In response, she indicated that science is interrelated with professionals and experts. Open schooling inspires the young generation to do science and bring value to the world.

**Title of the presentation:** Intelligent Virtual Assistant in the Area of Nature Sciences for Elementary School

**Name of presenter:** Viviane Cristina Marques

Viviana in her presentation elaborates on the constant interaction between digital information age, new technologies and network society. She highlighted the importance and challenges of these technological tools for education. The research paper presented was on the use of intelligent virtual assistance to support the teaching of Natural Sciences at Elementary schools. Intelligent virtual assistants that offer interaction with natural language and real-time information, allow contact with the contents of the disciplines, in addition to promoting support during the teaching and learning process, which provides not only the acquisition of knowledge but also personal development and the construction of meaningful learning. The Brazilian education system aims at stimulating the STEAM movement in areas of science in elementary schools. The development of intelligent virtual assistants was to deepen knowledge of STEAM concepts, and artificial intelligence, especially through virtual assistance. The development of the intelligent virtual assistance was introduced in the area of natural science and was named Biel, through the experimental design methodology and the ADDIE model.

The presenter discussed the operational aspects of Biel in her presentation and she also discusses how well the students and teachers interacted with this system as a conversational interface for interaction between users and the virtual tutor. To conclude she mentions that the virtual assistant enables different pedagogical practices and that AI is a technology that can be thought of for the improvement in the teaching of natural sciences.

**Title of the presentation:** Blended Learning: An Innovative Approach in Teaching and Learning in Higher Education Institutions

**Name of presenter:** Dr Kuldeep Kaur Juneja

A case study research was conducted on one of the educational colleges of Ujjain in India to investigate the impact of blended learning in education through an online survey to collect the data to test the attitude of teachers and students' engagement in blended teaching and learning. The objective of the study was to measure the attitude of students and teachers in learning the English language in a blended learning environment. She elaborates on the effective combination of different modes of delivery, methods of teaching, learning theories, learning styles and competencies. In her research, she used the Likert scale to measure the impact of blended learning on academic quality in education colleges.

According to her results, the blended learning (BL) approach is more effective than face-to-face learning and it also indicated that in the BL approach instruction are easy to follow. From the teacher's perspective, blended learning is more effective in teaching English and for synchronous and asynchronous teaching as well.

To summarise, she said that BL causes an interactive learning environment in the classroom. The teacher-centric and student-centric modes of transfer of knowledge assist in the transfer of knowledge utilizing the mobile computing mode of transmitting knowledge, thus facilitating the two-way process of communication in the English language. Her results suggested that video lectures, podcast recordings, articles and so on are impactful learning and teaching tools.

In response to the question of whether state-of-the-art blended learning was good, the presenter indicated that there is not much advancement in the education policy yet however steps are being taken for remodelling and restructuring and she also emphasised the collaborative steps for better implementation of these policies. In response to the question of whether online teaching would overtake real classroom teaching, the presenter mentioned that with online teaching the students felt isolated and for a holistic impact both online as well as offline teaching should be used. In response to the question of whether blended learning in Government schools is possible in India, she indicated that although government schools were not well-equipped, we could think of different ways of making it happen. For example, the use of mobile phones could be a means of teaching and learning in these schools.

**Title of the presentation:** Attitude and Knowledge towards Fire Safety among Students of Higher Education.

**Name of presenter:** Bikram

Bikram in his research refers to fire as the two-sided sword and says that fire can break out anywhere. He mentions that it is mandatory that each school should have its own school disaster management plan. Having proper knowledge regarding fire safety among students, teachers and other staff is very essential for their safety. His research is to access the attitude and knowledge of students regarding fire safety and also to establish the association between educational level and knowledge of fire safety among the students. He used a descriptive cross-sectional design to collect data from 120 students (50 from Punjab university) using questionnaires through WhatsApp. The results revealed that out of the total population only 62 % of students were aware of fire safety measures.

The researcher recommended that more fire drills should be arranged for the students and there should be steps initiated for creating a positive attitude towards fire safety for students in the educational set-up as education is centred on all types of Knowledge.

## PARALLEL SESSION 2B: EDUCATION

**Name of Chairperson:** Dr Victor Muchemwa
**Name of Rapporteur:** Mr Jean Serge Koffi

**Title of the presentation:** Cognitive structure and teaching-learning process: A systematic review

**Name of presenter**: Styne Joseph

The presenter introduced his paper with the conceptual learning process of a student by focusing not only on the structure and content of the knowledge but importantly on the qualitative differences between the concepts. For the need and significance of this study, he described the constructivist approach which he considered as an important improvement in the area of science education. In the second point, he supported that by analysing the different studies systematically, it is possible to derive a conclusion regarding the components and nature of the cognitive structure and its impact on the teaching-learning process.

The purpose of his research was to enhance the current level of knowledge regarding the association between cognitive structure and different aspects of the teaching-learning process. For this purpose, two objectives were to be met: Firstly, to analyse the studies selected in terms of publications per year and secondly to find out the different definitions put forward by different researchers for cognitive structure. Twelve studies were selected randomly for the systematic review.

In the findings and conclusion, he has demonstrated that out of the 12 studies selected, 10 of them used either the word Association test alone or its combination with other techniques such as sentence completion test or writing sentence test, metaphor technique, drawing writing technique, and the remaining 2 used concept inventory and flow map technique.

During the discussion, the questions asked by the audience included, what might be the practical application of your findings in terms of education and the green economy. What is the relevance of the study with respect to the theme of the conference? Is the research related to learning styles? The presenter responded by arguing that cognitive structure has different concepts. By understanding these concepts, we can modify the curriculum to derive a conclusion regarding the components and nature of the cognitive structure and its impact on the teaching-learning process. He also explained that the research is related to the cognitive ability of learners and has a great role in the teaching-learning process for the determination of misconceptions, missing information, and thereby making the students ready for learning. It is relevant to the topic and can be related to students learning styles as well.

The presenter concluded that by analysing the different studies systematically, the components and nature of the cognitive structure and its impact on the teaching-learning process becomes clear. The research also highlights the method used for revealing cognitive structure, the importance of cognitive structure in instructional material preparation, and ways in which cognitive structure can be properly developed.

**Title of the presentation**: Adopting Bloom's Taxonomy for Promoting Student's Life-Long Learning: A Vision of New Education Policy of India.

**Name of presenter:** Swati Raturi

The presenter introduced her presentation by asserting that the first education policy of the 21st century i.e. New Education Policy i.e. NEP-2020 was introduced on 30th July 2020 which focuses on access, equality, quality, creativity, and research through lifelong learning which advocates the hierarchical model of Bloom's taxonomy. She explained that Bloom's taxonomy aims to encourage learners to engage in higher-order thinking rather than rote learning. Each level in this taxonomy has its own set of action verbs which can be used to create observable and measurable goals for an academic project. After the review of the literature, Raturi admitted two major gaps in the research: Perhaps, she explained that most of the research did not place much emphasis on the need to build an assessment system that is more methodical, scientific, and has measurable objectives; she also explained that the focus on teachers' pedagogy had not been given due consideration. However, the objectives of her research were to focus on the aspect of how to apply Bloom's taxonomy in the teaching process; and to assess the extent of permanent learning using Bloom's taxonomy. In her different findings, she described the application of Bloom's taxonomy in four key points: Developing a curriculum or course, specifying objectives or goals for learning, creating educational activities, and Constructing evaluations or assessments.

Finally, she concluded and recommended that teachers must use Bloom's taxonomy as a tool to determine the degree of rigour and the challenges faced by the students.

During the discussion, the question asked was whether Bloom's model is more than 60 years old – and whether the presenter is aware of more recent frameworks that may provide an alternative framework for conceptualizing learning. Are you aware of any of the main criticisms of Bloom's work? The presenter argued that people are not using the model properly, although it is obsolete but still relevant, which is why they are not achieving higher-level outcomes. However, she admitted the criticisms and emphasized the need for adaptability of the model to the 21st century.

The presenter suggested and recommended that teachers use Bloom's taxonomy as a tool to determine the degree and the challenges faced by the students. It is up to the teacher to possess appropriate educational, social, cultural, pedagogical, psychological, and axiological knowledge, with the goals serving as the foundation from which the learning process begins.

**Title of the presentation:** Inclusive Education in the Changing Scenario

**Name of presenter:** Sartaj Ahmad Bhat

Sartaj started his presentation by defining inclusive education as the promotion of student participation and minimizing exclusion from, local school cultures, curricula, and communities, which is recognised as important and quoted in the Universal Declaration of Human Rights (Article 26). He explained that there is a crucial need and importance of inclusive education globally. In the case of India, efforts were made to include children with disabilities in the educational mainstream, including students with special needs in particular schools. The methodology and objectives of the research were outlined in 6 major points: To study the concept of inclusive education, to highlight the various benefits, and teaching strategies vis a vis inclusive education, to foster an inclusive learning environment in schools and classrooms, to find out the various issues and problems of inclusive education, to explore the provisions of NEP-2020 for Inclusive Education in India and finally to study the role of information and communication technology (ICT) in inclusive education.

After describing the benefits, issues, and challenges of inclusive education in India, he emphasises the provision of NEP-2020 which envisions an education system with roots in Indian culture that directly helps to transform India, sustainably into a just and dynamic knowledge society, making India a global knowledge superpower to bring about revolutionary changes.

Finally, he concluded and recommended that the millennium's slogan, "EDUCATION FOR ALL", cannot be realized until all people, including those with special needs, have access to educational opportunities.

During the discussion, the main question asked was if there is any figure to share with regard to the impact of the National Education Programme (NEP) provision for inclusive education in India? The presenter argued that this study was qualitative and focused on inclusive education in India. However, the aim of this revolutionary change will provide inclusive and equitable quality education and encourage lifelong learning opportunities for all by 2030.

The presenter suggested and recommended that IGNOU is one of the open universities that offer education and training based on needs. In addition, the ODL (Open and Distance Learning) mode accommodates a schedule that is suited for children with special needs since it offers flexible time, location, and speed. The inclusion of diversity and fostering a sense of belonging for children with special needs should also be fostered in conventional schools.

**Title of the presentation:** Creating Happy Classrooms through Innovation in Learning and Education

**Name of presenter:** Yogita Kushwaha

The author introduced her presentation by explaining that a happy classroom is a vision of every educator and student that can be executed with innovative techniques in the teaching-learning process. Creative learning also enables innovation by students to believe beyond the truck. The aims of this research were to study the role of innovation in teaching and learning which creates happy classes among adolescent students of higher senior secondary schools in Lucknow city; to qualitatively analyse the relationship between innovation and happy classrooms. The researcher selected randomly 20 students from higher secondary schools between the ages of 14-18yrs in Lucknow city. The questionnaire addressed to the participants included 29 main themes based on seven interview questions in relation to the meaning of innovation in education, Innovative class helps in creating happiness in classrooms, Innovative teachers are happy teachers, Different Innovative teaching practices, Innovative methods liked by students learning in schools, How Innovation and happiness can be promoted in classrooms?

It was concluded that making meaningful use of innovation in teaching-learning is a prevalent theme, although only very few teachers are aware of innovative teaching-learning to focus on a better learning experience. Happy Classrooms Programme may promote psychological well-being and a positive classroom climate, and reduce school aggression in students by increasing mindfulness levels.

In response to the question on how the definition of happiness differs among respondents of the study since every individual is unique as well as whether the sample size is representative; the presenter argued that this study is still in the formative stage and the focus was on very limited sampling. However, in the general rule, happy teachers and classrooms will always reflect the happiness and the psychological well-being of learners.

Some researchers suggested that effective learning is based on a deep understanding and engagement with core concepts and principles of the subject in order to achieve higher-order learning and generic skills and capabilities associated with innovation. Different innovative teaching strategies and teachers’ and students' active participation fill a class with happiness. More Studies are needed to promote innovation in teaching and learning to create happy classrooms.

**Title of the presentation:** Invisible Walls or Open Doors? Real and Perceived Barriers to Collaboration between Higher Education Institutions and Employers in Their Local / Regional Economies.

**Name of presenter**: Martin McAreavey

Martin McAreavey started by presenting the beauty of some architectural images to illustrate how the collaboration between Higher Education Institutions and Employers is not well elucidated. The aim of his research was to explore factors materially significant in supporting or undermining collaborative relationships between firms and Universities / HEI, with particular reference to North West UK. The presenter used various methods including a review of the literature on the collaboration between Higher Education/Universities and firms; the barriers and benefits of the collaboration with the firms' industry. He also conducted a quantitative primary research using questionnaires to obtain data from Employers. As the results, it was found that the vast majority of the respondents perceived good benefits arising from collaboration with HEI as this will help with business development, also with new ideas, and support for projects, and can constitute extra help in areas we are lacking resources. However, the research also found that it is not clear how to make the connection to the university, whom to speak to, and who wants to speak to us.

In his conclusion, the presenter quoted some other research to explain that there is a need for more clearly defined progression pathways between HEI and firms, to facilitate initial collaboration and support long-term relationship development.

During the discussion, the main questions asked were what types of relationships is important to establish between HEIs and Employers to ensure value-added outcomes for students? How can we use the UK case study globally? The presenter emphasised the fact that it is important to do more and break down the barriers to collaboration and HEI should engage with employers in the local and regional context and create a network with employers for ensuring value-added outcomes.

The researcher suggested that firms don't always know where to look, who to connect with, or why it might be of benefit. However, the university approach to collaboration is somewhat ad-hoc and scattergun, relying on individual networks and motivation to initiate contact and develop outcomes. It can be recommended that a more proactive and systematic approach may help to generate collaborative projects. These include internal coordination and cooperation within the University, long-term investment in staff development and incentives to support collaborative projects, and institutionalising of the outwardly focused processes to support dialogue and convert this into meaningful projects.

**Title of the presentation:** Effect of Social-Emotional Competence on Academic Achievement Among Elementary School Students in Relation to their Family Environment.

**Name of presenter:** Pooja Sharma

The presentation started with a definition of the concept of Social-Emotional Competence (SEC) as a child's ability to interact in a positive way with others, communicate feelings positively and regulate behaviour; he also included the components of the concept of SEC by following a model he described as CASEL. The objectives of the research were to study the effectiveness of social-emotional competence on academic achievement among elementary school students; and also to study the effectiveness of family environment on academic achievement among elementary school students. In order to proceed with this research that was descriptive in nature, he selected randomly a sample of 200 students from the elementary school of the Punjab School Education Board (P.S.E.B.) in the Amritsar district. The tools used included the Self-made Social-Emotional Competence Scale, and Family Environment Scale, developed by Harpreet & Chadha (Revised, 2012); in addition, he also recorded a study on the academic achievement of students and the percentage of their previous class. The research found overall that there exists a statistically significant difference in the effectiveness of social-emotional competence with the family environment on academic achievement among elementary school students.

In conclusion, the presenter explained that the development of social and emotional competence leads to effective academic success, positive behaviour, and better future learning in the life of adolescents.

During the discussion, the questions emerging from the audience included, what do you think should be the most important factors in the cognitive development of learners in general? The presenter responded by supporting that social and emotional competence is a need in the current times where everyone is facing stress, frustration, anxiety and behavioural problems because of various constraints of life. He also added that the positive family environment factor which is important in the cognitive development of learners enhances the high gain scores in academic areas as compared to the unfavourable family environment.

The review of literature and researchers suggested that Social-emotional competence can be seen as an important protective factor for young children, buffering them from stressors and helping to prevent the development of serious emotional and behavioural difficulties in later life. It exists a correlated influence between the family environment and the achievement of students' learning. Social-emotional competence plays a pivotal role in gaining achievement in students' learning and helps to make the family environment more favourable and conducive. Teachers and parents must pay individual attention to each child for preparing them to face the difficulties and challenges of life in a systematic and efficient manner. It lay emphasis on the activities and programs that develop the ability of positive feelings, thoughts, and actions to reduce negative behaviours.

**Title of the presentation:** Citizens' Participation in Local Education Governance: An Assessment of the Functionality and Spending Indicators of the City School Board of Caloocan.

**Name of presenter:** Ellenor Joyce G. Bartolome

The author commenced her presentation by elaborating on the background of the research which was to examine the Local School Board (LSB) and local education governance in terms of functionality, dynamics, and citizens' participation mechanisms in the planning, budgeting, and implementation of the School Board Plan and the Special Education Fund (SEF) in Caloocan City- Philippines. The purpose of this research was to evaluate the existing participation mechanisms and the government-civil society partnerships integrated into the local development plans and also to formulate the governance reform frameworks and policy recommendations that should be undertaken to assist policymakers.

In order to complete her research, she proceeded with a mixed methodology to elucidate the effects of the spending guidelines of the SEF in terms of the planning, budgeting, and implementation of the LSB Plan. She also used qualitative data derived from the semi-structured interviews with the focal persons from some National Government Agencies. For the quantitative data, she added a survey questionnaire that was given to the academic stakeholders in order to identify their level of awareness and involvement. In addition, she integrated a policy document analysis to collect supplementary information in order to examine the education policy.

As the result of the study, she has demonstrated that the relationship between the level of awareness and level of involvement of academic stakeholders in the citizen participation mechanisms with the LSB showed that there is also a very high positive relationship between the variables.

During the discussion, the presenter did not receive any particular question but her presentation was given a remark and comment from the audience stating the link with Dr Peter Gray's special lecture this morning - politics (in this case taxation) driving education, government agencies driving education, and education mediated through local governance (school boards). 3. Summary of suggestions and recommendations (100 words)

Following the study on the policy document analysis used to elucidate challenges and limitations on the SEF, in view of the conclusions, she has formulated the following recommendations such as to strengthen the relationships and clarify the power-sharing arrangements; Expand the SEF Coverage; Identify alternative sources of funds for the SEF; Institutionalize greater transparency, monitoring and evaluation mechanisms in the operation and utilization of the SEF; and expand the composition and functions of the LSB in terms of the National and Local Government Agencies. She also recommended in terms of the Academic Stakeholders' Participation that we should conduct technical training and capacity building on the existing participation mechanisms of the government for education planning and education financing; establish a School Governing Council in each school and institution; and conduct regular consultations, town hall meetings, and education summits.

## PARALLEL SESSION 2C: SOCIOLOGY AND MANAGEMENT

**Name of Chairperson:** Dr Rasika Ileperuma
**Name of Rapporteur:** Lydia Mireku

**Title of the presentation:** Gender Queer Being Embraced Socially: Global Beacon of Cognizance for Trans Community amid Adoption in Chandigarh

**Name of presenter:** Dr Shelly Aggarwal

Dr Shelly Aggarwal introduced her research with a highlight of how the trans community is struggling in India. She quoted this phrase; 'The Change will come', which she said is a tagline from a Chandigarh-based Trans woman and a social activist who brings a ray of hope for people under the gender spectrum. This research was inspired by a Chandigarh-based nonagenarian Chahal couple, who adopted a Trans couple when their families refused them. An act that ignites the elevation of the Trans community globally.

The researcher conducted an interview with one of the trans couple which revealed that she was a rape victim and that her community (trans) still struggles to be accepted. It was also revealed that apart from the legal declarations, they want society to acknowledge them. As per the responses received, they have to confront innumerable challenges each day, which include bad touch, anxiety, depression and body shaming. They have to hide their organs like breast, private parts but feel confident after laser and silicone implant surgery. It was also revealed that their financial status is weak, so they are forced into begging and engaging in commercial sex work, as there are no jobs for them in the Chandigarh Tricity region. The paper further reveals the level of compassion, perception and behaviour towards the transgender, among the inmates of Chandigarh, which was recorded via a self-constructed questionnaire.

The researcher collected data from 265 inmates and obtained mingled responses with respect to the acceptance of the Transgender. She mentioned that the adoption news had a huge impact on the mind-set of the people and paved way for the acceptance of the transgender at the global level.

It was discussed that this was a very sensitive topic and the question directed to the researcher was, "what has been genuinely achieved so far?" the researcher explained that, it has brought about some awareness in the community. It was recommended that statistics and humane behaviour have to be considered in future research. It was further discussed that trans students need to be accepted at the school level. Therefore, policy makers should have strong policies in place at the school level to include the transgender society in the educational system. There was another question on whether the government policy is helping in India. The researcher answered that things are now getting better than before and concluded that the trans gender's voice needs to be heard in order to be supported.

**Title of the presentation**: Teachers as Managers: A New Vision

**Name of presenter**: Neelu Jhanji

In a short introduction, the presenter suggested that mangers used to be seen in the cooperate world but now managers are being addressed in the school. She explained that the modern era demands teachers to act as efficient and effective managers to improve the quality of education because quality education shows the path for progress of the nation. She mentioned that teaching competence includes right techniques to convey knowledge, skills and attitudes whereas managerial skills enable a teacher to become a creative person and think about different strategies to achieve the goals of education. The presenter highlighted five categories of teaching competence as cognitive-based, performance-based, consequence-based, affective-based and exploratory-based. For the purpose of the study, the researcher included cognitive competence, performance-based competence and affective competence. The objectives of the study were to study the teaching competence of secondary school teachers, the managerial skills of secondary school teachers as well as the relationship between managerial skills and teaching competence of secondary school teachers.

The study was descriptive in nature with 20 secondary schools randomly selected from Jalandhar District. The researcher collected data from 200 Secondary School Teachers (100 male and 100 female) with 10 teachers were taken from each school. She developed and used Managerial Skills Scale for the Teachers and General Teaching Competency Scale was adapted to collect the data related to Teaching Competence of the Teachers. From the results and discussion, a total of 19 participants had low-level, 49 had average level and 32 had high level of teaching competence. The researcher's interpretation of data indicated that there is a strong, significant and positive correlation between teaching competence and managerial skills and concluded that with the increase in the managerial skills the teaching competence tends to increase and vice versa. The research findings indicated that there is a difference in the teaching competence of male and female secondary school teachers. She concluded that there is connection between managerial skills and teaching competence of secondary school teachers. The results of the study further indicated that there is a difference in the managerial skills of male and female secondary school teachers and the findings related to the correlation analysis between managerial skills and teaching competence of Secondary School teachers depicted that teaching competence have a significant positive relationship with the managerial skills.

In response to a question on the kind of managerial skills teachers have, the researcher answered that five managerial skills that were employed were communication, classroom management, time management, decision making and pedagogical skills. She added that these skills need to be effectively used by teachers to make teaching and learning effective. There was another question on how the sample was selected and it was explained that ten schools of both male and female students were selected and samples were taken on the basis of gender. The researcher contacted Principals to seek consent.

**Title of the presentation:** Effect of Positive Life Orientation on Ecological Attitude and Cognition during Pandemic

**Name of presenter:** Dr Anjali Puri

This presentation started with an overview of the environmental hazards caused by humans and how these have been inferred as one of the main causes of the pandemic, which has further caused various psycho-physiological changes in the mind-set of people and society. The purpose of the research was to study the effect of positive life orientation on Ecological attitude and cognition during the pandemic times.

The researcher employed instructional material based on positive life orientation and the test of Ecological Attitude and Cognition to collect the data. A pre-test consisting of an Ecological attitude and cognition scale was administered to a sample of 60 technology students pursuing a BTEC. Fifty students were selected and further divided into two groups of 25 technology students each forming control and experimental groups. Self-made positive life orientation modules were taught to the experimental group for fifteen days. In the end, the researcher administered a post-test to the experimental and control groups using the Ecological attitude and cognition tool to verify the learning outcomes among students of both groups.

The results showed that the students who were taught positive life orientation modules had better Ecological attitudes and cognition than those of the control group. The results showed a significant difference between the mean scores of the control group and the experimental group. The result highlighted the importance of incorporating positive life orientation in teaching, as it helps in creating ecological attitudes and cognition. It further highlighted that the more learners learn through positive life orientation, the more mentally cognizant they are regarding ecology, which helps them to recognize their strengths and weaknesses.

During the discussion, a question about the direction of how positive life orientation can be implemented was asked, and the researcher responded that this could be done through motivational lectures and she emphasised the importance of using Toktok as part of the curriculum. She further added that teachers should create a kind of connection with the students. Another question on significant changes in the students has been answered affirmatively. It was then concluded that although there were many challenges including the pandemic, this study had positive results as the students' minds were very receptive.

**Title of the presentation:** Green Human Resource Management Practices in Public Universities of Bangladesh and Its Impact on Sustainable Economic Development

**Name of presenters**: Prof Dr Dhanonjoy Kumar, Shimul Ray and Sraboni Bagchi

The researcher introduced his presentation with the statement "Education is the backbone of a nation" and added that education aids in the development of people's awareness, welfare, attitudes, abilities, and behaviour, as well as a feeling of ethical duties.

His literature review touched on Green Human Resource Management (GHRM) from different points of view, GHRM practices from the environmental point of view, the rof GHRM in the organizational performance and the linkage between GHRM practices and the environment, and how it impacts the sustainable development of an organization.

The study aimed to look into the use of GHRM in educational institutions, especially the government universities of Bangladesh. The study was qualitative in nature, secondary sources were used and data was collected from the following 5 public universities out of 50 public universities in Bangladesh: Dhaka University, Rajshahi University, Chittagong University and Jahangir Nagar University and Islamic University, Bangladesh. The study, according to the researcher, may help government organizations, particularly government universities, to implement GHRM to promote sustainable economic development, energy conservation, and a green campus for their students.

The study found that the application of GHRM in government universities of Bangladesh is in a negligible position and for sustainable economic development, there is a need to introduce GHRM in every section of the university. It was also found that GHRM will help to reduce employee carbon footprints through electronic filing, car sharing, job sharing, teleconferencing and virtual interviews, online recruitment and training, and by maintaining energy-efficient office spaces.

