CONFERENCE HANDBOOK

8th LSME INTERNATIONAL
RESEARCH CONFERENCE ON

SUSTAINABLE DEVELOPMENT
AND EDUCATION

LONDON SCHOOL®
OF MANAGEMENT EDUCATION

DATES
26 – 27 August 2021

VENUE
Online

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INTRODUCTION

Welcome to the 8th LSME International Research Conference, to which your active participation and contribution is valued and very much appreciated!

This booklet contains messages from Key speakers and presents abstracts summarising the main business of the Conference - the wide-ranging ideas, insights and interests that have led our esteemed colleagues to share their research with our community.

Please use the materials in this booklet as your 'key-in' to the conference, and take some time to consider the focal points, perspectives and phenomena that these researchers have been inspired to pursue. In doing so you will gain insights and form questions of your own, that will help to guide your selections from the many themes and streams on offer during the conference.

MISSION STATEMENT

Our long-standing alignment with the tenets of Responsible Research and Innovation agenda provide an overarching mission for the conference, namely 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.

OBJECTIVE OF THE CONFERENCE

- 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

The conference is hosted by the London School of Management Education (LSME), and delivered by an experienced committee of internationally renowned academics, practitioners and subject matter experts committed to excellence in conducting and sharing socially responsible research outputs and outcomes.

A WELCOME FROM OUR CONFERENCE CHAIR
PROFESSOR STEPHEN MCKINNEY

Dear Conference Delegates,

I offer you a warm welcome to the 8th LSME International Research conference. The series of LSME conferences commenced in January 2015 and has included two conferences in India. These conferences have been very successful and are testament to the commitment of the LSME to promoting the development of research and providing opportunities for researchers to present and discuss their research.

This year our theme is focussed on Sustainable Development and Education. We aim to explore the ways in which education can help us respond to some of the serious global challenges that we are facing in this period of time. This conference will include a strong emphasis on the highly relevant area of sustainable development, but also other topics such as the educational response to the aftermath of the effects of Covid-19 and the era of restrictions and lockdowns. We will examine what we have learned about different modes of learning and teaching and the adoption and adaption of technology for educational purposes. This particular period of time demonstrates that robust research is invaluable in helping us to understand the significant changes we have experienced over the last few years and the impact of these changes on the future of educational systems and practices.

I welcome all of the researchers presenting at this conference and I look forward to hearing the findings of your research in your papers. I welcome especially early career researchers and thank you for joining us and being willing to share your research. The LSME conferences aim to attract both early career researchers and more experienced researchers and we hope that we can all learn from each other and benefit from a shared experience at the conference.

This is our second international conference that will be conducted completely on-line. The first on-line LSME conference was in 2020 and, while much was learned from this new and slightly daunting experience, the conference was a marked success. We were delighted to welcome participants from many different parts of the world and were very conscious of important practical considerations such as the accommodation of time differences. We were very pleased with the quality of the papers and the engagement of the participants. We aim to ensure that this conference in 2021 will be equally successful, if not even more successful!

I am very grateful to 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. I also thank those who helped with the review of abstracts. The planning for any conference is complex and time consuming and there are further layers of complexity in the logistics when the conference is being planned as an online event. The members of the committee have been very hard working and industrious in the planning sessions and will have major roles to play during the conference. I offer them my heartfelt thanks.

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 LSME conferences would not be possible without the vision and leadership of Dr Ravi Kumar and Dr Sarita Parhi. Their leadership in the management and operation of the LSME is inspirational and exemplary. They are dedicated to their students and staff. The staff of the LSME also provide an invaluable support for the conference and I thank them for their unfailing patience and courtesy.

Finally, I hope you find the conference to be stimulating and enjoyable and thank you for your participation.

With very best wishes,

Professor Stephen McKinney
University of Glasgow

A FURTHER WELCOME FROM THE CONFERENCE CONVENER
DR RAVI KUMAR

Dear Friends and Colleagues,

Greetings to you all!

On behalf of the organising committee of the 8th LSME International Conference on 'Sustainable Development and Education', and my behalf, I welcome all the eminent personalities around the world to attend this grand event and to share your remarkable research work and expertise.

I am particularly excited about the core theme of 'Democratic Participation in Education and Sustainable Development' which was carefully chosen by the conference organisers. This will enrich us with research expertise encompassing the significance of education in an era when sustainable development is urgently required.

Education as we know is the foundation for sustainable development and should be transformative enough to allow us to make informed decisions and take individual and collective action to change our societies and combat climate change. Hence there is no doubt that governments, education policy-makers, academics, and education and environmental stakeholders need to further commit to Education for Sustainable Development.

The conference committee has carefully selected papers that offer a wide range of cultural, economic, social and organisational perspectives on the theme and we are very grateful for the significant contributions of these researchers through the use of document analysis, literature review, interviewing, survey analysis, figure creation and many more. These will hopefully stimulate interesting and meaningful discussions amongst participants with varying levels of expertise.

I look forward to meeting each of you and welcoming you to a wonderful learning and collegial experience.

Dr Ravi Kumar
Executive Director of LSME and Conference Convener

MESSAGE FROM THE LORD SHEIKH

The Lord Sheikh

Dear Readers,

We all waited anxiously for the next LSME International Research Conference since the last one held in the thick of the Covid-19 Pandemic in August 2020. At the time, we were looking at the little flicker of light at the end of the tunnel, and then 2021 brought us new dawn of hope for humanity. I remember saying in the last conference that science and research will give us a breakthrough from the grip of the devastating Pandemic. And I believe it is science and research that is leading us out of the Pandemic.

Hence, my trust and belief in the relentless effort of educating the young and the old, imparting useful knowledge in every mind and encouraging responsible research and creating more avenues for researchers, has been further strengthened by the experiences forced upon us by this dreadful Pandemic and how the humanity battled with it. I cannot emphasise enough that the education system should develop a questioning mind in every child and produce more researchers who would look for questions as much as answers.

Once again, I am delighted to be associated with LSME International Research Conference, where I get to meet many young researchers from across the world and the majority from developing countries, which is an absolute delight. They give us insights into the changes that is taking place around the world. They dig deeper and find the root causes of the problems, and paves the way for finding solutions.

I look forward to meeting these authors who would present their brilliant papers and the audiences from different continents that make up this conference. Though virtual, once again, I am sure it will be as exciting as all its predecessors.

Kind regards and best wishes,

The Lord Sheikh

London
SW1A 0PW

MESSAGE FROM DR PETER GRAY

LSME used to be in Barking, south of Ilford, where it is now. Barking is history.

A walk down River Road in Barking is gritty, noisy, uncomfortable. Every city has a River Road, cement, scrap, diesel. But when you're close to the river itself, a space opens up, the Creekmouth Open Space, wide open to the birds and the sky and soft marshland. The LSME conference is like this open space. The free birds of thought can fly and sing, and the grass of knowledge can grow.

Further inland, on this walk, there is Barking Abbey, ruins and once the centre of what became England. Faiths came and went, some in flames, others in peace. LSME, almost a university, born from the conjunction of faith and knowledge, is part of this coming and going. Perhaps LSME is closer to the centre of this conjunction than Oxford or Cambridge, once great but now reduced to turning out second-rate prime ministers.

Every one of your contributions to this conference is about knowledge, ground painfully from what went before, like recycled concrete. Even the fact that we are holding the conference online is new knowledge, a new space around the corner, outside the imprisoning spaces of airports and conference halls. The residents of Creekmouth could only travel to Barking by boat, because their paths, their internet connections, were too muddy.

But they travelled. And you are travelling, and connecting.

Creekmouth was washed away in the Great Essex Flood of 1953. We are seeing the flood approaching, but we are not sufficiently afraid. We confuse climate change with weather, something transient, but it is not. We have enough knowledge to fill the sandbags and build the barriers, but we are too busy keeping faith with outdated practices, and forget what we know. Let this conference be an opportunity to remind ourselves of what we know and what we could know if we really did responsible research and produced responsible innovations.

Most of what we know is tied up in belief systems. Academia, universities, papers, points, indices and citations constitute such a system, where we believe in its continued existence and carry out rituals to preserve it. Faith in scientific freedom is at the centre of this system, but science is only free within the limits of the Earth. Science needs to work to preserve our existence on Earth, not to support an outdated system of knowledge circulation. The Barking barrier was 30 years too late to save Creekmouth village. So are we, unless we overcome our faith and traditions, and switch off the things that will kill us.

This LSME conference is a positive opportunity to make progress and move forward. We are very pleased that you can attend, wherever you are and however muddy the path to get here! Welcome!

Dr Peter Gray
Research adviser, European Projects, NTNU, Norway

SUMMARY OF KEYNOTE BY PROFESSOR PETRA MOLTHAN-HILL

In my keynote, I will talk about future scenarios with regards to climate change and highlight various climate solutions to be implemented. I will offer a framework for differentiating between climate change science education, climate change mitigation education and climate change adaptation education. A special focus will be on our Carbon Literacy Training, which we designed for business schools and universities inspired by a training in the television sector. Some other initiatives to engage students in curricular and extracurricular activities will be also outlined. Throughout the whole presentation I will highlight possibilities for future research.

Recommended reading:

MOLTHAN-HILL, P., BLAJ-WARD, L., MBAH, M.F. and LEDLEY, T.S., 2021. Climate change education at universities: relevance and strategies for every discipline. In: M. LACKNER, B. SAJJADI and W.-Y. CHEN, eds., Handbook of climate change mitigation and adaptation. New York: Springer, pp. 1-64. ISBN 9781461464310

SRKOC, M.M.M., PONTOPPIDAN, C.A., MOLTHAN-HILL, P. and KORBEL, P., 2021. Exploring carbon education for all: the carbon literacy project. In: M. LACKNER, B. SAJJADI and W.-Y. CHEN, eds., Handbook of climate change mitigation and adaptation. Living reference work. New York: Springer, pp. 1-37. ISBN 9781461464310

MOLTHAN-HILL, P., ROBINSON, Z.P., HOPE, A., DHARMASASMITA, A. and MCMANUS, E., 2020. Reducing carbon emissions in business through Responsible Management Education: influence at the micro-, meso- and macro-levels. International Journal of Management Education, 18 (1): 100328. ISSN 1472-8117

SUMMARY OF KEYNOTE BY PROFESSOR STEPHEN MCKINNEY

The keynote will focus on sustainable development and education. This presentation will initially address the rise of a 'global education' in the contemporary world. This will involve exploring some of the contrasting configurations of 'global education', including the comparisons in performance in International Large-scale Assessments and initiatives such as global citizenship, development education and sustainable development and education. The keynote will then position sustainable development and education within the context of the 2030 Agenda for Sustainable Development and the Sustainable Goals. The United Nations is quite clear that there are three dimensions of sustainable development: the economic, social and environmental. This will be followed by an examination of some aspects of sustainable development and education, including environmental issues, and a discussion of the claims that this sustainable development and education needs to be transformational.

PROFILES

H.E. DR ABDULLA NASEER, MINISTER OF STATE FOR ENVIRONMENT, MALDIVES

We are delighted to welcome the Minister of State for Environment from the Maldives, Dr Abdulla Naseer as a keynote speaker, delivering a special lecture to start Day Two of the Conference proceedings on 27th August.

Dr Naseer has a special interest in the impact of climate change on coral reefs – a significant and telling indicator of the health of our planet. Having successfully studied in the UK to Masters level in Marine Biology and Tropical Coastal Management in the early 1990s, Dr Naseer gained his PhD in 2003 in Canada, marking him as an acknowledged expert in marine ecosystem management. With a career across a range of high profile departments and ministries in the Maldives spanning nearly 40 years, Dr Naseer brings a keen focus and awareness of the sensitive balance between marine ecosystems and global environmental policy. A well-seasoned author and contributor to international conferences, government reports and international Environmental Impact Assessment reports relating to developments on coral reefs, Dr Naseer brings a wealth of experience and insight to our conference proceedings. We look forward to his Keynote and welcome him to our growing community.

PROFESSOR STEPHEN MCKINNEY, UNIVERSITY OF GLASGOW

Stephen McKinney is a Professor in the School of Education, University of Glasgow. He is the leader of the Research and Teaching Group, Pedagogy, Praxis and Faith. He has published extensively on his research interests in: the impact of poverty on schooling, Intercultural Education, Sectarianism and Schooling, Catholic schooling and Faith schooling. He is currently the Chair of the Association *of* University Lecturers in Religion and Education. He is a past President of the Scottish Educational Research Association and is currently a member of the Council of the European Educational Research Association. He is a member of the editorial board of a number of international journals including: Scottish Educational Review, The Journal of Beliefs and Values and Improving Schools. He is the Chair of the Board of Directors of the London School of Management Education. He is a visiting professor in Catholic Education *at* Newman University, an Associate of the Irish Institute for Catholic Studies and on the steering group for the Network for Researchers in Catholic Education.

PROFESSOR RAJAN WELUKAR, VICE CHANCELLOR, AURO UNIVERSITY, INDIA

Professor Rajan Welukar has more than 36 years' experience with the Indian Higher Education System as a teacher, development leader, quality innovator, technology adopter, administrator and policy advisor.

A passion to make a difference to the lives of students and learners through involvement as a policy and opinion leader, as well as actually implementing development initiatives, has made him a known higher educational professional.

Various positions held include Vice-Chancellorships, Directorships, Secretarial positions in the Government, Asia wide Officer Roles, Memberships of numerous Committees, Associations and Bodies all across the globe.
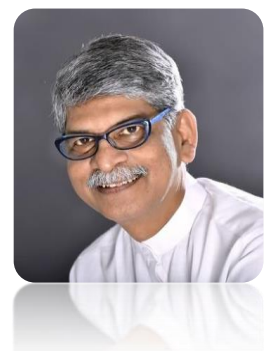
Institutions worked with include Vice Chancellor, G H Raisoni University, Chindwara (1st Oct 2017 to 16th March 2019), Provost, Somaiya Group of Institutions, Mumbai (July 2015 to sept 2017), Vice-chancellor, University of Mumbai(July 2010 to July 2015), Vice-Chancellor, Yashwantrao Chavan Maharashtra Open University(Sept 2004 to Sept 2009), I/C Vice-chancellor, SNDT Women's University (Feb 2011 to May 2011), Senior Programme Officer, Commonwealth Secretariat's CYP Asia Region(Oct 2003 to Aug 2004), Deputy Secretary to the Governor of Maharashtra(Mar 2002 to Oct 2003), Officer on special duty, Higher & Technical Education department, Government of Maharashtra(June 1996 to Feb 2001), I/C Director, Sydenham Institute of Management Studies, Research and Entrepreneurship Education(Sept 2009 to July 2010) and taught statistics to Undergraduate and Postgraduate classes in Institute of Science, Nagpur and Sydenham College of Commerce & Economics, Mumbai prior to 1996 from 1983.

Vice Chancellor AURO University, Surat, Gujarat from 2nd March 2020 onwards.

He worked on various important committees of National Knowledge Commission, University Grants Commission, National Assessment and Accreditation Council (NAAC), Film and Television Institute of India, Central Govt., State Govt., Future Generation University, USA and various important educational institutions.

DR PETER GRAY, NORWEGIAN UNIVERSITY OF SCIENCE & TECHNOLOGY (NTNU), NORWAY

Dr Peter Gray is European Projects adviser for the Department of Teacher Education (PLU) at the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway. He completed his Ph.D. at the University of Stirling, where he also worked on the Early Professional Learning project, funded by the Teaching and Learning Research Programme (TLRP) as well as several EU-funded projects. He started working with NTNU in 2007 and was proposal writer and subsequently project manager for S-TEAM (Science-Teacher Education Advanced Methods). Since 2012, he has worked on a significant number of European collaborative projects and proposals. Currently, his research interests include responsible governance in research, the theory-practice gap in teacher education and the theory and practice of learning spaces. He is an expert evaluator for the European Commission in the fields of RRI, STEM education and gender.

COMMITTEE MEMBERS

Professor Stephen McKinney Conference Chairman	University of Glasgow, UK
Dr Ravi Kumar Conference Convener	London School of Management Education, UK
Dr Peter Gray	Norwegian University of Science & Technology, Norway
Dr Sarita Parhi	London School of Management Education, UK
Martin McAreavey	University of Bolton, UK
Hassan Shifau	London School of Management Education, UK
Dr Alexandra Okada	Open University, UK

REVIEWERS

Professor Stephen McKinney Peer Review Group Chair	University of Glasgow, UK
Dr Peter Gray	Norwegian University of Science & Technology, Norway
Martin McAreavey	University of Bolton, UK
Irfan Chhadat	University of Bolton, UK
Andrew Kenny	University of Bolton, UK
Dr Tapati Mukherjee	S.K Rai Degree College of Commerce, India
Dr Dhiraj Sharma	Sant Baba Bhag Singh University, Punjab, India
Dr Alexandra Okada	Open University, UK
Dr Gulshan Jawa	Sant Longowal Institute of Engineering & Technology, Punjab, India

PARALLEL SESSIONS CHAIRPERSONS & RAPPORTEURS

CHAIRPERSONS

- Professor Stephen McKinney
- Dr Sarita Parhi
- Martin McAreavey
- Professor Zingiswa M M Jojo
- Dr Peter Gray
- Dr Andrew Kenny
- Prof Jan Apotheker
- Dr Dazy Zarabi
- Dr Gulshan Jawa
- Dr Alexandra Okada

RAPPORTEURS

- Dr Dolly Jackson-Sillah
- Lydia Mireku
- Amanda Babalola
- Harsha Subhashana
- Alfred Anim Agyeman
- Dr Minakshi Kishore
- Dr Mabel Zvobgo
- Jose Kattady
- Richard Osei Asibey-Bonsu

PRESENTERS' LIST

PRESENTER	COUNTRY
Dr Alexandra Geraldini	Brazil
Dr Alexandra Okada	United Kingdom
Dr Amit Joshi	India
Dr Ana Maria Di Grado Hessel	Brazil
Dr Anupam Karmakar	India
Dr Anupama Verma	India
Dr Chandrashekaran Praveen	India
Dr Cintia Rabello	Brazil
Dr Daniela Melare Vieira Barros	Portugal
Dr Dhanonjoy Kumar	Bangladesh
Dr Giorgos Panselinas	Greece
Dr Jagnyaseni Panigrahi	India
Dr Jessica Fernandez Morales	España
Dr Klaus Schlunzen Junior	Brazil
Dr Lt S Ravibalan	India
Dr Madhumita Chanda	India
Dr Mallika Shetty	India
Dr Malobika Routh	India
Dr Maria da Graca Moreira D Silva	Brazil
Dr Mayurakshee Gangopadhyay	India
Dr Mini K S	India
Dr Minisha Gupta	Oman
Dr Monika Chopra	India
Dr Raquel P Glitz Kowalski	Brazil
Dr Rimjim Borah	India
Dr Rini E Stephen	India
Dr Sankararao Kocherla	India
Dr Sharda Prasanna Rout	India
Dr Shelly Aggarwal	India
Dr Tapati Mukherjee	India
Dr Urvashi Mishra	India
Dr Veda C V	India
Mr Abroo Jaan	India
Mr Altaf Hussain Sheikh	India
Mr Amit Kumar Das	India
Mr Anand Sahu	India
Mr Ashok Kumar Singh	India
Mr Avilash Kaundal	India
Mr Jahangeer Mohd Reshi	India
Mr Rampravesh Ramjisingh	India
Mr Samuel Abiodun Alara	Nigeria
Mr Shanavas K E	India

Mr Styne Joseph	India
Mr Swadesh Deepak	India
Mr Vinay Lautre	India
Mrs Anitha Sannakamaiah	India
Mrs Antara Bose	India
Mrs K Sindhu Bhavani	India
Mrs Luci Ferraz de Mello	Brazil
Mrs Paula Carolei	Brazil
Mrs Praseetha M S	India
Mrs Richa Sahay	India
Mrs Vimla Choudhary	India
Ms Anusree Bose	India
Ms Azhanuo Peki	India
Ms Bhavika Bindra	India
Ms Chaitali Halder	India
Ms Divya Juneja	India
Ms Jayeeta Dutta	India
Ms Komal Gagare	India
Ms Marina Vianna	Brazil
Ms Meera Swami	India
Ms Parminder	India
Ms Priya	India
Ms R Subhashini Imran	India
Ms Rishika Bojwani	India
Ms Salma Rafiq	India
Ms Sanchika Taneja	India
Ms Sigrid Vedel Neuhaus	Denmark
Ms Uzma Nisar	India
Ms Viviane Cristina Marques	Brazil
Dr Jan Apotheker	Netherlands
Professor Kieron Sheehy	United Kingdom
Professor Silvar Ferreira Ribeiro	Brazil
Professor Zingiswa M M Jojo	South Africa

CONFERENCE PROGRAMME

DAY 1: 26 AUGUST 2021 (THURSDAY)

INAUGURAL SESSION

08:00 – 09:00	Technical Support to Delegates and Participants	Technical Co-hosts
09:00 – 09:35	House Keeping Announcements	MC
09:35 – 09:45	Welcome Address	Dr Ravi Kumar, Conference Convener
09:45 – 09:55	Recognition of the VIP Guests	Hassan Shifau, CRIO
09:55 – 10:00	Photo Presentation of LSME International Research Conference Series	
10:00 – 10:07	Introduction to 8th LSME International Research Conference 2021	Professor Stephen McKinney, Conference Chairperson
10:07 – 10:12	Special Remarks	Dr Peter Gray, NTNU, Norway
10:12 – 10:15	Good wishes from the Guest of Honour	Professor Petra Molthan-Hill
10:15 – 10:20	Special Remarks by Guest of Honour	H.E Dr Durga Bahadur Subedi, Chief of Protocol, Government of Nepal
10:20 – 10:30	Special Remarks by Guest of Honour	Professor Rajan Welukar, Vice-Chancellor, Auro University, India
10:30 – 10:40	Inaugural Address by the Chief Guest	Lord Sheikh, House of Lords, UK
10:40 – 10:45	Vote of Thanks	Dr Dolly Sillah, Vice Principal, LSME
	Group Photo Inaugural Session Ends	MC

HEALTH BREAK (30 MINUTES)

PLENARY SESSION: KEYNOTE		
	Chairperson: Professor Stephen McKinney Rapporteur: Dr Dolly Jackson-Sillah	
11:15 – 11:45	Keynote 1: High Impact Climate Solutions: We can do it!	Professor Petra Molthan-Hill, Nottingham Business School, Nottingham Trent University, UK
	Interactive Discussion	Hassan Shifau, LSME
	Q & A Session	
11:45 – 12:00	All Presenters and participants move to Parallel Session Rooms and Housekeeping announcements	Technical Hosts