It was concluded that GHRM involves undertaking environmentally friendly HR initiatives resulting in greater efficiency, lower costs, and better employee engagement and retention, which in turn, help organizations reduce employee carbon footprints by electronic filing, car sharing, job sharing, teleconferencing, virtual interviews, recycling, telecommunicating, online recruitment and training, energy-efficient office spaces, etc. It was further concluded that green human resources help in achieving greater efficiency and lower costs within a process by reducing and eliminating ecological wastage and refurbishing human resource products, tools, and procedures.

During the discussion, a question on the extent to which sustainable economic development is practiced came up and the researcher answered that the government is financing 108 universities but they are not interested in the use of technology. He emphasised that if the universities develop interest, then it will help them to perform. The importance of car sharing was discussed and the researcher was asked about how often he contributes to that. He mentioned that if the authority gives the initiative, individuals would follow. He further informed the audience that he ensures to reduce the use of paper to save the tree. It was further discussed that it would have been better for the universities to save the environment by using online mode of training and development programmes to reduce energy instead of allowing offline mode.

## PARALLEL SESSION 2D: PURE SCIENCE

**Name of Chairperson:** Professor Mokgale Makgopa
**Name of Rapporteur**: Dr Michal Lytovka

**Title of the presentation**: Legal Provisions for Children with Learning Disabilities: Across Five Countries

**Name of presenter:** Kamaljit Kaur

The presenter has begun with the definition of learning disability (LD) and a general overview of the problem. A systematic literature review of selected studies, published from 2011 to 2022 was conducted for Canada, India, Taiwan, the United Kingdom of Great Britain and the United States of America within the current project. The research was focused on legal support and educational services provided to students with LD, as well as on the prevalence rate of LD across five countries. As a result, the variability and lack of consistency were detected in the assessment approach, disorder identification, classifications used, legislation recognised and services provided across the chosen countries.

In response to a question about the significant difference between the level of disability in Canada and the UK, the presenter suggested that the lack of a universal tool available for the identification of hidden disabilities may be responsible for the disparity. Differences in national policies and research methodological approaches could also contribute to the disparities between countries.

In conclusion, the presenter suggested that international organisations should provide guidance and support to researchers, practitioners and lawmakers to facilitate universal changes that will better serve students with LD throughout the world. Early identification of LD should be prioritised by parents and teachers in order to support the learning process during the adaptation and socialisation periods of children. Recent increased attention worldwide to LD should lead to collaborative learning with active parent participation and decision-making.

**Title of the presentation:** Quality of Life of Children with Intellectual Disability: Case Studies

**Name of presenter:** Aditi Sharma

The presenter began with the definition of quality of life (QoF), intellectual disability (ID) and a general overview of the problem. Within the project, the QoF of children with ID has been studied in relation to parental involvement. Qualitative and Quantitative analysis was performed on 35 case studies of children with ID from special schools in Delhi using triangulation. The age of participants was eight to sixteen years old with a mild ID of IQ 50-70. Descriptive analysis for QoL was interpreted for personal, educational, social, emotional and occupational parental involvement. Regression analysis for QoL and parental involvement of children with ID was calculated. As a result, all five dimensions of QoL have significant positive correlations with parental involvement. An increase in parental involvement will improve the QoL for holistic growth and development of the children with mild ID, as well as their self-sufficiency and self-reliance.

**Title of the presentation**: Development of a Programme for Students with Hearing and Speech Impairment and its Effectiveness

**Name of presenter:** Dr Rajshree S. Rathod

The presentation started with a description of the fundamental human rights legislation and the theoretical background of the research. Traditional methods of learning are not useful for students with disabilities. Individualised Educational Programmes for each child with hearing and speech impairment should be used in the learning process of adapting multi-sensory teaching. The survey was conducted in hearing and speech impaired schools for developing multi-sensory teaching techniques that could improve the learning of the History subject. After the implementation of the programme the multi method research was conducted based on post-test, retention test and students' feedback. Thirty-four secondary school students with hearing and speech impairment from Pune City (India) took part in the mixed research methodology study. As a result, Multi-sensory Teaching Techniques are effective for learning and retention; the student had a positive opinion regarding the programme. The presenter has concluded that the research has contributed to the teaching methodology. The programme could be used in any school, at different levels, with other subjects on students without disabilities.

A question on why the current research has focused on very old sensory theories from the overview, the presenter highlighted that the scope of application of these theories is limitless

The research has demonstrated a wide range of positive impacts on teaching History at special schools with speech and hearing impairment. A similar study could be done on different school subjects, on students with different types of impairments and on other technological methods.

**Title of the presentation**: Potential of Boeravinones from Boerhaavia Diffusa L. as HCV Ns3-Ns4a Protease (4a92) Inhibitors by Molecular Docking.

**Name of presenter:** Assistant Professor Mangala K. J.

The presentation started with a general overview of Hepatitis C virus (HCV) infection and stated that no effective prophylactic vaccine has been developed against the disease in contrast to some pharmacological treatment available from WHO. In order to target HCV viral replication, the NS3 protein with NS4A cofactor were chosen as a primary target for direct-acting antiviral agent's development for this drug discovery study.

The phytochemical compounds from Boerhaavia diffusa L. were used for anti HCV properties investigation by in-silico molecular docking. 2D structure of each compound selected was drawn, then converted into 3D structure with optimised energy. The protein structure was downloaded from Protein Data Bank. As a result, all eight flavonoids showed potent inhibitory activity against 4A92. The best-ranked lead molecule was Boeravinone C. It showed potential interaction and significant hydrophilic and hydrophobic contact with active residues of 4A92. The presenter concluded, that further studies on the bioactive compounds should include extraction, isolation from the plant, modification and synthesis for in vitro application as potent inhibitors against HCV protease by carrying out cytotoxicity assay.

The presenter has clarified that current presentation is a small part of a bigger project which has included several different plants. The flavonoids table shown had included all the compounds studied. In silico molecular docking will be swapped with in vitro studies in observed future. These theoretical results are very promising but live cell studies could provide comprehensive answers.

**Title of the presentation:** A Study on Digital Hygiene Practices of Secondary School Teachers of Lucknow, India

**Name of presenter:** Ms Janki Srivastava

This online descriptive survey, involved the collection of data from 173 teachers (47 male, 126 female) from secondary school teachers in Lucknow, India, using a convenience sampling technique. In addition to demographic and general data, the questionnaire contained four specific categories of questions: psychological impact, awareness of digital device protection, awareness on cyber safety practices and good digital practices.

The findings suggested that >98% of respondents are using the internet every day, for one-two hours (>47%) and through mobile phone devices (>87%). Moreover, the teachers are aware of the psychological impact of using digital devices and mass media in everyday life, are applying digital device protection knowledge, are effective with cyber safety practices and are following good digital practices.

Comments from the audience indicated it is interesting to study health hygiene/epidemiology in connection with digital device operation in the post-covid era and to study gender and age differences within the digital habits of teachers.

The presenter concluded that by practising good digital hygiene in everyday life, secondary school teachers could motivate students to follow digital hygiene standards to ensure their safety and security in the virtual world.

**Title of the presentation:** CONNECT and Participatory Science: The Simulated Jury as a Resource for Thinking About Science

**Name of presenter:** Dr Raquel P. G. Kowalski

In this presentation, the researcher alluded to the fact that an inconsistent approach to science-based discussions in school education leads to insufficient scientific capital within the younger generation. The purpose of the study is to verify the methodology of three phase CONNECT project (care-know-do) in which pretended judges contribute to students' scientific capital.

The case study research methodology consisted of the application of a didactic sequence in Portuguese language classes and qualitative analysis of the collected answers. Thirty-two third-year private secondary school students and one Portuguese language teacher from Araucaria city, Brazil participated in the study. Within 'care' phase (2 weeks), activities with the textual genre simulated a jury and initial discussions on Covid-19 early treatment took place. Within the second stage of the project ('know' – 5 weeks), there was research on subject, exchange of findings between groups, validation of sources studied by other groups, research for arguments to refute arguments of opposed group and debates on scientific value of results between groups. The last section of the project ('do' – 3 weeks) contained verdict and final debate activities as an execution of imitated tribunal. As a result of the study the CONNECT methodology contributes to scientific capital growth among secondary school students by encouraging research and debate on key issues of science, technology and innovation.

The presenter in their conclusion suggested that pretended judge activities with research and debates contribute to a greater knowledge of subject and increase of critical thinking, which stimulate scientific capital accumulation within secondary school students.

## PARALLEL SESSION 2E: ENVIRONMENTAL SCIENCES AND ECONOMICS

**Name of Chairperson:** Dr Dazy Zarabi
**Name of Rapporteur:** Alfred Anim Agyeman

**Title of the presentation:** Importance of Environmental Educational on Eco-System in Third World Countries: Perspectives from Nigeria

**Name of presenter**: Adamu Ado Abubakar

The promotion of a sustainable environment and eco-system performance has made the development of an eco-friendly environment in third-world countries imperative. The research aim was to demonstrate a framework that empirically evaluates the significance of environmental education in the promotion of eco-systems in third world nations using Nigeria as a case study. The methodology was based on literature review using google scholar.

The presenter introduced an integrated framework connecting three variables of Natural resources, pollution and ecological aspects and its linkage to sustainability and ecosystem performance in an attempt to simplify the complex nature of sustainability policies especially in Nigeria. Based on the analysis of the framework, the speaker stated that the foundation of environmental education in Nigeria should be based on Green culture, Green innovation, and Green consciousness as its interaction will enhance sustainability.

In conclusion, the presenter emphasised the need to consolidate and classify environmental education based on sustainable environmental and eco-system performance. Also, there is the need to have in place sustainability policies and environmental education that aim to strengthen the integrated Eco-Friendly Theory and Theory of Sustainability as employed in the framework to be adopted by policymakers and environmental educationists.

A question was asked on the initiatives adopted by the Nigerian government with regards to sustainability-The speaker stated that there is a focus on deforestation and the Nigerian government has come up with policies on pollution control and the development of a green culture.

In response to the question of whether environmental education was being taught as a curriculum in Nigeria, the speaker stated that there is a gap and research is being encouraged in this area for this to be developed. The chairperson stated that environmental education is being taught in India from the primary level and that can be adopted in Nigeria**.**

**Title of the presentation**: Global Warming and Chemical Pollution Effects on the Environment

**Name of presenter**: Charalampidou Penelope

The paper presented was based on an action research involving school children using an educational framework of care-know and do at a school in Greece based on a teaching scenario aimed at assisting students in learning the causes of global warming as part of an Earth Pollution course. The activity was facilitated by the presenter who is a Biology teacher with another Chemistry tutor.

Students created a series of questions and conducted a scientific investigation about chemical pollution of the air, water, and soil based on the facts they had gathered and sent them to three different scientists or experts. The researchers highlighted the effects that marine chemical pollution has on ecosystems and marine organisms and explained how the phenomenon of bioaccumulation threatens people as leading consumers in food chains. Students undertook an exercise with their families on ecological footprint calculation in an attempt to reduce the Eco print.

The fundamental objective has been to put students at the centre of the learning process while encouraging them to develop curious, imaginative, and responsible thoughts on the environment and ways to minimise factors causing climate change and chemical pollution in the air, water, and soil in three different dimensions. Awareness of global warming issues was created via posters, environmental board games, rap songs, constructions and banners

There was a discussion on the effectiveness of the platforms used by the children in the research- the presenter stated that the students predominantly used the Padlet App as an open forum for discussion and recorded their comments.

The difference between ecological footprint and carbon footprint was discussed. The presenter stated that ecological footprint contrasts the overall amount of resources consumed by people with the amount of land and water required to replenish those resources while carbon footprint considers resource use and focuses on the greenhouse gases produced by burning fossil fuels.

**Title of the presentation:** Sensitizing Teacher Trainees to Green Economy Initiatives-A Study

**Name of presenter:** Dr Chandrasekharan Praveen

The introduction of a compulsory paper on environmental education for the Bachelor of Education (BEd) programmes in India seeks to raise awareness among aspiring teachers of the need of safeguarding the environment and the planet earth. Dr Chandrasekharan Praveen stated that the background and idea of the research came from the Rio earth summit. The aim of the research is to determine the potential causes of the unsuccessful Green Economy initiatives in Indian teacher training institutes and the need for a new curriculum. The research was based on a sample of 4 government-run colleges using empirical analytical, qualitative and participant observation methodology over a decade.

The study discovered that among students, parents, and community members there was no perceived need for safeguarding the seeds and saplings. The study also revealed that although most students had a casual attitude toward green initiatives and had no moral need to support efforts for sustainable development, teacher candidates in the natural science option had been shown to have a sincere interest in these issues. The main findings have no commitment to implement green economy programmes as there is no explicit profit and it was more of a window dressing.

In conclusion, the speaker made the point that gone are the "Days" celebrations which do not result in any appreciable progress toward promoting a green economy. Cultivating the right mind-set is key and more action has to be taken into encouraging students and community members to adopt the appropriate mind-set and an updated educational curriculum into the teacher preparation programme.

**Title of the presentation:** Social & Economic Impact Through Green Economy A Look at India

**Name of presenter:** Dr Tapati Mukjerjee

Dr Tapati Mukjerjee introduced the need for a new focus on environmental and green economy stating how 13-year-old Greta Thunberg's speech at the UN in Sept 2019 sensationalised the urgent need for global education to trigger a green economy. As the effects of climate change start to be felt, it is imperative that action is taken to establish a green economy. This should not mean substituting sustainable development, but rather placing a new emphasis on global infrastructure, skills, education, and economic development.

Although urban growth has put India in the headlines of emerging world economies as the 4th largest, it has also resulted in challenge of making India the 5th largest GHG (greenhouse gas) emitter with its emission since 1990 increasing by 150%. The government has introduced green initiatives as part of schools' curriculum. The study therefore aims to evaluate current green initiative programmes in India's education system in classroom learning and the extent of training imparted in crucial sectors such as agriculture, manufacturing sector, transportation, and infrastructure via Informal Education. A combination of primary data collection and secondary sources were used in the conduct of the research.

The findings of the study indicated the awareness of the world's diminishing resources and although projects to raise awareness about a greener future have been done in schools, such projects are not aggressive enough and little has been done to integrate green education into the curriculum. Also, although the informal training provided to workers in the infrastructure sector in towns like Gumla and Goalpara is praiseworthy, the pace of learning appears to be slow.

In Conclusion, the launch of a green campaign that will provide results more quickly requires intensive planning and given its population size and diversified eco-socio environment, India, must do more to implement programmes that will have a real impact on the green economy.

**Title of the presentation:** Mediating Role of Competitive Advantage on the Relationship Between Access to ICT and Sustainability of Small and Medium Enterprise (SMEs) in Nigeria

**Name of presenter:** Shamsudeen Muazu Salisu

The presenter gave a background introduction to the state of SME's in Nigeria. He stated that although SME's contribute immensely to the growth of the Nigerian economy, as per the SDG index 2022, Nigeria currently ranks at 139th position among 163 nations and most SME's fail within the first five years of operation. Also SME's in Nigeria have limited access to contemporary ICT. In a bid to combat the failure and to boost the SME sector, the government initiated the SME survival fund in 2020.

Although, there has not been a thorough discussion of the underlying causes for and mechanisms governing how ICT affect SMEs' sustainability, SME failures has been attributed to ICT issues. The main aim of the study is to examine how competitive advantage mediates the link between SMEs' sustainability and access to ICT in Nigeria. The study used a cross-sectional survey design. From a population of 21,615 people, a sample of 377 SMEs operating in Nigeria's Kaduna State was randomly selected to take part in the survey.

The findings show a favourable and significant relationship between ICT availability and the long-term viability of SMEs. Additionally, it was found that the link between SME sustainability and access to ICT is mediated by competitive advantage. As a recommendation, ICT tools should be used effectively by SMEs in their operations as this will help them gain a competitive edge and ensure the sustainability of their operations.

A question was asked on the difference between economic sustainability and environmental sustainability? It was clarified that economic sustainability is based on the financial capacity of funds available and profits while environmental sustainability looks at the operations of the organisation and its employee's activities impact on the environment

**Title of the presentation:** Serial Entrepreneurship Research: A Theoretical Framework

**Name of presenter:** Dr Mohd Imran

Dr Mohd Imran, defined Serial Entrepreneurs as individuals who first initiate one business, then after exit that business in order to start another one. In the year 2020, during the COVID-19 pandemic, around 7,000 new businesses were established all across the world with most of these businesses set up by serial entrepreneurs. Yet, Little research has been conducted regarding serial entrepreneurship compared to entrepreneurship research more broadly.

The main objective of the research paper is to review the existing literature on serial entrepreneurship from several theoretical viewpoints and highlight the different key factors that contribute to the success of a serial entrepreneur. The paper was based on a systematic review using a descriptive and exploratory research approach from a variety of secondary sources.

The findings of the paper outlined the exploration of serial entrepreneurship from four new research areas i.e. entrepreneurial ecosystem, heuristics in entrepreneurship, entrepreneurial capabilities and the technological development. The study lays out a clear path for future individuals who are interested in becoming serial entrepreneurs to learn about serial entrepreneurship from the grassroots level coupled with the need for policymakers to further regularise, update, or amend existing rules and future policies in accordance with the findings. In conclusion, to be successful, entrepreneurs need to maintain a consistent focus on opportunities and establish connections between those opportunities and the resources that are now available.

Considering the global impact of Covid 19, the research paper was commended as timely and relevant in the present economic environment.

It was suggested that the methodology is mainly review by nature and based on its theoretical nature, the exploratory descriptor needs to be amended to systematic review and the literature review should be meticulous.

## PARALLEL SESSION 2F: EDUCATION AND TECHNOLOGY

**Name of Chairperson:** Professor Stephen McKinney
**Name of Rapporteur:** Victoria Miroiu

**Title of the presentation**: Inclusion and Training Processes in Multicultural Environments

**Name of presenter:** Prof Klaus Schlünzen Junior

The presentation started with a brief video offering an overview of the collaboration between the São Paulo State University (UNESP) and Santa Fe College (USA) and the recognition of their collaborative work at Reimagine Education Conference which took place in San Francisco in 2018. Through collaborative work, the São Paulo State University (UNESP) and Santa Fe College (USA) designed and implemented the Certificate for Accessible and Inclusive Practice (CAIP) Online Training Program. He first pointed out the international and intercultural aspects of the training offered to teachers at Santa Fe College and its impact on inclusion and accessibility in Higher Education. He emphasised that, through this course, teachers become aware of the various opportunities they have as instructors to be more inclusive in their teaching and ways that universal design can benefit all learners.

Opening with the question "Why do we need a training program on accessibility and inclusion?" the presentation highlighted the fact that CAIP is aimed to enable the modification of teachers' conceptions and practices that promote student-centred learning and inclusive culture within Higher Education institutions. Prof Klaus Schlünzen Junior illustrated this point by presenting the learning outcomes of the course and the CCM (Constructionist, Contextualised and Meaningful) Approach which guided the structuring and development of training. For example, CAIP uses gamification techniques as a student-centred approach and activities throughout the participant study theories and then apply the theory in classroom. To explain this point, further reference was made to the course modules which contain readings and one or two brief videos, discussion board question, an application assignment and optional resources.

The presenter considered that teachers need to learn how to modify teaching resources to provide accessibility to all students, therefore, the participants apply what they learned by modifying the didactic materials to promote an inclusive education culture and learning environments for all, in which the abilities, potentialities, differences and singularities of the subjects are recognized and valued.

Lastly, the success of CAIP was highlighted based on the high completion rate (74,28%) of those who started the program, clear indications of a perspective change regarding inclusion and universal design, and changes already being discussed and made on didactic materials during and after the completion of the program. He also pointed to the satisfaction and willingness of the participants to recommend others to join CAIP's future offers.

In response to the question on clear indicators for prospective change, the presenter indicated that there is a need of change in Higher Education institutions as universities have now many disabled students and students with special needs, making the use of inclusive learning approaches more relevant.

**Title of the presentation**: Teacher Development through Science Projects from Open Education (Title on the slides: Professional Teacher Development and Science Projects from Open Education)

**Name of presenter**: Regina Liberato Shibuta

The presentation started with an emphasis on the importance of professional teacher development which is a key point of difference in elementary school. Through the development of their knowledge and skills, teachers do better and, consequently, children perform better. She referred to the concept of Open Education (OE) as the way of planning and implementing science projects in elementary school to promote responsible citizenship. Furthermore, Mrs the presenter indicated that science education is an approach to thinking about a better future and a better society. To illustrate this argument, she referred to the CONNECT project as a way of change in education through science with a greater motivation for teachers' lifelong learning and development and students' understanding of the importance of scientific content in their daily lives. She gave a brief overview of the CONNECT project by outlining that it was implemented in a private elementary school in Ponta Grossa, with the participation of 120 students and their families, 8 regular teachers from the 4th and 5th grades, one science teacher, the management school team and local partners such as politicians, businesspeople, journalists, and city hall employees. A greater emphasis has been given to the project's steps namely CARE,-KNOW-and-DO. Through the CARE step, children understand real-world problems and discuss them with their teachers and colleagues. At this stage, the children had the opportunity to choose a world problem for example water. In the next step, KNOW, the mayor of the city judged the water pollution creating awareness among children about it. Through the step DO, 'teachers felt the need to go deeper into the subject by involving children in practical activities and actions. The presentation of the project's steps included relevant material such as pictures taken during the project's progression.

The presenter summed up that the CONNECT project has been successful as students, parents and teachers were really involved in community actions.

In response to the question on the hope for the long-term sustainability of the project, the presenter indicated that children were really involved, motivated, committed, and felt they are part of the community and society. The project also brought many stakeholders together so, with such concerted effort, the project can be sustainable. She also argued that the children are really determined to propose and develop another project about another world problem.

**Title of the presentation**: Mobile App Production: Open Schooling and Responsible Innovation During the Covid-19 Pandemic

**Name of presenter(s):** Prof Silvar Ferreira Ribeiro and Katiuscia da Silva Santos

Prof Silvar Ferreira Ribeiro presented various innovative extension projects focused on Socio-digital Inclusion and the development of applications and social technologies. Those projects namely Tecsol, EduCovid, Mães 100%, Ethnic Tourism, and CONNECT and Application-Formation were designed and implemented by the GEC&TIS research group with support from the National Foundation for Studies and Research (FINEP) and consolidated with the extension project Applications for Mobile Devices: Open Education in the fight against the Covid-19 pandemic. He made reference to the status of innovation projects developed by the research group.

The talk focused on the developed applications for mobile devices such as EduCovid 19, E-Covid, IRECOVID, CoInfo, Educovidas, CheckList, Calculator IMC, EduCoKids, and the Ethnic Tourism, Mothers 100%, CONNECT and LABITEC projects. They emphasised the role of the Ethnic Tourism project which offers various activities with traditional community and aims at stimulating entrepreneurial activities to socio-digital inclusion, education that changes ethnic and racial awareness, self-esteem development, and employment and income opportunities for communities. On the same way, he explained that the Mothers 100% project is an application of activities aiming to promote social inclusion and entrepreneurial activity among women in peripheral communities. Further, he gave a greater emphasis to CONNECT which is a program which teaches science in schools and offers solutions to the main scientific problems, giving as an example the Carbon Neutral theme. In addition, he pointed to the fact that LABITEC is a mobile laboratory which helps teachers and children with open educational activities in schools without access to ICT.

Finally, the presenter indicated that through the use of mobile applications and digital materials of open schooling created and used by students in public schools, it was possible to determine how open education was promoted during the Covid-19 pandemic.

**Title of the presentation:** Gamicity: Constructing A Concept from Transforming and Responsible Practices

**Name of presenter:** Paula Carolei

Paula Carolei started her presentation by explaining the concept of gamicity and the importance of promoting playing as a way to responsible social transformation and dialog, and responsible gamified practices. She emphasised the role of locative games in which the city itself is the space of exploration and intentional learning by inviting people to play them in museums and on streets.

The presenter suggested that gaming elements are related to RRI and various games and their impact on people's experiences were analysed. For example, 10 games and 12 gamifications involving the relationship of playing in (with) the city were included in the analysis. Firstly, Gameout is about how to break the walls of schools inviting the students to play outside and learn within the city. She illustrated the success of this approach by giving an example from São Paulo which is a city with various social problems and, in order 'to understand the city and its problems', children went out to play in and learn with the city. There were also pictures with people interacting within museums showing various ways of making visible things about the city. She expanded her discussion with Extend and Amplify approach to augmented gamification which involves mapping spaces interactive potential and extending its levels of knowledge, significance, and creative potential by introducing projective and symbolic layers. For example, people discover important things to understand the interactive potential and put pins in the city and make memories to create layers.

Further, she talked about Immersion which is about creating scenarios and narratives, for example Tomorrow is a game about dreams and master of the dreams. In addition, Storytelling is a way of people feeling free to discover, invent, build, share and tell stories. Through Treasures and value collection, people collect items of great value that contributes to the construction of personal and collective affections. The presenter concluded with a suggestion that gamification presented an excellent opportunity for interactive learning.

**Title of the presentation:** Technology's Impact on Recruitment, Retention, and Reputation in the Education Sector

**Name of presenter:** Swati Yadav

The presentation was introduced with a discussion predominantly concerned with the challenges faced by educational organisations due to the use of technology in Recruitment, Retention and Reputation in the current competitive scenario. She highlighted the idea that, due to the ongoing pandemic, organisational development and success are becoming more complex. Developing a consistent research platform for hiring and retention strategies, followed by reputation building and maintenance, is the most difficult problem for every organisation. To illustrate this point further, the presenter referred to three areas namely Recruitment, Retaining, and Reputation which are taken in consideration by academic institutions in their overarching purpose of teaching students. She pointed out that recruitment is crucial as the survival of any university depends on who you are and finding the right kind of students rather than getting enough students. Reputation has been highlighted through several questions including: What is the university's standing among potential candidates, the general public, the community, the press, the governments? What is its reputation? What misunderstandings or preconceptions do individuals have about it? The answer to these questions is that, in order to achieve their survivability objectives, institutions of higher education must adopt organisational management practices. Therefore, the biggest challenge is to build a platform that is continuously examining techniques of selection, compensation packages, and then retaining and developing the right people.