12:00 – 14:00	**Parallel Session 1A: EDUCATION** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Martin McAreavey Rapporteur: Lydia Mireku
Paper Presentations	

Time	Name	Country	Title
12:00 – 12:15	Mr Altaf Hussain Sheikh	India	An Empirical Study on the Teaching Aptitude of Teacher Trainees in Relation to the Academic Achievement
12:15 – 12:30	Dr Amit Joshi	India	School is Not Out for teachers: Contribution of Continuing Education on the Career Growth and Development of Teachers in Higher Education Institutions

12:30 – 12:45	Mrs Antara Bose	India	Socio-Demographic Determinants Affecting Education and the Nutritional Status among School Children and Adolescents During COVID-19: In Context to India
12:45 – 13:00	Ms Anusree Bose	India	Gauging Financial Literacy - A Study on College Teachers of Kolkata
13:00 – 13:15	Mr Ashok Kumar Singh	India	Targeted Education for Sustainable Development in Primary Education
13:15 – 13:30	Ms Azhanuo Peki	India	Vocational Education and ICT in Colleges: A Prospect on Livelihood Promotion for Rural Districts in Nagaland
13:30 – 13:45	Dr Lt S Ravibalan	India	Educational Sustainability – A Historically Linear Perspective and its Techno Fads in Reality
13:45 – 14:00	Ms Jayeeta Dutta	India	Higher Education in Maharashtra: Today and Paradigm Shifts for New Pathways

12:00 – 14:00	**Parallel Session 1B: EDUCATION** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Dr Gulshan Jawa Rapporteur: Jose Kattady

Paper Presentations

Time	Name	Country	Title
12:00 – 12:15	Dr Madhumita Chanda	India	Treating the Root System: Introduction of Sustainability in School
12:15 – 12:30	Dr Mayurakshee Gangopadhyay	India	Online Education: Participation of Female Students and Gender Equality
12:30 – 12:45	Dr Minisha Gupta	India	Implementing Ed-Tech Model in Indian Institutions from Teachers' perspective: A Conceptual Framework
12:45 – 13:00	Dr Monika Chopra	India	Heutagogy: An Approach to Empower Learners
13:00 – 13:15	Dr Rimjim Borah	India	How to Achieve Sustainable Development Goal 4: India's Context with New Education Policy 2020
13:15 – 13:30	Dr Rini E Stephen	India	Pedagogic Calibration for Sustainable Living: Empirics from Evidence-Based Reasoning Strategy (EBRS) in Biology
13:30 – 13:45	Dr Shelly Aggarwal	India	Revamping E-Learning Platforms: Catering Life Long Learning Amid Pandemic
13:45 – 14:00	Dr Tapati Mukherjee	India	Targeted Education for Sustainable Development

12:00 – 14:00	**Parallel Session 1C: EDUCATION** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Professor Stephen McKinney Rapporteurs: Dr Dolly Jackson-Sillah & Dr Mabel Zvobgo		
Paper Presentations			
Time	**Name**	**Country**	**Title**
12:00 – 12:15	Mrs K Sindhu Bhavani	India	Impact of Digitalized Learning in the Field of Education Among Children with Learning Disabilities in Pandemic Situation: Case Study
12:15 – 12:30	Ms Marina Vianna	Brazil	The Use of Didactic Strategies and Technologies to Support Remote and Distance Learning
12:30 – 12:45	Mrs Vimla Choudhary	India	Democratic Education and Sustainable Development
12:45 – 13:00	Mr Vinay Lautre	India	Privatization as a Socio-Economical policy and its Impact on Teacher Education
13:00 – 13:15	Ms Komal Gagare	India	Impact of COVID- 19 on Skills and Attitude of School Teachers in Relation to Teaching Learning Resources
13:15 – 13:30	Ms R Subhashini Imran	India	Sustainable Education in Reading: An Effective Learning through Two-Fold Text
13:30 – 13:45	Ms Parminder Kaur	India	Impact of COVID Crises on School Education in India
13:45 – 14:00	Mr Rampravesh Ramjisingh	India	Opinion of the Stakeholder About the No Detention Policy in Secondary Students

12:00 – 14:15	**Parallel Session 1D: EDUCATION** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Professor Zingiswa M M Jojo Rapporteurs: Alfred Anim Agyeman & Richard Osei Asibey-Bonsu		
Paper Presentations			
Time	**Name**	**Country**	**Title**
12:00 – 12:15	Mr Samuel Abiodun Alara	Nigeria	The Role of Education in COVID-19 Safety Awareness Among Building Construction Operatives in Adamawa – Nigeria
12:15 – 12:30	Mr Styne Joseph	India	Sustainable Development Through Environmentally Responsible Behaviour: Role of Education
12:30 – 12:45	Dr Chandrashekaran Praveen	India	Pragmatic Solutions For Post COVID Teacher Education - Lessons from the Use of Sustainable Tools and Strategies
12:45 – 13:00	Mr Shanavas K E	India	Targeted Education for Sustainable Development
13:00 – 13:15	Mr Swadesh Deepak	India	Scope of Distance Education Sustainable Development in Indian Context
13:15 – 13:30	Dr Veda C V	India	The Role of Lifelong Learning in Personal and Professional Growth with Special Reference to Spirituality
13:30 – 13:45	Dr Mini K S	India	Quality Management in Higher Education
13:45 – 14:00	Ms Indu Bala	India	Education for Sustainable Development for Our Planet
14:00 – 14:15	Dr Sankararao Kocherla	India	Sustainable Development and Education in India

12:00 – 14:15	**Parallel Session 1E: SECONDARY EDUCATION**		
	[Presentation time is 12 minutes and 3 minutes of Q&A]		
	Chairperson: Dr Peter Gray		
	Rapporteurs: Harsha Subhashana & Dr Minakshi Kishore		
Paper Presentations			
Time	**Name**	**Country**	**Title**
12:00 – 12:45	Dr Alexandra Okada	UK	Open Schooling for Sustainable Development to Enhance Innovation Ecosystems
	Dr Cyril Dworsky	Austria	
	Dr Maria Vicente	Netherlands	
	Dr Pavlos Koulouris	Greece	
	Dr Chagit Tishler	Israel	
12:45 – 13:00	Dr Cintia Rabello	Brazil	Innovative Ecosystems with Open Schooling to Support "Less Well-Represented Actors and Territories"
13:00 – 13:15	Dr Sigrid Vedel Neuhaus	Denmark	Aligning Science Education with Societal Needs and Values: *Intriguing*
13:15 – 13:30	Dr Rosina Malagrida	Catalunya/ Spain	How Can Teachers, Students and Families Collaborate with Scientists Act as Co-Researchers to Improve Covid-19 Prevention? An Open-Schooling Approach to Engage the Education Community in Current Research
13:30 – 13:45	Dr Silvar Ribeiro	Brazil	Open Schooling with Collaborative Scientific Action for Environmental Protection of Wild Animals in the Semi-Arid Northeast
13:45 – 14:00	Dr Giorgos Panselinas	Greece	Science Teachers and Researchers as a Community for Adapting, Designing and Implementing Open Schooling for Sustainable Development
14:00 – 14:15	Dr Raquel Kowalski	Brazil	RRI in an Interdisciplinary Approach: Developing High School Students' Multi-Literacies

Conference Adjourns for the Day …

DAY 2: 27 AUGUST 2020 (FRIDAY)

PLENARY: KEYNOTE		
08:00 – 08:15	Housekeeping announcements and technical briefings	
08:15 – 08:45	Chairperson: Dr Sarita Parhi Rapporteur: Dr Minakshi Kishore	
	Keynote 2: Sustainable Development and Education	Professor Stephen McKinney, University of Glasgow, UK
	Q & A Session	

08:45 – 10:30	**Parallel Session 2A: SOCIAL SCIENCES** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Dr Jan Apotheker Rapporteur: Dr Mabel Zvobgo		
Paper Presentations			
Time	**Name**	**Country**	**Title**
08:45 – 09:00	Ms Bhavika Bindra	India	Paradigm Shift to Embrace Justice for Women: A Need
09:00 – 09:15	Dr Anupama Verma	India	Changing Cultural Dimensions of Indian Diaspora: A Study on Hofstede Model
09:15 – 09:30	Dr Dhanonjoy Kumar	Bangladesh	COVID -19 Upshots on Students' Health, Educational and Social Life: An Empirical Study
09:30 – 09:45	Dr Jagnyaseni Panigrahi	India	Gender Equality For Sustainable Development Goals
09:45 – 10:00	Dr Malobika Routh	India	The Dawn of Wakefulness to Endorse Sustainable Development
10:00 – 10:15	Dr Sharda Prasanna Rout	India	Disability and Discontentment: A Study of Social Exclusion in India
10:15 – 10:30	Dr Mallika Shetty	India	A Study on Problems Faced by Women Entrepreneurs in Organized and Unorganised Sector in India with Special Reference to Udupi District

08:45 – 10:30	**Parallel Session 2B: SOCIAL SCIENCES** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Dr Dazy Zarabi Rapporteur: Amanda Babalola		
Paper Presentations			
Time	**Name**	**Country**	**Title**
08:45 – 09:00	Ms Meera Swami	India	Reflections of Youth on Usage of Social Media
09:00 – 09:15	Mr Amit Kumar Das	India	Managing Factors Influencing the Construction of Road Over Bridges: A Critical Analysis
09:15 – 09:30	Mrs Praseetha M S	India	Friendzone: A Remedial Social Media Platform for Social Anxiety Disorder
09:30 – 09:45	Ms Priya	India	Cyber Bullying and Coping Mechanism Among Adolescents
09:45 – 10:00	Ms Sanchika Taneja	India	Impact of COVID-19 on Sustainable Development Goals
10:00 – 10:15	Mrs Anitha Sannakamaiah	India	A Study on "Impact of Social Isolation on Elderly and Social Inclusion of Elderly Through Social Work Intervention for Sustainable Development" with Special

			Reference to Omashram Oldage Home at Bangalore
10:15 – 10:30	Ms Chaitali Halder	India	School as the Messiah of Sustainable Development: A Multiple Case Study of Three Leading Rural Schools of West Bengal

08:45 – 10:15	**Parallel Session 2C: SCIENCE** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Dr Tapati Mukherjee Rapporteur: Harsha Subhashana		
Paper Presentations			
Time	**Name**	**Country**	**Title**
08:45 – 09:00	Mr Jahangeer Mohd Reshi	India	Comparative Study on Physicochemical Status and Diversity of Macrophytes and Phytoplanktons of Manasbal Lake, Kashmir, India
09:00 – 09:15	Dr Jan Apotheker	Netherlands	Special Issue of Chemistry Teacher International on Green Chemistry and Sustainable
09:15 – 09:30	Ms Abroo Jaan	India	Synthesis of Graft Copolymer of Methyl Methacrylate Monomer onto Natural Fibre: A Review
09:30 – 09:45	Ms Salma Rafiq	India	Synthesis of Graft Copolymer of Ethyl Methacrylate Monomer onto Nature Fibre: A Review
09:45 – 10:00	Mr Avilash Kaundal	India	Green Synthesis of Nanoparticles by Using Green Solvent: A Review
10:00 – 10:15	Ms Uzma Nisar	India	Synthesis of Bioplastic from Chitosan and Potato Starch by Using Polyethylene Glycol (PEG) as Crosslinker and Castor Oil as Plasticizer: A Review

08:45 – 10:30	**Parallel Session 2D: HEALTH & PURE SCIENCES** *[Presentation time is 12 minutes and 3 minutes of Q&A]* Chairperson: Professor Stephen McKinney Rapporteur: Dr Dolly Jackson-Sillah		
Paper Presentations			
Time	**Name**	**Country**	**Title**
08:45 – 09:00	Dr Anupam Karmakar	India	An Empirical Study of the Relationship Between Vaccination in India and Nifty Pharma Index
09:00 – 09:15	Mrs Richa Sahay	India	Motivation and Work Conditions of Healthcare Workers - A Study on COVID-19 First Wave
09:15 – 09:30	Ms Viviane Cristina Marques	Brazil	Selection for Use of Mobile Applications for Children with Autism Spectrum Disorder During Pandemic
09:30 – 10:30	**Parallel Session 2E: MANAGEMENT, MATHEMATICS & LANGUAGES** Chairperson: Professor Stephen McKinney Rapporteur: Alfred Anim Agyeman		
09:30 – 09:45	Ms Divya Juneja	India	Sustainability Consciousness - A study on Attitude of Upcoming Business Leaders Towards Sustainability
09:45 – 10:00	Dr Urvashi Mishra	India	Different Applications of Trigonometric Spline Curves

| 10:00 – 10:15 | Prof Zingiswa M M Jojo | South Africa | The Teaching of Mathematics as a Humanized and Encultured Process for Sustainable Development |
| 10:15 – 10:30 | Ms Rishika Bojwani | India | Impact of Higher Education System in Developing Entrepreneurship Skills |

08:45 – 10:45	**Parallel Session 2F: HIGHER EDUCATION – ONLINE LEARNING AND FUN** *[Presentation time is 10 minutes and 5 minutes of Q&A]* Chairperson: Dr Alexandra Okada Rapporteur: Lydia Mireku & Richard Osei Asibey-Bonsu		
Paper Presentations			
Time	**Name**	**Country**	**Title**
08:45 – 09:00	Prof Kieron Sheehy	United Kingdom	Should '**Meaningful**' Online Learning Experiences Be Fun for Higher Education Students in Indonesia?
09:00 – 09:15	Dr Paula Carolei	Portugal	Creative Gamification and Fun: Possibilities of **Authorship**, Autonomy and Collaboration
09:15 – 09:30	Dr Daniela Barros	Portugal	Higher Education in Pandemic Times: **Personalization**, Engagement, Autonomy and New Learning Strategies
09:30 – 09:45	Dr Klaus Schlünzen Junior	Brazil	The CCS Approach and Fun Learning: An Analysis of Research Data for **Inclusion**
09:45 – 10:00	Dr Luci Mello	Brazil	Learning Experience Design and Active Methods for Student Fun, Pleasure and **Engagement** in Online Courses
10:00 – 10:15	Dr Ana Hessel	Brazil	The **Pleasure** of Learning: The Vision of Complex Thinking
10:15 – 10:30	Dr Alexandra Geraldini	Brazil	Motivation, **Involvement** and Fun in the Online Learning Process: Perception of Undergraduate Students
10:30 – 10:45	Dr Fernando Almeida	Brazil	Algorithmization of **Happiness** or the Reconstruction of the Humanizing Nature of Numbers?

HEALTH BREAK (30 MINUTES EXCEPT FOR SESSION 2 F, 15 MINUTES)

PLENARY: SPECIAL SESSION		
	Chairperson: Dr Sarita Parhi Rapporteur: Alfred Anim Agyeman	
11:00 – 11:30	Special Lecture	H.E. Dr Abdulla Naseer, Minister of State for Environment, Ministry of Environment, Climate Change and Technology, Maldives
	Q & A Session	

VELEDICTORY SESSION		
11:30 – 11:35	House Keeping Announcements	MC
11:35 – 11:45	Introduction to the Valedictory Session	Dr Sarita Parhi, Principal, LSME
11:45 – 11:50	Recognition of the VIP Guests	
11:50 – 12:00	Overview of the Conference Proceedings	Professor Stephen McKinney, Conference Chairperson
12:00 – 12:05	Announcement of the 9th LSME International Research Conference	Dr Ravi Kumar, Conference Convener
12:05 – 12:10	Remarks by a Member of the Conference Committee	Dr Peter Gray, NTNU, Norway
12:10 – 12:20	Special Remarks by Guest of Honour	
12:20 – 12:35	Valedictory Speech by the Chief Guest	H.E Dr Ibrahim Hassan, Minister of Higher Education, Maldives
12:35 – 12:40	Vote of Thanks	A Delegate
	Group Photo Closing of the Conference	

ABSTRACTS IN CONFERENCE DELIVERY ORDER

This year's event is online, and is organised around a number of themes to facilitate your participation in parallel streams. The Conference programme sets out the broader detail of all scheduled activities, and the table below summarises the main themed sessions taking place over the two days. These include:

Day	Timing (BST)	Parallel Session	No. of Papers
One (26th August)	12.00-14.00	1A: Education	8
	12.00-14.00	1B: Education	8
	12.00-14.00	1C: Education	8
	12.00-14.15	1D: Education	9
	12.00-14.15	1E: Secondary Education	7
Two (27th August)	08.45-10.30	2A: Social Sciences	7
	08.45-10.30	2B: Social Sciences	7
	08.45-10.15	2C: Science	6
	08.45-09.30	2D: Health & Pure Sciences	3
	09.30-10.30	2E: Management, Mathematics & Languages	4
	08.45-10.45	2F: Higher Education - Online Learning & Fun	8

Abstracts for papers to be presented during these sessions are presented in the following pages, together with information about their timing and authorship.

DAY ONE SESSION 1A: EDUCATION [12.00-14.00]

AN EMPIRICAL STUDY ON THE TEACHING APTITUDE OF TEACHER TRAINEES IN RELATION TO THE ACADEMIC ACHIEVEMENT

Mr Altaf Hussain Sheikh[1], Ms Sumera Banoo[2]
[1]Research Scholar, Jiwaji University, Gwalior, MP, India.
[2]MEd Student, MIER College of Education, Jammu, India.

ABSTRACT

Aptitude refers to the ability to acquire certain situation specific training, knowledge, skills or set of responses and is the measure of the probability of success of an individual in certain type of the situation. Physical and mental differences are responsible for differences in aptitude. Teaching aptitude can be innate or acquired or the result of both natural endowment and special training. To know the relationship between academic achievement in teacher education and teaching aptitude motivated to take on this study. The current correlation study takes into consideration academic achievement as independent variable and teaching aptitude as dependent variable. In this study, survey method is used and five B. Ed colleges of Jammu city are randomly selected and data collected from 200 teacher trainees. For this study, *Teaching Aptitude Test* (2010) prepared by Dr S.C. Gakhar and Dr Rajnish is adopted and for analyzing the collected data, various different statistical measures like percentage, mean, standard deviation and critical value are used. The findings which are in consonance with the previous studies make known that most of the teacher trainees have average teaching aptitude, male and female teacher trainees have similar teaching aptitude and there is no significant difference in teaching aptitude of teacher trainees in relation to academic achievement.

Keywords: Teacher Trainees, Teaching Aptitude, Academic Achievement.

SCHOOL IS NOT OUT FOR TEACHERS: CONTRIBUTION OF CONTINUING EDUCATION ON THE CAREER GROWTH AND DEVELOPMENT OF TEACHERS IN HIGHER EDUCATION INSTITUTIONS

Dr Amit Joshi[1], Ms Priyanka Bhaskar[2], Ms Preeti Bhaskar[3]
[1]Assistant Professor, ICFAI Business School, ICFAI University, Dehradun, Uttarakhand, India.
[2]Assistant Professor, Doon Business School, Dehradun, Uttarakhand, India.
[3]Faculty, Department of Business Studies, Ibra College of Technology, Oman.

ABSTRACT

This paper focuses on the role of continuing education among the teachers of India. The study identifies factors which influence teachers in Higher education institutes (HEI) for continuing education. The paper also explores its impact on their career growth and development. A systematic survey was conducted among the teachers teaching in Higher education institutions of Uttarakhand. Factor analysis is used to identify the important factors that motivate the teachers to enrol for continuing education. The findings of the study indicate that factors like time, financial support, job opportunities, knowledge, skills, and abilities play a detrimental role among teachers for continuing education. Research results show that those Higher education institutions which provide time and financial support for continuing education make teachers loyal and committed to the organization. Teacher's personal intent on increasing knowledge, skills, abilities, and looking for better employment opportunities also motivate them for continuing education. This study also reveals that continuing education has a positive impact on career growth and development of teachers. Continuing education helps the teachers to explore better career opportunities, provides job security, salary increment, and promotion which contributes to their professional growth and personality development. Continuing education in teachers demonstrates a significant role in the development of interpersonal skills, technical skills and inculcates self-confidence that contributes to their personal growth. The importance of paper increases amidst the COVID19 pandemic and the launch of the National Education Policy in India, as the paper will provide support to the Higher education institutes and Government to frame policies and strategies to imbibe continuing education as an integral part of the education system. The paper by enumerating its benefits, motivates the teachers to enhance their qualifications and enhance their future prospects.

SOCIO-DEMOGRAPHIC DETERMINANTS AFFECTING EDUCATION AND THE NUTRITIONAL STATUS AMONG SCHOOL CHILDREN AND ADOLESCENTS DURING COVID-19: IN CONTEXT TO INDIA

Mrs Antara Bose[1], Mr Sanjoy Ghosh[2]
[1]Research Fellow, Department of Anthropology, University of North Bengal, District: Darjeeling, West Bengal, India.
[2]Assistant Teacher, Department of Science, Ishwar Chandra Vidyasagar High School, Bagdogra, District: Darjeeling, West Bengal, India.

ABSTRACT

Education and nutrition are among the most important related terms which coincide with one another as these two effects the growth and development of school children and the adolescent group. Nutrition can enhance the behavioural pattern in shaping an individual whereby increasing the attention span, psychological well-being as well as development towards motor and language skills. Nutrition-related micronutrient deficiencies lower the intelligent quotient thus diminishes the cognitive skills. The ongoing pandemic, COVID-19 in India had shifted to its second phase which had further caused continuity in schools, colleges, and universities closure, further fully shifting the traditional mode of learning to the digital online mode. The closure of school had hampered the mid-day meal scheme though take away of ration is indeed helpful, but on the other hand, the technology usage had increased which made the children and adolescents belonging to the poor household hard to access the internet facilities. Thus, the change in the present scenario has made the growing age group withhold the current challenges by coping up with both the educational changes as well as nutritional balance. The present paper highlights the current prevailing situation in context to the educational system and the nutritional relation among the school children and the transitional group. The paper further discusses the factors, causes, and consequences that have led to a challenging issue among the growing age groups.

Keywords: COVID-19, Education, Micronutrient Deficiencies, Nutrition, Technology.

GAUGING FINANCIAL LITERACY - A STUDY ON COLLEGE TEACHERS OF KOLKATA

Ms Anusree Bose[1], Mr Sayan Basu[2]
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[2]Research Scholar, West Bengal State University, West Bengal, India.

ABSTRACT

Financial literacy is essential for enabling people to make right financial choice. The term financial literacy refers to the set of skills and knowledge which enables an individual to make an effective decision regarding the financial resources. Hence financial literacy can be considered as a part of the elementary education system and as essential as the others day to day basic items. According to the OECD/INFE framework, measuring financial literacy essentially encompasses financial knowledge, financial attitude and financial behaviour necessary to make sound financial decisions and ultimately to achieve individual's financial well-being. Therefore, Financial Literacy is requisite for financial inclusion. On the other hand, Digitalization in financial sector has resolved the whole scenario and consequently digital literacy become as essential as the financial literacy to make sound financial choice in the digital financial era and also has a great impact on financial inclusion. If awareness regarding the digital products and services are increased, the usage level would also shoot high which ultimately bring a significant change in the inclusion level and thus contributing towards the economic growth of the nation. The present study is basically intended to evaluate the financial literacy of the teachers of different colleges in Kolkata on the basis of age by applying the OECD/INEF Toolkit and further this paper is focused to compare the level of financial literacy on the basis of gender and educational departments of the colleges by applying the unpaired t-Test & One Way ANOVA at 5% level of significance respectively.

Keywords: Financial Literacy, OECD/INEF Toolkit, Independent T-Test, One Way ANOVA.

TARGETED EDUCATION FOR SUSTAINABLE DEVELOPMENT IN PRIMARY EDUCATION

Mr Ashok Kumar Singh[1], Mr Rashika Kumari Singh[2]
[1]Author, Head of Department- Commerce at Daly College, Indore, MP, India.
[2]Co-Author, Civil and Criminal Advocate at State Bar Council, Indore, MP, India.

ABSTRACT

Sustainability is becoming an increasingly vital environmental, social and economic requisite. For sustainable development a continuous process of learning and research is needed to reengineer and apply innovation. Education for sustainable development (ESD) requires a practically oriented learning process. Children who embrace the principles of sustainable development at a rather young age have these principles ingrained in their malleable minds, thus enhancing their capacity to shape society in an informed, reflective and responsible way with a vision of sustainability for the future. This paper examines, from a global perspective, the role of inculcating ESD in primary levels of education. The paper will be divided into two main parts. The first part throws light on the importance of integrating ESD at primary levels of education. It also includes author's research on a group of primary students to study the effects of teaching sustainable habits for a month as a part of school curriculum and the findings of which validate the author's views. The second part elucidates the current developments in ESD at primary levels across the globe with due respect to its evolving nature. It will explore the ways in which the countries are inculcating ESD policies, initiatives and programs in education systems, especially in the curriculum of primary education with special attention to best global practices.

The paper draws upon journal articles, policy documents published by UNESCO and other international agencies, and several comparative databases reporting on ESD topics. It also bases upon a diverse array of national and regional documents.

The authors found that the developing brain of children is the most suitable phase to inculcate idea of sustainable development and allied issues. A large and diverse array of ESD initiatives has been implemented in primary schools around the world. These initiatives range from large-scale trans-national programs and national reforms to small community projects, from NGO initiatives across many schools to teacher-led projects in individual schools. Many ESD initiatives in schools primarily focus on the environmental components. Moreover, the coverage, scope and depth of sustainable development issues in school curricula have increased significantly. While policy attention to ESD has strengthened globally, many countries either lack an ESD policy or do not have a viable one. Limited financial resources and a weak global economy have inhibited the implementation of these nations, the reasons of which have been briefly discussed. It was found that support from stakeholders like parents, international donors, NGOs and the private sector is considered critical for the successful implementation of ESD.

VOCATIONAL EDUCATION AND ICT IN COLLEGES: A PROSPECT ON LIVELIHOOD PROMOTION FOR RURAL DISTRICTS IN NAGALAND

Ms Azhanuo Peki, Research Scholar, Department of Education, Nagaland University, India.

ABSTRACT

Vocational education is a sculpting practice that demands experience and proficiency to be mobilized. It is the advanced education and training which in today's context is the need of the hour for a developing nation when employment under the government sector cannot incorporate the thousands of graduates that qualify every year. Education should not be limited to theory and syllabus content but stand in order to serve as a tool to prepare each individual student in the colleges to pursue essential skills and knowledge regarding vocational courses and training. In addition, alongside the growth and progress of technology initiatives can be extended with the help of ICT in techniques and tools to assist and facilitate vocational education courses in delivering diverse growth concerning self-development, self-sustainability and self-independent for livelihood promotion. Incorporation of ICT with vocational education can build single individual graduates to back up in source of income by what has been studied and cultivated besides not exclusively dependent over government sector for income and employment. This paper is an attempt to put forth the different vocational courses and practices introduced for colleges in Nagaland. The Objectives behind implementing such vocation will be stated and besides the anticipated benefits of such practices will be discussed. The study is descriptive in nature and based upon available sources of data. Introduction of vocational courses and its practices in the colleges of the state is still a very new concept to most educators, students, administrators and even the society as a whole. Suggestions on mechanising vocational education and ICT awareness for further measures of improvement will be emphasized. The study is to call attention towards a productive, self-reliant and supportive job through the new paradigm of vocational education in association with ICT knowledge. Thus, this paper will be highlighting on how vocational education with ICT can be the prospective impetus in improving livelihood issues for a rural state like Nagaland, where on unemployment handicaps a massive number of qualified citizens every year under higher education sector and jobs are limited. Furthermore, it is an attempt to outline on approaches ICT can serve as a breakthrough in elevating vocational education true success for individual livelihood promotion and global knowledge sharing.

Keywords: Vocational, Livelihood, ICT, Colleges.

EDUCATIONAL SUSTAINABILITY – A HISTOR\JICALLY LINEAR PERSPECTIVE AND ITS TECHNO FADS IN REALITY

Dr Lt S Ravibalan, Associate Professor & Head, Department of English, S.I.V.E.T. College, Chennai, India.

ABSTRACT

History of modern education almost of necessity goes back, briefly to the work and contributions of ancient civilization. But have mostly failed to encourage the existence of moral values.

We teach, assess and try to reflect employable graduates that we hope to produce. We wish for a good intake of many students as possible to mastery who can collaborate, manage products, and solve problems. But we produce students who can recall facts or regurgitate by rote. Academic freedom and academic sustainability is forsaken with IRP (Institutional Rating Point) in mind. Education is now a factory creating an unbridgeable gap amidst the student's community. First generation learners and the downtrodden have got the exposure but failed to have an optimum utilisation of the source owing to many socio political predicaments. Many colleges and universities regard students as customers that need to be aggressively recruited. But a Learner's focus is totally forgotten. Mostly the curricula, schedules, pedagogies, assessments, and workload policies reflect the interest of departments rather than what we know about the challenges faced by today's growing number of non-traditional students. Despite the freebies in the education sector based on political manifestos the main purpose of education to a society has got diluted.

People play the most important role in shaping the status of the country but education is responsible for shaping a person. It is believed the higher literacy rate, the lower in unemployment rate and greater GDP growth. Apart from worrying about the growth of GDP, education should also transform a student to be handy. Living sustainably must nurture student's attitudes in the field of Agriculture production, health, Construction, Environment and moral values. It shall help all to transform our lives into something that doesn't impact too heavily on our current routines. To err is human and that's for education and experimentations but erring leads to a despicable living and a tumultuous society. Let the education be set on Baconian experimentation- truth is discovered through empirical observation and induction- and frees us from all the isomorphic clutches. It must create an overall educated sustainable mind towards the welfare of others rather self-centeredness.

Keywords: Purpose-Learner Centric – GDP Centred–Sustainability in Living-Handy – Baconian Experimentation – isomorphic.

HIGHER EDUCATION IN MAHARASHTRA: TODAY AND PARADIGM SHIFTS FOR NEW PATHWAYS

Ms Jayeeta Datta, MSc, NET, Assistant Professor, HoD, Geography, SPDT College, J B Nagar, Andheri, Mumbai, India.

ABSTRACT

Education means transforming of knowledge, skill, habits from one generation to other through the process of teaching and learning. Education is a major factor contributing to the process of national and individual development. It is defined as the investment of the current time and resource for future earnings. India has grown phenomenally in higher education during the last decade but there is long way to go. Maharashtra is the financial capital of India. The state is characterized by large youth strength; fast growing economy and emergence of knowledge play a significant role as an economic driver. The research present paper is an attempt to evaluate the challenges, problems and opportunities in higher education in national context while focus on the diverse issues of Maharashtra. The paper will assess the enrolment in different level of higher education in state and unfold the different challenges in higher education like expansion, inclusion and excellence.

Methodology/ Design: The methodology is mainly based on the literature review. Secondary data has been taken from previous research work and collected from books and internet sources. The pilot survey was conducted among the students under different higher education institution to analysis the satisfaction level and view about state higher education facilities.

Research Objectives: The main object of this research paper is to understand the higher education scenario in Maharashtra, opportunities to access the higher education, challenges faced by different stakeholders.

Research limitations: The present paper is focused in Maharashtra higher education and not compared with pattern of higher education with any other states in India. The primary survey also based on student's attitude towards the higher education paradigm not considers the view of other stakeholders of the society.

Practical Implementations: This paper will provide a pertinent policy recommendation in higher education. This recommendation on the basis of present scenario will surely help policy maker for achieving the excellence quality. The primary survey will review the student's opinion and their recommendation is highly acceptable for new pathway.

Keywords: Paradigm, Stakeholders, Enrolments, Pilot Survey.

DAY ONE SESSION 1B: EDUCATION [12.00-14.00]

TREATING THE ROOT SYSTEM: INTRODUCTION OF SUSTAINABILITY IN SCHOOL

Dr Madhumita Chanda, Assistant Professor, Heritage Institute of Technology, Kolkata, India.

ABSTRACT

Although the term "sustainable development" was conceptualized in the Brundtland Report in 1987, it had made its first appearance" in 1980. The SDGs were set up in 2015 by the UN General Assembly to be achieved by 2030. We all understand the 'why' of it. It is about 'our children and our grandchildren, and the world we will leave' for them. Therefore, building a sustainable world should start with us and must be viewed as a unilateral commitment. The present paper wishes to explore the 'what' and 'how' of it from an Indian perspective. We have strategized policies to help us reach the goals. Our world is like a wilted plant with a poorly functional root system. To save it from perishing we are perhaps treating the shoot system. It's time to realize that we just don't need policies, departments, strategies, fund, and goals but the right kind of people to execute them. An empirical analysis through the case study method will be adopted to support the findings that sensitization at the grass-root level brings about a positive behavioural change among the children. At the same time, it also indicates that education should aim at value creation. A revision of the process of education may help the present general appreciate the magnanimity of the situation. 'What' is required is the implementation of the new educational policy with a focus on value creation. 'Why' because we haven't been able to achieve anything substantial in all these years. We had data to apprise us of the situation and goals to pursue. A case study on reports furnished on CSR activities would be examined to show how some companies are unethically ploughing back the money they seemed to be investing in sustainable practices. Instances of value crisis! Out of the three dimensions of sustainable development, i.e., economic growth, social development and environmental protection, the biggest challenge arises from adequately attempting to secure the environmental and social dimensions, and integrate them with economic growth. Needless to say that economic growth remains the primary objective as our developmental model is unidimensional and continues to be driven by the economy. How can we strike a balance among all three dimensions? The problem concerns 'us'- the humans. The non-human elements of the world are not responsible for the ecological disbalance! We need to find the right direction to make the world a happy planet. If we succeed in solidifying our value system at the school level, the coming generation would adopt the sustainable mode of living naturally.

Keywords: Value-Creation, Sustainable World, Value Crisis, New Educational Policy.

ONLINE EDUCATION: PARTICIPATION OF FEMALE STUDENTS AND GENDER EQUALITY

Dr Mayurakshee Gangopadhyay, Assistant Professor, Department of Human Development, Dum Dum Motijheel College, Kolkata, India.

ABSTRACT

Due to pandemic online education is the only effective process to educate students and continue teacher-learner communication. But with its effectiveness there comes specific limitations like connectivity problems, unavailability of tools and infrastructure, language barrier, inability to produce performance based curriculum etc which can be addressed with improvement of social policies. But there are more unrecognized problems in which one is the participation of female students and gender equality.

In the developing countries, female students are likely to get married after the legal age of marriage and is the rural areas most their families are only capable of feeding their children. Because of that, institutions and government have arranged policies to provide free education, food and scholarship to the girl child. Now, due to pandemic, institutions are closed and students do not have available logistics to access online education. They are residing in the home and helping other family members to run the family in this tough situation where earning money for day to day expense is very difficult. Many of them are starving and that will clearly have an impact on future dropout rate. Adding to this, family members feel that there will be no future of their girl child after this pandemic and they will fail to secure a job. So, it is better to arrange marriage rather than encouraging their daughter to participate in online mode education. These tendencies have a serious impact on the mindset of female students as they feel male students are superior in terms of right to education and are privileged. Also this study focused on the larger argument that whether a female student is comfortable in online discussion and the kind of reaction she gets for being a girl.

While researchers have provided data that participation of female students increased in online education (Secreto, Percia 2013), this paper argues that the study is restricted to urban areas and only states that the percentage of admission whereas the pass-out percentage can be different. On the otherhand women feel more safe and free to express their views in online education (Alipour et al. 2011), but the possibility of discouragement in family should be noted equally. This study also aims to indicate the maximum limitation and deduce it to possible solution in its implication by which the present research contributes to narrow down the future paradigm for sustainable education.

Keywords: Online Education, Female Participation, Gender Equality, Sustainable Education.

IMPLEMENTING ED-TECH MODEL IN INDIAN INSTITUTIONS FROM TEACHERS' PERSPECTIVE: A CONCEPTUAL FRAMEWORK

Dr Minisha Gupta[1], Ms Preeti Bhaskar[2]
[1]Researcher, Quality Cognition Private Ltd, India.
[2]University of Technology and Applied Sciences, Ibra, Oman.

ABSTRACT

Purpose: With the emergence of fourth industrial revolution, every economy whether developed or developing are trying to adapt its paradigms. Every industry is trying to update itself as per the challenges of Industry 4.0. Educational institutions contribute in this process of industrial revolution by educating and developing talented employees who meet organizational expectations. Teachers being the major pillars are mostly responsible for educating and preparing the students about the upcoming expectations of the industry. Teachers with their knowledge, abilities, and skills implement Ed-Tech Model (Education and Technology Model) in educational institutions which help students in developing themselves in order to meet the current expectations of the industry. The main aim of this study is to exhibit the inhibitors to implement Ed-Tech model in higher educational institutions from teacher's perspective.

Research Methodology: The study has implemented Interpretative phenomenological analysis (IPA) technique to identify the inhibiting factor that influence implementation of Ed-Tech model in higher educational institutions (HEIs) of India. Semi-structured in-depth interviews have been conducted among the teachers working in HEIs of Delhi- NCR region. The interview duration range between 60 to 130 minutes. Data has been analysed by using steps suggested by Smith.

Findings: This study exhibited the four main inhibiting factor to implement Ed-Tech Model which includes Lack of Government Initiation, Lack of Organizational Support, Lack of awareness, and Lack of technological infrastructure. These inhibiting must be handled in order to ensure smooth implementation of Ed-Tech model in Indian educational institutions. It will also be helpful in meeting the expectations of the industry who always look for talented individuals in order to face the challenges of fourth industrial revolution. Ed-Tech model is not only important for improving the standard of education in educational institutes but also to meet the dynamically changing requirements of the industry.

Implications: The findings of the study can be useful for educational institutions both public and private while implementing the Ed-Tech model. With the changing scenario of teaching and learning, it has become important for educational institutes to understand the demands of industry and accomplish them by providing the talented individuals who can leverage upon their skills, abilities, and knowledge to generate novice and innovative solutions for organizational sustainable development.

Keywords: Conceptual Framework, Ed-Tech Model, Fourth Industrial Revolution, Industry 4.0, Indian Education Institutes.

HEUTAGOGY: AN APPROACH TO EMPOWER LEARNERS

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ABSTRACT

In the world of technological advancement, bombardment of information & knowledge and digital & e-learning platforms, a person of any age group can enhance skills and competencies to adapt to meet personal, social, economic and professional needs. Since centuries, various traditional and formal educational techniques have been in practice to inculcate various life and career growth learning skills to survive in a competitive environment. In daily life, everyone comes across different opportunities to enhance their personal and professional skills. Organizations do conduct various training programs to upgrade their workforce with innovative and transferable skills. COVID-19 and work from home culture has put pressure on every person to sharpen their soft and technical skills. Primary, secondary and tertiary levels of learning revolve around curriculum and classroom teaching. Even in organizations, people resist changes and innovative techniques rather than gaining new ideas and concepts. Heutagogy is an innovative approach which is applicable not only in education sector but also in other areas of life. The term Heutagogy has its origin in the Greek word heuriskein and was used by Hase and Kenyon in 2000 emphasizing on self-learning without using formal methods of teaching. This method of learning focuses on learner's potential, capabilities, understanding, experience, skills and willingness to gain knowledge of the concept without any time constraint. An educational institution, commercial organization, sports institution, NGO, retired persons or even illiterates can make use of Heutagogy approach. This approach helps in preparing the future generations more independent, flexible, capable, knowledgeable and talented. COVID-19 situation has changed patterns, experiences, relevance and methods of learning. In an unpredictable and dynamic environment, this way of learning can prove to be fruitful, aiming at building the confidence and competencies of learners of any age. One can discover higher potential through self-learning and overcome various digitalization demands of the complex and uncertain work place situations. Heutagogy targets on individual needs and enables the learner to access the best learning content resulting in the cost effective solutions to overcome complexities. This paper aims to survey workforce across different organizations learning voluntary or work based skills as well as retired peoples' interest in lifelong learning through heutagogical approach in different geographical locations.

Keywords: Heutagogy Approach, E-Learning Platforms, Workforce, Learning Skills.

HOW TO ACHIEVE SUSTAINABLE DVELOPMENT GOAL 4: INDIA'S CONTEXT WITH NEW EDUCATION POLICY 2020

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ABSTRACT

In today's competitive world, well-structured education system is one of the main instruments for achieving sustainable development of a country. Education is the key to promote knowledge, skills, values and attitudes of human resources for achieving a sustainable society. The United Nations approved a plan of action- the 'Sustainable Development Goals' (SDG) in 2030. In India, the National Education Policy 2020 was approved by the Union Cabinet on 29 July 2020. The aim of this NEP 2020 is to achieve the UN Sustainable Development Goal 4. The policy also aims to transform our nation into an equitable, vibrant knowledge society and sustainable nation by providing quality education from elementary to higher education including vocational skills. The objective of the present paper is to analyse how India's New Education Policy 2020 will achieve Sustainable Development Goal 4 (SDG4) on education in Indian context. This paper is a theoretical paper which is based on secondary sources. This paper analyses the recommendations of India's National Education Policy 2020 for achieving SDG4. The reforms of the NEP 2020 will certainly help India to convert into the top economies of the world. It is expected that in the next 10 years, the NEP 2020 would transform the education sector of our country to a sustainable sector. This paper also attempts to do a SWOT analysis of NEP 2020. The strong point of India's NEP 2020 is well designed school curriculum, flexibility in learning, no demarcation between streams, curricular- extra-curricular, vocational and academic course, multiple entries and exit system in higher education, focus on quality of teaching, research and innovation etc. The Education system of a country is a true indicator of its economic strength. For successful implementation of NEP 2020, there should be 100 percent cooperation and collaboration from all stakeholders of education system including the Central, State Government and the Ministry of education.

PEDAGOGIC CALIBRATION FOR SUSTAINABLE LIVING: EMPIRICS FROM EVIDENCE-BASED REASONING STRATEGY (EBRS) IN BIOLOGY

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ABSTRACT

The focus and perspectives of education all over the world have changed drastically in recent decades which is evidenced from the education policies and practices of the different nations. Among these, the most significant change is the deliberate attempt for integrating sustainability principles into education. Various issues largely due to the manmade actives themselves, like global climate change, ecosystem deteriorations, greenhouse effects, calamities, coral reef bleaching, ozone layer depletion, etc., made man think more deeply about the vitality of sustainable development. As education is the most powerful tool for transforming the destiny of any society, proper integration and implementation of sustainability education is the need of the time.

There is no single pedagogical approach recommended to education for sustainable development, rather it should be designed based on the demographic and cultural contexts of the learner keeping environmental validity. The curriculum should be designed carefully by integrating the sustainability issues faced by the planet in an age-appropriate manner. The mere inclusion of these issues in the syllabus is not sufficient enough but the pedagogical strategies used for conveying the concepts also deserve utmost importance.

The purpose of this submission is to share the success story of such a field study using the Evidence-Based Reasoning Strategy (EBRS) for the secondary school students focused on Biology. This strategy enabled the students to make intelligent decisions based on evidence, through critical and systematic thinking. Secondary school students were the sample for the study. The curricular disposition of each theme or issue is organized corollary to the intellectual routes derived from the conceptualization of the variables under consideration. Hence it followed an eight-phased pathway that ensures the active participation of the learners under the supervision of the teachers. The gain score obtained during the post-experimental stage from experimental and control groups assert that the Students can understand sustainability issues and could able to analyze these issues systematically by weighing empirical evidence related and thinking about the solution scientifically through evidence-based reasoning. The authors acclaim the potential and possibility of the tried-out model for different curricular subjects.

Keywords: Pedagogy, Sustainable Living, Evidence-Based Reasoning Strategy (EBRS) in Biology.

REVAMPING E-LEARNING PLATFORMS: CATERING LIFE LONG LEARNING AMID PANDEMIC

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ABSTRACT

Forward thinking academics and its channelization have become vital necessitate, amid unanticipated pandemic circumstances. To accommodate Lifelong Learning in an efficient way, the call for the hour is to re-visit the existing e-learning channels. The aim of this paper is to study the ingenuity of e-platforms to cater the lifelong learning among the teaching faculty. The research has been prompted by the global indulgence of vast teaching community into online courses, surmounting the constraints of time, distance, funds and disability. The paper contains the outcomes of the online survey conducted among the educators teaching in various universities, colleges and schools in the Chandigarh region. The survey form included the questions with respect to the frequency and nature of online courses that the teachers underwent for their professional as well as personal enhancement, during the lockdown period and also the suggestions for better online interface were acknowledged. To the author's astonishment, the e-learning have provided splendid opportunity to the teachers with disability to gear-up their lifelong learning at international podium, which have paved the way to celebrate inclusion. The study communicates the efficacy of the diverse online platforms like MOOCs, Hybrid Classrooms, e- Pathshala, IIT Pal, Vidwan, e-Shodh Sindhu, CBSE Podcasts, Docebo, Adobe Captive, Articulate, Elucidat, Blackboard learn, shift etc. and highlights the improvisations needed to kindle the process of Lifelong Learning in an efficient way. The paper concludes with the projection of societal concern and holds the implications for the policy makers so that the key areas could be introduced into practice.