To support her discussion, the presenter gave as an example virtual education and its role in this scenario. She pointed to the fact that it allows teachers to conduct a more tailored student- centred instruction and enables students to study actively and take on increasing amounts of responsibility for their time management. Another example is focussing one’s strength through online education which enables teachers to concentrate their energies on teaching rather than maintaining their physical classrooms and, consequently, to support, reinforce, and promote learning. Further example referred to the need for talent management as, in India, institutions often rely on candidates with minimal educational experience or those with a lot of teaching experience in a certain sector. Academic recruitment, development, and retention plans must be required by technical institutes in order to ensure optimal talent acquisition. Lastly, the presenter referred to motivation and argued that teachers tend to ignore it as they follow mostly traditional paths in their practice. Despite this, she recognised that various eminent institutions have proactively modernised themselves and made changes to their policies in this area. In addition, she mentioned various pathways to success, the most important being ‘the academic programmes and contests which can be created with prize and incentive structures to push the extraordinarily brilliant.

**Title of the presentation:** Lifelong Learning in India

**Name of presenter:** Paramjit Singh

This presentation emphasised the importance of lifelong learning in people's life. The presenter highlighted the fact that learning has to be continuous, therefore, lifelong learning is an important subject globally and has become a powerful policy discussion for international policy groups such as European Commission, UNESCO, the World Bank, and the Organization for Economic Cooperation and Development. After various objectives of lifelong learning education were mentioned, the tradition of lifelong learning in India received considerable emphasis.

The presenter focused his discussion on the role of the Government in lifelong learning programmes. For example, in order to achieve the general goals of lifelong education and skill upgrading, the Ministry of Human Resource Development of the Government of India has a crucial role in promoting lifelong learning programmes, primarily through the National Literacy Mission which funds several organisations, including the Jan Shikshan Santhans, the Zilla Sakharta Samities, and the State Resource Centres, He gave various examples of official and informal lifelong learning courses and argued that, despite the implementation of those programmes and initiatives within the education and training sector, in reality, the formal policy for lifelong learning is not properly implemented in India due to funding issues. He supported his affirmation by indicating that policies are not reaching everybody especially people in villages.

The discussion further delved into another issue in the accessibility of lifelong learning. For example, the UNESCO Institute for Lifelong Learning (UNESCO Institute of Education, UIE) has organised a wide range of activities in four major action areas in recent decades: advocacy, research, capacity-building, and cooperation. UNESCO has played an important role not only in promoting the concept of lifelong learning in India but also in orienting government officials and the academic community toward it. Currently, the country has around one hundred Departments/Centres of Lifelong Learning in operation. The majority of institutions have already established dedicated lifetime learning departments in order to institutionalise extension and satisfy the current demands of lifelong learning in their various operating areas. However, Mr Paramjit Singh said 'UNESCO sends money for lifelong learning programmes, but there is no proper policy on this topic and on how money is spent. India is quite sluggish in developing policies in lifelong learning'. Lifelong learning is not a comprehensive learning framework, it is frequently used as an umbrella term to encompass basic literacy, post-literacy, continuing education and extension programmes of various organisations, refresher/continuing courses of professional bodies, private institutions, and business houses. It is mostly due to a lack of interconnections between various education sectors, as well as identification and validation of prior learning. The National Literacy Mission did not place a high priority on skill training and providing approaches for skill upgrading. Furthermore, 'not all teachers acknowledge the lifelong learning in people's lives' and, because India's youth population is growing, the issue of lifelong learning impacts young children.

In his conclusion, Mr Paramjit Singh emphasised the fact that the establishment of the various Lifelong Learning Programs by NIOS, Colleges, and Universities may play a significant role in developing the lifelong learning programme, particularly through the provision of skilled labour, despite the numerous obstacles and challenges it faces. Also, 'hope comes with a practical application of The National Education Policy 2020 (NEP 2020)'.

As Mr Paramjit Singh declared that India is quite sluggish in developing policies in lifelong learning he was asked to provide further clarification. He answered that policies are there, but they are not implemented and are not reaching everybody especially people in villages.

**Title of the presentation**: Mobile App Production: Open Schooling and Responsible Innovation During the Covid-19 Pandemic

**Name of presenter**: Ms Priyanka Bhaskar

Ms Priyanka Bhaskar started her presentation by highlighting the importance of open enrolment and free Massive Open Online Courses (MOOCs) which provide a flexible approach to enhancing people's careers, gaining new skills, and delivering high-quality educational experiences. The discussion focused on teachers who can improve their subject-specific knowledge and skills in their industry by using MOOCs platforms. She argued that, despite the majority of MOOCs courses being either free or requiring a nominal fee to obtain a completion certificate, and consequently, their great potential, MOOCs are not being adopted by teachers as widely as they could be in developing nations such as India.

The presenter pointed to the fact that there are various barriers influencing the adoption of MOOCs by teachers working in higher education institutions in India. Some examples of those barriers are lack of awareness and technological and financial barriers.

To illustrate this point, further the researcher conducted semi-structured interviews with 11 teachers from various universities in Uttarakhand, India to investigate the factors influencing MOOCs adoption. The in-depth interviews were conducted with an average time duration of 115 minutes.

According to this study, the challenges to MOOCs adoption are a lack of understanding among teachers regarding MOOCs, a limited time schedule for teachers, and technological limits. She noted that lack of awareness was generally identified as the biggest obstacle, since teachers were unaware of MOOCs service providers, curricula offered through MOOCs, and MOOCs' functions. Further, the findings suggested that the teachers' professional and personal development, as well as their enthusiasm, as motivators for them to use MOOCs was lacking. Lastly, she outlined practical implications for various sides such as Higher Education Institutions (which can improve their education outcomes), Government (which can provide technical infrastructures and can spread the MOOCs awareness among teachers and students), MOOCs service providers (who can provide technical laptops and microphones), and teachers (who can motivate themselves for their personal and professional development).

At the raised question 'What do you think are the key barriers?', Ms Priyanka Bhaskar answered that the most challenging barriers which should be overcome are financial barriers and technology.

## SPECIAL LECTURE 2

**Name of Chairperson:** Dr Peter Gray
**Name of Rapporteur:** Dr Minakshi Kishore

**Title of the presentation:** "Ethical Dilemmas in Research"

**Name of presenter:** Professor Dr Asif Mahbub Karim

Prof Asif in his special lecture on Ethical Dilemmas in research suggested that ethics is subjective and subject to evaluations and refers to the guidance on one's conscience and moral life. He emphasises the importance of the protection of the dignity of the subjects in research. Ethical knowledge was described by Prof Asif as personal morality and how it impacts society and the KPIs of researchers.

He further discussed the definition of scientific misconduct focussing on Falsification, Fabrication, and Plagiarism which the young researcher should be mindful of and should start practising from their early years. He urged young researchers to be mindful of redundant publications in the context of ethical principles. He suggested that the main objective of any research should go beyond acquiring human knowledge but should also consider yielding accurate and valid results, providing feedback to respondents and promoting ethical principles of not harming participants.

In his conclusion, he urged that the researchers should avoid the violation of professional ethics as people are very sensitive to various issues hence there should be an honest attempt to respect their privacy and promote morality.

While answering the question of whether there should be an ethical code of conduct for research similar to the hypocritical oath to be sworn by researchers, considering some of the harmful effects of science like that of the Chernobyl nuclear disaster in Ukraine, Prof Asif suggested that in research there are few findings which are useful while many are not, particularly in the era when we are moving from R/D to R/D/C (commercialization). He further suggested that weapons of mass destruction should never be encouraged and agreed that a global consensus on this issue can be achieved.

In response to a question on how some research could end up harming participants, he indicated that sensitive issues such as religion and similar aspects should be carefully handled. He further suggested that there are several issues on which research can be conducted and that more contemporary topics could be picked to solve important problems in society.

# ABSTRACTS OF PAPERS DELIVERED AT CONFERENCE 2022

## KEYNOTE ADDRESS

**Text of Keynote delivered at LSME Online International Conference 9th *LSME* International Conference.**
**Global Education and the Green Economy. 18-19 August 2022**
**Keynote delivered on August 2022 Hybrid.**
**Global Education and Gender Parity**

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**ABSTRACT**

Covid-19 has had a major and unprecedented impact on education throughout the world. At the height of the pandemic in spring 2020, it is estimated that around 90% of the schools throughout the world were closed. This affected the schooling of more than 1.6 billion learners. There were concerns about the move to online teaching and learning, or other non-physical modes of educational interaction between teachers and pupils. There were questions about the quality of the learning experience during the pandemic and the potential learning loss experienced by children and young people. As a result of these concerns and questions, there is now a strong emphasis on 'pandemic' or 'crisis' proofing global education for future generations of children and young people.

This emphasis on pandemic proofing and crisis proofing is very relevant and understandable but has to be understood within the context of the development of global education and measures of success of global education. This means addressing the serious challenges in global education that existed pre-pandemic, during the pandemic and will continue to be challenges in the post pandemic era. One of these serious challenges was, and is, gender parity in education. This keynote will be delivered in four parts. Part one will examine the aim and scope of global education. Part two will present the contemporary context of global education in the Covid-19 pandemic era. Part three will discuss some challenges to formal global education and part four will focus on gender parity in global education.

***Part 1: What is Global Education****?*

The ambitious aim of contemporary global education is to ensure that all children and young people throughout the world have non-discriminatory and free access to school education. This is rooted in the 20th and 21st centuries conception of Human Rights and fundamental freedoms. This begins with the United Nations Declaration of Human Rights (UNDHR) in 1948 which is the foundation for the development of international human rights law (United Nations, 2022a). This right to education is articulated in Article 26, section 1 of the UNDHR:

> Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

The right to education is deemed to be on a par with other fundamental rights and freedoms such as the right to food and freedom (Lee, 2013). This means that education is a right, not a privilege, and everyone, without exception, has a right to an education (Right to Education, 2022). It is also important to note that education is not only a right in itself, but it is a means of empowering people to realise other human rights (United Nations Economic and Social Council, 1999). In the UNDHR, Education was to be compulsory at the elementary stages and education be free 'at least in the elementary and fundamental stages' (United Nations, 1948). Arguably, this

was based on a premiss that elementary education will provide children with sufficient levels of literacy and numeracy and 'basic social and life skills' to help them in the next stages of their lives. This is a premiss, of course, that might not be realised at the elementary stage (Lee, 2013).

This right to education has been revisited and amplified in subsequent documents, notably in articles 28 and 29 of the UN Convention on the Rights of the Child 1989 (UNCRC) and the Sustainable Development Goals 2030 (United Nations, 1989, 2022b). The UNCRC extended the discussion on education to include measures to encourage regular attendance at school and reduce drop-out rates so that children and young people could access and fully benefit from the opportunities offered by school education. This is outlined in section 28:

> States Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:
>
> a) Make primary education compulsory and available free to all;
> b) Encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need;
> c) Make higher education accessible to all on the basis of capacity by every appropriate means;
> d) Make educational and vocational information and guidance available and accessible to all children;
> e) (e) Take measures to encourage regular attendance at schools and the reduction of drop-out rates.

However, the parameters or scope of compulsory and free provision of schooling remained unchanged. Section 28 of the UNCRC still restricted the aim for free and compulsory education to the elementary level but not necessarily beyond this stage. This was still the case for Millennium Development Goal 2: *Achieve Universal Primary Education* (United Nations, 2015). Target 2a was to:

> Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

There has been, however, a substantial development in the Sustainable Development Goals. SDG number 4 aims to *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. Target 1 has the following aim:

> By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

The aim for free education now extends to both primary and secondary levels of schooling. This development is welcome and very ambitious.

***Part 2: The Contemporary Context for Global Education***

One of the main societal concerns of the pandemic era has been around school closures and the impact of these school closures on the education of children and young people. At the height of the pandemic in spring 2020, it is estimated that around 90% of the schools throughout the world were closed. This affected the schooling of more than 1.6 billion learners (Slade, 2022). Another concern was the move to online teaching and learning or other non-physical modes of educational interaction between teachers and pupils (Bovill and McLaughlin, 2022). There were questions about the quality of the learning experience and the potential learning loss experienced by children and young people (Memon et. al., 2021).

As a result, there has been considerable impetus to ensure that there is a future 'Pandemic proofing' of global education (Michel et al., 2022). However, this can be extended to a more comprehensive 'crisis proofing' for different crises in different parts of the world. This encompasses natural disasters such as hurricanes, tsunamis, earthquakes and also the disastrous effects of armed conflicts on school education.

This can be discerned in the conflicts in Syria, Myanmar, Ukraine and Afghanistan. It is sometimes no longer safe to travel to school. Teachers and children may be attacked travelling to school: three children and a teacher were killed in an airstrike walking to school in North West Syria in October 2020 (Save the Children, 2021). The school might be occupied by the military: more than 60 schools and university campuses were occupied by security forces in Myanmar in March 2021. Schools are attacked or even destroyed: hundreds of schools in Ukraine have been damaged since the beginning of the war in February 2022 (Unicef, 2022a). At least one in three schools in Syria can no longer be used (Unicef, 2021). Sometimes schools are closed, as was the case in Afghanistan in August 2021 when the Taliban assumed power. They suspended education for boys and girls beyond the 6th grade till March 23, 2022.

Different education systems are developing strategies and response mechanisms to prepare for emerging crises, and there is a focus on capacity building to ensure that quality education can be delivered at times of crises (Memon et. al., 2021). This means that teachers must be skilled to be flexible, be adequately resourced, and be able to respond and adapt quickly to crisis situations (McKinney et. al., 2022).

This emphasis on pandemic proofing and crisis proofing is very relevant and understandable but has to be understood within the context of the development of global education and measures of success of global education (McGowan, 2010). This means addressing the serious challenges in global education that existed pre-pandemic, during the pandemic and will continue to be challenges in the post pandemic era.

***Part 3: Challenges to Formal Global Education***

There were some serious criticisms about the parameters, or scope, of formal global education before and during the Covid-19 pandemic. One criticism that the aim for free and compulsory education was restricted to the elementary level but not necessarily beyond this stage. This now appears to have been addressed. A very recent issue that has been identified in a report by Koumbou Boly Barry, the UN special Rapporteur. She urges education systems to ensure that they provide inclusive and quality education that promotes cultural diversity and cultural rights and views these as assets, rather than viewing cultural diversity and rights as obstacles (Barry, 2021).

The pandemic brought many challenges for pupils and teachers and extensive disruption in the learning process in schools. This disruption served to highlight some of the deeper questions about the realisation of inclusive, equitable and quality schooling in global education. There were hard questions about digital poverty and equitable access to resources, digital devices and technology and, as has been mentioned, learning loss and the quality of the learning and teaching during the restrictions and the lockdowns (McKinney et. al., 2021).

Probably one of the major criticisms of formal global education, pre- and post-pandemic, is focussed on levels of success in inclusion in education. The United Nations goal is directed to *all* children and, therefore, this refers to all those children who are marginalised, disadvantaged, exploited, excluded and even self-excluded. This includes children in rural settings, displaced children, migrants, refugees unaccompanied children, child slaves, child soldiers, ethnic or religious minorities, disabled children, travelling children, homeless children and girls. There have been well documented efforts to ensure greater levels of inclusion but there remain serious questions, in particular, about gender parity in schooling and wider education (Unesco, 2022). One of these serious challenges, then, was, and is, gender parity in education.

***Part 4: Gender Parity in Global Education***

The right to education is one of the fundamental principles of the SDGs 2030 and can be discerned in a number of the seventeen goals (Osler and Stokke, 2021). One of the main aims in SDG 4 is to eliminate gender disparity, or the gender gap, in elementary and secondary schooling. This is closely aligned to SDG 5 *Achieve Gender Equality and empower all women and Girls.*

It is worth viewing the targets of SDG 5 *Achieve Gender Equality and empower all women and Girls* for a concise overview of how this gender equality can achieved (United Nations, 2022b):

- end all forms of gender discrimination towards girls and women,
- to eliminate all forms of violence and exploitation,
- eliminate early or forced marriages and genital mutilation,
- recognise unpaid household work and care work,
- ensure opportunities to attain leadership roles,
- ensure access to sexual and reproductive rights,
- equal rights in economic resources,
- enhance the use of technology to empower women,
- strengthen legislation for the promotion of gender equality and the empowerment of women and girls.

Unicef (2022b) reports that around 129 million girls are out of school: 32 million at primary level, 30 million at lower secondary level and 67 million at upper secondary school level. There are only 49% of countries that have achieved gender parity in primary schools, 42% in lower secondary and 24% in upper secondary. These figures point to a fragility for girls at all levels of schooling but especially senior secondary. The figures are also disproportionate in crisis situations. Across the world there are eight refugee girls in school for every ten boys and seven girls for every ten boys at secondary level (UNHCR, 2021). If we revisit the situation in Afghanistan, the Taliban suspended education for boys and girls beyond the 6th grade till March 23, 2022. It was expected that all schools would open. At the very last minute, it was announced that the girls' schools would not reopen on that date (E-International Relations, 2022).

Sometimes creating better conditions for girls in schools can make an enormous difference. Improved levels of sanitation for girls in schools can be very beneficial: the UN reports that a campaign to build more single-sex toilets increased the enrolment and a fall in the drop-out rate of adolescent girls in India. School enrolment on its own, however, is not an adequate measure of success. The measure of success should be on the progress of girls through secondary schooling, equal access to resources and a low drop-out rate (Xu et. al., 2019).

Apart from the justice issue of equal access to education for girls, there is research evidence that higher levels of gender parity in education results in fewer maternal deaths, an increase in female life expectancy and higher child survival rate (Gadoth & Heymann, 2020). One extraordinary example is in Zimbabwe where an additional year of schooling for girls can be associated with a 21% decline in child mortality (United Nations Educational, Scientific and Cultural Organisation, 2022).

During the pandemic there were a number of serious challenges for girls (Unesco, Unicef & World Bank Short Report, 2021). Girls were more likely to have limited access, or no access, to devices and the internet than boys (Unicef, 2019). They often had to undertake more household chores during periods of restriction and lockdown. There were the ever-present dangers of child marriage and early pregnancy. Unesco (2021) estimates that as more than 11 million girls may not return to school due to the effects of the pandemic.

The Unicef Gender Action Plan 2022-2025 cautions that working towards gender parity in education, especially in the post pandemic world, will entail challenging power structures (United Nations, 2021, section 12):

> The pandemic has also exposed the web of restrictive gender norms and power dynamics that rationalize and perpetuate the subordinate status of girls and women, while endorsing harmful behaviours related to masculinity. Because power structures in societies throughout the world mostly privilege boys and men, the disadvantages faced by girls and women must be addressed in order to advance gender equality.

If this right to education for girls and women, and achieving gender equality and empowering all women and girls, is to be meaningful, rather than an aspiration or a utopian ideal, it needs to be recognised, supported and realised (Lee, 2013). This means committing resource to realising this right to the education of girls and women.

However, let us look deeper, beyond the realisation of the right to education. This means concerted efforts to remove the restrictions and barriers to girls and women. A Sen argues that this right to education, as with other rights, will only be effective if an individual is able to do something with it, in other words, it supports the self-empowerment of the individual (Lee, 2013). If children and young people are educated, they must be able to use this education and societies must recognise the value of their education. It is not simply about ensuring that the human right to education is recognised, supported and realised, those who are educated must be able to access genuine opportunities. There must be a relationship between processes and opportunities. This relationship between processes and opportunities must be realised and it must be realised for both boys *and* girls and it must involve gender equality and the empowerment of girls and women.

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# ABSTRACTS OF THE PAPERS PRESENTED AT THE CONFERENCE

## A STUDY OF DISABLED STUDENTS' SATISFACTION TOWARDS E-LEARNING EDUCATION (WITH SPECIAL REFERENCE TO UJJAIN CITY, INDIA)

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**ABSTRACT**

**Introduction:** In the present era, increasing growth of E-Learning Education is spreading its legs across the world. E-Learning is become the powerful tool for the educational institutions to provide their teaching in best and effective manner to their students. The present study is an attempt to explore the dimensions of satisfaction towards uses of E-Learning in Ujjain city of the disabled students. T. Muthuprasad (2021), Piyush Joshi (2021), Zahoor Ahmad Lone (2017), Arun Gaikwad (2016) and other researchers time to time have contributed in the area of students satisfaction and how it can be increased by using E-Learning. Several researches have been conducted in the field of students' perception however; only few have emphasized and correlated their studies from the Disabled person respondents' perspectives. Therefore, the disabled students became the population for the study who uses E-Learning.

**Objectives:** To study and understand the conceptual framework about Disabled Students (DSs) Satisfaction w.r.t. E-Learning Education with the help of Review of Literatures, to study the factors influencing E-Learning Education w.r.t. Disabled Students (DSs) on the basis of their personal and demographic variables and to discuss the challenges and opportunities faced by the Disabled Students (DSs) while using E-Learning Education.

**Methodology:** The study adopted an exploratory research design with sample size of 100 respondents of E-Learning Education selected randomly with the help of purposive sampling technique, and validated self-structured questionnaire was given among them to collect the primary data. Collected data was analyzed by applying statistical techniques. Reliability test and Factor analysis were applied through Statistical software.

**Findings:** The findings suggests that four factors namely innovative teaching aids (ITA), quality of knowledge, responsiveness and cost/time saving, plays important role in building satisfaction levels in E-Learning Education with respect to disabled category students. This paper makes key recommendations w.r.t. Disabled category students satisfaction measures. This piece of research is an attempt to make an original contribution in the field of Education with respect to E-Learning and improving the quality of delivery of E-Learnings. The output of this study may be helpful to the education system practitioners/professional teachers to manage and improvised their E-Learning from this new perspective.

**Keywords:** Disabled Students, E-Learning, Education System, Innovative Teaching Aids, Satisfaction Level.

# IMPORTANCE OF ENVIRONMENTAL EDUCATIONAL ON ECO-SYSTEM IN THIRD WORLD COUNTRIES: PERSPECTIVES FROM NIGERIA

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**ABSTRACT**

The development of eco-friendly environment in the third world countries become necessity in promotion of sustainable environmental and eco-system performance. The aim of this paper is to show a framework that empirically evaluates the important of environmental education in promotion of eco-system in third world countries. Improving the environmental and eco-system performance to keep up with changing business settings and new technological opportunities is becoming increasingly critical. There is still a lot of room for improvement in the field of environmental education, as it is still quite broad in scope and does not consistently reflect today's more complex and knowledge-intensive reality leading to more sustainable environmental and eco-system performance. It is necessary to construct an integrative framework in order to establish a link between the variables under investigation. The authors demonstrate that education on green culture, green innovation, and green consciousness are all intertwined to explain the sustainable environmental and eco-system performance of third-world countries. To support the integrated framework, Eco Friendly Theory and Theory of Sustainability are used. In practices, this study offers best practices, as derived from literature by consolidating and classifying the environmental education and sustainable environmental and eco-system performance.

**Keywords:** Environmental Education, Sustainable Environmental and Eco-System Performance.

# IDENTIFICATION OF DELAY FACTORS AND ASSESSMENT OF THE COST EFFECTIVENESS OF THE CONSTRUCTION OF ROAD OVER BRIDGES IN WEST BENGAL, INDIA

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## ABSTRACT

The road over bridge (ROB) can be defined as a grade separated bridge structure with the gradient approaches on both sides. People's lives are getting faster. People become engaging their life with various work places and developing life style for the fulfilment of expectation of the development towards the nation. Roads are one of the main mediums of transportation, so the traffic at any level crossing (LC) is becoming large and the main problem of waiting at LC increases some indirect loss like effective man-hour, loss of fuel, consequent loss of GDP, increasing sound pollution and finally damnification of a fast growing economy.

The Industrial sector is the second largest sector of India (Source: statistic times.com) which contributes around 40% at the development investment during the past 50 years. Around 16% of the nation's working population depends on construction for the livelihood. In West Bengal, some of the agencies like Kolkata Metropolitan Development Authority (KMDA), Hooghly River Bridge Commissioners (HRBC) etc. are engaged as governed by the State Government for the execution of construction of over bridges. While construct the bridges or flyovers, some essential factors are associated in delaying the construction in addition to alienation of various parameters relating to time delay and cost overrun. An observation can be made to generate an idea on economy and it may help to fill the gap of loss due to some common factors related with time delay like Managerial related factors, Finance related, Construction related, Labour related and many more. Therefore, this study gradually focuses on the way to build up a linkage between the delay factor and that leads to cost overrun. The methodology which have been adopted in this particular study is to find out some vital factors for cost overrun. Factor analysis has been made to find out the vital factors and regression analysis have been initiated to show the relationship between time delay and cost overrun. This study concludes that a structured framework keeping emphasis on the quality improvement of the development particularly by constructing over bridges is required for smooth running, easy movement and reducing both time delay and cost overrun as a part of Green Economy.

**Keywords:** Time Delay, Road Over Bridge, Cost Effectiveness, Cost Overrun, GDP.

# RELATIONSHIP BETWEEN FINANCIAL KNOWLEDGE AND FINANCIAL BEHAVIOR: IS THERE ANY MEDIATING EFFECT OF FINANCIAL ATTITUDE?

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## ABSTRACT

Financial literacy is essential for enabling people to make right financial choice. Therefore, financial literacy is also important to secure our future, which can be termed as financial wellbeing. According to the OECD/INFE framework, measuring financial literacy essentially encompasses financial knowledge, financial attitude and financial behaviour. Financial knowledge refers to the basic knowledge regarding the financial concepts, whereas financial behaviour implies actions and habitual conducts of an individual on the basis of this financial knowledge. Apart from these two there is also an important component of financial literacy i.e., financial attitude, which can be defined as the mental disposition of an individual which, despite their adequate knowledge and behaviour, influences the decision-making process of an individual. This paper mainly focused on to analyse the variation in the level of financial literacy and its components across different zones in India. In addition, the study assesses the impact of financial literacy on the financial wellbeing through considering the mediating effect of financial behaviour. The result depicts that the level of financial literacy is highest in the west zone, and it is followed by north, east and south. Further, the outcome of the mediation analysis portrays that though financial literacy has an indirect effect on financial wellbeing still there is no such direct impact on the financial wellbeing.