Keywords: Lifelong Learning, E-Learning, Online Learning Platforms, Pandemic.

TARGETED EDUCATION FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

Swami Vivekananda had rightly said, "Education is not the amount of information that is put into your brain and run riots there, undigested all your life." It is something more, education for sustainable development allows every human being to acquire the knowledge, skills, attitudes, values necessary to shape a sustainable future. It is simultaneously a sub- field of education for shaping educational policies that will take into account the present environmental, societal and economic challenges.

This paper emphasises on a fool proof education system that will survive any kind of adversity be it a pandemic, a war or a natural calamity. Apart from jobholders, the lives of students waiting to give their Boards, one of the deciding factors for students to go for higher studies were the biggest losers. Due to the present pandemic the Indian education system is feeling the pinch of catching up late in adjusting to the switch from offline to online. Is the pandemic creating a 'new normal' in education or simply accenting what has already become a normal- an accelerating tendency towards technologization? This tendency presents an important challenge for education which requires to think about post COVID-19 curriculum. With students scattered in cities and country, online teaching enables students to continue their learning and the educators can complete syllabus in some sort of a methodical way. But the educational institutions in remote areas are unprepared to take this advantage due to improper connectivity.

As education is a passage to progress, this paper will aim to address the following question,
-What form of Education will stand the test of time? Be it war, a calamity, or a pandemic?
The approach for the same will be done by studying in detail, three types of education systems namely Formal (offline teaching) , Informal (online teaching) includes practical adult learning, diversity in methods and content and the New Education Policy (NEP) as proposed by the Government of India with emphasis on Goal 4 that make up 2030 agenda and ensures inclusive equitable quality education to all individuals.

From the above this paper will present its conclusions about the ideal Education System for India that's flexible and can be adapted in any scenario.

Keywords: Sustainable Development, Present Education System, 2030 Goal 4, National Educational Policy.

DAY ONE SESSION 1C: EDUCATION [12.00-14.00]

IMPACT OF DIGITALIZED LEARNING IN THE FIELD OF EDUCATION AMONG CHILDREN WITH LEARNING DISABILITIES IN PANDEMIC SITUATION: CASE STUDY

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ABSTRACT

The world before and during pandemic has brought a drastic change in the Global education. Although the other way round education is being continued with digitalization as a back end support, there are exceptions in cases where children with learning disabilities are completely overlooked. They have lost their educational track due to lack of physical connectivity with their teachers and supporting people. The purpose of the researcher is to study the impact of digitalized education among children with learning disabilities. Multiple case study design has been adopted. Semi-structured interviews and focused grouped discussions were conducted for the teachers and parents under the experts' guidance. The sample for the study was special schools in Telangana state in India. The findings suggested that making adjustments to the routine such as experiencing closure of schools and confinement to home atmosphere has proved to be a real struggle for children with learning disabilities. Support from siblings, parents and teachers were very less due to lack of digital skills understanding among children with learning disabilities. The study suggests that an alternate way for educating the children with learning disabilities need to be upgraded by flexible curricula, professional advancement among the teachers as well as parents and availability of learning resources should be given special consideration. Support from schools and teachers are very much necessary in building motivation and mental wellbeing among the children with special needs.

Keywords: Digitalized learning, Children with Learning Disabilities, Pandemic Situation, Mental Wellbeing.

THE USE OF DIDACTIC STRATEGIES AND TECHNOLOGIES TO SUPPORT REMOTE AND DISTANCE LEARNING

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ABSTRACT

The 2020 UNESCO Report states that during the pandemic some universities have postponed learning and teaching until further notice, due to the lack of information technology (IT) infrastructure for both students and teachers. With the expansion of global adversities, such as COVID-19 crisis, global warming and social inequalities, it is necessary to use pedagogical strategies for social transformation. In this sense, researchers, teachers and global citizens had to adapt for this new scenario. Technologies have been already used by teachers and researchers before the pandemic. Although, on a worldwide scale, a considerable number of teachers were immediately tasked to use different kinds of technologies and Information Communication Technology (ICT) skills, it was observed that strategies of blended and distance learning were used without sufficient guidance, training, or resources during the pandemic. This study aims to analyse pedagogical strategies and technology used by teachers in a private higher education institution in a context of global adversity. In the educational field, technology has been used as an important resource for supporting online and presential learning in Brazilian institutions to develop students' skills, engagement and motivation. Considering the social isolation, the fact of this COVID-19 crisis is lasting longer than expected initially and the large number of teachers were not prepared for this new scenario, remote learning has been an opportunity for teachers to apply technologies integrated with their pedagogical strategies at this moment of uncertainty. In remote learning and distance education mediated by digital technologies the pedagogical strategies involving engagement, action, resilience and students support is more evident. Freire's (1996) points out that the educational process demands creating motivated actions in order to promote the critical transformation respecting the students' dignity, subjectivity, experiences and autonomy throughout the learning journey. The use of technologies does not make the learning process something qualitative and meaningful, it is necessary the development of didactic proposals by the active involvement of professors. The research questions focused on which pedagogical strategies undergraduate teachers use during global adversities to engage their students.

This research is based on Responsible Research and Innovation (RRI). The RRI requires a consensus on necessities and expectations by society between researchers, citizens, companies, among other interlocutors, throughout the research process aligned with procedures and results with the values (OKADA & SHERBORNE, 2015). Participants included ten teachers of EDAP/IDP who answered a questionnaire related to pedagogical strategies used during global adversities in Higher Education. Initial findings indicate that teachers are using more digital resources and applied technologies integrated with their pedagogical strategies due to the pedagogical support fulfilled by the academic area. A large number of teachers who did not know how integrated pedagogical strategies and technologies are now are improving their ICT skills

which can be used to engage students and use for teacher training. Still, it is necessary to understand how these pedagogical strategies and technologies have been used and which pedagogical strategies are new.

Keywords: Global Adversities, Pedagogical Strategies, Information Communication Technology (ICT), Responsible Research and Innovation (RRI).

DEMOCRATIC EDUCATION AND SUSTAINABLE DEVELOPMENT

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ABSTRACT

A democratic education system brings changes in the society. It brings democratic values to education and values as justice, respect and trust. Democratic education can apply to learners of all ages in any learning environment in different societies, therefore, a significant focus is placed on this educational system by various educational institutions. In ancient time this system was adopted by Gurukuls, and even in current era this system is followed by many educational institutions specially in India.

United Nations program defined education for sustainable development that encourages change in knowledge, skills, values and attitudes to enable a more sustainable and just society for all and the institute like "Banasthali Vidyapith" is fulfilling these objectives since 1935. In today's scenario the educators have a crucial responsibility in terms of sustainability in education system. It's essential to raise the next generation into eco-conscious, self-sufficient world-citizens who understand the need of environmental responsibility, therefore sustainability in education provides self-sufficiency to today's learners which they need for tomorrow. There should be a balance between environment and society as they are interdependent. Identification and adoption of environment friendly campaigns can lead a eco-friendlier societal future. Giving kids a head start with early sustainable education will also help to prepare them for successful careers.

Earth is the only home, the next generation has, so what students learn in educational system shapes them for the future. Starting early with sustainable education teaches kids why the environment is important, how it should be treated, and how they play a crucial role in the future of its existence. The world is changing and by emphasizing on sustainability in education, we can do more than that they need to take on environmental change — we can bring a better future for them.

This article is based on case study of an educational institute, namely Banasthali Vidyapith, Rajasthan, India. A wholesome education system of Five-fold education (social, economic, environmental, cultural and spiritual) along with Gandhian philosophy is followed by the institute to acquire the knowledge, life skills, attitude and values necessary to shape sustainable future. To meet the demands of sustainable output, Banasthali provides adequate curriculum design along with the all variants of extra co-curricular activities, bringing sustainability to the environment, society & economy.

Keywords: Democratic Education, Gurukul System, Environmental Change, Five-Fold Education (Panchmukhi Shiksha), Gandhian Philosophy.

PRIVATIZATION AS A SOCIO-ECONOMICAL POLICY AND ITS IMPACT ON TEACHER EDUCATION

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ABSTRACT

The paper aims to analyze and convey the various arguments for and against Privatization. Privatization is largely discussed in economics and political science research with its pros and cons. The goal of this paper is to study the privatization of education in the Indian context in the field of teacher education and its impact on the teacher education institutions' practices. It's seen that from the last 15 years the growth of teacher education institutions is 268% and the maximum institutions are run by private players. The government of India accepted new economic policies from 1991 under the influence of global economic changes. It assumes that globalization, privatization, and liberalization will increase employment. Following the open market philosophy, rapid changes occurred in the educational scenario of India. Moreover, recently shaped and accepted new national education policy 2020 is recommending to increase the role of public-private partnership in the field of education. The corporatized structure of institutions is using free-market philosophy in the name of charitable service. On the other hand, the gross enrolment ratio of the country is increased by opening such institutions. Privatization of education has its negative side as well as it influenced the socio-economic life of Indian students.

Teacher education in India is under the supervision of a government statutory body named as National Council for Teacher Education (NCTE). It has four regional offices divided into four regions to smooth the operation of supervision. This body has the authority to grant or withdraw the permission of running teacher education courses. In past years the state of Maharashtra under the western regional committee and Uttar Pradesh under the North regional committee has been granted a large number of colleges/institutions. These institutions are affiliated with the state universities and follow the guidelines prescribed by the University grant commission and NCTE. On the hypothesis that the enrollment of students in the private institutions and government institutions are the same and the quality of education is not differing in any means, the authors will analyze the data available in various reports published by government bodies, universities, and other secondary sources. The study will mainly descriptive. Data will collect from websites, surveys, research papers & articles, journals. The study will discuss the teacher education institutions of the selected regions so it will not apply to other country's teacher education institutions.

IMPACT OF COVID-19 ON SKILLS AND ATTITUDE OF SCHOOL TEACHERS IN RELATION TO TEACHING LEARNING RESOURCES

Ms Jovita Nathan[1], Ms Komal Gagare[2]
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ABSTRACT

Only I can change my life. No one can do it for me.
Carol Burnett

The dawn of Covid-19 has collectively made all to reimagine education and achieve our vision of equal access to quality learning around the globe. The pandemic directly affected the education of nearly 1.6 billion learners which is 90% of the world's total student population. This crisis has challenged the teacher's creativity, innovation, acceptance and leadership. Globally, in a context where teachers and learners didn't have computers, internet access. Online learning was a new leap- a novel way of teaching, creating an interactive learning environment and simultaneously ensuring that learning never stops.

Being technologically sound, working systemically and using the appropriate teaching learning resources was a big challenge for the teachers as all the teachers did not have the skill and attitude to accept this new change. The purpose of this paper seeks to address the problems related to the attitude of the school teachers towards the paradigm shift of offline learning towards online learning. The questions that arose in the minds of the researchers were- Are the teachers ready to accept the new change? Do they have the skills which will help them to inculcate new teaching-learning resources for the students? Can a workshop or small sessions on teaching-learning resources conducted will help the teachers during this pandemic. In an attempt to answer the above questions, the researchers conducted a survey on 50 school teachers to find out their attitudes towards online learning and their awareness towards the different skills required for online teaching.

It was found that 72 % of the respondents did not have a positive attitude towards online teaching.85% of the respondents were not aware of the skills required for online learning.80 % teachers were ready to know the new teaching methods. Considering the above need the researchers thought of taking some measure which will be useful for the teachers. The researchers created an Edu-Tech module on teaching-learning resources which will establish a linkage between the teacher and the student in the classroom teaching. The teachers can utilize the technology and resources which are available to engage students, keep an eye on their progress from far and ensure quality education.

Keywords: Skills, Attitude, Teaching- Learning Resources, Edu-Tech.

SUSTAINABLE EDUCATION IN READING: AN EFFECTIVE LEARNING THROUGH TWO-FOLD TEXT

Ms R Subhashini, Ph.D. Research Scholar (Full-Time) in ELT, PG & Research Department of English, Presidency College (Autonomous), University of Madras, Chennai, India.

ABSTRACT

In the current scenario, there is a tremendous transformation in learning a language. Education of sustainable development (ESD) is a comprehensive and transformative educational process in which participatory learning and creative, critical, and systemic thinking are strengthened by creating links between individuals and the community. William Butler said once "Education is not the filling of a pail but the lighting of a fire". This paper mainly focuses on the goal of ESD and how reading can be magnified through Two-fold text to make students lifelong learners.

The researcher had introduced & termed for the first time in India a new reading technique called "Two-fold Text" that enables students to interact with the text effectively. This technique mainly emphasizes for students to prepare for their CORE Examinations. Learning is defined as assimilating and processing new knowledge and skills, moving them via short-term memory to long-term memory, and then re-using them in another context. The researcher had investigated research with 20 samples with pre & post-test to test language elements in reading for 9th & 10th-grade learners in Chennai, Tamil Nadu.

The researcher had applied methodology as content-based instructional method (CBIM) for this research. This article gives a brief account of CBIM and its advantages & reading techniques. CBIM simply brings immersion learning into the language classroom. In this research article assets of two-fold text have been discussed briefly. The supremacy of sustainability provides rich and engaging contexts for developing students' abilities in reading comprehension.

Reading comprehension assists students to develop the skills necessary to understand, organize, generate, analyze, evaluate, synthesize, internalize, interact and communicate ideas and information related to actions for sustainable futures. The learners can develop their understanding and skills necessary to act responsibly and create texts that inform and persuade others to take action for sustainable futures. In this learning area, students may interrogate a range of texts to shape their decision-making, problem-solving, critical thinking, & social skills with sustainability.

The content-based instruction, language, and literacy strands are key to improve and share the knowledge about social, cultural, economic, and worldviews that promote social justice. Through outcomes of the results investigated by the researcher that Two-fold text has proved a positive outcome for students in their reading.

Keywords: Sustainable Education, Content language and Integrated Learning, Reading & Two-Fold Text.

IMPACT OF COVID CRISES ON SCHOOL EDUCATION IN INDIA

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ABSTRACT

The present study is conducted to see the impact and challenges to Indian school education system during covid crises. A documentary analysis of various sources like research papers, newspaper articles, government documents and other research evidences is used in the present study. A paradigm shift has been witnessed in the education sector in India during covid pandemic as schools and teachers are forced to adapt to e-learning, leaving the traditional way of teaching. In India, school closures have affected 320 million students and only 37.6 million children across 16 states are continuing education through online classrooms. The covid pandemic has brought a huge digital divide by pushing a large number of children out of school and increase a gender disparity in education. A learning gap has been created among marginalized sections of society which includes disables, ethnic minorities, children on the move (migrant, refugee and internally displaced children), and the ones that are in the most rural hard-to-reach and poorest communities. The pandemic has disrupted school meal services thus affected the nutrition of 115.9 million children between 6-17 years of age who are enrolled under the mid-day meal scheme. The lockdown during COVID-19 pandemic have had huge consequences on the health, nutrition and learning of 30 million children (3-6 years) who were beneficiaries of the Integrated Child Development Services (ICDS) scheme. The government of India has undertaken various initiatives such as: educational channels through Direct to Home TV, Radios for students, social media tools like WhatsApp, Zoom, Google meet, Telegram, YouTube live, Facebook live and digital initiatives (Diksha and e-Pathshala) to continue school education in covid crises. The efforts of government, corporate giants, and other social agencies need to be synergized as it is difficult for one single entity to bring about the change, as the scale is enormous.

Keywords: COVID-Pandemic, School Education, Online Learning, Digital Initiatives.

OPINION OF THE STAKEHOLDER ABOUT THE NO DETENTION POLICY IN SECONDARY STUDENTS

Mr Rampravesh R Yadav[1], Dr Keshar R Jadhav[2]
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ABSTRACT

Education is the Basic Need of the Human Being. It helps in the development of humans and country. Government of India has started many educational policies for the achievements of this goal that is minimum basic education for all. In 2002, through the 86th Amendment Act, Article 21(A) was incorporated. It made the right to primary education part of the right to freedom, stating that the State would provide free and compulsory education to children from six to fourteen years of age. Six years after an amendment was made in the Indian Constitution, the union cabinet cleared the Right to Education Bill in 2008. The Right of Children to Free and Compulsory Education Act or Right to Education Act (RTE), which was passed by the Indian parliament on 4 August 2009, describes the modalities of the provision of free and compulsory education for children between 6 and 14 in India under Article 21A of the Indian Constitution. India became one of 135 countries to make education a fundamental right of every child when the act came into force on 1 April 2010. The bill was approved by the cabinet on 2 July 2009. Rajya Sabha passed the bill on 20 July 2009 and the Lok Sabha on 4 August 2009. It received Presidential assent and was notified as law on 3 Sept 2009 as The Children's Right to Free and Compulsory Education Act. In the year 2009 Government of India started the no detention policy (Right to Education Act, no student can be failed or expelled from school till the completion of elementary education covering classes 1 to 8. The essence of the policy is that children should not be 'failed' and detained up to Class 8.). The effect of no detention policy on students, parents, teachers and on the principal has been studied (investigated) in this research. The competitive study of the impact of different policy was seen in the many research but the opinion of the students, parents, teachers and the principal of the difference school of English, Marathi and Hindi medium school are compared in the present research. Over all 300 students, 100 parents ,40 teachers and 20 principal opinion was taken. The opinion of the teachers and principals about No detention policy is presented here by the researcher.

DAY ONE SESSION 1D: EDUCATION [12.00-14.15]

THE ROLE OF EDUCATION IN COVID-19 SAFETY AWARENESS AMONG BUILDING CONSTRUCTION OPERATIVES IN ADAMAWA – NIGERIA

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ABSTRACT

Coronavirus (COVID-19) has devastating effect on human health and the global economy. Poor COVID-19 safety awareness culture is linked to the rising number of COVID-19 cases. COVID-19 safety awareness is vital for sustained recovery for the Nigerian construction industry. The study investigated the role of education in COVID-19 safety awareness among building construction operatives in Adamawa – Nigeria. A quantitative research approach was employed through descriptive research design. Questionnaires containing information relating to respondent level of education and COVID-19 knowledge were randomly administered to 450 building construction operatives from nine selected construction sites across the state, 306 valid responses were used for analysis; corresponding to an 68% response rate. The data collated were analyzed using descriptive and inferential statistics through SPSS v26. The result revealed that operatives' level of education plays a significant role in the state of COVID-19 safety awareness culture among building construction operatives in Adamawa - Nigeria. Construction employees with formal education exhibited higher level of COVID-19 safety awareness compared to their counterpart with no educational qualification. The study therefore recommended that construction firms should prioritize educational qualification for all level of employee. More educated operatives should assist less educated operatives with COVID-19 safety education. Authorities should enforce COVID-19 safety education through massive COVID-19 awareness promotion campaign among construction companies to halt the rising number of COVID-19 cases.

Keywords: Education, Construction Operatives, COVID-19 Safety Awareness, Construction Sites, Adamawa Nigeria.

SUSTAINABLE DEVELOPMENT THROUGH ENVIRONMENTALLY RESPONSIBLE BEHAVIOUR: ROLE OF EDUCATION

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ABSTRACT

Sustainable development was first officially discussed in the Brundtland Report published by the World Commission on Environment and Development in 1987, and the corresponding rapporteur defined it as "sustainable development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED, 1987). The life of human being depends entirely on the environment and any adverse change in the environment makes the life of the human being difficult on the planet. The desires and expectations of humanity increase exponentially which crosses all limits consumption of environmental resources that are essential for the existence of future generations. The greedy nature of certain people makes this planet not suitable for human life. Development is essential for humanity but the projects for those developments do not affect the existence of human being. In this context the term sustainable development got importance. Sustainable development has three dimensions, namely economy, environment, and society (Olsson, Gericke, & Chang Rundgren, 2016). For sustainable development to take place, the sustainability of these three dimensions must be ensured simultaneously (Alkış, 2007). On the road to sustainable development, the role of individuals and their awareness is important. Even though the attainment of sustainable development is a global one but the understanding of individuals especially students, teachers, and teacher educators are important in attaining sustainable development goals.

By 2030 United Nations aims to build a more prosperous, more equal, and more secure world. For this 193 Member States at the UN General Assembly Summit in September 2015 formulated seventeen sustainable development goals and 169 targets. Awareness and understanding are important in achieving the goals by 2030 with the motto leaving no one behind. This study aims to find out the attitude towards the sustainable development and environmentally responsible behaviour of individuals especially students, teachers, and teacher educators and also to find out the relation between them. This study also intended to make awareness to individuals about the importance of sustainable development goals and developing and promoting different strategies based on the above findings. Mixed method research is used to find out attitude, behaviour, and the extent to which the individuals show environmentally responsible behaviour. The different tools used for the study are Sustainable development attitude scale and environmentally responsible behaviour inventory. Environmentally responsible behaviour is

important in attaining sustainable development goals. Through education these behaviours can be imparted to the individuals and thereby SDG can be fulfilled.

PRAGMATIC SOLUTIONS FOR POST COVID TEACHER EDUCATION - LESSONS FROM THE USE OF SUSTAINABLE TOOLS AND STRATEGIES

Dr Chandrasekharan Praveen, Former Principal, Institute of Advanced Study in Education, Thrissur, Kerala, India.

ABSTRACT

The National Curriculum Framework for Teacher Education (2010, India) proposed to prepare humanistic and reflective teachers with the potential to develop more professional teachers and improve the quality of education. A decade later, when the Covid pandemic struck, teaching was shifted to online mode and social distancing resulted in an abrupt end of face to face instruction. Untrained teacher educators were directed to engage classes online for student teachers who had no prior experience of learning online. The existing digital divide in India and issues related to accessibility and affordability affected seamless delivery of instruction resulting not only in lowering of quality of instruction but also affecting negatively, student mental health. Then, finding ways to address student needs, suddenly became imperative.

As early as 1943, Abraham Maslow   proposed   that individuals must satisfy lower level deficit needs before progressing to higher level growth needs. With the Covid pandemic raging in 2020, many parents of students lost their jobs and the resulting financial crunch affected the family budget set aside for education. This meant that investing in laptops and acquiring a   broadband connection with high internet speed not only became a luxury but an elusive   dream resulting in widening the gap between the have and the have not's.

The investigator cum teacher educator, a former faculty of a government run teacher training college, where meritorious students mostly from low socio-economic backgrounds study, explored affordable tools and quality content for delivering online instruction. In order to raise the quality of instruction, the investigator   for half a decade, attempted a resource mining of Massive Open Online Courses (MOOCs). Then by utilizing an affordable and sustainable tool like WhatsApp, the investigator transacted the teacher education syllabus in a blended mode by integrating it with the high quality content acquired for own CPD from MOOC's offered by leading universities. Such a strategy opened up the possibility of student teachers to continue education even in times of crisis and acquire to an optimum level the   instructional goals of the teacher education programme.

This paper presents the strategy employed which basically attempted to match Maslow's   hierarchy of needs with the needs of student teachers to ensure quality instruction. Now it is becoming increasingly clear, that the Covid pandemic and online instruction is likely to continue in the coming years. In such a scenario, the author hopes that the sustainable strategies and tools employed in own academic setting can provide pragmatic solutions for teachers struggling to cope with online Post Covid teacher education.

Keywords: Covid, MOOC, Needs, Sustainable, Teacher Education, WhatsApp.

TARGETED EDUCATION FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

Targeted Education for Sustainable Development, it is often referred to as TESD allows every human being to acquire knowledge, skills, attitudes and values necessary to shape a Sustainable Future. TESD Goal4 is about quality education and is among the 17 Sustainable Development Goals established by the United Nations in September 2015.

Mission (4 Quality Education, Wikipedia) is "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

Objectives of the Study

To equip Higher Secondary school students to build a more sustainable world in chemistry text books in Kerala state syllabus.

Methodology of the study

The Methodology used for the study is Qualitative approach/Systematic review / whole institutional approach is used for the study. It helps the policy makers and acute researchers to assess multiple development and impact across the environmental, social, economic and educational dimensions. The study is theoretical and qualitative and uses the content analysis is to explore the opportunities offered by the chemistry text books to promote TESD in the school class room. The whole institutional approach involves how the school planning, management, well-being, teaching- learning process, Content transaction, care for oneself, others, environment, behaviour of students. Observation is the tool used for the study.

Targets of Education Bourn,2018

The main three "means of achieving targets" are:

Build and upgrade inclusive and safe schools;

Expand Higher Education scholarships for developing countries;

Increase the supply of qualified teachers in developing countries

Targets and Indicators of Education for Sustainable development UNESCO, 2012; UNDESA 2013

SDG 4 has 10 targets which are measured by 11 indicators.

Target 1. Free primary and secondary education

Target 2. Equal access to quality pre-primary education

Target 3. Equal access to affordable technical, vocational and higher education

Target 4. Increase the number of people with relevant skills for financial success

Target 5. Eliminate all discrimination in education

Target 6. Universal literacy and numeracy

Target 7. Education for sustainable development and global citizenship

Target 8. Build and upgrade inclusive and safe schools

Target 9. Expand higher education scholarships for developing countries

Target 10. Increase the supply of qualified teachers in developing countries

Analysis for the study

The study is conducted to find out the sustainability of chemistry text books to promote Targeted Education for Sustainable Development in the school class room. Simple and categories analysis (content wise, chapter wise, unit wise analysis) of higher secondary chemistry text book in kerala state syllabus is used for the study. Frequency distribution, Bar graph, Pi diagrams etc is used as the statistical techniques for the study.

Challenges of the study Filho, 2020

Impact of COVID-19 pandemic

Just as all SDGs, achieving SDG 4— for inclusive and equitable access to education—is likely to be missed due to the **COVID-19 pandemic**, there is a projection that more than 200 million children will still be out of education by 2030.

Conclusion/Outcome of the study

Empower the students to take the responsibility for the present and the future generations and actively contribute to societal, economic, environmental and educational transformations and to build a more Sustainable World. Employ interactive, project based, e learning resources and learner centred pedagogy in higher secondary texts and syllabus in Kerala state. Transform all aspects of learning environment through a whole institution approach to Education for Sustainable development to enable learners to live what they learn and learn what they live.

SCOPE OF DISTANCE EDUCATION SUSTAINABLE DEVELOPMENT IN INDIAN CONTEXT

Mr Swadesh Deepak, Assistant Professor, Department of Business Administration Unity, Unity PG College, Lucknow and Centre Co-ordinator, Uttar Pradesh Rajarshi Tondan Open University Allahabad, Centre, UDC Lucknow, India.

ABSTRACT

Primary education starts from 6-14 years with Middle and Upper Primary school education. Schooling is offered at state and private schools, however, a private school often have good facilities and infrastructure than government schools. Education in India is provided by the public sector as well as the private sector, with control and funding coming from three levels: central, state, and local. Indian Constitution is providing free and compulsory education as a fundamental right to children between the ages of 6 to 14. At the primary and secondary level, India has a large private school system complementing the government run schools, with 29% of students receiving private education in the age of 6 to 14.

In the today's world, Open and Distance Education (ODE) system has been gaining widespread popularity. India possesses a developed higher education system, which offers facility of education in almost all aspects of human creative and intellectual endeavours. The institutional framework consists of Universities established by an Act of Parliament as Central Universities or of a State Legislature as State Universities and, Deemed Universities, Institutes of National Importance, Institutions established under State Legislative Act and colleges affiliated to the University both government-aided and unaided.

Open Universities across the world are embracing TEL based teaching and learning process to disseminate quality education to their learners spread across the globe. In India availability and access of TEL and learner characteristics are uneven and vary from state to state. Hence it is important to establish the facts about TEL access among learners, their TEL usage patterns and their readiness to use TEL for educational purpose. In view of this, a study was conducted with the objective to find out the access level of TEL among distance learners. The analysis indicates that maximum learners have desktop/laptops and most of them are accessing internet very frequently from their home.

Keywords: Open Universities, Technology in Education.

THE ROLE OF LIFELONG LEARNING IN PERSONAL AND PROFESSIONAL GROWTH WITH SPECIAL REFERENCE TO SPIRITUALITY

Dr Veda C.V, Assistant Professor, Department of Social Work, Bangalore University, Bengaluru, Karnataka, India.

ABSTRACT

Lifelong learning can enhance our understanding of life and the people around us, it provides us with more and better opportunities and improves our quality of life. There are two main reasons for learning throughout life for personal growth as well as for professional growth these reasons may not necessarily be distinct as personal development can improve over employment opportunities and professional development can enable personal growth. The objective of the paper is to understand the key factors which enhance our personal and professional growth. The paper is based on historic research design and data collection has done through secondary data. The paper majorly highlights the key factors which are responsible to enhance personal and professional growth such as spirituality factors includes self-awareness, self-love, Intra-personal development, being optimistic, Forgiveness, Hope, the need for meaning and purpose in our lives, the need to love and feel loved, the need to feel a sense of belongingness, the need to feel hope, peace and gratitude. The results show that spiritual factors help an individual to grow personally as well as professionally.

QUALITY MANAGEMENT IN HIGHER EDUCATION

Dr Mini K S, HoD, MEd Department, Fathima Memorial Training College, Pallimukku, Kollam Kerala, India.

ABSTRACT

Management Education is one discipline of Higher education by which students are taught to be business leaders, managers and administrators. One of the key elements in determining the socio-economic significance of education is quality. For few, quality is in connection to the importance of predominance and perfection, and to others quality is a confirmation. All centre on clients and their fulfilment. Quality is a great and exciting challenge to Higher Education (HE). Quality in education is a very vital issue because HEIs are accountable to several stakeholders such as students, society and other. Quality management plays an integral role in higher education by ensuring that quality benchmarks are being met, thereby attributing to its prestige, increased enrolment, and student success. With quality management still in the growing stage, research is needed regarding the applications, challenges, and benefits of these policies within advanced academics. It is about creating a quality culture where the aim of every member of staff. In addition, quality of HE is a standout amongst the most of parts of the making of learning, human asset improvement and social power for any country.

Promotion of quality and the management of quality is not about long service but an exhibition of effective leadership that institutions to navigate through the turbulence of challenges facing higher education today. The two main dimensions of quality management are product and service. There are various disciplinary perspectives from which professionals view quality management from. In the contemporary world all managers must pay particular attention to follow a standard operating procedure (SOP).

This paper focusses on approaches to quality management in higher education, with particularly focus on India as well as quality tools used in higher education like SIX SIGMA, LEAN and TQM. Globally, quality has emerged as one of the determinants of a university's world ranking and competitiveness. The concept of "quality in higher education" is thus of immense concern for academics and academia globally.

To conclude from the review, the new wave in the higher education space has necessitated new forms of accountability in the sector. It is argued that when determining quality assurance in teacher education there is need to take into account not only what teachers are taught but also how they are taught. It provides an insight on how innovative teaching and learning methods.

Keywords: Quality Management, Approaches, Leadership, Quality Assurance.

EDUCATION FOR SUSTAINABLE DEVELOPMENT FOR OUR PLANET

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ABSTRACT

Education is the best mean and instrument to make aware about sustainability. It is an essential tool to achieve sustainability. Sustainability is only the way for maintaining healthy environment and reduces negative impact on environment. Sustainable development means "use of resources to meet present needs without compromising the ability of future generations to meet their needs" (United Nation General Assembly, 1987). So only education has potential to represent the importance of sustainability and it can play a crucial role to develop a vision of sustainable development and help to achieve our sustainable development goals (SDGs).

Education for Sustainable development (ESD) introduced by UNECSO which is defined as to empower all learners and provide opportunities to acquire knowledge, skills, values and attitudes to take decision and responsible actions. This will help in environmental integrity, welfare of society and economically supportive. Education for Sustainable development is not just for a limited time but it is a life-long process, which should be the part of quality education. ESD is an integral element of Sustainable Development Goal 4 (SDG 4- quality education) and important key to achieve all Sustainable Development Goals and help in transforming the society (UNESCO). Education for Sustainable development is important for environmental learning and it should be integrated across the curriculum, with a holistic pedagogy. This will provide the students, support to learn and act for the planet sustainability. Therefore, this paper intends to explore the relationship between education and sustainable development, to describe suitable education for sustainable development and to discuss on review of how environmental issues are projected in education. The paper also focuses on important elements of Education for Sustainable Development such as Learning content, Pedagogy and Learning Environment, Societal Transformation, Learning outcomes, etc.

Keywords: Education for Sustainable Development (ESD); Sustainable Development Goals; Environment; Pedagogy; Learning Content; Learning outcome.

SUSTAINABLE DEVELOPMENT AND EDUCATION IN INDIA

Dr Sankara Rao Kocherla, Assistant Professor in Education, M.R. College of Education, Fort, Vizianagaram, Andhra Pradesh, India.

ABSTRACT

As defined by the Brundtland Commission, "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The Brundtland Commission, formerly also known as the World Commission on Environment and Development was formed in 1983. The rationale was to have an organization independent of the UN to formulate "a global agenda for change" that would bring together industrialized and developing nations on a common platform to chart out a course of development that would take into consideration the interrelatedness of people, resources, development and planet. The Commission was represented by members of 21 nations and its first chair was Gro Harlem Brundtland, a former Prime Minister of Norway. The Commission held public hearings in the capitals of 15 countries and subsequently published a report titled "Our Common Future" in 1987 that explored the ways in which political commitment and public participation can trigger a new era of economic growth that would manage environmental resources efficiently to ensure both sustainable human progress and human survival. After the publication of its report, the Brundtland Commission called for an international conference to be convened to review the progress being made by nations with regard to Sustainable Development in their respective countries. This resulted in the United Nations Conference on Environment and Development, popularly known as the 'Earth Summit' which was held in Rio de Janeiro, Brazil in 1992. At Rio, a global plan of action, titled 'Agenda 21' was developed focusing on climate change, loss of biodiversity, management of the earth's forests and the responsibilities and rights of nations. In fact, it was Chapter 36 on Education, Awareness and Training of Agenda 21 that laid the foundation of Education for Sustainable Development (ESD). It stated, "Education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential. Education is critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. Both formal and non-formal educations are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns." Agenda 21 urged countries to develop and implement a strategy on education for sustainable development. However, only a few countries drafted policy frameworks for advancing this process at the national level as ESD was more or less relegated to the periphery of policy making in most countries. In 2002, the World Summit on Sustainable Development was held in Johannesburg which recommended that the United Nations General Assembly consider adopting a Decade of ESD. As a result, the 57th Session of the UN General Assembly in December 2002, adopted Resolution 57/254 declaring 2005 to 2014 as the 'Decade of Education for Sustainable Development (UNDESD) and designated UNESCO as the lead agency to promote it. RESET is recognized as "Decade Project" by the UN Decade of Education

for Sustainable Development for the decade 2012/ 2013 again. Aim of the paper is to discuss about how education helps to promote sustainable development in India.

DAY ONE SESSION 1E: SECONDARY EDUCATION [12.00-14.15]

OPEN SCHOOLING FOR SUSTAINABLE DEVELOPMENT TO ENHANCE INNOVATION ECOSYSTEMS

Alexandra Okada[1], Chagit Tishler[2], Cyril Dworsky[3], Maria Vicente[4], Pavlos Koulouris[5], Peter Gray[6]
[1]The Open University UK, [2]Bloomfield Science Museum, Jerusalem, [3]Vienna University Children's Office, AT, [4]Leiden University, The Netherlands, [5]Research and Development Department, Ellinogermaniki Agogi, Greece, [6]Norwegian University of Science and Technology.

ABSTRACT

Open Schooling is an approach promoted by the European Union to enhance science education with more than twelve projects funded by the European Union. Literature about the term "open schooling" in the context of science education for responsible citizenship (Hazelkorn, et al. 2015) is still very limited, because this concept has emerged recently and most of research projects are still in development. This paper, supported by a narrative literature review presents and discusses five open schooling projects implemented with partners in and beyond Europe. Findings shows key components of open schooling for sustainable development – actors, artefacts and activities to enhance Innovation ecosystems.

Keywords: OSTogether, Open Schooling, Innovation Ecosystems, Education for Sustainable Development

INNOVATIVE ECOSYSTEMS WITH OPEN SCHOOLING TO SUPPORT LESS WELL-REPRESENTED ACTORS AND TERRITORIES

Dr Alexandra Okada[1], Prof Miriam Struchner[2], Dr Cintia Rabello[3], Karine Pinheiro[4], Rossana Moura[5], Luziana Quadros[6], Thais Castro[7]

[1]The Open University, UK, [2]Titular Professor, Universidade Federal do Rio de Janeiro, [3]Universidade Federal Fluminense, Brazil, [4]SECAD, [5]NGO, [6]Universidade Federal de Santa Catarina, Brazil, [7]Associate Professor, Federal University of Amazonas, Brazil.

ABSTRACT

One of the main challenges for education around the world is to support the large number of less well-represented actors and territories towards a more scientific-literate society for sustainable development locally and globally. This challenge became even more difficult for countries extremely affected by adversities aggravated by the pandemic.

COVID-19 has reached 14.74 million people in Brazil. Of the 16.2 million living below the poverty line – with less than $45/month, 4.8 million survive on no income at all. Over 34% of youth leave school before completing secondary education and only 18% of adults in Brazil have attained tertiary education. Brazil is the country with the highest number of intentional homicides in the world. In 2020, its Amazon rainforest and Pantanal, the world's largest tropical wetlands, suffered the worst fires in a decade (HRW,2020).

'Innovation Ecosystem' is a key strategy promoted by the European Commission (2021 – 2024) to support green, digital, and social innovations by connecting existing strengths at local, regional and national levels for sustainable growth aligned with societal needs (EC, 2021). To prepare youth for responsible research and innovation, open schooling is a key approach to foster scientific literacy through the cooperation between students, teachers, professionals and local communities (EC, 2018).

This inter-region study focuses on how to design innovation ecosystems supported by open schooling and examines drivers and challenges to expand open schooling initiatives as innovation ecosystems for preparing disadvantaged students to support sustainable growth – green, digital and social in their local communities. Participants were five communities of the CONNECT project – inclusive open schooling with engaging and future oriented science, whose aim is to guide youth including disadvantaged students to solve real-problems with scientists. Through in-depth interviews, five practices were mapped to examine common drivers and challenges.

Preliminary findings were discussed at local and inter-regional level. Three drivers were identified:

- Providing opportunities at an early stage for students to identify scenarios, problems, or issues that they are interested in; that they <u>care</u> about
- Creating flexible systems (virtual or physical) with and for students to <u>know</u> how to solve issues supported by (re)search skills with fun.

- Supporting students with activities and contacts for them to <u>do</u> their work based on knowledge acquired, make evidence-based decisions, and take action to develop competences.

The challenges were:

- Increasing students' <u>access</u> to "fruitful" learning opportunities with and without technologies.
- Supporting students' <u>retention</u> with active roles and intrinsic motivation.
- Propitiating learners' <u>attainment</u> with self-regulated strategies and <u>progress</u> with competences for sustainability.

Projects	Aims	Participants
WebRadio UFRJ/RJ	Examine students' authorship about socio-scientific issues and school community's engagement	State schools' students, teachers, Researchers, Scientists and Social Activists
LabLanguages UFF/Niteroi	Support teachers' CPD to integrate multiliteracies, Technologies and socio-scientific issues	Suburb-schools' teachers, academics and multidisciplinary researchers
DigitalSkills BRGovernment/Ceara	Guide teachers to integrate pedagogies, technologies and competences	Semi-arid schools' teachers, students, academics, citizens & policymakers
DigitalAngels NGO/Brasilia	Empower girls through ICT to increase awareness about gender inequalities	Youth from rural schools, indigenous villages, quilombo communities, and agrarian reform settlements
STEMnetwork UFAM/UFMA/UFSC	Strengthen STEM teaching skills to improve students' learning	State schools in Amazon and Santa Catarina

Keywords: OStogether, CONNECT, Open Schooling, Innovation Ecosystems, Brazil, Disadvantaged Students.

ALIGNING SCIENCE EDUCATION WITH SOCIETAL NEEDS AND VALUES: INTRIGUING STUDENTS' INTEREST IN STEM THROUGH PARTICIPATORY METHODS

Ms Sigrid Vedel Neuhaus, The Danish Board of Technology, Denmark.

ABSTRACT

The EU funded project CONNECT takes a point of departure in Open-schooling and sets out to encourage students with low science-capital to pursue a career in STEM by improving their scientific self-esteem, through good experiences of '*science is for me*' and by putting science in the context of society.

CONNECT is working with two types of Sciences Education processes – structured and open-ended scenarios. Contrary to the structured scenarios the open-ended scenarios do not have a set topic. It is rather a process which the students go through, starting with deciding on a local challenge to work with.

This process of the open-ended scenarios builds upon the tradition of Deliberative Democracy and Technology Assessment. It is based upon the idea of democratic, well-informed, and inclusive decision-making processes. As well as on the idea of having societal needs and values set the agenda for research and innovation, putting scientific knowledge into the context of society as well as using this knowledge for decision making processes.

The open-ended scenarios are an innovative experiment led by The Danish Board of Technology supported by the user advisory board of CONNECT, which aims to stimulate students' interest in science by approaching it from a different perspective. A perspective where societal needs and challenges the students experience in their own community are at the core of Science Education.

Developing processes targeting local challenges

By combining elements of open-schooling, Deliberative Democracy and Technology Assessment a novel model has been developed taking the students through six steps – two for each of the CONNECT science action stages: CARE, KNOW, DO.

CONNECT Science Action Stage	Steps
CARE	Framing
	Questions
KNOW	Knowledge & Opinions
	Deliberation
DO	Recommendations
	Dissemination

The students will always go through these six steps in this particular order, but each step has different options for method and participants. The teacher will facilitate and guide the students through these steps, but the knowledge acquired will come from experts and local stakeholders. Families are moreover included

in different steps of the model. With a point of departure in this model and different participatory methods the different open-ended scenarios are developed.

A pilot has been developed with inspiration from The Citizen Jury method. It has tested in Greece, Spain, and Brazil, dealing with a great variety of topics.

The open process of the model and the pilot has been well received. Although the open process is difficult to carry out in practice, it has shown to be quite flexible and adaptable to schools' needs.

A second open-ended scenario structured around the Consensus Conference method is now in development.

Keywords: CONNECT Project, Open Schooling, Sustainable Development, Open-Ended Scenarios, Deliberative Democracy and Technology Assessment.

HOW CAN TEACHERS, STUDENTS AND FAMILIES COLLABORATE WITH SCIENTISTS ACT AS CO-RESEARCHERS TO IMPROVE COVID-19 PREVENTION? AN OPEN-SCHOOLING APPROACH TO ENGAGE THE EDUCATION COMMUNITY IN CURRENT RESEARCH

Dr Jessica Fernández[1] Rosina Malagrida[2] Dr Alexandra Okada[3]
[1, 2]Living Lab for Health, IrsiCaixa AIDS Research Insitute, IGTP, Badalona, Spain.
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ABSTRACT

Engaging young and old citizens to appreciate the importance of science and helping them become more informed through science education are some of key societal priorities in Europe.

To tackle this challenge, Open Schooling is a novel approach promoted by the European Commission (EC) to support cooperation between schools, scientists, families and other stakeholders to solve local problems. With the aim to support open schooling in formal science education, the EC has funded the CONNECT project to implement action research to tackle local societal challenges.

A CONNECT pilot project was carried out in Catalonia to address the prevention of Covid-19 in the school environment. An innovative approach to enhance the engagement of participants was to invite the education community to participate as co-researchers in the research project "Escoles Sentinella" led by the Catalonia Local Government. It aimed to monitor and evaluate SARS-CoV-2 infection in the school environment to elaborate recommendations for improving the prevention and control policies.
The Living Lab for Health at IrsiCaixa, supported by CONNECT and other partners from "Escoles Sentinella", facilitated a transdisciplinary and participatory research approach with a systemic perspective.

A total of 6 schools from primary and secondary education explored their problems and opportunities in different areas of the system followed by an ideation of recommendations. It was conducted in 6 virtual workshops with 44 teachers, then, 24 teachers implemented the same workshops with their students, and so did they with their families. A total of 750 students and their families contributed to this participatory research.