**Keywords:** Financial Literacy, Financial Behaviour, Financial Attitude, Financial Knowledge, Financial Wellbeing.

# IMPACT OF TECHNOLOGY ON EDUCATION AND GREEN ECONOMY SETTINGS

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## ABSTRACT

The impact of technology in education in green economy setting is one of the top most important needs in the global educational scenario. For the economic development of the country and improvements in people lives the technology and green economy principles and methodology pays way for tremendous change of growth. Green technology is also important to be implemented in the field of education to stimulate student's interest in encouraging the environment. Students can also exhibit the knowledge learned and spread it to the community towards a more sustainable country. This concept paper aims to provide awareness of green economy and its principles related and methodology to environmentally relevant information and sustainable development education in line with the importance of green technology. Due to the lack of awareness of environmental conservation and conservation among the community, it is not well established. Therefore, the awareness of environmental conservation should be imparted since childhood as those who will change the next generation. Hence, the application of green technology in education sectors should be followed globally to fulfil the needs of the people, community and development of nation's growth and economy as well as to protect the nature and environment globally.

**Keywords**: Technology, Education, Green Economy, Green Technology, Principles, Methodology, Awareness, Implementation.

# ATTITUDE AND KNOWLEDGE TOWARDS FIRE SAFETY AMONG STUDENTS OF HIGHER EDUCATION

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## ABSTRACT

Disasters related to fire can occur at any place and at any time. It can cause a threat to the life and property of the people. Therefore, knowledge about fire safety becomes very important. The educational institution plays an important role in the inculcation of knowledge about fire safety among all. The present paper focuses on the attitude and knowledge among the students of the higher educational institution i.e. graduate, postgraduate and research scholars of Panjab University Chandigarh.

**Keywords:** Fire, Higher Education, Knowledge, Safety, Attitude.

# GLOBAL WARMING AND CHEMICAL POLLUTION EFFECTS ON THE ENVIRONMENT

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## ABSTRACT

Our project is within the framework of European project Connect which is a three-year project funded by the European Union's Horizon 2020 program.
**Students:** 3rd grade Secondary School students (15 years old).
**School participated**: Gymnasium of New Alikarnassos, Heraklion, Crete in Greece.
**The activities took place between January 2022 and April 2022**

**Description:** The present teaching scenario guided students in discovering the factors that lead to global warming and it was a co-teaching course on Earth Pollution carried out by Biology and Chemistry teachers. Students learned the scientific facts, became aware of the climate change and wrote down their thoughts on a common **padlet** https://padlet.com/charalap/plc5njqf3lrrwyy4. Based on the collected information, students formulated a series of questions, which have been submitted to three different scientists/experts about chemical pollution of the air, the water and the soil. Thus, students "come out" of the boundaries of the classroom and investigate an environmental problem of their choice in a scientific way. With the help of their families, they discussed and proposed solutions that can improve their energy footprint. The learning activities were created in a Course Management System (Open eClass) and were supported by an electronic classroom service (e-Classroom) we created for that cause : Ηλεκτρονική Σχολική Τάξη (η-Τάξη) | Υπερθέρμανση του πλανήτη και χημ... (sch.gr)

The students finally:

- Calculated their ecological footprint together with their parents.
- Came up with the proposals they believe they should adopt in order to reduce their ecological footprint
- Chose an environmental problem of their interest and made a research project
- Created posters, constructions, a rap song about global warming and an ecological board game
- Presented their projects to their school for the World Environment Day.
- Students and teachers evaluated the presentations and the students completed a survey in order to give feedback to their teachers about the content and the activities.

**Conclusion**: We tried to create a STEAM scenario with the combination of Biology and Chemistry in order to raise environmentally sensitive individuals by enabling them to deal with environmental problems at the right time and in the right way. Our main goal has been to encourage students to develop curious, creative and responsible ideas while ensuring that students are at the center of the learning process. The students participated in different activities to explore climate change and understand the chemical pollution in three different dimensions: air, water and soil.

**Keywords:** Global Warming, Chemical Pollution, Environment.

# HOLISTIC PLAY PEDAGOGY FOR BUDDING ENTREPRENEURSHIP AND GREEN ECONOMY: ADOPTING SUSTAINABLE MULTIDISCIPLINARY APPROACH FOR ELEMENTARY SCHOOLS

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## ABSTRACT

Learning beyond boundaries is the most interactive experience that exposes a child to the world of exploration. Exploring through a multidisciplinary approach at the elementary school level can bring about joyful learning, leading to the development of concepts and skills- introducing the children to rudimentary entrepreneurship. Such a form of learning can bloom in holistic progress among individuals. Children of all ages enjoy learning if provided with sufficient and appropriate toys, and they define them using their vocabulary. Play pedagogy nurtures critical and creative thinking, showing their curiosity and eagerness to learn. Children learn from meaningful play experiences when they are provided with ample time and space to engage freely in exploring and manipulating the toys, stimulating and enabling a well-organized environment. Children feel very empowered when they dismantle toys for the play and then recreate a whole new one with the separated pieces. This aids in problem-solving, as they are engaged in such a replay with direct and indirect teacher guidance to understand the children's fantasy world. Emphasizing Sustainable Toys as teaching-learning resources can transform classroom pedagogy - not just for entertaining the act of teaching-learning but also playing a predominant role in developing a child's budding entrepreneurial attitude. The present paper represents researchers' efforts to modify conventional toys illustrating innovative gamification to instigate the learning zeal among elementary school learners following a multidisciplinary approach, maintaining sustainability simultaneously with drawing out their entrepreneurial competencies. After an extensive literature review, purposive sampling of conventional toys and games was done. Later, the investigators put significant efforts into redesigning four toys and games into an improved version and rediscovered ideas for addressing the core curriculum concepts, through the same. The remoulded resources include light-shadow clay puppetry (for science and history), globe game (for geography and general knowledge), cardboard paper-activity (for biology and art-craft) and magnetic umbrella (for linguistics and geometry). The uniquely blended play-pedagogy elements had an extraordinary impact on the 'effective conceptualization' and 'entrepreneurial attitude' of the elementary school learners. These education modalities make textbook pages come alive with diversely varied interactive activities. The goal is 'learning without boundaries through innovative techniques', which includes taking advantage of all the available resources to turn the whole world into a classroom. This powerful approach to global education creates a self-paced activity mode that leads to budding entrepreneurship and a green economy.

**Keywords:** Play-Pedagogy, Effective Conceptualization, Entrepreneurial Attitude, Green Economy, Elementary School Learners, Sustainable Multidisciplinary Approach.

# ECONOMIC AND SOCIAL IMPACT OF EDUCATION

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## ABSTRACT

Education in each and every aspect is an imperative factor for the growth and development of the country. No nation without the support of education can achieve substantial investment in human capital. It helps to enrich the understanding of the people. In most of the underdeveloped countries or developing countries poverty and low quality, life is a major hurdle in advancement. Education can lead to enhancement of quality life of the individuals which can be directly associated with the social benefits of the society. Through higher education, specifically productivity and creativity of the people advances which can prove to be a backbone of the society hence education must be encouraged. According to article, 21A of the Indian constitution education is a fundamental right of every citizen. This paper focuses on the impact of education on the economy and social structure of the nation. It is an attempt to explore the intensity of educational level, which is directly linked with employment and economic growth. The central aim of the research paper is to identify the role of education and its significance on social and economic structure. The paper examines how the education system should be formulated to meet the challenges of the twenty-first century. It also enquires how social process of education helps in moulding values, attitudes and beliefs of democratic society. Drawing on critical theory the paper scrutinizes the interrelationship of economic and social aspects related within education and society. It also discuss about the reforms taken during last few decades for the spread of education in India as well as globally The paper is descriptive in nature and is based on existing literature which is collected through books, magazines, internet, newspapers etc. to understand socio-economic development .It also provide some insight of survey and estimates done by various organization on education.

**Keywords:** Economic Growth, Economic and Social Development, Human Capital, Poverty, Education, Critical Theory.

# MANAGING EDUCATION USING BLOCKCHAIN TECHNOLOGY: LATEST DEVELOPMENTS AND FUTURE PROSPECTS

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## ABSTRACT

**Purpose:** This paper is an attempt to order to describe the present applications as well as challenges of using blockchain technology in the education sector. Moreover, the study highlights the potential applications of the technology in a college / university educational environment.

**Design / Methodology / Approach:** The SCOPUS database was used to acquire the data on "Blockchain Technology in Education." Using Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA), we gathered the data in order to conduct systematic literature survey and bibliometric analysis. Data from publications, journals, authors, and citations was used to construct a bibliometric study. The study follows both qualitative as well as quantitative approach.

**Findings:** This paper investigates the pros, cons, and existing uses of blockchain technology in higher education. The technology can be used in various administrative functions of an educational institute / university apart from teaching and learning. According to the findings, there exist implementation benefits of blockchain in all academic activities including teaching, learning, admissions, placements and community welfare. The technology is still in its early phase, which is likely to transform the entire educational settings.

**Implications For Practice:** The present research framework provided by the study will be useful for the entire educational institutes or universities, scholars and policy makers worldwide. This could enhance the potentials of blockchain benefitting the entire technological industry along with the academia.

**Originality / Value:** The paper provides the latest developments in academic literature on existing as well as future uses and benefits of blockchain technology in the education field. This emerging technology has never been examined in this way before in education; this study examines its benefits, drawbacks, and present uses. The study also adds value by identifying and describing potential future applications.

**Keywords**: Blockchain, Blockchain Technology, Education, Higher Education, Education Management.

# SENSITIZING TEACHER TRAINEES TO GREEN ECONOMY INITIATIVES-A STUDY

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## ABSTRACT

**Problem Statement:** An objective of the introduction of a compulsory paper on Environmental Education for the Bachelor of Education (B Ed) programmes in India is to sensitize prospective teachers to the need for protecting the environment and planet earth. Every year, several teacher education institutions across India celebrate World Environment Day on which teacher trainees plant seeds and saplings. But the investigator noted that more that 75 percent of seeds and saplings supplied, perish owing to negligence or absence of continued care by watering and supply of manure.

**Aim of the Study:** The main objective of the study is to find out the possible reasons for the flawed Green Economy initiatives in teacher training colleges in India.

**Key Theories/Studies Consulted**: Dobson as early as 2003 argued that for sustainable development to take place fundamental changes in values and norms of citizens are essential. The UNDESA guidebook (2012) affirms the need to consider social aspects besides green technology and renewable energy while considering Green Economy.

**Methods Used**: The population of the study are teacher trainees undergoing the Bachelor of Education programe in teacher training colleges across India. The sample comprised teacher trainees whom the investigator, a teacher educator by profession had taught for more than a decade (2008 to 2020). This empirical analytical and qualitative study makes use of participant observation, field notes, and informal interviews with institutional authorities, students, parents and community members. Secondary data was collected from documents, newspaper articles and studies published in journals.

**Main Research Questions:** The main research question is to find out the impact of the introduction of Environmental Education as a paper for the B Ed programme. The specific objective is to find out the likely reasons for failure to realize the proposed objective of the Green economy initiatives.

**Key Findings**: The study found an absence of a felt need for protecting the seeds and saplings among students, parents and community members. The study also found that though a majority of students tended to take a casual approach to the Green economy initiatives along with a complete absence of any moral obligation to contribute to a sustainable development initiative, the teacher trainees of the Natural Science optional were found to show a genuine interest.

**Implications of the Study**: The study highlights the need to focus on action not words. More significantly, it has become imperative to foster in teacher trainees a scientifically sound and an ethically appropriate environmentally sustainable behaviour.

**Limitations of the Study**: The study was conducted by the investigator by focusing mainly on the initiatives of teacher training institutions to foster a Green economy. The efforts of NGO's and government aided public-private partnership initiatives have not been studied.

**Scope for Future Studies**: Identification of best practices adopted in certain educational institutions where the authorities themselves take a prime responsibility in maintaining an environmental friendly campus such as setting up large gardens through student involvement may be attempted. Further, drawing on the findings of such studies, effective practices may be emulated in those institutions where Green economy initiatives failed.

**Claim and Conclusion Made**: The study highlights the fact that mere celebration of 'Days' without nurturing the right mindset in students and community members cannot produce any marked change in fostering a Green economy. It also hints that new educational curricula for developing appropriate knowledge and skills for fostering Green economy should be integrated into the Teacher education curriculum.

**Keywords**: Farming, Green Economy, Sustainability, Teacher Education, Teacher Trainees.

# GREEN ECONOMY: WAY TO SUSTAINABLE DEVELOPMENT

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## ABSTRACT

For a prolonged time, economic development generated multiple crises upon fuel, food security, water availability and other environmental aspects. This urged to seek for a sustainable economic condition among the developed nations for a healthy community growth. In this context, the 'green economy' concept focuses specifically on the fundamental changes that are required to ensure that development in economy is made more sustainable with the reduction in environmental risks over the longer time. It is basically based upon sustainable business practices with minimum or no damage to the environment. In 2008, a 'green economy' initiative was launched by the United Nations Environment Programme (UNEP), and defined it as 'the process that reconfigures business and infrastructure and serves better returns on natural and economic investments, at the same time, reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities (UNEP, 2010). UNEP (2010) has defined and explained the core principles and concepts underlying a green economy. These include the decarbonisation of economy, creating green jobs in sectors like renewable energy, agriculture, transport, water, pisciculture, construction industry, tourism, management of wastes, etc.

The green economy has much evolved today from theoretical to ground practical level. From being global to becoming more national and societal, it stands out today as a solution to environmental challenges. The idea depends upon responsible use of energy with promises for economic development together with environmental protection. The prime focus areas therefore include global warming prevention, sustainable use of natural resources, groundwater recharge, prevention of pollution, waste management, etc. This paper evaluates the social impact through emerging green economy in India with ideas from sustainable rural livelihoods. Rural life is often well connected to ecological services, especially in developing nations. Thus, prioritizing green economy for creation of jobs, alleviation of poverty and reduction of inequality has been found to create intense social impact apart from addressing the environmental concerns. More clear definition and relevance of its application shall definitely bring changes for better.

**Keywords**: Green economy, Sustainable Development, Environment, Initiatives.

# GREEN HUMAN RESOURCE MANAGEMENT PRACTICES IN PUBLIC UNIVERSITIES OF BANGLADESH AND ITS IMPACT ON SUSTAINABLE ECONOMIC DEVELOPMENT

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## ABSTRACT

Green Human Resource Management (GHRM) refers to the use of HRM practices and policies that encourage the efficient use of resources inside organizations to support environmental sustainability concerns. GHRM is explicitly accountable for developing a green workforce that acknowledges, admires, and practices green initiatives and ensuring that the company's green goals are met throughout the HRM recruitment and selection process, hiring, training, compensating, and developing and advancing its human capital. It refers to the policies, procedures, and systems that make employees of an organization green for the benefit of the person, society, the environment, and the business. Green HRM provides the chance to accompany and encourage long-term shifts in employees' mindsets and behaviors, which are necessary for overall organizational environmental improvement. Economically, environmental sustainability is important since it reduces organizational expenses, boosts employee engagement, and opens up new markets. This study aimed to look into the use of GHRM in educational institutions especially the government universities of Bangladesh. A qualitative research technique and a focused group discussion were utilized to achieve the study's goal. The study found that the application of GHRM in government universities of Bangladesh is in a negligible position. For sustainable economic development, it is very important to introduce GHRM in every section of the university. GHRM will help to reduce employee carbon footprints through electronic filing, car sharing, job sharing, teleconferencing and virtual interviews, online recruitment and training, and by maintaining energy-efficient office spaces. The findings of this study may help government organizations, particularly government universities, to implement GHRM to promote sustainable economic development, energy conservation, and a green campus for their students.

**Keywords**: Green Human Resources Management, Government University, Green Campus, Sustainable Economic Development.

# LIFE SKILLS EDUCATION: PAVING WAY TO SOCIALLY COMPETENT INDIVIDUALS

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## ABSTRACT

Three basic theoretical perspectives of sociology i.e. functionalism, conflict theory and symbolic interactionism provides basis for the study of education from sociological point of view (Ballantine & Hamnack, 2009). Role of education in fulfilment of societal needs is the basic assumption of the functionalism which further emphasised on the social development of the child through various functions viz. socialisation, social integration, social placement and cultural innovations. Across the globe these functions varies due to disparity in social norms and variation in culture. Despite of all these disparities education is the only vehicle, which can promote the development of societal norms, values and skills for effective functioning of the society and socialization of child. Life skills based education is necessary for the development of skills among children of this technological and faster growing era where the value system is deteriorating in the same pace in which the society is growing economically and technically. Teaching of life skills develops the capacity to deal the problems of life in a positive way. Research studies has supported that life skill education resulted in reduction of usage of drugs, sexual abuse and HIV/AIDS etc. (Botvin, 2006). Many other social and mental problems which can hinder the process of the development of the child like behavioural disorder, anxiety, poor interpersonal relationships and adaptation of oneself towards the norms of society, educational problems, lack of social adjustment and social dysfunction can be tackled in an effective way through the training, intervention and integration of life skills in education. Developed and skilful human resources laid foundation for prosper social and economic system of any nation. So, life skills based education can reform the social structure and may lead to sustainable development of the society.

**Keywords**: Social System, Socialization, Education, Life Skills Education.

# INCREASING ACCESSIBILITY THROUGH DISTANCE EDUCATION: A REVIEW OF NEW EDUCATION POLICY 2020

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## ABSTRACT

Education plays a crucial role in the development of a country, even at the individual level, education improves a person's cognitive ability and makes them more creative and develop their social skills. Education as per ancient times was to make people realize the purpose of their life; it was to enable them to lead a satisfactory life. The article mainly argues the importance of education being accessible to everyone, here open and distance education can prove to be a blessing for a country like India. The article discusses the role of Distance education in fulfilling the aims of the New Education Policy 2020, which are to make education more inclusive, equitable, accessible, and flexible. It begins with the historical perspective of distance education in India, there are commissions and policies, which directly or indirectly supported the expansion of Distance education and improvement in its quality. Distance education, as mentioned in the NEP 2020 also, can be a road towards 100% GER. But, even after these years, could we really develop distance education in India? Students who did their studies through Distance mode are still given less importance in comparison to other students. The traditional thinker does not value distance education. Keeping these points in mind, the article briefly discusses the different points of NEP 2020 which talks about Distance Education and How much importance have given to distance education in the policy.

**KEYWORDS:** New Education Policy, Distance Education, Accessibility of Education, Education Timeline, Education during COVID.

# BLENDED LEARNING: AN INNOVATIVE APPROACH IN TEACHING AND LEARNING IN HIGHER EDUCATION INSTITUTIONS

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## ABSTRACT

The purpose of the research is to show the importance of having a blended learning program to rejuvenate the teaching-learning process in an innovative learning environment. The world is changing. Innovation in educational systems is vital in the 21st century. The implementation of innovation in education will ensure that the existing educational system will produce skilled and knowledgeable students to fulfil existing and future industrial needs. It involves the scaffolding of the learning materials and the constant collaboration with colleagues. Innovation in education is about more than just technology. It is about the process, the techniques applied in to use technology, to encourage and motivate students to become lifelong learners who are an important aspect of change in the society. One thing is for sure is that innovation has an important place in education. It involves doing things in a new way to improve academic performance. To do something unique and different requires coming up with an approach, process, product or strategy. Blended learning also known as, hybrid learning is an approach to education which causes opportunities for interactions, online and traditional based classroom methods. The researcher to study the impact of blended learning in education conducted an online survey to collect data to test the attitude of teachers and students engaged in blended teaching and learning. To achieve this research, a study will be applied in the Education colleges of Ujjain district in Madhya Pradesh, which uses the blended learning program in certain majors such as mass communication and language. A case study will be used to evaluate responses. It is formed of a symmetric agree-disagree scale for a series of statements. The respondents are asked to evaluate each statement in the survey depending on their level of agreement or disagreement. Then, the total sum of the statements will be calculated.

**Keywords:** Blended Learning, Education, Mass Communication, Language, Innovation in Teaching and Learning.

# ATTITUDE OF PROSPECTIVE TEACHERS TOWARDS GLOBAL EDUCATION

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## ABSTRACT

Global Education is a necessity for the 21st Century learner. Our world is increasingly interconnecting every day. Our students no longer only compete domestically. Global education enables people to understand the links between their own lives and those of people throughout the world as well as to address the world's most pressing issues collaboratively, equitably, and sustainably. As for as teacher education is concerned it is the responsibility of prospective teachers to think about the relevance of global education and develop proper attitude towards it. In this study, it is aimed to investigate the level of attitude of prospective teachers and how this impacted upon their attitude towards global education. The study highlights how Prospective teachers feel towards the promising trends of Global education in the Education Sector and look forward to the insights that they will realize in the near future. Normative Survey method was used to employ the study utilizing the Scale of Attitude of Prospective Teachers towards Global Education implemented on 100 prospective teachers selected randomly. All collected data were analysed statistically.

The findings indicate that there exists significant difference among Prospective Teachers with respect to Gender and Subject Stream such as Arts and Science. The study suggests ways to promote proper attitude and understanding regarding the subject Global Education.

**Keywords:** Attitude, Global Education, Prospective Teachers, Education Sector.

# IMPLEMENTING INNOVATIVE LEARNING MODEL IN INDIAN EDUCATIONAL INSTITUTIONS: A CONCEPTUAL FRAMEWORK

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## ABSTRACT

**Purpose:** Due to widespread of Covid-19 and impact of fourth industrial revolution or (Industry 4.0), educational institutions have adapted innovative learning models to continue their processes. They are not only updating themselves but also implementing these models to improvise their processes and functioning. Educational institutions play a considerable role in the growth of the economy by providing skilled and talented employees who leverage their talent to attain organizational sustainability. Teachers and students are the main receptors and adaptors of this change as innovative learning models affect equally to teachers and students. Thus, this study aims to propose a conceptual framework on innovative learning model, which can be implemented in Indian educational institutions.

**Research Methodology:** The study has implemented Interpretative phenomenological analysis (IPA) technique to identify the barriers that influence the implementation of innovative learning model in Indian educational institutions. Semi-structured in-depth interviews have been conducted among the teachers and students of higher educational institutes of Delhi- NCR region. The interview duration ranges between 60 to 130 minutes. Data were analysed using steps suggested by Smith.

**Findings:** This study exhibited the major five potential factors, which affect the implementation of innovative learning model, which includes Organizational Barriers, Technological Barriers, Personal Barriers, Financial Barriers, and Psychological Barriers. These factors must be handled in order to ensure smooth implementation and processing of innovative learning model in Indian educational institutions. Further, this model will help in preparing the talented and skilled employees to meet the expectations of the industry. Innovative learning model helps in meeting the challenges of the industry which arise due to the technological revolution of Industry 4.0 and also updates the educational standards of Indian educational institutes.

**Implications:** The findings of the study will not be restricted to only educational institutions but can also be useful for other sectors of the economy, which induce learning among their employees. With the fourth industrial revolution, along with product or service based industries, educational institutes also need to update themselves in order to cope with the challenges of the global economy and they can only accomplish them by facilitating talented and skilled workforce to the industry who can leverage upon their skills, talent, knowledge, and experience to attain organizational sustainability.

**Keywords**: Conceptual Framework, Innovative Learning Model, Fourth Industrial Revolution, Industry 4.0, Indian Educational Institutions, Organizational Sustainability.

# SERIAL ENTREPRENEURSHIP RESEARCH; A THEORETICAL FRAMEWORK

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## ABSTRACT

The Serial entrepreneurship is the emerging research dimension of entrepreneurial process that has gained much scholarly attention in the recent years. It refers to a procedure in which the entrepreneurs nourish and develop multiple enterprises one after another. Serial entrepreneurs gradually ensure the new heights of success in an enterprise by their constant projection ability at the right time for the right product on the right place for the right purpose. The main objective of this paper is to showcase a snapshot of the serial entrepreneurship from various theoretical perspectives' basis by reviewing the existing literature. In some preceding years, a less attention was given to study the concept of serial entrepreneurship. This research paper narrates the outlines of serial entrepreneurship from various aspects i.e. serial entrepreneurial intention, serial entrepreneurial activities, unique decision-making mechanism and the adaptability etc. with the current entrepreneurial situation's context. This study portrays a clear path to the future serial entrepreneurial aspirants to know the serial entrepreneurship from grassroots' level. This research paper also gives the future research directions to the various stakeholders i.e. field researchers, policy makers, industrialists and academicians for serial entrepreneurship research related aspects.

**Keywords:** Serial Entrepreneur; Entrepreneurial Intention; Entrepreneurial Process; Entrepreneurial Failure: Entrepreneurial Opportunity.