The results were analyzed by researchers from the Living Lab who clustered them by similarities and the resulting list of recommendations was validated by the students. Recommendations were obtained for the different areas of the system and were integrated with those concluded by the other research partners.
The engagement of teachers, students and families in a participatory research contributes with complementary recommendations for policies to those obtained by the other researchers contributing to a better fit with the needs of the schools. Moreover, the systemic approach is useful to help the participants to come up with a broad range of recommendations that cover the different areas of the system, beyond those of the health system. Finally, the partnership with policymakers with a national socio-scientific issue were vital for facilitating teachers, students and families' engagement with scientists, everyone acting as co-researchers to improve Covid-19 prevention.

Furthermore, we believe that this approach contributes to increase motivation, meaningful learning and scientific literacy among students and their families. This will be further investigated in upcoming phases of the CONNECT project.

We conclude that research in education should offer possibilities for participation to assure that the results better fit their needs, and that, if the challenge is complex, the research should have a systemic approach.

Keywords: CONNECT Project, Open Schooling, Sustainable Development, Systemic Approach, Engagement, Partnerships with Policy Makers, Open Science, Citizen Science.

OPEN SCHOOLING WITH COLLABORATIVE SCIENTIFIC ACTION FOR ENVIRONMENTAL PROTECTION OF WILD ANIMALS IN THE SEMI-ARID NORTHEAST

Prof Silvar Ferreira Ribeiro[1], Dr Ana Karine Torres Rocha Dourado[2], Ms Angela Emefa Yawa Tay[3], Bruna Barbosa Santos[4], Ms Katiuscia da Silva Santos[5], Dr Sonia Maria da Conceição Pinto[6]
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ABSTRACT

This study identified relevant scenarios and collaborative scientific actions to prepare young students to understand the problems of the natural environment caused by man and their consequences for the balance of the planet. The trafficking of wild animals, capture, marketing, and captivity of songbirds was chosen, because it has a strong impact on the environmental balance. The illegal transport, death and mistreatment of the birds that are the majority, many extinct and or threatened with extinction. The focus of the research is to answer the following question: how can the collaborative scientific partnership be co-evaluated by those involved in open schooling for the conception and implementation of curriculum plans in public schools of basic education?

The discussions in meetings, researches in scientific literature, dialogues between the participants resulted in the creation of the Rewinding Birds Brazil Project, linked to the Connect Project, in a public elementary school in the city of Irecê, in the State of Bahia, Brazil, with 34 teachers and 810 students from the Antônio Carlos Magalhães Municipal School. The objective was to implement collaborative scientific actions with open education. Education supported by open schooling for environmental protection has a key challenge to engage distinctive societal representatives to select real world scenarios to empower the youth to become scientific literates as responsible innovators for the green economy growth and responsible citizenship for a sustainable world (Okada et. al 2020).

Procedure

1. Open invitation and mobilization of basic education teachers, university, including researchers and undergraduate and doctoral students.
2. Weekly meetings to adapt the scenario to Rewilding Birds Brazil.
3. Coaching to support teachers in establishing partnerships and student-led scientific actions.
4. Co evaluation of results using the European project instruments adapted for Brazil.

Methodology

Exploratory action research with responsible research and innovation principles (RRI). Data from synchronous and asynchronous discussions using Microsoft Teams and WhatsApp for interaction with the subjects. The interpretation and model of CONNECT "Take Care-Act".

Preliminary results

The co-evaluation of several factors: The relevant and engaging scenario; principle of open schooling; collaborative scientific actions; planning and definition of study coverage and focus; mobilization of participants. Areas of law, pedagogy, language, biology, basic education; sciences; technological resources, analysis software, databases and ways of carrying out field activities.

Keywords: Open Schooling. Scientific Education. Collaboration. Sustainable Development. Environmental Protection. Responsible Research and Innovation - RRI.

SCIENCE TEACHERS AND RESEARCHERS AS A COMMUNITY FOR ADAPTING, DESIGNING AND IMPLEMENTING OPEN SCHOOLING FOR SUSTAINABLE DEVELOPMENT

Dr Giorgos Panselinas[1], Antonios Sfounis[2], Maria Eleftheriou[3], Katerina Daskalaki[4], Eleni Korakaki[4], Avraam Apostolakakis[5], Panagiotis Toumpaniaris[6], Antonios Foundoulakis[7], Anna Karaiskou[7], Dimitrios S. Nikas[8], Eleni Likaki[8], Katerina Skaraki[9], Charalambos C. Katsidis[10], Iasmi Stathi[11], Panayota Koulouri[12], Wanda Plaiti[12], Dimitris Podaras[13], Konstantinos Chalkiadakis[14]

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ABSTRACT

Open Schooling is a novel concept promoted by the European Commission since 2015. A key issue is that there are still limited resources and tools for promoting this approach in schools. "*Open schooling is where schools, in cooperation with other stakeholders (scientists, families…), become an agent of community well-being;*" (European Commission, 2015).

To explore this issue, a novel component in the CONNECT project developed by the Regional Directorate of P&S Education of Crete (RDE) team is the collaborative production of open schooling resources involving educational researchers and science professionals from Museums and Research Centers.

This exploratory study aims to examine procedures and benefits to promote collaboration among teachers and researchers. Qualitative data were generated by observation, discussions and semi-structured questionnaires.

Participants were 18 Science teachers and 4 science researchers coordinated by 2 coaches who worked together to:

(a) recreate an educational scenario from "Rewilding Britain" to "Rewilding Greece", to reintroduce marine and terrestrial animals that once existed in several ecosystems in Greece

(b) co-design five new scenarios for promoting sustainable development: Renewable Energy, Global Warming - Chemical Pollution, Plastics, Measuring CO_2 for coping with pandemic Covid-19 aerosol transmission and using Map skills for problem solving, and

(c) implement these resources with 13 secondary schools of Crete to augment the science capital of 336 students measured through a pre and post-questionnaires.

Findings revealed that <u>three useful procedures</u> to promote collaboration: 1. discussing educational scenarios to address relevant issues for the community; 2. identifying links to formal and non-formal learning objectives and 3. using the "open schooling" framework of Care-Know-Do (Okada, 2020) to prepare activities to engage students with teachers, researchers and parents.

These procedures were implemented through online workshops; five to prepare open schooling resources and four to organise and assess the implementation. Along with synchronous online tools we have been using asynchronous collaboration tools.

There were <u>three key benefits</u> of collaborative production of resources for the community members: 1. developing resources that can be used in activities in and outside schools; 2. providing students with activities that are more real with topical data selected by scientists including meaningful connection with the curriculum; and, 3.having students motivated with resources that enable them to become agents of sustainable development.

RRI IN AN INTERDISCIPLINARY APPROACH: DEVELOPING SECONDARY SCHOOL STUDENTS' MULTI-LITERACIES

Gabriele Polato Sachinski[1], Dr Patrícia Lupion Torres[2], Dr Raquel Pasternak Glitz Kowalski[3], Mrs Danielle Cristine Boaron Grunewalder[4]

[1, 2, 3, 4] PUCPR, Brazil.

ABSTRACT

In recent years, society has undergone transformations marked by scientific and technological development, which has brought new educational demands, such as finding new alternatives for a praxis that aims at the construction of knowledge aimed at training students as active subjects of society. The Functional Illiteracy Indicator, applied by the Paulo Montenegro Institute and Education Action in 2018, showed that 29% of Brazilian who participated in the study can be considered functionally illiterate, i.e., they do not demonstrate the ability to understand and apply written information and reflect on it. Okada and Sherborne (2018), Torres, Kowalski and Santos (2018), Okada (2015), Kowalski (2018) and Shimazaki, Torres and Kowalski (2018) were used as theoretical port, allying it with the theory of Multi-literacies, taking Rojo and Almeida (2012) as reference. Integration between the RRI approach, seeking an education for science along with the CONNECT Project, with the Multi-literacies theory, for an interdisciplinary performance between the areas of Natural Science and Portuguese Language. The purpose is to develop strategies that allow working with current issues in the field of scientific discoveries and innovations (Covid-19) in an analytical, critical, reflective and engaged way in Portuguese Language and Natural Sciences classes, through the development and application of a didactic sequence based on RRI skills. How can the use of RRI strategies and skills contribute to students' Multi-literacies, especially to their Scientific Literacy, helping in the formation of students-citizens who are more critical and able to reflect and act upon the society around them? The methodology used consists of a case study research (YIN, 2001), with the application of an interdisciplinary didactic sequence and qualitative analysis of the collected data. Two teachers, one from Nature Science and other from Portuguese Language, and two classes of 2nd year of secondary school in a private school in the city of Curitiba in Brazil, with about 30 students each. The results obtained suggest that the RRI approach, by providing interactive and collaborative learning, contributes to the students' Multi-literacies, especially for Scientific Literacy, making it possible to perceive a greater criticality in the moment of textual production, since, by stimulating the analysis of the effects of scientific and technological innovations in society, allows for an increase in the student's repertoire, and scientific knowledge is now applied to the social problem that serves as the basis for the theme of the proposed final activity.

Keywords: RRI. Multi-literacies, Portuguese Language, Natural Sciences.

DAY TWO SESSION 2A: SOCIAL SCIENCES [08.45-10.30]

PARADIGM SHIFT TO EMBRACE JUSTICE FOR WOMEN: A NEED

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ABSTRACT

In a culture, everybody has the opportunity to live his or her ideal lifestyle without discrimination. It is called fairness, until a state is achieved in which all persons are considered equal regardless of their caste, sex, colour, profession, or position. The most common type of prejudice is gender bias. Women want a dream; they govern to participate and flourish fairly by good governance. Female provides financial stability of steady investment and business empowerment; females look to those who have a greater impact on the development of long-term peace as well as resilience, and they all prosper fairly through prevention. Gender equality is a constitutional right for stability, security, and economic growth. Women are subjected to patriarchal legislation, societal norms, and thus are marginalized in the current elite. A cultural shift is required to bring about the reforms necessary to end women's inequality and injustice.

Approach: This paper deals with the status of women, their work arrangement, policies, strategies for their participation, sexual harassment, domestic violence, women trafficking, child marriage, acid attacks, etc.

Need: The need is for radical positive action to readdress the inequalities in women's lives and build a just and resilient world. There is also a need to spread awareness and empower women to fight for their rights.

Methodology: Secondary data is used to highlight the actual position, women's misery, and gender inequality in numbers. Various academic papers and related articles are compiled to throw some light on the status of women.

Conclusion: Women's participation, gender wage disparities, and educational attainment remain challenges. Women have historically been looked at with scorn for decades, with numerous strictures inflicted on them restricting their standing to the whims of men. They've been restricted to the hearth and the house. However, society's perspective has shifted, and a general mindset is being formed to strive for the emancipation and advancement of women so that they can also contribute to the enhancement and wellbeing of society.

Keywords: Justice, Women, Growth, Equality, Gender.

CHANGING CULTURAL DIMENSIONS OF INDIAN DIASPORA: A STUDY ON HOFSTEDE MODEL

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ABSTRACT

The culture of a group of people or country refers to the experience, knowledge, beliefs, values, attitudes, and possessions of material objects acquired through generations, communicated, and transmitted from one generation to another. The individual's behaviour pattern is guided by the cultural belief of the group he or she belongs to and the learning through experience, perpetuated in a society through various institutions. India is a diverse country with various religions, cultures, dialects, beliefs reflected through their diverse behaviour. These beliefs and behaviours of the individuals are reflected in the organizations they are associated with and play a crucial role in determining the organizational culture and work environment.

The Dutch Psychologist Hofstede studied people of different origins and cultures to determine their behaviour patterns in the organizations. As people's culture and beliefs are changing with the influence of various external factors and their exposure to international dimensions, it becomes necessary to study the changes experienced by the Indian society, which moulds the future of the organizations. In this paper, an attempt has been made to study the change in cultural dimensions of people residing in different geographical locations of the country with different educational and experiential backgrounds, exhibiting diverse behaviour through different social learning. The analysis of the cultural evolution will assist the organizational change practitioners to introduce change and development in their organizations successfully according to the requirement of the society. A questionnaire method has been adopted for collecting the responses from different regions of the country. The Reliability Analysis has been done to check the reliability of the scale employed in the study. Further, Descriptive Statistics showed interesting results.

Keywords*:* Culture, Organizational Development, Organizational Culture, Hofstede Model.

COVID-19 UPSHOTS ON STUDENTS' HEALTH, EDUCATIONAL AND SOCIAL LIFE: AN EMPIRICAL STUDY

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ABSTRACT

Due to the Covid-19 virus, almost all the countries of the world have fallen unawares into the trap of the reality of disruptions and instability, requiring painful adjustments to the new reality. Bangladesh is no exception, but it has tried above par to confront and handle the acuteness and effects of the pandemic on the public health, economy, and society. The struggle is still ongoing and so, it is essential to understand the nature of the influences of the virus to chalk out proper preventive and recovery measures in order to handle it effectively and professionally. The intention of this research is to find out the influences of covid-19 on students' health, educational and social life in the perspective of Bangladesh. The research work has employed a descriptive survey with a structured survey questionnaire and interactive interview for collecting the possible data. Some important statistical tools like chi-square test, factor analysis and regression analysis have been deployed for analysing the data. Covid -19 virus has affected the stoppage of the consistent academic core curriculum of about 40 million students through the state from 17 march, 2020 to date. The government and concerned authorities have by far taken some initiatives for students e.g., out-school online learning and using TV media to deliver education during the pandemic but these do not meet the desired levels of satisfaction. The study has yielded that school closure has brought about disruptions to education, hampered regular routine learning, changed lifestyle, increased students' violence, invigorated social media addiction, created unemployment and increased poverty levels.

Keywords: COVID-19, Student, Social Life, Online Education, Bangladesh.

GENDER EQUALITY FOR SUSTAINABLE DEVELOPMENT GOALS

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ABSTRACT

Gender equality, Women's empowerment and the realization of women's rights in achieving sustainable development has been increasingly recognized in recent decades and intrinsically linked to sustainable development goals and the 2030 agenda. On 1st January 2016, the world officially began implementation of the sustainable development plan of action based on 17 sustainable development goals to address urgent global challenges for the next 15 years. Achieve gender equality and empower all women and girls is one of 17 global goals. It has been identified as a key component and placed at the care of sustainable development goal number 5. But why is this goal regarded as indispensible to achieving sustainable development. Because approximately 1.4 billion women and girls are still victims of discrimination, violence, harmful practices and sexism. Violence against women is a major barrier to the fulfillment of human rights and a direct challenge to women's inclusion and participation in sustainable development and sustaining peace. Women still don't enjoy the same conditions in the workplace as men. Despite massive progress, women's rights remain a critical issue throughout the world. Women are confronted with a systematic denial of rights where legal discrimination leaves them inferior to their male counterparts. Consequently, women globally lack a full realization of their fundamental human rights. Gender inequality still existing in the world today. This study is mainly focused to discuss about how empowering women and promoting gender equality is crucial to accelerating sustainable development. In turn, sustainable development goal 5 also is used as a platform to help successfully achieve the rest of the 16 goals. In this study the researcher uses a descriptive qualitative approach.

Keywords: Gender, Gender Equality, Sustainability and Sustainable Development Goals.

THE DAWN OF WAKEFULNESS TO ENDORSE SUSTAINABLE DEVELOPMENT

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ABSTRACT

Sustainable development is not anonymous in contemporary times. Debates, discussions extended the floors concrete summation of facts for everyday utility could not surface substantially. Years passed, hope lying dull and dry. Multiple questions triggered to understand the value of sustainable development in life. When we say life it is not about fulfilling endless desires but thinking for the future in terms of the sustenance of humanity. History experienced upheavals and now in the 21st century how much are we able to promote and impart the necessary knowledge and skills for future generations? The term sustainable development is not a fortnight work, a continuous yearning to learn and experience the undercurrents of a sustainable lifestyle and enlighten the dawn of wakefulness for the self, the society and the nation. So how education could create a conscious realization about sustainable lifestyle in the minds of humanity? History trembled instances of calamities and casualties due to lack of sustainable energy. The focal points of learning towards sustainable energy were activated due to the following impact on humanity across the globe.

1. Global warming
2. The rise in seawater level
3. Reduction in animal live
4. Shortage of fossil-based fuel for automobile and industries
5. Pollution
6. Carbon emission
7. Impact on Human health.

Apart from the above discussion, the only solution available for these challenges is sustainable energy to a great extent. It can be possible to reduce and eliminate carbon emission through fossil fuel and the indirect impact on human health due to global warming could be reduced. We need to take charge of these new challenges collaboratively across the globe ensuring sustainable life for everyone. The change of mind-set, attitude, and behaviour is the need of the hour at all levels. The purpose observed the challenges threatening people with a possible solution. The methodology selected was phenomenology qualitative research to understand ways how sustainable energy could be procured to reserve the forthcoming years of existence. The findings identified and interpreted the areas that demand progress not promises and that could change things towards advancement of civilization.

Keywords: Sustainable Development, Sustainable Energy, Education, Challenges, Solutions.

DISABILITY AND DISCONTENTMENT: A STUDY OF SOCIAL EXCLUSION IN INDIA

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ABSTRACT

This Paper is broadly going to focus on the issues, related to disability and discontentment and social exclusion of India in general. In particular, to highlighted about the Odisha disability's deprivation and related to their social exclusion. How the disable person's live status is dealt by the government policies and plans? Which is clearly reflecting in the field of education, health and employment etc. It evidently reflects that how they have excluded from every important position of the state inclusive agenda. Unfortunately, persons with disabilities are routinely subjected to all forms of discrimination, denial, and deprivation of rights with the result that they are often marginalized and excluded and are made to live in a state of relative invisibility, disempowerment and disarticulation. The world is home to over 600 million people with disabilities. Over two-thirds of them live in developing countries. In this context it can be argued that disability is both a cause and consequence of poverty.

In such view point, this paper is going to argue that seven decades have already passed so far. Now the time has come to ask a very pertinent question to ourselves: have we really been able to achieve such values? And have we been able to give every citizen a share in the system? These are certain questions which I will be addressed in my paper in terms of inclusive policies and welfare measures initiated by our state for the most neglected and marginalized sections of the Indian society i.e. people with various disabilities.

Also, this paper will highlight a broad viewpoint of Amartya Sen in his work "Development as Freedom", argued that, development or wellbeing has to be majored in terms of facilities and services that are available for the fulfilment of the basic needs of human beings in terms of food, shelter, clothing, education and health and also freedom from poverty, disease, illiteracy, ignorance, unemployment and malnutrition. Development has to be understood as freedom from all kinds of exploitation and awareness about one's social and economic position.

Keywords: Discrimination, Discontent and Exclusion.

A STUDY ON PROBLEMS FACED BY WOMEN ENTREPRENEURS IN ORGANIZED AND UNORGANSIED SECTOR IN INDIA WITH SPECIAL REFERENCE TO UDUPI DISTRICT

Dr Mallika S, Assistant Professor, MGM College Udupi, Karnataka, India.

ABSTRACT

Entrepreneurship is embedded in the society since ages. Entrepreneurs are people who remain in pursuit of identifying new business possibilities and exploit these possibilities through new ventures, for economic gain. However, during the past six decades, the role of entrepreneurship in the economic development has changed dramatically. Post World War II, Robert Solow was awarded the Nobel Prize in 1956 for identifying physical capital and unskilled labor as two major factors for economic development. Solow's factors of economic growth fit well with large-scale production and represent the state of the economy, post the war. Several pieces of evidence also support the same by referring to an increasing presence of large enterprises in the economy during the period, which spreads over to many countries. This study throws a light on what are the problems faced by women entrepreneurs in organized and unorganized sector. The survey is made with 504 women entrepreneurs from Udupi district from both organized and unorganized sector. The conclusion is drawn on the basis of analysis

Keywords: Women Entrepreneurs, Constraints, Organized and Unorganized.

DAY TWO SESSION 2B: SOCIAL SCIENCES [08.45-10.30]

REFLECTIONS OF YOUTH ON USAGE OF SOCIAL MEDIA

Ms Meera Swami, University of Mumbai, India.

ABSTRACT

The world has turned into a global village since everyone is connected through social media. Social media has been embraced with high dynamism especially among youth across the globe. Based on review of studies regarding social media, it was observed that social media is greatly impacting the lives of youth. There is a dearth of studies focusing on social media use by youth in India; therefore, a necessity was felt to carry out this study on the reflections of youth on usage of social media in the Indian scenario. Main objectives of this qualitative study were to understand the outlook of youth regarding social media; the ways of accessing social media; the extent and the purposes of social media usage among youth; and the problems encountered related to social media usage. The sample for the pilot study comprised of 8 undergraduates and postgraduates in the age group of 18-25 years, from streams of science and technology, commerce and management, humanities and interdisciplinary studies from South Mumbai. For the purpose of data collection, in-depth interviews were conducted for which the researcher used open-ended, unstructured interview protocol and a personal data sheet. The data analysis technique involved arranging the data into codes, categories and broad themes. The data interpretation was carried out according to the final themes that emerged subsequently. The themes were as follows: (1) Social Media: A multidimensional digital ecosystem, (2) Repercussions of excessive social media usage, (3) Threats of social media usage, (4) Remedial measures for building up a social media friendly society. The study revealed that maximum number of youth today access social media. The youth uses this tool for learning, sharing, interacting and building relationships, for awareness, activism. The youth perceives social media as an integral part of their lives and has a great understanding of pros and cons of the social media usage. The threats of excessive social media usage cannot be neglected and an effort can be always be made to minimize them. Hence, social media is akin to a double-edged sword. This study will fill lacuna in the existing literature, create awareness for responsible usage of social media and will guide further research along with government and other stakeholders.

Keywords: Reflection, Social Media, Youth, Social Networking Sites.

MANAGING FACTORS INFLUENCING THE CONSTRUCTION OF ROAD OVER BRIDGES; A CRITICAL ANALYSIS.

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[2]Associate Professor and Head, Department of Commerce, Raiganj University, India.

ABSTRACT

Infrastructural development is an essential criterion for the overall development of any nation which includes: Roads, Over Bridges, and Flyovers etc. As population ratio of India is much higher than any other third world country, the policy for development nature should be more effective. The periodic labour force survey (PLFC) of the national sample survey office showed that the worker population ratio in India stood at 46.8% in the 2017-18 fiscal year. The unemployment rate in the year of 2019 was 5.36%. But in the pandemic situation, it has increased up to 6.8% (updated CMIE unemployment rate 2020). It has been seen that, due to various factors, majority of infrastructure projects are affected by time delay and it leads to cost overruns, moreover these overruns vary from a few months to as high as five or more years, placing the project viability at risk. The road over bridge (ROB) can be defined as a grade separated bridge structure with gradient approaches on both sides. People's lives are getting faster. People become engaging their life with various work places, developing life style and their expectations for development towards nation is growing very fast. 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 leads to loss at man hour, fuel, consequent loss of GDP, increasing sound pollution and finally damnification of a fast growing economy. The Industrial sector is second largest sector of India (Source: statistic times.com) and contribution has accounted for 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. This study not only examine the cost overrun and delay factors but also, to contribute something to the society for the development of employment level. 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 like time delay, cost, quality and design. Therefore, our study will gradually focus on ways to build up a linkage between the economy and development of the nation through a structured framework keeping emphasis on the quality improvement of ID particularly by constructing over bridges or smooth running as well as easy movement.