# ACCESSIBILITY IN HIGHER EDUCATION FOR STUDENTS WITH DISABILITIES

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## ABSTRACT

Higher education is very critical in the life of persons with disabilities in their employment. Individuals in the society can live an independent existence through it. Taking this into account stakeholders are focusing on creating an inclusive educational environment. Unfortunately, the numbers from the various sources are startling by showing meagre persons with disabilities are able to pursue higher studies in developing countries including India. With the help of the focus group discussion, this study examines the challenges, existing facilities, and required accommodations needed by students with disabilities in their higher educational environment. Four major metropolitan cities across India were selected to conduct a qualitative study with adults with disabilities who had access to higher education. Accessibility in different terms including classroom functions, accommodations for exams, communication, social attitudes, and employment concerns were cited as key issues that need to be addressed. The results indicate inadequate planning, poor implementation of disability policies, lack of disability awareness among people in the society, and limited resources available in a developing country. Friendship networks established by college classmates highlighted the strength of humanity in the face of limited disability accommodation provisions. Many people with disabilities have expressed annoyance over the lack of policy and service options in a developing country like India.

**Keywords**: Higher Education, India, Focus Group, Persons with Disabilities, Annoyance.

# QUALITY OF LIFE OF CHILDREN WITH INTELLECTUAL DISABILITY: CASE STUDIES

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## ABSTRACT

Quality of life describes the independence, happiness and freedom available to an individual. The present paper aims to study quality of life of children with intellectual disabilities in relation to their parental involvement. Twenty-seven case studies on intellectually disabled children from special schools of Delhi were taken. Purposive sampling of children with mild intellectual disability IQ 50-70 age between 8 years to 16 years was done. Quality of life checklist was prepared with the help of special educator, occupational therapist and experts on various parameters. Help from parents and caregivers was taken to fill the consent form for ethical considerations. Parental involvement is a unique parental child rearing practice exerting significant impact in growth and development. Both Qualitative and Quantitative analysis were done on the basis of data collection by the investigator using triangulation. Descriptive analysis for quality of life was interpreted for personal, educational, social, emotional and occupational parental involvement. It was learnt that quality of life is influenced by income, employment, family life, social support, stress and crisis, health care services, educational opportunities and relationship with the environment. The focus in this study was on objective indicators, as subjective indicators were not responded well by the special children. Positive correlation was found between quality of life and parental involvement of children with intellectual disability. Regression analysis for quality of life and parental involvement of children with intellectual disability was calculated. Inferences were drawn on the basis of Anova. Qualitative analysis was done on the basis of case descriptions prepared by the investigator through observations, structured interview and face-to-face interactions. Findings were based on involvement of these children with family, involvement in activities, joys of children, fears of children, performance of motor skills, expression of emotions, autonomy and socialization. The study will improve our understanding of children with intellectual disability, the emergence of their behavior problems and the psychological wellbeing of parents and caregivers especially mothers. Qualitative data revealed that quality of life has high priority in care and treatment of children with intellectual disability. Psychological attention is very important in treating these children. It was concluded that there exists a positive relationship between parental involvement and quality of life of these children. Hence, parental involvement helps in making their life independent and better for general living.

**Keywords**: Quality of Life, Intellectual Disability, Parental Involvement, Intelligent Quotient.

# A VISION OF NEP 2020 FOR UNIVERSAL EDUCATION: FOUNDATIONAL LITERACY & NUMERACY IN INDIA BY 2040

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**ABSTRACT**

In the present scenario, after the post-pandemic, the globe is undergoing rapid changes in the knowledge landscape, especially in the educational sector. With various dramatic scientific, pedagogical & technological advances, such as the rise of ICT tools, big data, machine learning, and artificial intelligence for quality education. According to the Maastricht Declaration, 2002 ***"Global Education is education that opens people's eyes and minds to the realities of the globalized world and awakens them to bring about a world of greater justice, equity, and Human Rights for all".*** NEP 2020 has planned new horizons, fundamental principles & perspectives for high-quality Universal education for the learners to promote foundational skills (Reading & Writing) and numeracy for future generations.

India's first education strategy of the twenty-first century aims to address the country's myriad expanding developmental imperatives. Based on the premise that education should develop not only cognitive abilities like literacy and numeracy but also social, ethical, and emotional abilities and dispositions. Reading, writing & numeracy are considered the foundational skills; without being able to read, write & calculate well, a child cannot progress in the universal education system and eventually in their lifelong learning. Pedagogy must evolve to make education more immersive, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, adaptable, and pleasurable. The article explains the strategies required for attaining the aim of universal foundational literacy and numeracy at five levels: curriculum revamping, pedagogical innovations, restructuring teacher education programs, revisiting assessments, & administrative support. Indeed, with the rapidly changing employment and global ecosystem. It is more important than ever for children to learn what to learn and how to know. As a result, education must change away from imparting information and instead teach students how to think critically and solve problems, be creative, multidisciplinary, innovate, adapt, and absorb new content in unique and rapidly changing fields. The National Education Policy envisions an education system rooted in Indian ethos that directly contributes to converting India, or Bharat, into a sustainable and thriving knowledge society by offering high-quality education to all, thereby transforming India into a global knowledge superpower.

**Keywords:** Universal Education, NEP 2020, Foundational Literacy & Numeracy, Pedagogical Innovations, Quality Education & Lifelong Learners.

# DEVELOPMENT OF A PROGRAMME FOR STUDENTS WITH HEARING AND SPEECH IMPAIRMENT AND ITS EFFECTIVENESS

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## ABSTRACT

The process of facilitating learning is called as education. A child starts the process of learning from mother's womb and it ends in tomb. Special education gives equal rights of education to children with special needs. Students with disabilities receive education from trained professionals. Different approaches of teaching, the use of technology, a specifically adopted teaching area or a resource room are beneficial for students with disabilities. There should be individualized Education Program (IEP) for each child.

In a class having students with hearing and speech impairment, only traditional method is not useful to understand new concepts. Therefore, the researcher had prepared the multi-sensory teaching techniques programme for teaching the students with hearing and speech impairment.

Initially the researcher had conducted the survey in hearing and speech impaired School. The survey was conducted using the questionnaire for the teachers. Researcher also taken the pre-test of hearing and speech impaired students then based on the survey results the researcher had selected the content to develop the multi-sensory teaching techniques programme for the hearing and speech impaired students.

After the pilot study, the programme was implemented followed by the post-test and retention test and students' feedback was taken after the implementation of the program. Multi method research is used for this research.

This paper mainly focuses on Problems faced by HI&SI students, Development of the Multi-sensory teaching techniques Programme, implementation of the programme and test the effectiveness of the programme.

**Keywords**: Hearing and Speech Impaired Students, Multi-Sensory Teaching Techniques Programme, Special Education, Learning Disabilities.

# GREEN ECONOMY INITIATIVES: ROLE OF WOMEN AS GLOBAL AGENTS

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## ABSTRACT

A green economy is defined as an economy that facilitates sustainable development without environmental degradation. It aims to reduce environmental risks and ecological scarcities. To be green, an economy must be low-carbon, resource efficient, energy-efficient and socially inclusive. In a green economy, economic activities must reduce pollution, carbon emission, protect ecosystem services and biodiversity, develop energy and resource efficiency and reduce energy poverty. The three pillars of a green economy are-people, profits and the planet. Healthy workforce can create a healthy economy. Women have a vital role in environmental management and development. Rio Declaration on Environment and Development mentioned that full participation of women is very essential to achieve sustainable development. Women constitute approximately half of the population of the world. Majority of the world's women carry out unpaid work, involve in lowest-paid work, least secure forms of work and in informal markets. A very few women occupy top-most corporate executive jobs across the globe. But as a producer, women produce the majority food supply of the world, although they own only 10 to 20 percent of the world's land. In this paper, an attempt is made to analyse green economy initiatives and role of women as global agents for achieving sustainable development. For this, data are collected from secondary sources. It was found that women comprise approximately 40 percent of the agricultural labour force in the developing world, 50 percent in Bangladesh, 50 percent in sub-Saharan Africa, 50 percent in Africa, 50 percent in East and Southeast Asia, 45 percent in Northern Africa, 35 percent in South Asia, 30 percent in India and 20 percent in America. In developing countries, women produce as much as 60 to 80 percent of the food. In all the stages of the food cycle, women play a fundamental role all over the world. Women can act as the key managers for proper management and conservation of environmental resources for achieving sustainable development and green transformation of the economy. If women were in more productive and decision-making roles, the world would be moving faster towards a green economy and sustainability will be achieved in the economic, social and environmental sense.

**Keywords**: Green Economy, Sustainable Development, Sustainability, Global Agents.

# GENDER QUEER BEING EMBRACED SOCIALLY: GLOBAL BEACON OF COGNIZANCE FOR TRANS- COMMUNITY AMID ADOPTION IN CHANDIGARH

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## ABSTRACT

'The Change will come', a tagline by Chandigarh based Trans woman and a social activist Dhananjay Chauhan brings a ray of hope for people under gender spectrum. The prompt for the study came after a Chandigarh based nonagenarian Chahal couple, in consent with their daughters, adopted the Trans couple Dhananjay Chauhan and Rudra Partap Singh. This unusual act of opening the heart and home for the marginalized group of the society is a bolt from the blue, when their families refused to shoulder them and would definitely act as an ignition for the elevation of the Trans community globally. In an interview conducted with Dhananjay Chauhan, it was revealed that she was a rape victim and her community still struggle to be accepted. Apart from the legal declarations, they want the society to acknowledge them. As per the responses, they have to confront innumerable challenges each day, which include bad touch, anxiety, depression and body shaming. They have to hide their organs like breast, private parts but feel confident after laser and silicone implant surgery. Financially they are weak, so forced into begging, commercial sex work, as there are no jobs for them in the Chandigarh Tricity region. Socially she has been accepted but still many more are waiting for the social acquiescence.

The paper reveals the level of compassion, perception and behaviour towards the third gender queer, among the inmates of Chandigarh, which was mapped via a self-constructed questionnaire. The data was collected from 265 inmates and the mingled responses were obtained with respect to the acceptance of the Transgender. The adoption news has definitely put a big impact on the mindset of the people and has paved the way for their better acceptance at global level.

**Keywords:** Transgender, Adoption, Social and Global Acceptance.

# OPEN EDUCATIONAL RESOURCES (OER) TO ADDRESS EDUCATIONAL INEQUALITY: PROSPECTS & CHALLENGES IN HIGHER EDUCATION

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## ABSTRACT

**Purpose:** The availability of learning resources is critical to student learning. Of course, access to learning materials is a significant challenge resulting in educational inequalities in the higher education sector. During the COVID-19 pandemic, students had limited access to physical library resources due to the suspension of face-to-face classes and the closure of educational institutions due to social distancing and lockdown measures since March 2020. Open Educational Resources (OER) are learning materials that are openly licensed and allow others to retain, reuse, revise, remix or redistribute (the 5 Rs) these materials (Allen & Katz, 2020; Wiley & Hilton, 2018). The availability of OER and its utilization reduces the disparity in the distribution of learning materials and results in equitable access to quality education in alignment with the sustainable development goals (SDG4) (Abeywardena, 2017).

This paper reviews the deployment of OER in higher education institutions (HEIs) and examines its role in reducing educational inequalities in the higher education sector.

**Design/Methodology/Approach:** This research uses a quantitative non-experimental research design. Data are obtained using a survey method from students across the various HEIs in the Sultanate of Oman. We intend to collect data from students from different HEIs, private and public, college and university, undergraduate and graduate, and from different specializations. A five point-Likert scale is used to obtain feedback on the awareness, use, and extent of thrust on OER in teaching, its importance in reducing educational inequalities and the challenges in using OER.

**Findings:** By examining the current use of OER in teaching and learning, its benefits and the challenges faced, this research offers strategies to integrate OER for learning beyond classrooms.

**Practical Implications:** The primary purpose of this research is to showcase the current status of OER usage in HEIs in the Sultanate of Oman. This research highlights the major OER repositories and offers insight into the benefits of using OER. The research also offers specific suggestions to find, personalize, and contextualize OER for HEI teaching and learning pedagogy.

**Originality/Value:** Educators have propagated the use of OER in HEIs; however, only a few studies examine the current status of OER use in HEIs and its role in reducing educational inequalities. This research fills this gap and examines the current status of OER in detail. This research aims to raise awareness of the use of OER and offer a coherent strategy to mainstream OERI into HEI teaching and to learn beyond classrooms.

**Keywords:** Open Educational Resources, Pedagogy, Higher Education, Teaching and Learning.

# SOCIAL & ECONOMIC IMPACT THROUGH GREEN ECONOMY A LOOK AT INDIA

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## ABSTRACT

As the effect of climate change begins to impact, it is the need of the hour to take the initiative on a green economy not by replacing sustainable development but to create a new focus on global education, economy, investment, infrastructure, skills and positive social environmental outcomes across the world. People should have relevant knowledge and skills to tackle environmental and social problems like material consumption, environmental degradation and inequality in all spatial scale. A green economy aims at empowering growth of economy and investment along with social comprehensiveness and quality of environment (Green growth knowledge platform 2020). Is the present education system all-encompassing of the pressing needs for a greener earth? For instance, a student training to be a doctor needs to be trained in using environment friendly disposable surgical tools or medical supplies. Similarly, a student studying to be an engineer needs to be trained in the usage of innovative tools in manufacturing, infrastructure that will lower emissions for a greener earth. This paper will attempt to address the social & economic impact of a green economy in global education by dividing the educational faculties into Humanities, Science, and Commerce and study the extent of 'green' inclusion made in the curriculum. This paper will try to highlight how green economy and global Education together can bring the natural growth of employment and investment by identifying the norms, structure, understanding the elements like standard, curriculum and institutional resources. Over the last decade, green economy in India has created new job opportunities, helping to improve standard of living, but its growth is limited to degrading environment and depleting natural resources for which it has taken the steps to decarbonize economy. Covid 19 has made it possible to get consumer's attention to green economy, green growth along with global education. For instance, Food being a crucial industry steps are being taken to train consumers and farmers the importance of organic farming and products which could play a catalyst role in green economy by re- vitalizing the farm and food sector and creating employment. This in turn could increase income and business opportunities to the investors, reducing import bills and increasing exports. Whereas, use of synthetic fertilizers, pesticides etc in conventional industrial agriculture could result higher level of greenhouse gas emissions, land degradation and depletion of natural capital.

**Keywords**: Green Economy, Green Growth, Global Education, Farming, Humanities, Commerce, Science.

# CITIZENS' PARTICIPATION IN LOCAL EDUCATION GOVERNANCE: AN ASSESSMENT OF THE FUNCTIONALITY AND SPENDING INDICATORS OF THE CITY SCHOOL BOARD OF CALOOCAN

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## ABSTRACT

Citizens' participation in local governance has become vital in translating development results in the exercise of local affairs. The Local Government Code (LGC) of 1991 provides mechanisms for participation in local planning and development by strengthening the local special bodies to further improve the delivery of basic social services in the Local Government Units (LGUs). As education sector is one of the areas where optimum realization of participation can be best reviewed, this study examined the Local School Board (LSB) and local education governance in Caloocan City in terms of its functionality, dynamics and citizens' participation mechanisms in the planning, budgeting and implementation of the School Board Plan and the Special Education Fund (SEF). The Local School Boards and the Budgeting of Special Education Fund are a strategic, most logical and crucial avenue to institute reforms on public education and to cohesively translate and reflect the global and national goals for education at the local level.

Using the correlational research method and a descriptive research design, this study was participated by the academic stakeholders and keynote officials through survey and interview. The study revealed the level of awareness and involvement of the academic stakeholders in the School Board Plan and the allocation of the SEF. It also showed the effects of the SEF Guidelines in the utilization of the budget, planning, and the Seal of Good Local Governance (SGLG) of Caloocan City in terms of Basic Education. To further contextualize the gathered data, policy document analysis was also integrated in this study that showed the supplementary mechanisms for participation, challenges for education financing and the overarching national policies on education. Moreover, the outcome of this study also showed the significant correlation between the awareness of the spending indicators of the City School Board Plan and involvement in participation mechanisms.

**Keywords:** Local Education Governance, Special Education Fund, Education, Local School Board, Citizen's Participation, Local Government.

# A STUDY ON THE POSITIVE AND NEGATIVE IMPACT OF TECHNOLOGY ON EDUCATION DURING AND AFTER COVID 19 PANDEMIC

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## ABSTRACT

**Background**: The global impact of pandemic COVID-19 may be evident in every industry. It has a negative impact on India's and the world's education sectors. Over 32 million students in India were unable to change schools or institutions, and all educational activities were ceased. The COVID-19 pandemic has proven that change cannot be avoided. It has functioned as a catalyst for educational institutions to expand and use platforms based on previously unknown technology. To eliminate the potential of a pandemic, the education sector has been attempting to survive crises in new ways and digitizing the challenges.

The majority of educational institutes in India and throughout the world were unprepared for digital learning. Despite the difficulties in schooling during the lockdown, a paradigm shift from offline to online learning occurred. Science and technology have the potential to facilitate a quick shift from offline to online learning. Technology has had a significant impact on schooling. Massive volumes of knowledge (books, music, photos, and videos) are now available at one's fingertips via the Internet, and formal learning possibilities are available online globally via MOOCs, podcasts, and traditional online degree programs. Technology has significantly replaced the classic four-wall classroom with desks and benches, blackboards, whiteboards, and textbooks. Needless to say, technology has had an influence on both the positive and negative lives of teachers and students.

The positive impact that technology can Easy access to information; easy retention of information; increased storage of information; improved presentation of information; education becoming more interactive; easier sharing of knowledge; and increased enthusiasm for learning. Technology can have a negative influence on student's emotional health, physical health, and learning. Educators frequently face several hurdles and stressors as they seek to study and prepare technologically sophisticated classes while receiving little to no professional development.

**Method:** We conducted a systematic literature review (SLR) of selected studies, published from 2020 to 2022. We classified and compared the selected studies based on a characterization framework.

**Keywords:** Education, Impact, Technology, Pandemic, COVID 19.

# LEGAL PROVISIONS FOR CHILDREN WITH LEARNING DISABILITIES: ACROSS FIVE COUNTRIES

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## ABSTRACT

Learning disability known as a hidden disability is a neurological disorder cause of genetic, maturation delay, neurological damage, environment and nutritional deficiencies which affect the brain's ability to send, receive and process of information. It is indeed sad to realize that a significant portion of student population across the world has learning disabilities. There are 5 - 9% of people having learning disabilities of general population (Vuleta, 2020) and estimated prevalence rates of LD in India range widely between 2% and 19% (Misquitta & Panshikar, 2022). Learning disability first time considered as benchmark disability in RPWD Act, 2016 by India. Research and advocacy in learning disability is still at its nascent stage in India (Sandhu, 2015). According to National Center for Education Statistics (NCES) 34% students had specific learning disabilities in U.S. by the year 2017-18. UNESCO reported that although countries around the world must ensure that students with disabilities receive free, inclusive and appropriate education. Very less research studies has been published regarding the legislative efforts and the implementation of services and supports specifically for students with learning disabilities (LD) around the world (Agrawal et al., 2019) it is so because the field is quite new and the group of persons called Learning Disabled is unusually diverse (Kushwah & Meena, 2018). Therefore, the purpose of this review study is to explore legislative efforts, services and interventions provided to students with learning disabilities from five countries worldwide: India, United Kingdom, United State America, Canada and Taiwan. This review study based on systematic literature review selected studies, published from 2011 to 2022 conducted at global level. Further, study suggested that these legal provisions would help to meet the learning goals of the learning-disabled (LD) students. In addition, it is important that international organizations provide guidance and support to practitioners and lawmakers to facilitate changes that will better serve students with LD throughout the world.

**Keywords:** Learning Disabilities, Legislative Efforts, International Educational Laws, International Special Education Laws.

# MOBILE APP PRODUCTION: OPEN SCHOOLING AND RESPONSIBLE INNOVATION DURING THE COVID-19 PANDEMIC

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## ABSTRACT

The Research Group Gestão, Educação Ciência e Tecnologia para a Inclusão Social -GEC&TIS, is linked to the Postgraduate Program in Knowledge Diffusion of the Department of Human Sciences and Technologies of UNEB, DHCT Campus XIX, Camaçari, working on research projects and extension in Camaçari, in the Metropolitan Territory of Salvador, as well as in another 30 municipalities in the State of Bahia. With this, it proposes research projects, extension and actions focused on Socio-digital Inclusion and the development of applications and social technologies. With emphasis on the development of applications, which began in 2015 with the Solidarity Technologies Project - Tecsol, at the Digital Centers for Rural Citizenship (CDCR) - implemented by the University of the State of Bahia (UNEB) with support from the National Foundation for Studies and Research ( FINEP), and was consolidated with the extension project Applications for Mobile Devices: Open Education in the fight against the Covid-19 pandemic, proposed the development of applications for mobile devices, by students of public schools, amid the context of social isolation, imposed by legal determination of the state government due to the Covid19 pandemic, through the funding of Public Notice 030/2010 – PROBEX, proposed by UNEB, promoting the triggering of a set of actions with research and university extension for the development of applications and social inclusion -scientific research of basic education students in the public education and higher education network.

Applying the Open School principles that according to Okada (2018), together with open science and open schooling are essential to prepare individuals and communities for critical-collaborative participation with knowledge, skills and attitudes. to bring training to different communities, mobilizing the academic community to carry out university extension aimed at facing the adverse conditions experienced.

Based on the actions developed in 2020, the group sought to reflect on the question: how could the principles of open education be implemented in remote educational actions? And through the participatory action research methodology, in several extension projects (Tecsol in 2015; EduCovid in 2020; Mães 100% in 2021/2022; and, Ethnic Tourism in 2022) and research (CONNECT and Application-Formation) obtaining results that demonstrate that thinking about real problems faced by society, involving different social actors in the elaboration and implementation of solutions, became possible and produced effective results.

**Keywords:** Applications for Mobile Devices. Open Education. Sustainable tourism. Ethnic Tourism. Application-Training.

# INCLUSION AND TRAINING PROCESSES IN MULTICULTURAL ENVIRONMENTS

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## ABSTRACT

Inclusive Education advocates that all students have the right to be together, participating and learning. Therefore, this article will present considerations about the international collaboration established between the São Paulo State University (UNESP) and Santa Fe College (USA). The study presented here aims, among other aspects, to analyze the international and intercultural online training offered to teachers at Santa Fe College, and its impacts on the constitution of a culture of Inclusive Education in this context. As a result, we have that training, when considering the precepts of inclusion and using the Constructionist, Contextualized and Meaningful approach (CCS), together with the styles of use of the virtual, is configured as a possibility to carry out training processes in service and to enable the modification of conceptions and practices that promote an inclusive culture within higher education institutions. The CCS approach guided the structuring and development of training, since the proposal presupposes the construction of knowledge based on the appreciation of the learners' context, as well as the skills and potential of each one, in order to enable knowledge to be significant and that promotes attitudinal changes, which in the case of this study refers to the construction and/or strengthening of the Inclusive Education culture within a Higher Education institution. They, in addition to being spaces for the dissemination and construction of scientific knowledge, must be constituted as learning environments for all, in which the abilities, potentialities, differences and singularities of the subjects are recognized and valued. In order for inclusion and, consequently, an inclusive culture to be experienced, there is a need to impregnate the foundations that involve these perspectives in teachers and in higher education institutions as a whole, and one of the possibilities for this is the constitution of processes training courses that consider these aspects.

**Keywords:** Inclusion, Training, Intercultural Environments, CCS Approach.

# IMPACT OF TECHNOLOGY ON EDUCATION SECTOR AND GREEN ECONOMY

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## ABSTRACT

Education is the most significant change in human history. It has a personal, national, global, and, in many ways, limitless impact. Yes, it is the result of technological advancements. All of our daily challenging jobs can now be quickly and efficiently automated thanks to technology. Government and private investments that reduce carbon emissions and pollution, improve energy and resource efficiency, and avoid the loss of biodiversity and ecosystem services should drive income and employment growth in a green economy. Green technology innovation attempts to create long-term sustainable development by generating economic, environmental, and social advantages; conserving resources and energy, and eliminating or reducing pollution and deterioration in the environment. While there are some major cost savings from reusing, reducing, recycling, and refusing, the greatest economic gain is the creation of jobs. Going green has boosted the economy and spawned a new industry with hundreds of thousands of jobs. It is important to remember the three E's of sustainability, which are economy, ecological, and equity, at times like these. Challenges will necessitate extensive public participation through education and communication. To create and drive a green economy, all interested learners and environmentally educated individuals will need to learn from and teach one another. Top-down solutions will not be sufficient without a large number of literate citizens to implement them. Bottom-up, community-based solutions, on the other hand, will require adequate resources and guidance in order to effectively inform and involve their constituents, one building at a time. For the purpose of writing this research paper was gathered as a review of the literature and based on some secondary data. Technology is an essential component of life in the twenty-first century, referred to as the fourth revolution, which brings with it both challenges and opportunities. A green economy has the potential to provide a path to long-term sustainability and development.

**Keywords:** Education, Green Economy, Information Technology, Learning, Sustainable Development.

# POTENTIAL OF BOERAVINONES FROM *BOERHAAVIA DIFFUSA* L. AS HCV NS3-NS4A PROTEASE (4A92) INHIBITORS BY MOLECULAR DOCKING

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## ABSTRACT

Hepatitis C virus (HCV) infection is a global health burden with over 180 million people infected worldwide. HCV is known to cause severe liver disease leading to cirrhosis and hepatocellular carcinoma. For viral replication, NS3 protein is very much needed. N-terminal serine protease domain and a C-terminal helicase/NTPase domain is present in the NS3 protein. It also requires NS4A protein to act as a cofactor along with NS3 for its complete activity. NS3-NS4A protease of HCV is the primary target for direct-acting antiviral agents' development. Till date, there is no licensed drug available in the market for HCV. Plant-derived bioactive compounds provide a vast source for new drug discoveries. *Boerhaavia diffusa* L. has medicinal properties such as anti-bacterial, anti-nociceptive, hepato-protective, hypo-glycemic, anti-proliferative, anti-estrogenic, anti-inflammatory, anti-convulsant, anti-stress and anti-metastatic activities. The antiviral property of the bioactive compounds of *Boerhaavia diffusa* L has not been studied. Therefore, the present study aims at investigating the inhibitory property of the bioactive compounds, Boeravinones derived from *Boerhaavia diffusa* L. against HCV NS3-NS4A protease, 4A92 by *in silico* molecular docking. The results showed potent inhibitory activity of all the Boeravinones selected for the study against 4A92. The best-ranked lead molecule was Boeravinone C with the binding energy of -11.2 kcal/mol. This specified that these bioactive compounds may be extracted and isolated from the plant, modified and synthesized *in vitro* to be used as potent inhibitors against HCV protease by carrying out cytotoxicity assay.