Keywords: Infrastructural Development, Road Over Bridge, Cost Overrun, Time Delay, GDP.

FRIENDZONE: A REMEDIAL SOCIAL MEDIA PLATFORM FOR SOCIAL ANXIETY DISORDER

Mrs Praseetha M S, Assistant Professor, Department of Management Studies, St Teresa's College (Autonomous), India.

ABSTRACT

The present study explores the concept of Blockchain Technology with special reference to its implications in the perspectives of anxiousness and fearfulness in common people due to usage of their data through social media. Many businesses run successfully by using the data about a large set of unknown customers. We people are in the dark about data and scared of being spammed or scammed. With the immense usage of social media platforms, we unknowingly share our data through simple search button clicks, creating accounts on e-commerce websites, following others' business profiles, etc. The paper discusses the enormous possibilities of using social media platforms that ensure data privacy and security through blockchain social media platforms. Introduction of a blockchain social media application "FRIENDZONE" that does most of the functions or tasks that we have usually done on social media platforms like Facebook, Instagram, etc.

Keywords. Social Anxiety Disorder, Blockchain Technology.

CYBER BULLYING AND COPING MACHANISM AMONG ADOLSCENTS

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ABSTRACT

Modern Era has a strong focus on the use of technology, realizing that it is one of the key elements of providing learning resources and technology has made possible the easy access of everything especially with the help of internet. The online environment dominates a significant part of the lives of our younger generation today and thus become a frequent place for peer abuse and bullying. This cyber bullying can be neglectful or overindulgent or dictatorial or based on reasoning. The culmination of the effects of cyber bullying may be seen in the adolescent who is on the threshold of independence. Coping mechanism are learned behavioural patterns used to cope. In order to cope effectively with stressful event, one requires several discrete emotions – based developmental tasks such as recognizing danger and frustration tolerance. How well adolescents study, more often not, depends on the home environment and the way they are supported by their parents. This investigation therefore has attempted to find out whether the coping mechanism influences cyber bullying. The sample consisted of 160 senior secondary school students of district Hoshiarpur Punjab (India). The tools used were self-prepared questionnaire on awareness about cyber bullying and coping mechanism. The analysis of data was mainly carried out through t-test and correlations. The results indicate that there is a strong relationship between coping mechanism and cyber bullying. To inculcate coping mechanism, parents need to be realistic about their expectations from their children as well as their own principles and actions in their daily lives. It is imperative that you ensure that your child engages more in offline activities than an addiction to computers, online gaming, and smart phones.

Keywords: Coping Mechanism, Cyber Bullying, Adolescents.

IMPACT OF COVID-19 ON SUSTAINABLE DEVELOPMENT GOALS

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ABSTRACT

Normal lives during a pandemic come to a standstill and the impact of such an outbreak is felt even in the remotest of area of interest to various stakeholders. From disturbance in trade and economy to fulfilling basic human needs to unprecedented disruptions in imparting education to students. The impact and magnitude of such an outbreak can only be felt in the number of losses occurred in terms of humans lives lost and trade and economy slowdowns. While one prepares for the worst outcomes to come, one never expects the worst to come until it already is at the door and knocks it. One such pandemic the world faces right now is COVID-19 which has left the world helpless. The historic spread of this virus has resulted in drastic slowdown of lives of people, businesses are shut and economies are experiencing turbulence. The global recession caused by the COVID-19 response is alarming and has made researchers question whether the sustainable development goals (SDGs) are fit for the post-pandemic age. Some have even claimed that certain SDG targets might be counter-productive because they enhance growth rather than development. We argue that the COVID-19 crisis demonstrates the need to integrate the SDGs at the national level as well as in individual health-care decisions. We also call for a focus on sustainable health decisions, meaning decisions that are made in the present do not compromise future needs, whether local or global. Making such decisions requires adapting to the current context, anticipating future impact, and using a rights-based framework. Every individual needs to make health decisions that meet personal needs as well as the needs of the broader community, such as using facemask, sanitize hands frequently, maintaining social distancing and home-quarantine when necessary. Such decisions can help to curb transmission and reduce illness, deaths and economic impacts.

Getting "back to normal" is simply not feasible—because "normal" got us here. The crisis has shown us how deeply connected we are to others and to the planet. COVID-19 is forcing us to revisit our values and design a new area of development that truly balances economic, social and environmental progress as envisioned by the 2030 Agenda and the SDGs.

Keywords: COVID-19, SDGs, Global Recession, Sustainable Health Decisions, Trade and Economy.

A STUDY ON "IMPACT OF SOCIAL ISOLATION ON ELDERLY AND SOCIAL INCLUSION OF ELDERLY THROUGH SOCIAL WORK INTERVENTION FOR SUSTAINABLE DEVELOPMENT" WITH SPECIAL REFERENCE TO OMASHRAM OLDAGE HOME AT BANGALORE

Mrs Anitha Sannakamaiah, Faculty, Department of Social Work – MSW, Ramanagara PG Centre, Bangalore University, India.

ABSTRACT

Introduction

Aging is a normal process of each human being in his/her lifespan development. In each phase of human life, one or the other way we were connected with family, friends, colleagues more with the society through social relationships. Elderly life will become more wretched as they were lacking family support, retirement, diminishing joint families, death of their friends/colleagues, prone to life threatening illnesses, feeling isolated and neglected by relatives, friends, society. Due to all these issues, they feel isolated, try to make suicidal attempts, eagerly waiting for their children and grandchildren will visit them to provide emotional support and they can go back to their home with their children. In current scenario, it is highly difficult task to change the mindset of new generation and intergenerational bonding is required to change the society. So, it is an effort of the researcher to build social relationship in the society and with the elderly through social work strategies.

Objectives of the study:

To understand about the social isolation and its impact on their life

To know about the social work intervention for social inclusion of elderly for sustainable development

Methodology: The Present study is based on descriptive research design. The study impounds to elderly who is 60 years and above. This paper is to comprehend the social work perspectives to address the significance of family and societal support for elderly social inclusion.

Results: To educate new generation to understand the family values and provide emotional support to lead contemptful life through intergenerational bonding for sustainable development in geriatric social work.

Conclusion: Ever since elderly were lacking family support, emotionless life, diminishing joint families, acquisitive mindset, today's world is losing the significance of elderly. Social workers should formulate social work strategies to strengthen the elderly to lead contemptful life.

Keywords: Elderly, Social Isolation, Family Support, Social inclusion, Sustainable Development.

SCHOOL AS THE MESSIAH OF SUSTAINABLE DEVELOPMENT: A MULTIPLE CASE STUDY OF THREE LEADING RURAL SCHOOLS OF WEST BENGAL

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[2]Assistant Professor of Bijoy Krishna Girls' College, Howrah, West Bengal, India.

ABSTRACT

Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people have peace and prosperity. Education, the guiding force to create worthy, dignified, responsible, productive, philanthropist citizens of the world, can only ensure peace and prosperity to all people. That is why Education is considered to be the most influential medium to achieve the goals of Sustainable Development. As it is quite easier to develop among the young learners the attitude and values which are instrumental to achieve sustainable development goals, the present study is an attempt to explore those school where initiatives & innovative strategies have been taken for achieving the goals of sustainable development like- No poverty, zero hunger, good health and well-being, quality education, clean water and sanitation, industry, innovation and infrastructure, reduced inequality, climate action, peace & justice, etc. for which the schools are working in partnership with the communities. The study also aims to analyse the impact of the activities to change the attitude and values of the learners to accelerate the journey to achieve the goals of sustainable development. Case study research design has been followed for the present study and 3 Higher Secondary schools located in remote rural areas in West Bengal, India which have been working excellently to achieve the goals of sustainable development are selected as sample for this study. In order to collect in-depth data from the participants, semi-structured interview schedule with the self-made questionnaire focusing on selected Sustainable Development Goals, has been administered. The qualitative data has been analysed by using narrative analysis technique. The study has found out that the initiatives not only enriched the quality of education but also changed the attitude and values of the learners that are instrumental to achieve the goals of sustainable development because they are the future citizens of the country and of the world as well upon whom the well-being of the planet depends on. It also has an indirect impact on the families and communities on a large scale. Thus, the study has explored how schools can work as a messiah to achieve the goals of sustainable development.

DAY TWO SESSION 2C: SCIENCE [08.45-10.15]

COMPARATIVE STUDY ON PHYSICOCHEMICAL STATUS AND DIVERSITY OF MACROPHYTES AND PHYTOPLANKTONS OF MANASBAL LAKE, KASHMIR, INDIA

Mr Jahangeer Mohd Reshi[1], Dr. Jaya Sharma[2], Dr. Ishtiyaq Ahmed Najar[3]

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ABSTRACT

Present investigation has made an attempt to assess the seasonal variation of phytoplankton, macrophyte communities and some physico-chemical properties such as water temperature, pH, electrical conductivity, dissolved oxygen, transparency and biochemical oxygen demand in six selected sites in the Manasbal lake of Kashmir Himalaya. During the study a total of 101 species of phytoplankton belonging to different taxonomic groups were identified out of which 49 species of phytoplankton belonged to Bacillariophyceae, 39 to Chlorophyceae, 07 species to Cyanophyceae, 03 species to Euglenophyceae, 02 species to Dinophyceae and 01species of Chrysophyceae. The species occurrence of the different study stations reflects relationship between season and physico-chemical properties of the water. The phytoplankton density was high during summer season and low during winter season with Bacillariophyceae formed the dominant group. From the present study, it can be concluded that the higher values of total Phosphorus (350 μg/l), Alkalinity (242 mg/l), Chloride (30 mg/l) Electric Conductivity (563μS/cm), Total suspended solids (433.0 mg/l), BOD (57mg/l), COD (170 mg/l), NO_3-N (408μg/l), NH_4-N (121μg/l) and lower values of dissolved oxygen (2 mg/l) and transparency (0.2m) clearly depicted higher trophic status of Manasbal Lake. It can also be concluded that climatic factors, untreated sewage and solid garbage from surrounding population, fertilizers containing Nitrates and Phosphates and slit load were the main causes for degradation of water quality of the studied lake. For lake water management, powerful control and management mechanisms such as community perceptions and priorities are also required. In addition to frequent monitoring of Manasbal Lake, the quality of water for human and animal use and for aquatic life needs to be evaluated. In order to save it from further contamination and deterioration, urgent remedial steps should also be taken to preserve and sustainably manage this monomictic lake.

Keywords: Manasbal Lake, Phytoplankton, Physico-chemical, Eutrophication.

SPECIAL ISSUE OF CHEMISTRY TEACHER INTERNATIONAL ON GREEN CHEMISTRY AND SUSTAINABLE DEVELOPMENT

Prof Jan Apotheker, Editor in Chief, University of Groningen, the Netherlands.

ABSTRACT

Chemistry Teacher International(CTI) is an open access journal published by DeGruyter in close cooperation with the Committee on Chemistry education of IUPAC and the Division on Chemistry education of EuChemS. The first issue of the journal was published in 2019. The first issue of volume 3, containing 15 articles was published recently. All issues are available at the following URL: https://www.degruyter.com/journal/key/CTI/html .

The journal was set up to bridge the gap between educational research and educational practice in the classroom. It accepts articles describing good practices that teachers wish to share with the teaching community around the world. All levels of education are accepted in the journal.

CTI is an open access journal. This choice was made deliberately in order to make articles available in all countries. In order for the journal to be economically feasible an Article Processing Charge has been set, starting in volume 3. The Article Processing Charge has been set as low as possible. Reductions of 50% and waivers of 100% for authors from emerging economies are in place. Members from IUPAC and EuChemS also receive a reduction on the APC.

CTI is planning special issue on Green Chemistry and Sustainable Development for the September issue of 2021. In this issue examples of choices made in industry for a greener process or the application of Sustainable Development principles are described in such a way that they can be used in education as examples. In many chemistry curricula Green Chemistry has become a feature. The curriculum in the Netherlands is an example(Apotheker, 2018) But the concrete examples of green processes is limited. In this issue sofar 8 abstracts have been received, which will be discussed in more detail in the paper.

Keywords: Chemistry Education, Green Chemistry, Sustainable Development, Publications, Industrial Chemistry, Pharmaceutical Chemistry.

SYNTHESIS OF GRAFT COPOLYMER OF METHYL METHACRYLATE MONOMER ONTO NATURAL FIBRE: A REVIEW

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ABSTRACT

Graft copolymerization is one of the most important methods for modifying different cellulosic fibres through creation of branches of synthetic polymers which impart certain desirable properties to the backbone of the desired materials without changing their basic properties. The grafted copolymers incorporated new properties from their parent polymers by grafting polymer backbones. Cellulose graft copolymers have a variety of uses depending on the composition of polymers grafted over the cellulose. The new properties that cellulose gains from different monomers grafted onto it includes low absorption of moisture, improved elasticity, hydrophobic character, ion-exchange, dye adsorption capabilities, heat resistance, thermosensitivity, pH sensitivity, antibacterial effect etc. We have focused on finding materials of similar intensity. The aim of this review is to look at the best materials created by combining natural fibres with different monomers for use in a variety of applications.

SYNTHESIS OF GRAFT COPOLYMER OF ETHYL METHACRYLATE MONOMER ONTO NATURE FIBRE: A REVIEW

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ABSTRACT

Graft copolymerization is one of the most important strategies for editing unique cellulosic fibres with artificial polymers which impart certain applicable residences to the spine of the desired materials without changing their fundamental properties. The grafted copolymers bears new residences from their parent polymers by grafting polymer backbones. Particularly, cellulose graft copolymers have a range of uses depending on the composition of polymers grafted over the cellulose. Graft copolymerization will enhance these characters like, Absorption of water, will improved elasticity, Hydrophilic/Hydrophobic character, Ion-exchange, Dye adsorption capabilities, Heat Resistance, Thermosensitivity, pH sensitivity, Antibacterial effect etc. Recently, further studies on herbal fibres have been conducted. These composite buildings have a large variety of uses. Our lookup is centered on finding substances of comparable intensity. The intention of this evaluation is to seem at the satisfactory materials created via combining natural fibres with exclusive monomers for use in a range of applications. In the present paper, grafting of ethyl methacrylate (EMA) onto lotus fibre was to be carried-out underneath distinctive reaction situation such as in air (IA), under strain (UP) and underneath the impact of micro-wave radiations (MWR).

Keywords: Graft Copolymerization, Cellulose, Copolymer, Monomers, Elasticity, Ethyl Methacrylate, Thermosensitivity, Antibacterial.

GREEN SYNTHESIS OF NANOPARTICLES BY USING GREEN SOLVENT: A REVIEW.

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ABSTRACT

Nanoparticles are extremely small particles that vary in size from 1 to 100 nanometers. Nanotechnology is the term for the method of using nanoparticles. Nanotechnology will now create a variety of new materials and devices for a variety of uses, including nanomedicine, nanoelectronics, biomaterials, energy production, and consumer goods. Nanotechnology is now a hot subject in medicine. Better imaging and diagnostic equipment is needed in both the medical and technical fields. Nanoparticles have a wide variety of applications due to their specific size-dependent properties. Chemical and green synthesis is the two methods for synthesis of nanoparticles. Nowadays Green synthesis is much superior to chemical synthesis because green synthesis concepts are consistent with bio-organism-based synthesis, environmental friendly, non-toxic, and healthy reagents are used in the "green synthesis" of nanoparticles. Nanoparticles made with biological or green technology have a wide range of properties, including greater stability and appropriate dimensions. So this paper includes the review of green synthesis of manganese nanoparticle by using different methods and the green solution.

Keywords: Nanotechnology, Nanoparticles, Chemical Synthesis, Green Synthesis, Biocompatibility.

SYNTHESIS OF BIOPLASTIC FROM CHITOSAN AND POTATO STARCH BY USING POLYETHYLENE GLYCOL (PEG) AS CROSSLINKER AND CASTOR OIL AS PLASTICIZER: A REVIEW.

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ABSTRACT

Chitosan is a polycationic biopolymer with wide biological applications due to its unique chemical nature, positive charge, presence of reactive hydroxyl, amino group. Chitosan has excellent physiochemical properties such as bio adhesive, biocompatible, and biodegradable and thus is considered as an environmentally friendly packaging material. However, inherent drawbacks including low mechanical properties and high sensitivity to humidity represent major limitations to its industrial applications, including food packaging. In the present study, the scientific literature of the last five years has been extensively reviewed addressing chitosan-based films for their potential application in the food packaging industry. This summarizes the various strategies adopted to overcome inherent drawbacks and improve the properties of chitosan-based films, with special regards for blending with natural and synthetic biopolymers.

DAY TWO SESSION 2D: HEALTH AND PURE SCIENCES [08.45-10.15]

AN EMPIRICAL STUDY OF THE RELATIONSHIP BETWEEN VACCINATION IN INDIA AND NIFTY PHARMA INDEX

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ABSTRACT

This paper will analyse the relationship between the second wave of COVID-19 pandemic and share prices of Nifty Pharma Index. For the analysis this paper will consider historical data of share prices of around past 6 months of this ongoing pandemic to determine whether the pandemic is influencing the share prices of Nifty Pharma Index, and if so then how. Detailed data will be collected on the share prices of the Nifty Pharma Index and its constituent companies during the period of second wave. The paper will analyse the collected data to study the variation of share prices of these companies due to the pandemic and lockdown i.e. during May 2021. Prediction of share prices of Nifty Pharma Index for the coming months i.e. June to September 2021 will also be made in the study, if the pandemic extends for that period. The objectives of this study are: (i) To determine the trend of Nifty Pharma Index during the second wave of the pandemic, (ii) To examine if the second wave influence Nifty Pharma Stock Price (iii)To find out the correlation between Nifty Pharma Stock Price and vaccinations done during this time and (iv)To predict the Nifty Pharma Stock Price for the coming months. on the analysis and findings of the study conclusion and suggestions will be made.

MOTIVATION AND WORK CONDITIONS OF HEALTHCARE WORKERS - A STUDY ON COVID-19 FIRST WAVE

Mrs Richa Sahay[1], Dr Anupama Verma[2]
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ABSTRACT

In the ongoing health crisis of COVID-19, the health care workers dedicated to serving the sick have become vital and the only resolution. The healthcare sector that deals with human lives currently needs pressing utilization of its resources to touch each person. That can be addressed with employee's motivation and improving their work conditions that are the significant markers of quality of any enterprise.

Therefore, this study is aimed to investigate the motivation and prevailing work conditions of the health care workers during the first wave (March to June 2020) of COVID-19. As a method, an online survey using Google forms was distributed to health care workers working in three different locations in India. (N=84) The questionnaire was designed to explore the demographics, motivation, and factors concerning the prevailing work conditions during the 1st wave of COVID-19. Descriptive statistics (mean and standard deviation) were applied that were analysed using PSPP Statistical Analysis Software.

This finding of the study foregrounds the necessity of adequate work conditions and safety for enhancing the motivational levels of the health care workers. That is indispensable for constructing a robust health care sector for the forthcoming times to be equipped for future occurrence of pandemics while remaining sustainable. Finding from this study can also provide a solution to the policymakers, administrators, planners, researchers, and NGO's looking towards better management of work conditions and health care workers' motivation to the continuing pandemic of COVID-19.

Keywords: Motivation, Work Conditions, Healthcare Workers, COVID-19.

SELECTION OF MOBILE APPS FOR CHILDREN WITH AUTISM SPECTRUM DISORDER DURING PANDEMIC

Ms Viviane Cristina Marques, Student, Universidade Estadual de Campinas, Brazil.

ABSTRACT

The impacts of the Covid-19 pandemic on educational processes have intensified the challenges experienced in the education of students with Autism Spectrum Disorder (ASD). ASD is defined as a neurobiological condition characterized by severe and invasive damage in the areas of interaction and social communication and by a restricted and stereotyped repertoire of activities and interests. During the period experienced as a result of the isolation imposed by the emergency situation, teachers and families had to adapt to new contexts. Thus, the use of digital resources was necessary to maintain students' activities. Therefore, this study aims to present a mapping and systematization of mobile applications for people with ASD. A survey was conducted on the platforms: Apple Store and Google Play. The descriptors used were: autism, autistic children, autism apps, autism games and autistic space. 81 applications were identified, and 53 were selected, of which 23 are open access (free) and 30 limited access (free and paid). From this analysis it was found that the applications are about: educational games, aimed at literacy and the development of reading and writing; applications aimed at developing social and emotional skills; applications for pairing, communication and intellectual development and for routine organization. Applications designed for routine development have an intuitive interface facilitating children's interaction. Its content is gamified to encourage the user to perform the tasks. Applications that have a job related to emotions are structured from narratives providing greater contact and communication between the user and the device and the content. Alternative communication applications have different options, providing choices that help the user to identify themselves. It was found that the categories with the most development of games and applications for children with ASD are aimed at the early stages of education, communication, routines, social skills and emotions. Applications for students with ASD are considered assistive technology resources and can be used in educational processes and for the development of different skills.

Keywords: Autism Spectrum Disorder (ASD), Mainstream Education, Pandemic, Mobile Applications.

DAY TWO SESSION 2E: MANAGEMENT, MATHEMATICS & LANGUAGES [09.30-10.30]

SUSTAINABILITY CONSCIOUSNESS A STUDY ON ATTITUDE OF UPCOMING BUSINESS LEADERS TOWARDS SUSTAINABILITY

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[2]Assistant Professor (Senior Grade), Prestige institute of Management and Research, India.

ABSTRACT

Purpose: With enhancement of uses of technology, remote working and advancements at workplaces, the concern of leaders has shifted from sustainable development to competition and technological achievements. Further, it is very important to have a conscious attitude towards various dimensions of sustainability (Social, Economic and Environment) in upcoming leaders to build a sustainable future for current and upcoming workforce.

Methodology: An empirical research was carried out, in which 152 students of MBA Course have participated of Chandigarh City. The data collection was done online using five point Likert Scale and items for construct in study were taken after through Literature review. The R 3.6. 2 was used for data analysis and hypothesis testing and graphical representation.

Findings: It was found that the test is appropriate to estimate the dimensions of sustainability consciousness of Upcoming Leaders. Specifically, we found that these students score moderate in all the three dimensions of sustainability attitude. Very minute difference has found in Social, Economic and Environment dimensions in terms of gender. This results highlighted the need of increasing sustainable awareness in young upcoming leaders.

Practical Implications: The results provide a clear view that with the changing time and getting into more technological world, it is very important to provide awareness of sustainability to the upcoming leaders. This awareness can be given through the university education. This will make young people to develop an attitude towards the sustainability and will make them work and think about different dimensions.

Social Implications: This study is an initial exploration of what young upcoming leaders may need to focus on in order to cultivate leadership with the capacity to address very complex social, economic, and environmental challenges.

Contribution to the conference: The research paper serves a humble contribution in the field of Sustainability and education, which considerably matches with the theme of conference.

Keywords: Upcoming Leader, Sustainability, Adult Development, Attitude, Sustainable Consciousness.

DIFFERENT TRIGONOMETRIC SPLINE CURVES AND THEIR APPLICATIONS

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ABSTRACT

In recent year's trigonometric splines have found many interesting applications in problems involving geometric modelling and it has been observed that many problems of surface modelling could be better handled by trigonometric splines specially those relating to data fitting on spherical object. All these possible applications have led to introduction of various types of trigonometric splines having different features suitable for CAGD applications. The objective of the study is to find spline function approximation techniques as a powerful tool in the field of Computer Aided Design and Computer Graphics. As a unified mathematic model with many desirable properties, spline functions can be applied very conveniently in modelling free form curves and surfaces. In the present study the main objective is to construct some spline curves and surfaces with a good range of shape parameter that provide local control, sufficient continuity and possess satisfying shape preserving properties. The scheme which be developed in the chapter should be very easy to implement, convenient and economical and the curves visually pleasant.

Keywords: Bézier Trigonometric Bases Functions, Bézier Trigonometric Curves and Surfaces, Trigonometric Polynomial, Shape Parameter.

THE TEACHING OF MATHEMATICS AS A HUMANIZED AND ENCULTURED PROCESS FOR SUSTAINABLE DEVELOPMENT

Prof Zingiswa M M Jojo, University of South Africa, South Africa.

ABSTRACT

Mathematics is not seen as an absolute corpus of well-founded knowledge anymore, but as a human activity, a social phenomenon, part of human culture, historically evolved and intelligible only in a social context. It is also important for teachers to explain why a mathematical concept is worth knowing and understanding together with how it relates to other concepts in both theory and practice. The paper reports from a mixed methods approach research project that analysed the teaching and learning environment that promotes mathematics as an encultured process for sustainable development. The main research question was: How can mathematics in the senior phase be taught as a subject that embraces culture for sustainable development? From a population of 126 senior phase mathematics teachers in the Bizana district, a sample frame of 60 teachers was used for the study, obtaining a stratified random sample of four teachers. Questionnaires were administered to the whole population, after which semi-structured interviews were conducted with four teachers based on their responses in the questionnaires. Results indicated that the use of mother tongue and visual representations in learning activities promote the learners' development of their own meaning-making processes. It was also found that the introduction of multiple meanings each mathematical concept taught enabled its connections to culture for sustainable development.

IMPACT OF HIGHER EDUCATION SYSTEM IN DEVELOPING ENTREPRENEURSHIP SKILLS

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ABSTRACT

Higher education institutions are required to demonstrate the ways in which their students respond to the social and economic needs of society. Higher education also triggers for entrepreneurship skills and employability skills. Study is to identify the contribution of higher education in postgraduate management to develop entrepreneurship skills. Besides academic knowledge which students acquire in their high education it is equally important to develop skills related to leadership, teamwork, resilience, communication which are essential for entrepreneurship.

Hence, a 'holistic' approach for exploring the entrepreneurial and innovative potential of the university as the basis for change and future development (Gibb, 2012) is a necessity. For this, a certain degree of autonomy is needed both at the level of individual staff as well as for the organisation itself. Regarding entrepreneurship, the literature shows the importance of the soft skills related to leadership, moral values and ethics, communication and also the ability to adapt to new work contexts are inevitable. (Bell 2009; Beckton 2009; McIntosh 2008; Eisen et al. 2005; Leroux and Lafleur 2006)

Purpose

Purpose is to study the impact of higher education on development of entrepreneurial skills. Various components of higher education such as teaching and learning methods, Use of advance technology, Industrial visit, Internships etc, Results and conclusion of study will provide suggestions to higher educational institute to improve curriculum or to make necessary modification.

Methodology

Type of research is primary. Questionnaire method will be used to collect data from around 100 respondents who are the students of Post Graduate programs.

Contribution

This study specifically deals with how entrepreneurship skills will help students develop higher education system. And also what the education system provide to stakeholders and approach towards them.

Keywords: Higher Education, Entrepreneurship Skills, Leadership, Management, Communication.

DAY TWO SESSION 2F: HIGHER EDUCATION – ONLINE LEARNING & FUN [08.45-10.45]

SHOULD 'MEANINGFUL' ONLINE LEARNING EXPERIENCES BE FUN FOR HIGHER EDUCATION STUDENTS IN INDONESIA?

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ABSTRACT

Indonesia is the 'most diverse multi-ethnic state in the world with very low enrolment rate in tertiary education (36%) comparing to primary education (93%) and secondary education (79%) according to UNESCO Institute for Statistics. There are 4 kinds of *tertiary* institutions in *Indonesia*, namely polytechnics, academies, institutes and universities.

A key issue highlighted by the Ministry of Education and Culture is to provide 'meaningful' online learning experiences for their H.E. students, which was aggravated by the pandemic. Eight million of tertiary students are experiencing distance education for the first time in Indonesia. Examining approaches to 'meaningful' online learning experiences became extremely relevant. 80% of institutions whose students have left campus and returned to their home locations are concerned about how to support students' retention and progress. To explore the needs and views of H.E. students, this work examines epistemic beliefs and relationships between fun and learning.

In addition, previous work in Indonesia suggests that international epistemological research needs to have a more differentiated view of learning models in order to better understand and inform how more meaningful pedagogies can be applied (Budiyanto et al, 2018) in all levels of education. This study in Indonesian tertiary education is supported by a recent research (Okada & Sheehy, 2020a) which has identified two key factors students' epistemological beliefs and their beliefs about fun in learning. These factors are relatively underexplored in distance education.

Through a mixed-method approach, this study examined questionnaire responses from 774 students from across Indonesia. Findings shows that five themes emerged which reflected relationships between students' epistemological beliefs and beliefs about study and enjoyment. A key issue that emerged from the findings is the lack of enjoyment with online study including a dissatisfaction with a content delivery approach to online teaching. These findings will be used to provide recommendations for tertiary education in Indonesia.

Keywords: OLAF, Indonesia, Online Learning and Fun, Epistemic Beliefs.

CREATIVE GAMIFICATION AND FUN: POSSIBILITIES OF AUTHORSHIP, AUTONOMY AND COLLABORATION.

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ABSTRACT

The word fun is usually associated with jokes and games, so when talking about fun online learning, it is expected that the elements of games are incorporated into pedagogical strategies such as gamification or even with the use of playful resources.

Carolei and Tori (2014) introduce fun as a dimension of gamification, but they emphasize that it is not the type of fun that distracts or alienates. Indeed, it contributes to immersion and participates in the agency once it proposes the experimentation of the diverse which, as a result, causes and tensions context and player's repertoire and invites him to a more authorial and creative posture.

This idea of fun presented in the creative gamification strategy meets Okada and Sheehy's (2020) perspective of fun in an interactionist and transforming logic considering individual dimensions (constructivist) with personal challenges to actions that involve collaboration and emancipation for social responsibility (interactionist partner).

How can creative gamification and fun promote collaborative and emancipatory actions/attitudes? Based on this questioning, this study innovation is to overcome the reactive, behavioural logic of gamification by promoting more authorship and creative proposals in which the fun is the tension to diversify perceptions and promote collaborative and emancipatory attitudes with social responsibility.

Creative gamification starts from the five principles of creative learning (Resnick 2017): to promote authorial postures, learning by playing, by projects, in pairs, with passion and with purpose.

In the online educational context of a creative gamification strategy, the focus shall fall on investigative, authorship and collaborative actions, in which the fun appears as much as a possibility to learn by playing with challenges that promote realizing the diverse tensioning creative and inclusive propositions, with emphasis on social transformation.

The participants in this investigation were Portuguese, Spanish and English higher education students, in total, six hundred and twenty-five (625) students were involved.

The proposed methodology is qualitative promoted by data analysis of a semi-structured and previously validated questionnaire.

The analysis sought to map the controversies between more behavioural actions and more emancipatory fun proposals that involved games and gamification experienced by these subjects in the online context.

The results highlighted as mapped tensions facilitate building elements for a prototype of a creative gamification framework, with a focus on creating scenarios, narratives and challenges, mobilizing the emancipatory and collaborative dimensions of fun

Keywords: Gamification, Creative Gamification, Fun, Collaboration, Autonomy.

HIGHER EDUCATION IN PANDEMIC TIMES: PERSONALIZATION, ENGAGEMENT, AUTONOMY AND NEW LEARNING STRATEGIES

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ABSTRACT

A massive, distant, transmissive and unattractive learning modality for students can cause a lack of autonomy, lack of interest and, as a consequence, non-engagement of students. The innovative perspective of this study focuses on examining which recommendations for the customization of teaching strategies through pedagogical resources, aiming to promote an engaging and engaging online education for sustainable and fruitful dynamics as ways of co-learning (Iyengar, R., 2020). Diversified strategies using digital technologies in online Higher Education expand the development of autonomy for individual, collective and emancipatory learning (Okada & Sheehy, 2020).

The most recent literature, some of them even developed during the COVID-19 pandemic, indicates that new approaches to learning are being grounded in diverse perspectives, according to needs and preferences for the process of adapting to the conditions and profiles of students (OECD, 2020; Aguaded, I., Jaramillo-Dent, D., & Ponce, 2021; Fullan, 2020).

What types of pedagogical resources can be adopted to provide fun learning, highlighted as "meaningful - engaging" in online higher education, considering the context of the pandemic?

This qualitative exploratory study collected data generated from an open online questionnaire implemented by the UAb-PT network aimed at students during a period of three months in higher education in Portuguese-speaking countries (Brazil, Portugal and Angola). To analyse data, the research adopted the technique called Collective Subject Discourse (CSD), which allows the grouping of testimonies and their respective synthesis (Lefevre, F. & Lefevre, A., 2005). In total, data from 625 responding students were analysed.

The results summarized in Table 1 were interpreted according to the framework of the "four levels of fun for online learning" Okada (2020).

OLAF Didactic Strategies (Okada, 2020)	Pedagogical Resources	Technology
Constructivist	Research Brainstorming	Concept maps webquest mentimeter Quizzes
Socio-constructivist	Discussion Collective Writing	Forum Chat Social Apps
Optimal flow	Challenge Inverted class	Games Padlet Comics
Sociocultural	Simulated Jury Project	Storytelling Video Wiki

Table1: elaborated by the authors (2021)

Fun online learning should include the use of technologies, collaborative, individual, networked for co-learning with different activities and exercises according to the needs and preferences of using virtuality. This type of approach personalizes learning according to the student's profile, allows more engaging and fun pedagogical approaches from the point of view of the students in higher education.

Keywords: Higher Education, Personalization, Pedagogical Resources, Engagement, Autonomy.

THE CCS APPROACH AND FUN LEARNING: AN ANALYSIS OF RESEARCH DATA FOR INCLUSION

Dr Klaus Schlünzen Junior[1], Dr Elisa Tomoe Moriya Schlünzen[2], Cícera Aparecida Lima Malheiro[3], Prof Leandro Key Higuchi Yanaze[4], Ms Carmem Silvia Lima Fluminhan[5], Daniela Jordão Garcia Perez[6]

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ABSTRACT

The social distancing measures imposed by the COVID-19 pandemic highlights the importance of considering accessibility in strategies, resources and pedagogical actions in learning environments combined with the Constructionist, Contextualized and Meaningful (CCS) approach in the perspective of the principles of learning with fun. The CCS approach has been successfully consolidated in the past 20 years as it values diversity and centres the students´ skills and potential to promote meaningful and contextualized learning. This study is innovative and aligned with the Sustainable Development Goal 4 (SDG4), which scope is "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all", since it reinforces the importance of considering accessibility in strategies, resources and pedagogical actions in learning environments consistent with the CCS approach and the principles of learning with fun. In this context, this study sets to analyse the perception of educators concerning the relationship they establish between diversity, inclusion and fun learning with reference to the assumptions of the CCS approach. As part of the Online Learning and Fun (OLAF) project, a questionnaire was applied to 897 students, teachers, lecturers, and other stakeholders in 7 countries between November and December 2020. For the purpose of this study, selected data for analysis correspond to the teachers and lecturers. The results demonstrate that among teachers and lecturers, 96% agree that students and teachers/lecturers should participate together in learning in diversity. These teachers and lecturers reveal they use diversified pedagogical strategies to promote open, more meaningful and engaging learning. Accordingly, only 5% indicate that it is necessary to separate the students in a homogeneous way and by intelligence. The study proposes an extended discussion of the challenges facing the complexity of Education during and in the post-pandemic global setting.

Keywords: Inclusive Education. Constructionist, Contextualized and Meaningful Approach, Online Learning and Fun, During & Post-COVID-19.

LEARNING EXPERIENCE DESIGN AND ACTIVE METHODS FOR STUDENT FUN, PLEASURE AND ENGAGEMENT IN ONLINE COURSES

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ABSTRACT

Issue How to make online education proposals more pleasurable, fun and engaging for students, enabling the improvement of the desired learning objectives, based on a learning experience design instrument.

Evidence The COVID-19 pandemic and the consequent need for physical isolation has raised the need to better understand, plan and implement which dynamics promote more fun and pleasure for students, so that they are more engaged in the activities of courses offered in the online format.

Literature Studies carried out from the bases of Active Pedagogy and Dialogic Education point to the need to use real educational experiences that promote the consistent construction of knowledge. There is also a need to develop a planning instrument that gives visibility to the demands for didactic-pedagogical and communicational adjustments of active methods, aimed at promoting student engagement through fun and pleasurable dynamics.

Innovation This study seeks to identify how to assist teachers in the adoption of active methods in online course offerings through the adoption of fun and enjoyable activities that result in student engagement and improvement of their learning results, through a learning experience design instrument.

Purpose To know and understand which activities are carried out in online courses that students find fun and pleasurable, that make them engage in the learning processes, for the improvement of the desired results.

Research Questions What are the didactic-pedagogical and communicational practices considered fun and pleasurable by students, which can provide the improvement of learning results? Which are their structuring aspects and how can they be visualized, clearly known, monitored and adjusted? How to promote these differentiated learning experiences for the improvement of the desired learning results?

Methodology Qualitative research through content analysis, using a digital form composed of closed and open questions answered by undergraduate students.

Participants Students (71) from the different undergraduate courses at PUC / São Paulo / Brazil, participating in the online survey OLAF - Online Learning and Fun.

Findings The results obtained are analysed and weighted based on the relationships mapped between the fun and pleasurable practices reported by the students and the structuring characteristics of the active pedagogy, dialogical education and design instrument that can be adopted for their planning and execution.

Keywords: Dialogic Education, Visible Learning, Learning Experience Design, Visible Thinking, Learning with Fun.

THE PLEASURE OF LEARNING: THE VISION OF COMPLEX THINKING

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ABSTRACT

Issue Online learning and fun is a topic that has been the focus of the online research OLAF - Online Learning and Fun - which is a project developed by Open University, UK. The Pontifícia Universidade Católica (PUC), in São Paulo, Brazil, and some other educational institutions in Europe, are involved in this proposal and have developed academic works with the aim of enriching the debate.

Evidence A disruptive scenario took shape in the context of educational experiences in view of the need to adopt online education in the context of the COVID-19 pandemic. The individuals involved have faced challenges and the need to promote changes is necessary. The search for innovations becomes a priority goal to cope with understanding and promoting the pleasure of learning in new scenarios.

Literature The concept of understanding in the context of complex thinking (Edgar Morin) complemented by the concept of meaningful learning (David Ausubel) are the filters to support the interpretative analysis of the research. The notion of understanding sees human phenomenology within a historical context and meaning. In this sense, human understanding perceives the individual in its environment, time and space, in its plurality and potential, as well as moved by its meanings and feelings.

Innovation The study proposes a discussion based on complex thinking (Edgar Morin) with the aim of presenting a reflection on a pandemic reality.

Purpose To reflect on the conditions in which the pleasure of learning can occur in the context of online classes through the following developments: what senses and meanings are present in learning; in what extent the relationship between theory and practice contributes to meaningful learning; how didactic and methodological strategies, such as problematization, are valued in pleasant learning experiences.

Research Question How can the conditions perceived by undergraduate students from PUC/São Paulo/ Brazil contribute to identify the best learning experiences in online classes, implemented during the COVID-19 pandemic, with such an objective to understand what the pleasure of learning is?

Methodology This is a qualitative research that implements an interpretive content analysis. The data collected by means of a digital form, in the OLAF survey, were selected according to educational level criteria of the respondents (in this case it was the under graduation).

Participants Students (71) responding to a questionnaire, from different undergraduate courses at PUC / São Paulo / Brazil who are participating in the online survey OLAF - Online Learning and Fun.

Findings The results are discussed in order to highlight the identified relationship between the individuals' perceptions of the pleasure of learning and the concepts of understanding in the systemic/complex dimension and meaningful learning.

Keywords: Pleasure of Learning, Complexity, Meaningful Learning, Online Classes.

MOTIVATION, INVOLVEMENT AND FUN IN THE ONLINE LEARNING PROCESS: PERCEPTION OF UNDERGRADUATE STUDENTS

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ABSTRACT

Issue

Impact of the Covid-19 pandemic on Higher Education

Evidence

The social distance measures imposed by the Covid-19 pandemic induced Higher Education Institutions to migrate the teaching processes to the online context, supported by digital technologies. Education has been significantly affected, in such a way that new challenges are added to pre-existing difficulties. More than ever, it is necessary to reframe the teaching methodologies, seeking to promote greater student involvement and avoid school dropout.

Literature

The central role of students' feelings and their effective participation in learning processes has been reiterated by scholars in the areas of Psychology (Vygotsky, 2008, 2010; Rogers, 1971), Education (Freire, 1996) and Neurosciences (Damasio, 2018; Immordino-Yang & Darling-Hammond, 2018).

The presence of joy, fun and playfulness in the learning processes has generated an increase in the retention of knowledge and an improvement in the learning results (Santaella, 2012). Active learning methodologies have contributed to students' motivation, involvement, better understanding and memorization of content (Alves, 2008; Valente, 2014).

Objective

Check, among undergraduate students at PUC-SP, how they perceive fun learning and the extent to which it articulates with motivation and involvement and whether, in their opinion, fun should be part of learning.

Methodology

This quantitative and qualitative research is part of a project coordinated by Open University (OU), on the theme of Online Learning and Fun. The data were collected through a questionnaire applied to students from different universities in Brazil and Europe. In Brazil, there were 153 respondents, of which 71 are undergraduate students. The corpus of this work is composed by 69 undergraduate students at PUC-SP.

Results

Data reveal that most students consider that fun should be associated with learning and relate fun learning to activities that promote motivation and involvement. However, online learning experienced during the period of social isolation was considered fun by only 27% of participants. Considering the important role that fun and enjoyment can play in the learning process, this last data reiterates the already addressed need to reshape pedagogical dynamics and strategies at the University.

Keywords: Online Learning, Higher Education, Student´s Motivation, Fun, Enjoyment, Perception.

ALGORITHMIZATION OF HAPPINESS OR THE RECONSTRUCTION OF THE HUMANIZING NATURE OF NUMBERS?

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ABSTRACT

Issue

This article is situated in the Online Learning and Fun (OLAF) research context, which brings together many universities to understand the meaning, importance and efficiency of learning that is considered "fun, pleasureful and meaningful", particularly in activities taking place during the Covid-19 pandemic. It considers the meanderings, the values, and the achievements of human beings that have been scrutinized by search engines that aim to reveal their secrets and control their points of entry and exit, adapting them to the dominions and finalities of *Big Data* operators.

Evidence

Over the last 5 years, Brazil, with its profound socioeconomic differences, has produced and experiences the symbolic and concrete violence that stems from neoliberal thought, the negation of science, of fact substituted for the "post-truth", and the manipulation of data on social media. In this scenario, education takes place through online activities, and one finds youth who are fluent in technologies.

Innovative method

This study analyses the students' voice regarding their online classes, through the lens of Paulo Freire's (1997) theoretical principles.

Literature

We utilize the concept of algorithmization which affects education and ideas of emancipation, liberty, and social transformation through education. It is also based on the concepts of transformational education developed by Freire and concepts by Vieira-Pinto (1995), Zuboff (2020) Levitin (2019), Morozov (2020) and Sadin (2016).

Purpose

The objective is to analyse and shed light on the constitutive elements of the process of algorithmization of "happiness" and its reflexes on education so as to gather, through the students' voices, paths for the construction of its humanizing nature.

Research Question

What are the conceptual paths for the reconstruction of the humanization of education that go beyond the algothmization of happiness?

Methodology

The methodology involves a theoretical debate, as well as qualitative analysis of the answers to a questionnaire about "fun learning".

Participants

The participants consist of almost 70 students in undergraduate courses at the Pontifical Catholic University of São Paulo, who answered the questionnaire in 2020.

Findings

Our findings indicate that students understand learning that is pleasureful or fun occurring in situations that involve a challenge, group projects, interactions between teachers-students-students, when they feel respected, listened to, and valued.

Discussion

The title of the article points to an issue that is part of the recent 3 challenge in education: One of the school's tasks is "to educate citizens that are capable of social interaction and for life that has the quality of being fair and free, through knowledge production"; It's the school's responsibility to produce an understanding of the universal nature of knowledge and the different ethical, economic, aesthetic, and scientific dimensions of social life; It's the school's role to make viable the conditions that permit that new generations have access to such tools, creating projects for society. Technology presents itself in an ambiguous role: at times it can induce a world of consumption and surveillance, and in other moments it has the potential to create solidary and humanizing networks.

Keywords – Curriculum, Fun-Learning Algorithmic ICT.

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