**Keywords**: HCV, 4A92, Boeravinones, Effective Inhibitor.

# INVISIBLE WALLS OR OPEN DOORS? REAL AND PERCEIVED BARRIERS TO COLLABORATION BETWEEN HIGHER EDUCATION INSTITUTIONS AND EMPLOYERS IN THEIR LOCAL / REGIONAL ECONOMIES

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## ABSTRACT

According to recent research in the UK, collaboration between Higher Education Institutions (HEIs) and organisations domiciled within their local and regional economies may be significantly impeded by a lack of understanding on both sides regarding the potential benefits arising from such exchanges (Pereira & France, 2022; Alunurm, Roigas and Varblane, 2020; Jongbloed, Enders & Salerno, 2008). Whilst larger firms with dedicated resources focused on building collaborative knowledge networks for competitive advantage may possess the capabilities to engage effectively with HEI, many smaller organisations may lack even basic understanding of how to approach (or be approached by) HEI (see Alunurm 2020; Fernandez et al, 2015).

HEI are increasingly seeking to establish links with employers in their local and regional contexts, however, as pressure increases from government to demonstrate value-added outcomes for students across all disciplines, alongside increasing demand for value for money and feature rich programmes from fee paying students (OfS 2019).

The problem facing HEI across the UK can be seen when considering the structural composition of the local and regional economies with which they seek to engage collaboratively. Over 99.7% of all businesses in the UK are either micro or SME (small & medium sized enterprises), with less than 8,000 large employers (i.e. 250 plus employees) across the country (Hutton and Ward, December 2021). Whilst the large companies account for well over 50% of gross domestic output by turnover, nearly two thirds of the workforce are employed by SMEs, which is the sector least likely to understand the reasons for engaging with HEI.

Consequently, attempts by HEI to engage with employers in a local and regional context tend to be somewhat piecemeal (e.g. business clinics, ad hoc seminars, showcase events etc), highly dependent upon personal networks of academic and support staff and ephemeral (i.e. tending to dissipate quickly if not carefully managed). Not only this, but academic staff are sometimes not incentivised to add new dimensions to their already heavy workload through building and maintaining collaborative relationships with employers. Where attempts are made to develop such networks, staff often encounter inertia due to a lack of clear value proposition with which to engage SME partners, whose needs are disparate and not always well understood by HEI.

So, whilst there is often a tacit assumption that there are links between HEI and organisations within their local and regional economies, through which mutually beneficial collaboration can take place, the reality is often less consistent.

This paper presents research carried out by a well-established medium-sized North West UK University seeking to understand perceptions amongst its local and regional employers of all types of the barriers (real or perceived) that may impact their choosing to work with / collaborate with HEI for competitive gain. The study, which was carried out in Q1 and Q2 2022, surveyed a representative sample of over 300 employers in the North West UK, using a semi-structured questionnaire delivered through the University's key employer networks.

Preliminary results confirm the existence of a number of limiting factors that may mitigate attempts at HEI / Employer collaboration, and which support the findings of previous systematic reviews suggesting the need for marketing management to facilitate cross-economic collaborative projects. The research seeks to establish a mandate for more effective economic collaboration between HEI and employers, by highlighting and categorising the real and perceived barriers faced by employer communities and seeking practical solutions to support HEI outreach and connections.

# HIGH TURNOVER: A CHALLENGE TO THE PUBLIC SERVICE IN THE MALDIVES.

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## ABSTRACT

**Purpose:** To identify the main reasons why the public sector in the Maldives is facing in high turnover of staff.

**Design/Methodology/Approach:** A quantitative study methodology is used to identify the main reasons why staff are constantly leaving jobs in the public sector. In order to identify the exact reasons, a predefined questionnaire will be distributed to selected people who have changed jobs within the last five years. The study sample will be taken from major ministries and other public sector organisations such as the Islamic University of Maldives. Over 100 respondents will be targeted and will receive questionnaires.

**Research limitations/Implications:** The key objective of this research is to identify the main factors that contribute to public sector staff changing jobs frequently. The public sector which comprises Maldives Civil Service and other public organisations such as Islamic University of Maldives, Maldives National University, covers a large portion of the national workforce. In view of the size of the sector with regard to others, the research will not cover the entire sector. Given the limitations, the research is undertaken using three government Ministries and four public sector organisations.

**Practical Implications:** The research is aimed at understanding the factors that contribute to public servants changing jobs frequently. With the findings of this research, public sector organisations in the Maldives can understand and develop policies and procedures to address the issues identified. We believe this will be of great help, if used appropriately, to combat the effects of high turnover in the public sector.

**Originality/Value:** Based on the literature review, we could not identify any past research undertaken with regard to the high turnover in the public sector of the Maldives. Hence, this research, based on specific organisations, though limited in scope, will be applicable to similar organisations in practice. The results can be applicable to most public sector organisations as the policies and procedures in most public sector organisations are similar and are governed by the Maldivian Employment Act.

**Keywords:** Turnover, Public Sector, Civil Service, Employment.

# ACCESSIBILITY TO EDUCATION FOR THE DISADVANTAGED SECTIONS OF THE SOCIETY WITH SPECIAL REFERENCE TO SLUMS OF BANGALORE METROPOLITAN CITY THROUGH SOCIAL WORK INTERVENTIONS.

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## ABSTRACT

Bangalore is a hub of technology, gardens, full-fledged special economic zones, industrial areas and with slums consisting of disadvantaged sections of the society. They are lacking with safe drinking water, hygienic shelter, sanitation and education. Slum dwellers are basically migrated population from rural areas reached city with the expectation of job. Most of them were unskilled; easily get into the field of construction work or domestic work or any other kind of unorganized sector employment. Migrant workers usually lacking shelter, so they are in search of shelter easily they accommodate themselves either under flyover, railway good shed areas or nearby sewerage areas. As they do not have regular employment, as it is a construction work obviously they make their children play wherever they are working. If they have lactating mother they made their elder kids take care of the small baby and she goes for construction work. These children become school dropouts even though government school teachers do campaign of “Back to School kids”. Present study is an attempt was made to accessibility to education and find out the ways to rearing up of small kids of construction workers.

Birds NGO is working for construction workers and domestic workers in 45 slums specially unorganized workers. Most of the slums having school dropouts of construction workers and the elder kids taking care of younger siblings. Along with the Slum Development Project Coordinator and animator of the particular slums Investigator did an in detail study of school dropout children in 6 major slums namely Hennur Bunde, Nagenahalli, Byrathi Bunde, Bagalur, Doddagubbi and HRBR Layout. This is a qualitative study and data collected through school dropout children in 6 slums through in-depth research interview and through Focused Group Discussion.

Outcome of the study is to bring back school dropout children to school and find out referral home to rearing up of zero to below 3 years children of construction workers. Creating awareness among construction workers on value of education of their children for socio-economic upliftment.

**Keywords**: School Dropouts, Construction Workers, Educational Accessibility, Slums.

# A STUDY ON FACTORS INFLUENCING CONSUMER BEHAVIOUR ON PRE AND POST DIGITALIZATION OF HEALTH INSURANCE PRODUCT IN INDIA"

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## ABSTRACT

Prior to the health insurance industry being totally converted to the digital world, most health insurance providers were not able to work effectively. Digitalization will have a dramatic effect on the marketability of the product. The digital revolution has given the health insurance industry greater power and influence. Health insurance is a critical necessity for the world's population. Since 2020, an epidemic has ravaged the globe in the form of the COVID-19 pandemic. People encountered fear at lockout as they were buying health insurance because of a disease outbreak. This panic situation is regulated by the explosive development of digitalization, which provides innovative possibilities and opportunities to leverage customer behaviour by digitalisation on the purchase of health insurance products as nobody could meet physically. Digital transformation in the insurance industry makes it to another level. This is a phase whereby consumers are thinking radically and this affects their actions in the purchase of health insurance. As a result, this study presents the factors influencing consumer behaviour in Mumbai prior to and after the digitalization of Health Insurance products.

This paper examines the factors that influence consumer behaviour, and here the main factor "CRISIS" is taken in the form of C= Critical, R= Recovery, I= Insurance, S= Society, I=Information Search and S= Solution. This paper focuses on exploring these variables, which affect consumer behaviour in pre and post digitalization of health insurance products in Mumbai. The study includes an examination of factors that affect consumers' behaviour in pre and post digitisation. This paper aims to find the trend of customer behaviour for health insurance products prior to and after digitalisation in Mumbai.

**Keywords:** Consumer behaviour, Health Insurance, Pre and Post digitalization, CRISIS, COVID-19, Pandemic.

# DIGITAL STORYTELLING: INNOVATION IN INCLUSIVE EDUCATION

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## ABSTRACT

The pedagogical value of storytelling is widely documented in the literature. Digital Storytelling has evolved into a new type of creation and presentation because of the growing use of digital media. Digital storytelling (DS) is a medium that uses digital images, videos, text, and sounds to deliver a story to readers, viewers, and listeners with a computer system. In terms of education, new teaching approaches based on the use of technology have been developed to help students learn more effectively. Familiar conceptss are adapted in a new instructional setting and strengthened with technology. There is a range of DS software such as PhotoStory3, Animoto, ComicLife, StoryBird, Digital Vaults, VoiceThread, and Glogster, Kerpoof that offer the tools to create a story with images and text through a computer system. Digital storytelling offers several benefits to the educational process in variable domains and for different learning groups. Digital Storytelling can make students more engaged and creative, by helping them to discover different ways to express their ideas. This will enable children to express themselves verbally and visually in an artistic, productive, and inspiring way. Digital storytelling has a positive effect on developing creative thinking and other skills like communication skills, listening skills, reading skills, writing skills, social skills, and emotional skills and helps in developing interpersonal skills among learners. Teaching and learning through the application of digital storytelling will help in increasing their comprehension and learning. When students use multimedia software to visualize their thoughts, they were more active and engaged with the subject matter. Digital Storytelling has been used as an educational tool for learners with special needs and digital storybooks for teaching literacy to students with learning difficulties. Integration of digital storytelling in the inclusive classroom will help in the development of narrative skills, reflective learning, project-based learning, and the effective integration of technology in education, the development of creativity in problem-solving, knowledge, and management of tools and technological means. Digital storytelling as a medium of instruction in inclusive classroom helps in training of multisensory organs used for exploration by children helps them to create mental images and abstract mental processes; it is crucial, then, to organize the learning environment so that they can interact with objects through different sensorimotor channels.

**Keywords**: Digital Storytelling, Technology, Inclusive Classroom, Multimedia, Skills.

# A STUDY ON DIGITAL HYGIENE PRACTICES OF SECONDARY SCHOOL TEACHERS OF LUCKNOW, INDIA

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## ABSTRACT

People are connected online for everything whether it is education, shopping, medicine, industry, or socialization. As people spend lot of time on internet, it becomes essential to be safe and follow cyber ethics. The way most of the human beings have adopted good health and hygiene practices for healthy body, similarly, practicing good digital hygiene has become crucial for being safe and secure in the cyber world. The present paper argues on the digital hygiene practices of teachers in secondary schools of Lucknow, India. Descriptive Survey Method was adopted, and the data was collected through Convenience sampling technique. Percentage analysis was done to find healthy digital practices of teachers on four different parameters: Psychological impact, awareness on digital device protection, Awareness on cyber safety practices, and Good digital practices. Results of the study revealed that secondary school teachers of Lucknow are aware about the digital hygiene practices. They practice digital hygiene in their daily life and motivate students as well to follow the digital hygiene practices to ensure their safety and security in the virtual world.

**Keywords:** Digital Hygiene Practices, Digital World, Cyber Safety, Cyber Ethics, Digital Devices.

# SIGNIFICANT ROLE OF BLENDED LEARNING APPROACH IN THE CONTEXT OF TEACHING LEARNING PROCESS

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## ABSTRACT

*"The capacity to learn is a gift; the ability to learn is a skill; the willingness to learn is a choice"* (Brain Herbert)

Learner-cantered approach has always helped the learners to achieve curriculum outcomes and add to their skills to functional effectively as the 21st century learners. At one side the different learning strategies like as group learning, cooperative learning, group projects in creation of the conductive learning environment whereas collaboration of ICT tools, blended learning, flipped learning, 3D projects, experimental activities through great aids for the teacher in teaching learning process. In recent years, blended learning has become a well-known way of giving guidance at all educational levels and across multifarious fields of study. Blended Learning (BL) is one of the most used methods in education to promote active learning and enhance students' learning outcomes. Blended learning indicates, an educational environment that encompass inventions in the classroom learning (Alqarni). According to 77% academician online education is superior to traditional methods. This paper highlights the role of new pedagogical approach of blended learning which means a combination of face-to-face and online activity based learning. Blended learning increased learning skills, greater access to the information, learning outcomes and opportunity to the learner. The objective of this research paper is to explore reasons for use blended learning in education. Blended learning is an effective way of teaching that is flexible and easy to access (Avazmatova 2020). Romli (2019) suggested that the impact of BL (Blended Learning) on learners' effectiveness is positively predicted by achievement, engagement, involvement, retention and cognitive outcome. National Policy on Education (NPE) 2022 recommends for use of blended learning models from school education to higher education. For this research paper, the data has been collected from various resources of evidence, journal, research papers and websites. It also explores the different models of blended learning and its effective impact on the education.

**Keywords:** Blended Learning, Flipped Learning, Digital Learning, Education, Teaching- Learning Process.

# INVESTIGATING FACTORS AFFECTING MOOCS ADOPTION AMONG TEACHERS OF HIGHER EDUCATION INSTITUTIONS IN INDIA

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## ABSTRACT

Massive Open Online Courses (MOOCs) have the potential to eradicate the digital divide and endorse education globally among the learners in the education industry. Through MOOCs platforms, teachers can upgrade their knowledge skills and abilities in their field. Most of the MOOCs course are available for free of cost or small amount need to be paid for the completion certificate. In spite of its potentials, the adoption rate of MOOCs is still relatively low among the teachers of developing countries like India. Teachers need to keep up with the rapid pace of change in the educational innovations and technologies for learning. Teachers are responsible for continually upgrading their knowledge and skills. But it has been observed that once teachers enter to teaching profession they do not continue their education and their knowledge become obsolete.

MOOCs can play a critical role in enhancing their knowledge and skills and also help in achieving career and educational goals. To fill this research gap, the present study aims to identify the barriers and motivating factors underlying the adoption of MOOCs by teachers employed in higher education institutions of India. The research has employed an Interpretative phenomenological analysis of qualitative research methodology. In this research, 11 teachers from various universities of Uttarakhand have been selected as the respondent to investigate the factors influencing MOOCs adoption. The in-depth interviews were conducted with average time duration of 115 minutes. Findings revealed that technological barriers, financial barriers, and lack of awareness act as barriers to adopt MOOCs whereas teacher's self-motivation, personal growth, professional growth, and characteristics of MOOCs act as motivators to adopt MOOCs. This study contributes to the literature by identifying the barriers and motivating factors influencing teachers' intention to adopt MOOCs. The research has a number of implications for higher education institutions, MOOC providers, and government entities.

**Keywords**: Massive Open Online Courses (MOOCs), Teachers, Universities, Technology Adoption.

# INNVOATIONS IN LEARNING AND EDUCATION

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## ABSTRACT

There is a common belief that innovation in education is only related to technological advancements. However, in reality, innovation in education transcends technical expertise. The words 'Innovation' and 'Learning' are synonymous with human nature and tendency. Both these words are beautifully interdependent on each other. While the stress on innovation cannot be higher, it is a well-established fact that innovation is driven by learning. The foundation for preparing Creative Leaders of the future starts with innovative learning. Creative Thinking and Design Innovation finds its application across industries and sectors, including the education sector. The introduction of innovation in education allows students to expand their minds and develop skills outside the textbooks. As Albert Einstein has aptly quoted, imagination is the real sign of intelligence. Hence, it is quintessential that we change and improve learning, educating, and teaching methods according to society's changing dynamics. Innovative teaching methods are necessary to channel innovative education and to help learners understand and solve modern-day challenges, break futile social constructs, and grow towards a sustainable future. There is a widespread notion that educational systems should empower learners with skills and competences to cope with a constantly changing landscape. Reference is often made to skills such as critical thinking, problem solving, collaborative skills, innovation, digital literacy, and adaptability. What is negotiable is how best to achieve the development of those skills, in particular which teaching and learning approaches are suitable for facilitating or enabling complex skills development. In this paper, we build on our previous work of exploring new forms of pedagogy for an interactive world, as documented in our Innovating Pedagogy report series. We present a set of innovative pedagogical approaches that have the potential to guide teaching and transform learning. An integrated framework has been developed to select pedagogies for inclusion in this paper, consisting of the following five dimensions: (a) relevance to effective educational theories, (b) research evidence about the effectiveness of the proposed pedagogies, (c) relation to the development of twenty-first century skills, (d) innovative aspects of pedagogy, and (e) level of adoption in educational practice. The selected pedagogies, namely formative analytics, teach back, place-based learning, learning with drones, learning with robots, and citizen inquiry are either attached to specific technological developments, or they have emerged due to an advanced understanding of the science of learning. Each one is presented in terms of the five dimensions of the framework.

**Keywords:** Education, Teaching, Learning, Innovations, Techniques and Methods and Development.

# EFFECT OF COVID-19 PANDEMIC ON LEARNING STYLES OF ADOLESCENTS

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## ABSTRACT

Due to the C0VID-19 pandemic, almost all the countries of the world have fallen unaware into the trap of the reality of disruptions and instability, requiring painful adjustments to the new reality. The struggle is still ongoing and so, it is essential to understand the nature of the influence of the virus to chalk out proper preventive and recovery measures in order to handle it effectively. COVID-19 pandemic has affected all sectors of the country including the education sector. The closure of schools, colleges and universities has disrupted academic activities, hampered regular routine learning and invigorated social media addiction. The government and concerned authorities have by far taken some initiatives for students e.g., online classes to deliver education during the pandemic but these do not meet the desired levels of satisfaction. A learning gap has been created among marginalized sections of society which includes disables, minorities and the ones that are in the most rural hard-to-reach and poorest communities. Every individual has their own natural pattern of acquiring and processing information. The patterns by which an individual learns are known as their learning styles. Learning Styles are a special kind of procedural knowledge: knowing how to do something. Some are general and taught in school, such as summarizing or outlining focus on attention and efforts, process information deeply and monitor understanding. It is a vehicle to foster the learning by allowing the adolescents to embrace their personal cognitive differences and leverage them to develop dynamic approaches to learning. It enables students to be more mindful of what they are doing and why and of how the skills they are learning might be used differently in different situations. The purpose of this study is to understand the effect of COVID-19 pandemic on learning styles of adolescents during this unprecedented crisis and assess how they are adapting to the new e-learning styles and how they are managing their academic activities.

**Keywords:** COVID-19, Education Sector, Online Classes, Learning Gap and Learning Styles.

# EFFECT OF DIGITAL ORIENTATION ON DIGITAL SUPPLY CHAIN ADOPTION AMONG SMES IN NIGERIA

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## ABSTRACT

The concept of digital orientation (DO) is attracting increasing attention among academics and practicing managers. One possible reason for the scholars increasing attention on the concept of DO is the assumptions that digitally oriented firm are capable of building competitive advantage through the use of flexible resources. However, there is still no consensus on the effect of DO constructs on digital supply chain adoption among SMEs. The study employed cross sectional survey design. A simple random sampling technique was used to select the sample of 273 out of the population of 457 SMEs operating within Kaduna Metropolis. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to analyze the data. Findings revealed that Digital curiosity, digital openness and digital alertness were positively and significantly related to Digital supply chain adoption while digital innovative passion was positive but insignificant. Base on the findings, it is concluded that SMEs are more likely to adopt a digital supply chain if they have the necessary digital orientation in terms of Digital Curiousness, Digital Alertness, Digital Openness, and Digital Innovative Passion.

**Keywords:** Digitalisation, Digital Orientation, Digital Supply Chain, Digital Supply Chain Adoption.

# TEACHERS AS MANAGERS: A NEW VISION

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## ABSTRACT

Modern era demands teachers to act as efficient and effective managers to improve the quality of education because quality education shows the path for progress of the nation. Teaching competence includes right techniques to convey knowledge, skills and attitudes. Managerial skills enable a teacher to become a creative person and think about different strategies to achieve the goals of education. The present paper focuses on managerial skills of teachers and teaching competence. Managerial skills include communication skill, class-room management skill, time management skill, decision-making skill and pedagogical skill. Communication skill means imparting knowledge in effective and efficient manner, classroom management skill comprises seating arrangement and encourage learning oriented activities, time management means to use available time in the best possible manner, decision making skill encompasses taking decisions independently well in time and pedagogical skill includes the understanding of academic level of the students with the help of illustrations. Teaching competence includes cognitive competence, performance based competence and affective competence. Cognitive competence includes teacher's mastery over the content, his ability to organise it adequately, use diverse methods and techniques and motivational strategies. Performance based competence includes mainly his ability to convey the knowledge to the students, ask questions and adopt appropriate evaluation strategies. Affective competence deals with rapport with learners; infuse values among students, cordial relations and create conducive learning environment in the classroom. The study was conducted on 400 secondary school teachers randomly selected from 40 schools and were classified on the basis of demographic variables. Managerial skills scale was developed by the investigator and standardised. Teaching competence scale was adapted so reliability and validity was established. Descriptive analysis was done to find out managerial skills of the teachers and teaching competence. It was observed from the data that there was significant difference in the managerial skills and teaching competence of the school teachers. The study shows that there was positive correlation in managerial skills and teaching competence of secondary school teachers. Hence, level of managerial skills should be enhanced for improving teaching competence. It is concluded that management of teaching learning process needs managerial skills along with teaching competence to achieve the goals of education.

**Keywords:** Managerial Skills, Teaching Competence, Communication Skills, Demographic Variables**.**

# EFFECT OF POSITIVE LIFE ORIENTATION ON ECOLOGICAL ATTITUDE AND COGNITION DURING PANDEMIC

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## ABSTRACT

Environmental hazards caused by humans have been inferred as one of the main causes of pandemic, which has further caused various Psycho-physiological changes in the mindset of people and society. It is being realized during pandemic that man and environment must go hand in hand for sustainable development and prevention of future pandemics. The purpose of the present investigation is to study the effect of positive life orientation on Ecological attitude and cognition during the pandemic times. In the present study, the tools employed to collect the data are Instructional material based on positive life orientation prepared by investigators and Test of Ecological Attitude and Cognitive by Rajamanickam, M. (2013). A pre-test consisting of Ecological attitude and cognition scale was administered to the sample of 60 technology students pursuing B.Tech. The technology students constituting sample were nearly equated on the basis of Ecological attitude and cognition score. 50 students were selected and incomplete questionnaires were rejected. This sample of 50 students was further divided into two groups of 25 technology students each forming control and experimental groups. Self-made positive life orientation modules were taught to the experimental group for fifteen days. At the end, post-test was administered to the experimental and control groups using Ecological attitude and cognition tool to verify the learning outcomes among students of both the groups. The result showed that the students taught through positive life orientation modules were having better Ecological attitude and cognition than those of control group. The results which showed significant difference between the mean scores of control group and experimental group are evident enough to prove the same. It emphasized on the role of positive life orientation on learners. The study demonstrates the positive effect of positive life orientation on Ecological attitude and cognition of technology students, thereby rejecting the null hypothesis that there exists no significant effect of positive life orientation on Ecological attitude and cognition of technology students. The result highlights the importance of incorporating the positive life orientation in teaching, as it helps in creating Ecological attitude and cognition, which is in turn, in need of more research to gain better pedagogical insights. The more learners learn through positive life orientation, the more mentally cognizant they are regarding ecology, which helps them to recognize their strengths and weaknesses. In other words, the technology students' Ecological attitude and cognition can be significantly improved with the help of positive life orientation.

**Keywords**: Positive Life Orientation, Ecological Attitude and Cognition, Technology Students.

# HOW DIGITAL EDUCATION EMPOWERED THE LIVES OF RURAL PEOPLE

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## ABSTRACT

The present research paper tries to emphasize the use and benefits of technology for the development of rural areas. Healthcare, medical, education, transportation, tourism, industry, business, management, administration, banking, and rural development are all areas where technology has become essential in today's globe. People will require the necessary digital education to succeed in the future workplace. Whether in school, university, or the workplace, the ongoing digital change is making IT skills more crucial every day. The use of computers and software programs is at the heart of technology. It can refer to machinery, equipment, tools, skills, knowledge, and expertise, among other things. The use of technology for the development of rural regions has been done on a large scale, and as a result of the effective implementation of technology, there has been expansion and progress in the field of agriculture. The objectives of technology development in rural areas, benefits of technology application in rural areas, areas of technology application, the role of information and communications technologies in rural development, challenges faced by rural areas, and ways of connecting energy access and rural development are the main areas that have been highlighted in this research paper. The major goal of this study is to present information on how technological advancements are assisting in the development of rural areas. Rural development in India is tremendously important for the country's growth, as has been widely acknowledged. This is due to the fact that over 70% of India's population lives in rural regions, and thus rural development will effectively contribute to the country's development.

**Method:** The researcher will conduct systematic literature review studies, published from 2012 to 2022. We classified and compared the selected studies based on a characterization framework.

Keywords: Digital Education, Technology, Rural Area, Rural Development, and Empowerment.

# LIFELONG LEARNING IN INDIA

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## ABSTRACT

Lifelong learning crosses professions and promotes learning beyond traditional schooling and throughout adulthood. It encompasses learning at all ages and includes formal, non-formal, and informal learning that is flexible, diversified, and available at many times and locations. Learning, it is believed, is not age- or classroom-bound, but occurs throughout life and in a variety of settings. It promotes not only social involvement, active citizenship, and personal growth, but also self-sufficiency over competitiveness and employment. The UNESCO vision of lifelong learning embraces all learning contexts (formal, non-formal, and informal) and ages (from birth to grave. Lifelong learning is especially crucial in the context of a changing global economy, where knowledge-based economies outnumber other types of economies in terms of national economic strength and citizen socioeconomic empowerment. It has become a key concept in global education and training thought. There is no doubt that colleges play an important role in encouraging lifelong learning that affects the expectations of young people who see education as a power that can improve their lives. At the moment, it has been observed that understandings of lifelong learning vary greatly, not just between countries, but also between educational system sub-sectors. Because the proportion of youth in India is increasing, the issue of lifelong learning affects young children. Indeed, the principle of Lifelong Learning is deeply ingrained in Indian society, culture, and education. Many lifelong learning programmes are provided by various agencies in the country, including academic institutions, non-governmental organisations, and numerous government departments; their emphasis remains on adult literacy, continuing education, and skill training. The paper will aim to cover the aims, present state, significant programmes, concerns, and challenges relating to lifelong learning, as well as the life-sustaining role of higher education in promoting lifelong learning in India, based on the study of policy statements, programme reports, and assessment of select initiatives.

**Keywords:** Education, Lifelong learning in India, UNESCO, Policies.

# LIFELONG LEARNING AND SUSTAINABLE DEVELOPMENT: IN CONTEXT TO GREEN ECONOMY

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## ABSTRACT

In the era of globalization and knowledge based economy the new entrants in the global economy have intensified the competition thus turning production towards high value-added and knowledge-intensive products and services demanding high-level skills labour force in return. The widespread diffusion of information technology gives rise to new.

Opportunities for learning but challenging the established views and practices of learning. The process of growth and innovation continue to cluster around those which have invested in human capital development thereby creating an exclusion, environmental crisis and sustainability challenges in the societies at local, national and international level. The role of lifelong learning in promoting green economy for sustainable development is to make an education for people and planet. Developing a green mindset in education, skills, and training programmes needs to be an important area of lifelong learning for achieving the targets of sustainable development. Going beyond the labour market orientation of education systems of present times such kind of learning tools are needed which aimed at promoting climate and environmental literacy, sustainable livelihood and understanding of human-nature interdependencies and values system. The main challenges for lifelong learning in global education for sustainable development are inducement of informal learning opportunities; stimulation of self-motivated learning; acceptance of self-funded learning; and stimulation of universal participation to the learning process.

**Keywords:** Lifelong Learning, Green Economy, Sustainable Development, Global Education.

# GAMICITY: CONSTRUCTING A CONCEPT FROM TRANSFORMING AND RESPONSIBLE PRACTICES

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## ABSTRACT

This text describes the identification of elements and ludic concepts from practical experiences with locative games, pervasive and gamified practices having as game field the city with its various cultural and educational contexts already described in other publications.

In this analysis concrete and symbolic, physical and digital layers that emerged in these experiences were described, as if they were level designs and of the mechanics (patterns and rules), dynamics (relationships and systems) and aesthetics (value creation), comparing with theoretical references on gamification and heritage experience.

The methodology used is Design Science Research for the prototyping of the conceptual model and cartography of controversies for the mapping of emergences, dynamics and aesthetics. 22 experiences were analyzed: 10 games and 12 gamifications that involved this relationship of playing with (in) the city and some of experience were highlighted:

1) Gameout: or breaking the walls of schools and taking the game outside and learn with the city. In these practices we identify the types invitations, tensions and needs to break bubbles and overcome barriers.

2) Extend: the augmented gamification is how to map the interactive potential of spaces, and extend their layers of information, meaning and creative possibilities, adding projective and symbolic layers. New proposed interfaces had to be thought in layers of possibilities that present new ways of living and creating

3) Immerse: ambiences from the construction of exploration scenarios, to micro world proposals, in which there are investigations and problematizing experiences with hypothesis elaboration and data collection.

4) Storytelling: discover, share, invent, reconfigure narrative experiences, interact or experience their characters and their symbolic and imaginary universes.

5) Treasures and value collection: make value structures explicit from the playfulness since the attribution of auras to objects, organizational forms such as collections and curating until deepening in the logic of patrimony, in which it invites to the construction of personal and collective affections.

6) Mediation and authorship: city as medium, as a support of the authorial creation as a playful action that can promote creative expressions in multimodalities and hypertextualized, and in experimenting on interfaces, screens, platforms, supports, genres so that they generate groupings, links, collective and collaborative productions, creations and recreations, interventions and occupations.

7) Mapping: action produces records and tracks which may be recovered, mapped, visualized and how these help to promote reflection and dialogue on the experiences lived.

8) Emancipation: make challenges, contradictions and controversies explicit and help to propose actions and collective creations aimed at social transformation.

We describe the concept of Gamicity as a flow of playing, scripting, adapting and playing again, in a continuum iterative, always creating new versions of the game experience with the creation of microworlds or formative ambiences in which the city itself is the space of exploration and intentional learning. This space is configured in layers and interfaces and their technological extensions to build memories, meanings and stories, personal and collective, which can promote from listening, dialogue to social transformations.

In the experiences analyzed, it was possible to describe each of these levels and layers, and the most present were: narratives, the microworlds, the tracks and the collections. The dynamics of leaving, amplifying, valuing, collaborating and emancipating still has little depth in the sense of making controversies explicit and reaching the notion of cities as place more pleasurable and fun.

The next step is to create a framework with these dimensions to support the creation of playful experiences in cities that are truly mobilisers of transformation and social responsibility.

# EFFECT OF SOCIAL-EMOTIONAL COMPETENCE ON ACADEMIC ACHIEVEMENT AMONG ELEMENTARY SCHOOL STUDENTS IN RELATION TO THEIR FAMILY ENVIRONMENT

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## ABSTRACT

Social- Emotional Competence (SEC) is one of the most important investigated area of everybody's life, especially in young children in present scenario. To develop children social-emotional competence, a positive and affectionate relationship between adults and children is very essential. Besides this, a positive relationship between teachers and young students helps those students to have better school achievement and behavioural skills. Teachers have the responsibility to enhance children's development in many aspects, including social, emotional, cognitive, academic, and behavioural skills. Various review studies show that SEC has direct influence on children's learning outcomes and on their ability to engage in good relationship. The purpose of this paper is to discuss the SEC on teacher- child relationship along with children's academic achievement, school readiness and behavioural success and family environment as well. With the help of several strategies of SEL teachers are able to build strong and healthy relationships with children. These strategies foster children's academic and behavioural success. Additionally, social and emotional learning is also defined in relation to school successes to show that competence in these areas increases students' reading, writing, critical thinking, and vocabulary skills. It is also believed that family and school environment as a social, psychological and financial entity plays a pressed role in the holistic development of child in his entire life. A positive family and school climate have been linked with higher student academic motivation and engagement as well as elevated psychological well-being. Family is the primary agency of the social environment where child feels, observes and learns the social emotional relationships and develops his holistic personality.

**Keywords:** Social-Emotional Competence, Teacher-Child Relationship, School Readiness, Academic Achievement, Family Environment.

# CONNECT AND PARTICIPATORY SCIENCE: THE SIMULATED JURY AS A RESOURCE FOR THINKING ABOUT SCIENCE

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## ABSTRACT

**Issue:** The importance of thinking scientifically in daily life and reflecting on the impacts that science brings to society and the world is well known. However, school education often does not stimulate the discussion of such issues, which leads to young people with little scientific knowledge and low interest in science and innovation, as they believe it is something distant from their context. In this sense, CONNECT intends to add to the curriculum activities that provide opportunities for discussion and debate on scientific issues relevant to the reality of the student, so that they increase their scientific capital and develop a taste for science and its developments (CONNECT, 2020).

**Evidence:** The new edition of the Public Perception of Science and Technology survey, conducted in Brazil in 2019, pointed out that 73% of the population believes that science is beneficial to society. Although 62% of respondents said they are interested in science and technology, the survey shows that 78% of citizens who answered the survey believe that antibiotics are intended to kill viruses - which attests to a low scientific capital among Brazilians. Other worrying indices deal with the ignorance about science and technology in the country: 90% of the people interviewed cannot point out the name of a scientist and 88% could not remember the name of any Brazilian research institution (CGEE, 2019).

**Literature:** Okada and Sherborne (2021), CONNECT (2020), European Commission (2018), Okada (2021), Okada and Matta (2021), Okada and Rodrigues (2018), Sherborne and Youg (2021) and Nerhaus (2021) were consulted.

**Innovation:** Adaptation of Project CONNECT methodology to a didactic sequence of Portuguese Language, with focus on the textual genre simulated jury.

**Purpose:** The purpose is to verify how the methodology of Project CONNECT (based on the steps of Care-Know-Do), allied to the pedagogical practice of the simulated jury, and contributes to the increase of the student's scientific capital.

**Research Question:** In what way can the adaptation of Project CONNECT's methodology, by means of a simulated jury activity, contribute to the increase of the student's scientific capital?

**Methodology:** The methodology used consists in a case study research (YIN, 2001), with the application of a didactic sequence in Portuguese language classes and qualitative analysis of the collected answers.

**Participants:** A Portuguese Language teacher and 32 high school students from a private high school in Paraná.

**Findings:** The results obtained suggest that CONNECT contributes to increase students' scientific capital, as it encourages research and debate on key issues of science, technology and innovation - in this case, the use of early treatment against Covid-19. According to the students' reports, the simulated jury activity, by requiring research and the defence of a point of view about this scientific impasse, contributed to greater knowledge on the subject, as well as to an increase in criticality and a greater openness to new points of view on the same issue.

# TEACHER DEVELOPMENT THROUGH SCIENCE PROJECTS FROM OPEN EDUCATION

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## ABSTRACT

**Issue:** In recent years, teacher education and development as well as the importance of introducing science projects at schools, have been the focus of study all over the world in the hope of making a better school system for our children. After closing schools due to the pandemic time, teachers felt the motivation to go after knowledge and update their skills, using projects and tools from open education.

**Evidence:** Necessary needs to overcome the difficulties brought by pandemic showed us that teacher can and should overpass their own limits in order to change education. Open education and the implementation of science projects, such as CONNECT, have also been proved as a way to promote those changes.

**Literature:** Belloni (2002), Bolsoni, Turini and Mariana (2018), Esteve (2004), Murgatrotd (2020), Tardif (2000), Toma and Greca (2017), Okada and Rodrigues (2018) were used as theoretical port.

**Innovation:** Integration between teacher lifelong learning, seeking a change in education through science along with the CONNECT Project.

**Purpose:** The purpose is to motivate teacher´s lifelong learning and development while implementing science projects for their students, using open education for that matter.

**Research question:** How does the implementation of science projects from open school, such as the CONNECT project, contribute to teachers´ lifelong learning and development?

**Methodology:** The methodology used consists of case study research (YIN, 2001), with the application of a didactic sequence and qualitative analysis of the collected data.

**Participants:** Four groups of 4th and 5th grades from a private Elementary school, accounting for approximately 100 students, 5 teachers and external partners in the city of Ponta Grossa in Brazil.

**Findings:** the students were very involved and motivated during the process and that the involvement of stakeholders and scientists were fundamental for the good application of CONNECT. Students have a greater understanding of the importance of scientific content in their daily lives.

**Keywords:** Open School, Teacher Lifelong Learning, Science Projects, Development.

# DIGITAL DIVIDE AMONG THE FACULTIES OF HIGHER EDUCATION AMID COVID-19

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## ABSTRACT

**Paper Proposal:** Despite the technological advancement in many sectors (i.e. e-banking, e-commerce, tele medicines, e-governance, etc.) specifically in the educational sector, there is a gap between the people who are having access to technology (i.e. competencies of faculties, internet connectivity and access to technological devices) and who are not. Therefore, the digital divide exists in varied sectors along with the education system. From the world point of view, the majority (72%) of the urban households were accessed to internet as compared to internet access by 37% of rural people (International Telecommunication Union report, 2020). In the same line, the report revealed that the majority (63%) of the urban households accessed computers as compared to 25% of the rural households (ITU Report, 2020). A report shows that nearly 24% of the households in the country had internet access and the proportions were 15% and 42% among rural and urban households respectively in the year 2017-18 (National Statistical Organisation Report, Govt. of India). The report again stated that among persons of age 15-29 years, nearly 24% in rural areas and 56% in urban areas were able to operate a computer. The report also stated that nearly 4% of rural households and 23% of urban households possessed computers. Although swift advances in technology have occurred, the digital gap remains ever-present (Centeio, 2017). Such inequalities also exist in educational settings (Centeio, 2017) (in Soomro, Kale, Curtis, Akcaoglu, and Bernstein, 2020). Some studies found a gap between the usage of male and female faculty members (Soomro *et al.*) whereas no significant difference was found in the competence in using digital technologies (Martin, Polly, Coles, and Wang, 2020). Currently, the whole world is going through a critical situation due to the COVID-19 pandemic. This education system has also been affected by the deadly Coronavirus which hinders the achievement of sustainable development goal- 4 stated as “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Faculties have started online teaching and assessment in higher educational institutions by using different digital technologies. Therefore, the Researcher is intended to study the digital divide among faculties of higher education with regard to their gender, locality, and teaching experience. Data will be collected from the faculties of higher education teaching in various higher education institutions in India through an online survey by administering a self-developed scale. A number of suggestions will be given to reduce the digital divide among the faculties.

**Keywords:** Accessibility, Higher Education, Digital Inequality, COVID-19.

# GLOBAL EDUCATION AND GREEN ECONOMY

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## ABSTRACT

The significance of green economy is that it motivates and facilitates sustainable development with integrated decision making. In this economy, there will be increase in employment and income through economic activities, improvement in the efficiency of resources and energy, improving infrastructure by lessening pollution and carbon emissions, eco system services and biodiversity driven by public and private investment. This paper is focused on the green economy and higher education, its need and the strategies for sustainable evolution which initiates action focused on the preservation of the necessary resources through optimal use and predicting how their today's choices they make affect tomorrow. The improvement in the growth of the economy and environmental management working mutually in support of social development enabling the well-being of the humans to enjoy and create prosperity through promoting equity among the generations reducing the risks of environment and insufficiency of the resources.

**Keywords**: Green Economy, Education, Sustainable Development.

# INCLUSIVE EDUCATION IN THE CHANGING SCENARIO

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## ABSTRACT

In a relatively short period of time, inclusive education has emerged and established itself as a subject of educational study, policy, and practice. Simply put, inclusive education is both a goal and a method of instruction. It aims to identify and remove barriers to education for all children so that they have access to, are present in, and engage in school and achieve optimal academic and social results. Inclusion in education is a technique for educating students with unique needs. Learning difficulties, communication difficulties, emotional and behavioral issues, physical disabilities, and developmental disorders are all common special needs. Children with special needs spend significant amounts of time with non-disabled students under the inclusion paradigm. Additional educational services, such as innovative teaching methods, the use of technology, and a specially modified teaching environment or resource room, are likely to benefit students with these types of special needs. Inclusive education contrasts with previously held concepts of integration and mainstreaming, which were primarily concerned with disability and special educational needs. Inclusion, on the other hand, is about the Child's right to participate and the school's obligation to accept the child. Inclusion opposes the use of special schools or classrooms to separate children with and without disabilities. Students with disabilities are encouraged to participate fully and to respect their social, civic, and educational rights. The National Education Policy 2020 promises to bring revolutionary changes through equitable and inclusive education. The NEP 2020 seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030.In this paper while using the secondary sources, the researcher has made an attempt to explore the changing scenario, benefits, limitations, strategies and the use of modern ICT (Information and Communication Technology) tools for all students for the smooth implementation of inclusive education programme.

**Keywords:** Inclusive Education, Children with Special Needs, Integration, Mainstreaming, National Education Policy 2020, ICT.

# TEACHER'S SKILLS IN USING ICT IN GOVERNMENT SECONDARY SCHOOLS IN WEST BENGAL

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## ABSTRACT

21st century is the age of new media and ICT is playing a key role in shaping individuals, its culture, lifestyles and way of being human. ICT and techno-pedagogical content knowledge is a vital aspect in present day specially for teachers and teacher education. This study aims to find out ICT resources used by teachers and techno-pedagogical knowledge of teachers and their skills in teaching learning process. An online survey was conducted with 15 Govt. Secondary Schools in west Bengal with 110 sample randomly using self-made questionnaire with the no of 73 questions. The study found very limited access to ICT resources and very poor access to modern Techno-Pedagogical Content Knowledge of teachers. Above ninety five percent teachers suffer TPCK due to lack of resources and trainings. This study will be helpful for teachers, Govt and policy makers and further research can be done to develop Techno-Pedagogical Content Knowledge of teachers and would be teachers.

**Keywords:** ICT, Techno-Pedagogical Content Knowledge.

# INVESTIGATING THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND WORK-LIFE BALANCE AMONG UNIVERSITY TEACHERS

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## ABSTRACT

The nature of work is changing at whirlpool speed. Globalization and privatization have sped up the pace of change around us and the higher education system in India is no exception to this. Drastic transformations in terms of development, privatization, marketization, curricular modifications, and pedagogical novelties have placed unprecedented demands on the higher education system especially public universities to constantly evolve and align with the needs of different stakeholders. Since the efficiency of the education system largely depends upon the quality of teachers associated with it, it is not only imperative to attract and retain talented faculties but it is also necessary to understand the factors which hinder the growth and development of teachers. One such factor vital to institutional dynamics is occupational stress among university teachers. As work and family are two significant facets of an individual's life, changes in one will have an impact on the other. Increased levels of occupational stress in the work domain will have an impact on the non-work domain thereby disturbing the work-life balance of the university teachers.

Therefore, the main objective of conducting the present study is to investigate the factors leading to occupational stress and its relationship with the work-life balance of university teachers. To get the required information, standardized questionnaires are used and data is collected through the Convenience sampling technique from a sample of 414 teachers belonging to various public universities in Jharkhand. Data has been analyzed through Statistical Package for Social Sciences (SPSS). Descriptive Statistics, Correlation, and Regression analysis have been applied to draw the inferences from the study.

Occupational stress is found to have a strong negative relationship with work-life balance. The overall result of the study indicates a statistically significant causal relationship between occupational stress and work-life balance. The result of the study can help university administrators, academics, and educational policymakers to design and implement programs to decrease the level of occupational stress and increase the level of work-life balance to create a conducive working environment. These, in turn, will improve organizational efficiency and effectiveness in academic setup.

**Keywords:** Occupational Stress, Stressors, Work-Life Balance, University Teachers.

# MEDIATING ROLE OF COMPETITIVE ADVANTAGE ON THE RELATIONSHIP BETWEEN ACCESS TO ICT AND SUSTAINABILITY OF SMALL AND MEDIUM ENTERPRISE (SMES) IN NIGERIA

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**ABSTRACT**

The purpose of this paper is to see how competitive advantage mediates the relationship between access to ICT and sustainability of SMEs in Nigeria. The study utilized cross sectional survey design. A simple random sampling technique was used to choose a sample of 377 SMEs operating in Kaduna State of Nigeria from a population of 21,615. The data was analyzed using the Statistical Package for Social Science (SPSS) and Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings demonstrate that access to ICT were positively and significantly related to sustainability of SMEs. It was also discovered that competitive advantage mediates the relationship between access to ICT and sustainability of SMEs. It is recommended that SMEs should properly utilize ICT tool in their businesses since it is significantly assist them in achieving competitive advantage and sustainability of their business operation.

**Keywords:** Access to ICT, Competitive Advantage, Sustainability of SMEs.

# COGNITIVE STRUCTURE AND TEACHING LEARNING PROCESS: A SYSTEMATIC REVIEW

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## ABSTRACT

The constructivist approach is one of the important improvements in the area of science education(Adak, 2017). This approach focuses on ideas of knowledge construction in the mind and how people learn. Memory plays an important role in knowledge construction (Verhoeven et al., 2009). The memory of a person is the center where knowledge is constructed and learning is carried out cognitively in people. Knowledge construction of an individual is affected by factors such as prior knowledge, the way of prior knowledge construction, the perception and experience of individuals, and interaction with the environment. Knowledge forms a construction in the shape of a connected network. These networks of knowledge existing in the memory of learnes are called cognitive structures(Ramersh et al., 2020).

Learning difficulty arises due to misconceptions, missing information, and the inability to connect the new learning concepts with prior knowledge existing in the memory of the learner. The knowledge existing in the memory of students is revealed by cognitive structure analysis. Cognitive structure and its revealing become important in the teaching-learning process for the better association of prior knowledge with new knowledge. The present study aimed to obtain an understanding of the recent findings related to cognitive structure and its impact on the teaching-learning process. A search strategy was developed for the inclusion of studies for systematic review and a total of 12 studies selected for the systematic review. The findings revealed that cognitive structure has a great role in the teaching-learning process for the determination of misconceptions, missing information, and thereby making the students ready for learning. it provides suggestions for improving the cognitive structure of students. By analysing the different studies systematically it is possible to derive a conclusion regarding the components and nature of the cognitive structure, impact on the teaching-learning process, the method used for revealing cognitive structure, the importance of cognitive structure in instructional material preparation, and ways in which the cognitive structure can be properly developed.

# ADOPTING BLOOM'S TAXONOMY FOR PROMOTING STUDENT'S LIFE-LONG LEARNING: A VISION OF NEW EDUCATION POLICY OF INDIA

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## ABSTRACT

The first education policy of 21st century i.e. New Education Policy was introduced on 30th July 2020, which focuses on access, equality, quality, creativity, and research through lifelong learning. For lifelong learning NEP-2020 advocates adopting Bloom's Taxonomy, which is a multi-tiered approach in all of its forms that describes the learning process created by Benjamin Bloom in 1956 and revised in the 1990s & 2001 by Lorin Anderson. The taxonomy aids teachers in thinking about and analyzing their lessons and students' lifelong learning as initiated by NEP-2020. The aim of the study focuses on the aspect that how to apply Bloom's taxonomy in the teaching process so that students can reach the higher level of the cognitive domain which leads to permanent learning as envisioned by NEP-2020. For assessing the extent of permanent learning of pupils with the help of Bloom's taxonomy, a systematic balance of questions from both the lower and higher domains of learning in the summative assessment is used. As a result, the teacher must first and foremost possess appropriate educational, social, cultural, pedagogical, psychological, and axiological knowledge, with the goals serving as the foundation from which the learning process begins. In conclusion, teaching goals are properly set, clear, precise, and successful lifelong learning can be achieved to a greater extent.

**Keywords:** Bloom's Taxonomy, Domain, Learning, Teaching, NEP-2022.

# TECHNOLOGY'S IMPACT ON RECRUITMENT, RETENTION, AND REPUTATION IN THE EDUCATION SECTOR

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## ABSTRACT

**Purpose:** When an advanced innovation, approach, or technology-driven system is introduced, the claims for it might range from student liberation and cost savings to a full revolution of higher education. Almost the whole early years of a technology advancement appear to be spent debating what exactly it can help with, what problem it is fixing. In this paper, researchers adopted a purely pragmatic approach, arguing that any long-term technological improvement must tackle some specific concerns of institutions. Vice chancellors, provosts, and presidents are already worried about current advances in the following areas: Recruitment, retention, and reputation are now all-important factors. The HRM platform's intensive developmental activities are most commonly responsible for the employee's emotional commitment and multidimensional involvement in bringing about positive and consistent growth that meets the demands of academic institution, enabling them to survive in the current competitive scenario. So, let us not forget that academic institutions also must move toward corporate-style organisational management to accomplish survival goals. Those who are not proactive will not be able to stay afloat of competition. The most difficult task every firm face is establishing a consistent research platform concerning, methodologies of recruitment, retentions, and then maintaining and developing the reputation.

**Design/Methodology/Approach**: Exploratory research with an aim to recognize the technological factors that influence the practice of recruitment, retention, and reputation in Education sector. Desktop research with certain organizations website and their press releases and focus group discussion are the tools used to collect the data.

**Practical Implications:** The framework for future planning for recruitment, retention, and reputation with the help of technological platform of can be designed. This can also help organizations thinking to go with digital platforms to design the course for success.

**Keywords:** Digital Technology in Education, Digital Recruitment in Education, Retention in Education Sector, Reputation Building in Education Sector Etc.

# CHALLENGES OF BLENDED LEARNING IN MANAGEMENT EDUCATION

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## ABSTRACT

Blended learning means the combination of traditional face-to-face learning with technology. Blended learning in management education fetching remarkable attention of learners across the globe. Management education provided by different institutions and e-learning platforms transform the teaching pedagogy by embracing digital technologies. It evolved as a boon for millions of people in this world yet it challenged many people in different ways. People throughout the world getting benefits by upgrading their managerial skills from the world-class education involving esteemed institutions and academicians. Yet several challenges are faced by management students while opting for blended learning. Inadequate technical infrastructure and skills, lesser motivation for learning, monotonicity, higher cost etc. are few of them. This paper attempts to identify the major challenges of blended learning in management education specially faced by learners. For the identification of these challenges an extensive review of literature has been done, followed by interviewing the 30 management students who opted for blended learning. The interviews are further analysed by implementing content analysis and further different themes in the form of challenges of blended learning emerged out. The results show a number of challenges faced for the blended learning by the management students. This study emphasizes over the challenges and also provides the theoretical and practical implications to overcome these challenges. This study concludes that the blended learning can be more sustainable and enthusiastic if some ground level improvements and implementations can be done.

**Keywords**: Blended Learning, Challenges, Literature Review, Interviews.

# INTELLIGENT VIRTUAL ASSISTANT IN THE AREA OF NATURE SCIENCES FOR ELEMENTARY SCHOOL

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## ABSTRACT

The increase in access and use of the internet through different activities in our lives has pointed out the importance of technological tools for Education. With regard to the educational context, new technologies, specifically intelligent virtual assistants, can be understood as a mediator between knowledge. They present themselves as a way to contribute to teaching, making students protagonists in the construction of knowledge. Intelligent virtual assistants that offer interaction with natural language and real-time information, allow contact with the contents of the disciplines, in addition to promoting support during the teaching and learning process, which provides not only the acquisition of knowledge but also personal development and the construction of meaningful learning. This paper aims to present an intelligent virtual assistant to support the teaching of Natural Sciences at Elementary schools. This intelligent virtual assistant was developed from the skills and abilities present in the National Common Curricular Base, a guiding document for Brazilian Education, and with the aim of stimulating the STEAM movement, which allows providing possibilities and challenges in the development of projects in the area of Sciences for elementary school. For the development of this intelligent virtual assistant, the first comprises was bibliographic research to deepen knowledge about the STEAM concept, Artificial Intelligence, especially virtual assistants, and an analysis was carried out on the competencies and skills for the area of Natural Sciences proposed in the National Common Curricular Base, in order to identify their characteristics to incorporate them into the solution, intelligent virtual assistant. In addition to exploratory research for the development of the intelligent virtual assistant with based on the knowledge built in the first stage, the research sequence took place with the development of the intelligent virtual assistant for the area of Natural Sciences that was named Biel, through the experimental design methodology and the ADDIE model. At the end of the intelligent virtual assistant development, output integrations were carried out with other platforms for better interaction with users. The last stage was intended to correspond design and implementation of an intelligent virtual assistant on the site. The first results are an intelligent virtual assistant as an open and intuitive educational tool using Natural Language according to the age group of the students for friendly interactions that can contribute to the improvement of Natural Sciences teaching with these characteristics allows students to have an active process in teaching.

**Keywords:** Artificial Intelligence, STEAM, Intelligent Virtual Assistant, Natural Sciences.

# CREATING HAPPY CLASSROOMS THROUGH INNOVATION IN LEARNING AND EDUCATION

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## ABSTRACT

Innovation is essential for happy learning and education. The purpose of this paper is to investigate the role of innovation in teaching and learning which makes happy classrooms. It explores the relationship between innovation and happy classrooms and how innovation is linked to both issues. Purposive sampling was used which includes students and teachers as participants. The study utilized a qualitative research design through the interview, specifically, phenomenological, through the use of a validated interview questionnaire. Our findings point out that the Happy Classrooms Programme may promote psychological well-being and a positive classroom climate, and reduce school aggression in students by increasing mindfulness Levels.

**Keywords:** Innovation, Happy Classrooms, Well-Being, Teaching, and Learning**.**

# CONNECT-SCIENCE.NET SUPPORTED BY THE CARE-KNOW-DO OPEN SCHOOLING FRAMEWORK TO EMPOWER GIRLS WITH SCIENCE ACTIONS FOR SUSTAINABLE DEVELOPMENT

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## ABSTRACT

**Issue:** Science education became increasingly relevant to foster responsible scientific professionals and citizens for a green economy. Increasing the number of women in science is still a big challenge.

**Evidence:** Economic projections highlighted the need for one million more STEM professionals over the next decade (Labour Statistic, 2015). A significant proportion of pupils in Europe do not achieve basic proficiency. Only 15 percent of women are employed in science and engineering occupations according to the National Science Foundation (2016). Gender issues, inequalities and inequities must be considered at local and global context to foster inclusive, democratic scientific literate and sustainable societies (EC, 2017).

**Innovative Approach:** The CARE-KNOW-DO pedagogical framework to implement open schooling was designed to enhance the science capital and affective engagement of students including girls. Its aim is to promote participation in science studies and science careers by engaging all students in meaningful real-life problem-solving scenarios that they care about, need to know about and take action, do something about to develop knowledge, skills, attitude and values.

**Literature:** In open schooling, schools become an agent of community well-being in cooperation with all societal representatives (scientists, researchers, professionals, policymakers, families and civil society members) who are actively involved in bringing real-life projects to the classroom (EUROPEAN UNION, 2018). A literature review focused on gender issues in science revealed the lack of studies exploring gender equity and inclusive pedagogy under the lenses school policies and schoolwide structures that might enhance parent involvement and education in relation to gender (Brotman & Moore, 2008).

**Purpose:** This study presents the theoretical foundations and practices of the CONNECT project – Inclusive Open Schooling with engaging and future-oriented science funded by the European Union with partners in Brazil. CONNECT is based on participatory research between students, scientists, parents and policymakers), real-life problematization and co-inquiry narratives (CARE-KNOW-DO) to engage students with science-action supported by teachers, scientists, and families.

**Research Question:** In this study, we examined the following questions: Do girls care about science? How confident are they with their knowledge in science? What open schooling activities do they feel engaged with science?

**Methodology:** Its methodology is based multi-methods with data generated through multi-language analytic platform for teachers-scientists' partnerships and self-reflective questionnaires on students' perception about science capital, science leaning and science relevance in their lives.

**Findings:** Preliminary results allow us to point out that boys are more confident than girls especially in using maths to solve science, use science knowledge and talking about science. Conversely, the number of girls who do science activities outside school and discuss real life problems are higher than boys.

# GREEN ECONOMY SUPPORTED BY OPEN SCHOOLING WITH DIGITAL TECHNOLOGIES AND INQUIRY MAPPING

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## ABSTRACT

**Issue:** Contemporary education has a key role to prepare citizens and professionals to participate effectively in the processes of aligning societal needs with scientific technological developments for sustainable development. In this context, learning centred approaches has become increasingly relevant to empower students with knowledge and skills at local level. However, there is a lack of studies at global level.

**Evidence:** The 2030 Agenda, which includes high quality education across the world, seeks solutions to global challenges to promote peace, prosperity, and a green world. However, countries are progressing too slowly on green growth (OECD, 2022). In addition, global education for green economy is still underexplored.

**Approach:** To explore this gap, we argue that open schooling approach promoted by the European Union can contribute by global education for green economy. It promotes the cooperation among multi representatives of societies to empower young people with knowledge, skills, attitudes, and values. Through open schooling, students are supported by teachers, scientists, professional experts, and civil society organisations to solve real-life problems that are relevant at local and global level.

**Literature:** Global education has become fundamental to support the 'Sustainable Development Goals' SDG led by UNESCO, the 'Responsible Research and Innovation' - RRI principles promoted by European Union and the Green Deal led by national governments. Open Schooling can be conceived by the theoretical principles of meaningful learning supported by inquiry-based thinking (DEWEY, 1938), problematization with real-life context (FREIRE, 1969) supported by participatory research for social innovation (Hodson, 2009) and problem-solving (SHEEHAN; RIDE, 1999).

**Purpose:** The studies presented in this panel explores a set of innovative practices, challenges and recommendations for global education supported by open schooling to enhance green competences.

**Research Question:** How can open schooling facilitate the interaction between all partners (science professionals, teachers, students, and their families) to result in effective learning experiences linked to Research and Innovation at local and global levels?

**Methodology:** Our methodology is based on multi-case studies and inquiry mapping to bring together innovative ways to explore open schooling to support learners, educators, practitioners and policymakers and civil society at local and global levels. It is supported by CONNECT-SCIENCE self-assessment instrument and CARE-KNOW-DO pedagogical framework of best practices.

**Participants:** Participants include five large networks of universities, research-centres and schools from Brazil.

**Findings:** Our findings suggest innovative approaches and transition innovation initiatives in education from local to global levels supported by open schooling with a theoretical and empirical basis in various formal, informal, and non-formal learning scenarios.

# INTERNATIONALIZATION FOR GLOBAL EDUCATION SUPPORTED BY FOUR PILLARS: OPEN EDUCATION, OPEN SCHOOLING, OPEN SCIENCE, AND RRI

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## ABSTRACT

**Issue:** Due to pace of scientific and technological advances and the emergence of major global challenges, internationalization has become a fundamental issue in higher education to expand partnerships aimed at exchanging knowledge, training, and greater responsiveness in the face of accelerated transformations.

However, studies on internationalization in education, research and innovation are still very scarce.

**Evidence:** Internationalization must be considered in the broader context of the changing role and position of higher education in the world. Internationalization should broaden the limited mobility-centric and economically driven focus to support more inclusive strategies focused on improving the quality of education and research to make a significant contribution to society.

**Innovative Approach:** This study argues that the openness movement can be a potential catalyst for internationalization and global education. The open education initiatives, which are marked by open universities, open digital content, open educational resources, open online courses, open science, open technologies, and open responsible research and innovation. All these initiatives favour and are favoured by internationalization through cooperation of Higher Education networks from different nations.

**Purpose:** The purpose of this study is to understand how the instrument os4globe (Okada, 2022) could be used to design and evaluate the impact of internationalization to enhance knowledge exchange supported by four pillars: (1) open education, (2) open schooling, (3) responsible research and innovation and (4) open science.

**Research Question:** Aiming to contribute to this gap, this chapter discusses how the opening movement can be a potential catalyst for internationalization as a support base for greater knowledge exchange, enriching education, research, and innovation through open international cooperation

**Methodology:** The methodology focused on a set of descriptive multi case studies, including the partnerships and productions of the COLEARN - Co-learning and Co-investigation network which include open educational resources, responsible research and innovation activities, open science principles and open schooling projects. The instrument os4globe (Okada, 2022) was implemented to analyse various international projects: OLAF online learning and fun, CONNECT Open schooling and Earth 2030.

**Findings:** Our findings confirm what De Wit et al., (2015) indicated that Internationalization should be seen as a means to an end instead of an objective in itself. It should focus on improving the quality of education, research, and service for the global cooperation between societies rather than encouraging competition, exclusion, and limited access to opportunities of knowledge exchange. We conclude that internationalization needs to evolve into a more comprehensive process, supported by diversity, inclusion, and sustainability; that is, open to all citizens and professionals to enhance a green economy.

# CONFERENCE EVALUATION

## OVERVIEW

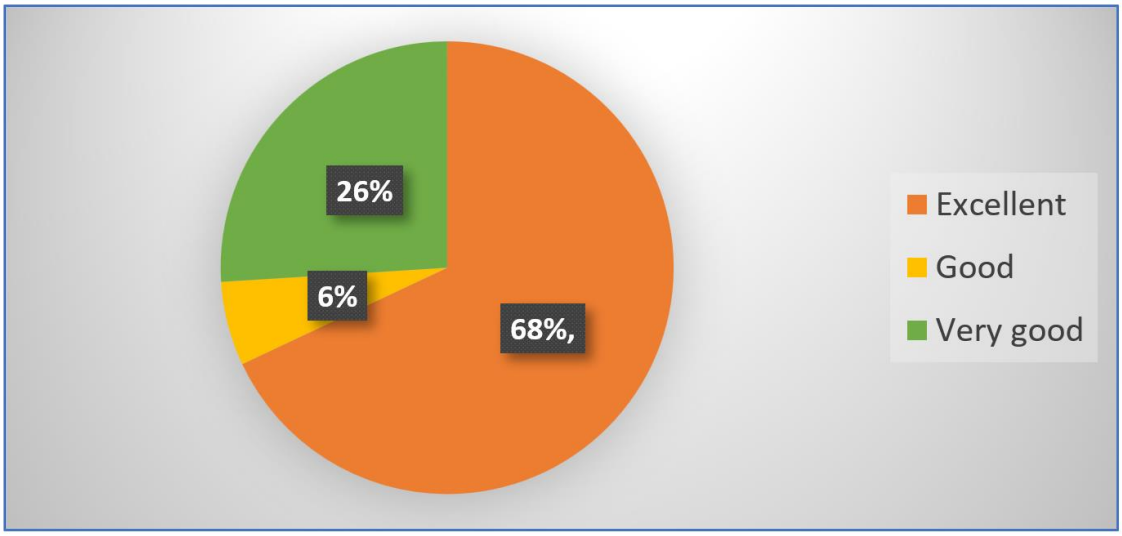
The London School of Management Education (LSME) 9th Annual International Research Conference took place on both the 18th and 19th of August 2022. More than 200 delegates from 12 countries in Asia, Europe, Africa, Middle East and South America attended via a hybrid mode with in-person and online. The event, themed **"Global Education and the Green Economy",** highlighted the importance of implementing learning initiatives at the local level to foster future growth in employment and income that is driven by public and private investment in such economic activities, infrastructure, and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of biodiversity and ecosystem services loss.

We were able to accommodate many more research papers at our previous conference, which were run simultaneously across parallel sessions, and this year's conference followed the same format. The conference was a huge success; however, the Conference Committee wanted to find out more about how the conference was perceived and where it could be improved. Both presenters and participants were asked to share their experiences and feedback with us at the end of the conference. The feedback was gathered using an online form in the form of a survey, which included both closed-ended questions for analysis and open-ended questions for feedback on best practices and areas for improvement.

Below are the findings from the survey responses:

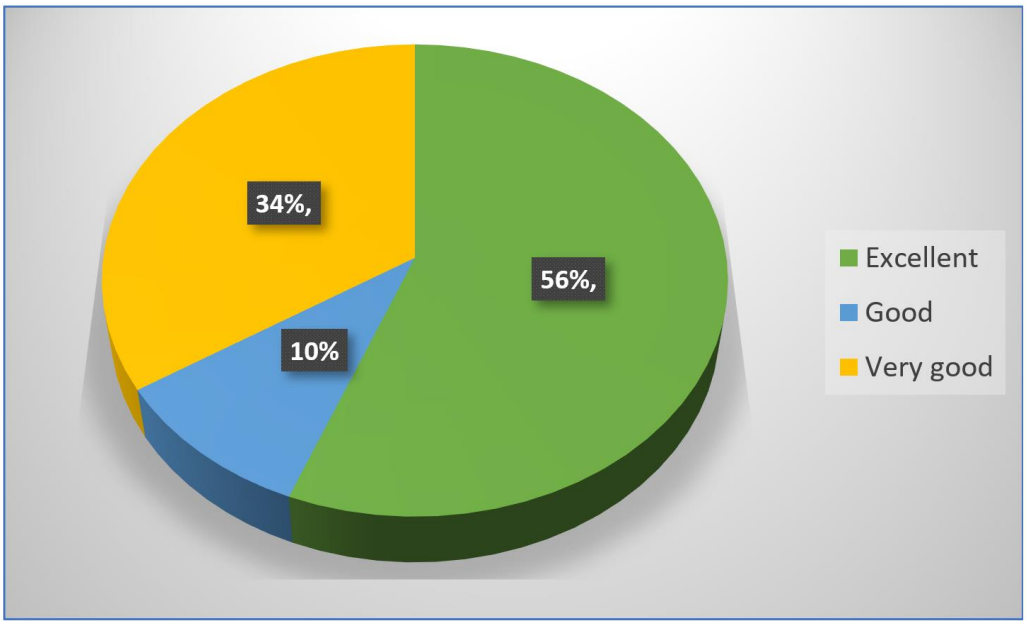
## CONCEPT OF THE CONFERENCE

The conference concept was thought to be very relevant, as all participants shared a positive opinion on it (100%). This demonstrates that we chose a relevant theme for this year's conference, and the categories were appropriate in exploring the areas of Education, Technology, Economics, Management, Sociology, Environmental Sciences, and Pure Science.



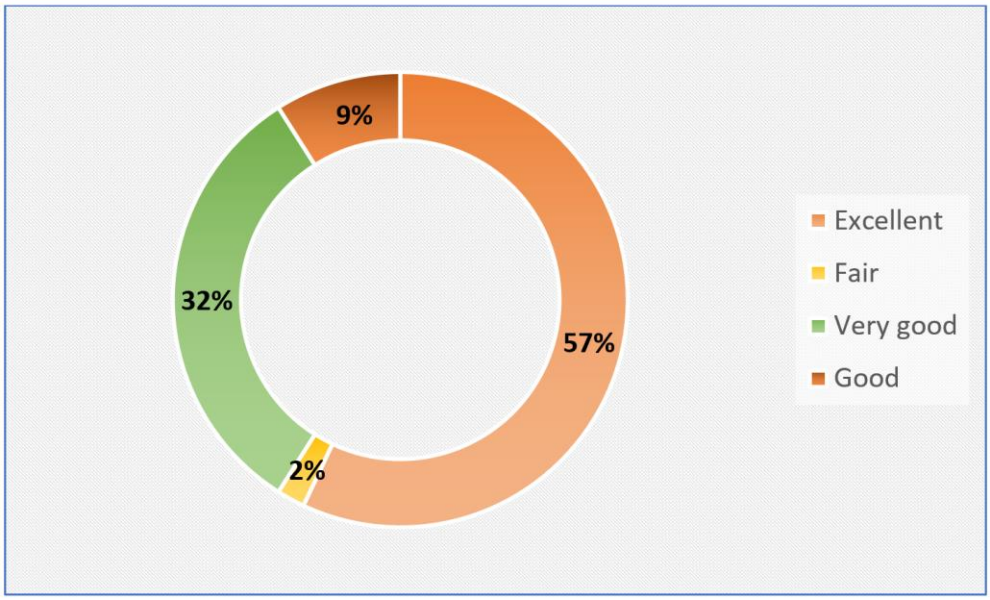
## INAUGURAL FUNCTION AND VALEDICTORY

We were able to make the sessions interesting for everyone who attended online and in person. The invited guests shared valuable insights on the evolution of education, as well as the steps that could be taken to improve educational practices and their significance.



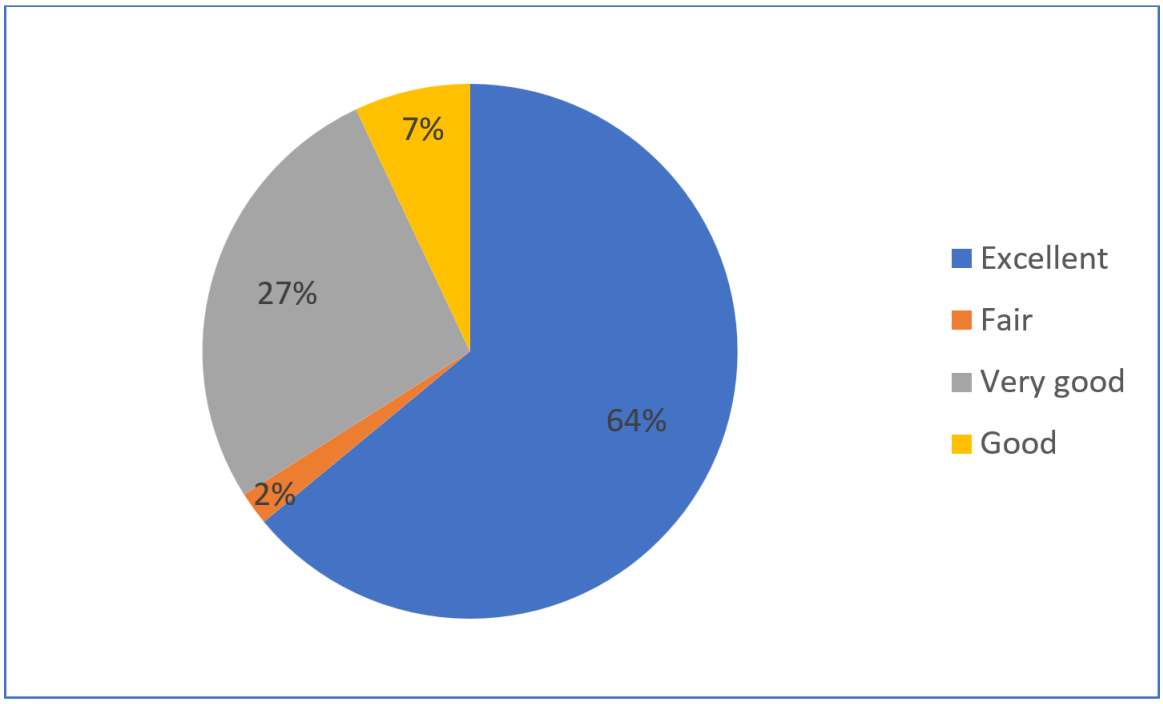

## KEYNOTES AND SPECIAL LECTURES

The majority of the participants highly rated the keynotes and special lectures although 2% only had a fair view on this. During this year's conference, we had two Keynotes on "Global Education and Gender Parity", and "Balancing Honesty with Hope: Helping young people navigate a Climate- Altered Future" and two Special Lectures on " Global Education and the Green Economy", and "Ethical Dilemmas in Research". The sessions were highly informative and well-presented and participants found these sessions very insightful as specialists were able to share their expertise with practical examples.



## ORGANISATION AND COORDINATION

The majority of presenters and participants rated the event's organisation and coordination as excellent, with only 2% rating it as fair. The event went off without a problem because the team was able to reflect on areas for improvement from the previous conference. In comparison to last year, only a few participants experienced technical difficulties, and appropriate assistance was provided, such as being redirected to the breakout rooms.




## DELIVERY AND CONTENT

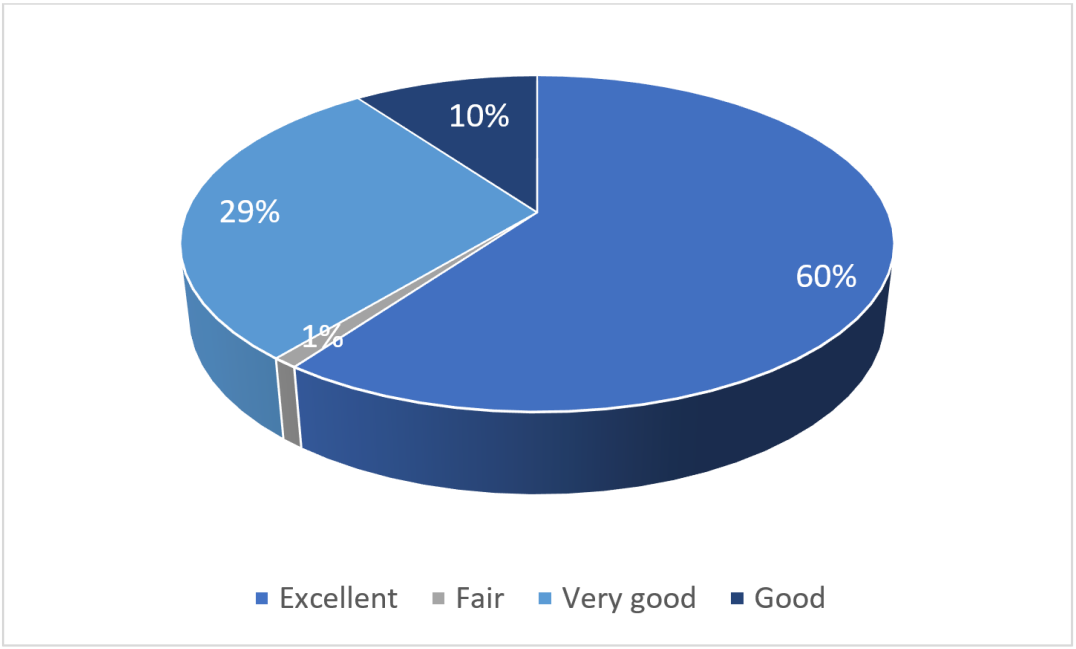
The sessions were split into the following categories:

- Education
- Technology
- Economics
- Management
- Sociology
- Environmental Sciences
- Pure Science

We received a higher volume of papers for presentation this year as well, and as a result, the review process was much more scrutinised due to the limited time slots available for presentations. The majority of participants gave very positive feedback on the content and delivery, as well as how the findings were presented, with only 3% holding a neutral opinion.

## SESSIONS EXPECTATIONS

The presenters' and participants' expectations reflect the team's consistent efforts to manage high-quality international conferences. Participants undoubtedly appreciated the high quality of the international research conference platform and how the LSME has maintained the standard by improving the event and adding more appropriate content yearly. The majority of participants gave very positive feedback on the session expectations with only 1% holding a neutral opinion.



## SUGGESTIONS FOR FURTHER IMPROVEMENTS

We provided presenters and participants to provide additional feedback on the conference by adding any comments to further enhancement of future conferences.

Some participants suggested to have the next conference in person and also some suggested to continue this hybrid method as all the presenters and participants are not able to attend in person.

Also, participants suggested to provide the opportunity for more paper presentations. They also proposed shortening the inaugural and valedictorian sessions and increasing the time allotted for research paper presentations to 20 minutes rather than 15 minutes.

Furthermore, they suggested that peer-reviewing and selection of the papers should be made even stronger, particularly relevant to the theme of the conference.

Another suggestion received was that LSME should provide more awareness about the conference through social media.

Overall, participants were very pleased with how the conference was organised. They thought it was well-organized and systematic, and they could see the preparation that went into the conference. The papers chosen were of exceptional quality. All of the attendees are looking forward to the next conference because they had such great times at this conference while enhancing their knowledge.

## SUGGESTED TOPICS FOR FUTURE SEMINARS

We offered presenters and participants the opportunity to suggest topics for upcoming conferences, and the following topics were suggested by them.

- Electronic learning opportunities and challenges
- Women empowerment
- Sustainable tourism development and green economy
- The impact of world conflict on environment and food security
- Inclusive Education
- Global Peace and Education
- Technology and the citizens of the digital world
- Comparison of Education system among developing and developed countries

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