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The 1st International Symposium Webinar on

Transition from Traditional to Outcome-Based Education: Call of the Hour

Organizer: Institutional Quality Assurance Cell (IQAC)
East West University
Jaharul Islam City, Aftabnagar, Dhaka-1212, Bangladesh
Date: 13 – 14 November 2020

Transition from Traditional to Outcome-Based Education: Call of the Hour

Program Schedule: Inaugural Session
Date: Friday, 13 November 2020

4:00 pm – 4:07 pm	**Welcome Speech** by Professor M. M. Shahidul Hassan, Vice Chancellor, East West University, Bangladesh
4:08 pm – 4:23 pm	**Special Guest:** Professor Dr. Kazi Shahidullah, Chairman, University Grants Commission of Bangladesh
4:24 pm – 4:44 pm	**Chief Guest:** Dr. Dipu Moni, MP, Hon'ble Minister, Ministry of Education, The People's Republic of Bangladesh
4:45 pm – 5:00 pm	**Program Chair:** Professor Dr. Mohammed Farashuddin, Chief Adviser & Founder Vice Chancellor, East West University, Bangladesh
Organizer: Institutional Quality Assurance Cell, East West University, Bangladesh	

Transition from Traditional to Outcome -Based Education: Call of the Hour

Program Schedule: Closing Session
Date: Saturday, 14 November 2020

4:00 pm – 4:10 pm	**Speech** by Professor Dr. Muhammad Ziaulhaq Mamun, Pro-Vice Chancellor, East West University, Bangladesh
4:11 pm – 4:26 pm	**Special Guest:** Professor Dr. Habibul Haque Khondker, Department of Social Sciences, Zayed University, United Arab Emirates (UAE)
4:27 pm – 4:43 pm	**Chief Guest:** Professor Dr. Sanjoy Kumar Adhikary, Member, Bangladesh Accreditation Council (BAC), Bangladesh
4:44 pm – 4:54 pm	**Program Chair:** Professor M. M. Shahidul Hassan, Vice Chancellor, East West University, Bangladesh
4:55 pm – 5:00 pm	**Vote of thanks by Moderator**, Dr. Basanta Kumar Barmon, Director, Institutional Quality Assurance Cell (IQAC), East West University, Bangladesh
Organizer: Institutional Quality Assurance Cell (IQAC), East West University, Bangladesh	

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Short Biography of the Speakers

Dr. Charlotte Holland
Associate Professor, School of STEM Education,
Innovation and Global Studies,
DCU Institute of Education, Dublin City University,
Director of RCE Dublin, **Republic of Ireland**

Dr. Charlotte Holland is an Associate Professor in the Dublin City University (DCU) Institute of Education of the Dublin City University. She was appointed to the expert research and policy advice think tank (T20) for the G20 leaders in April 2019. She is currently the Director of the Regional Centre of Expertise in Education for Sustainable Development Goals for the greater Dublin region, RCE Dublin. She has a further interest in research on excellence frameworks and assessment exercises of academic performance within the context of higher education.

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Topic: Accelerating Action on Sustainable Development Goal 4 of the UN 2030 Agenda for Sustainable Development: Progressing the Integration of Education for Sustainable Development and Global Citizenship in Higher Education Curricula and Practices

Professor Dr. Tom Ward
Deputy Vice Chancellor (Student Education)
Leeds University, **UK**

Professor Dr. Tom Ward is the Deputy Vice Chancellor for Student Education, Leeds University, UK. He leads their education strategy, ensuring the University attracts, excites and retains high-quality students from a wide range of backgrounds, to benefit from an outstanding education. His brief activities include implementing innovative measures to ensure students benefit from an outstanding education and excellent all-round experience, widening participation, promoting teaching excellence and innovation, and further boosting the employability of the University's students. He is a mathematician specializing in ergodic theory and number theory.

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Topic: Improving Higher Education during a Pandemic

Professor Dr. Jim Tognolini
Director, Centre for Educational Measurement and Assessment (CEMA)
Faculty of the Arts and the Social Sciences
The University of Sydney, **Australia**

Dr. Jim Tognolini is currently a Professor and Director of the Educational Measurement and Assessment Hub at the University of Sydney and Managing Director of JT Educational Consulting Pty Ltd. He is also a Professorial Fellow at Wollongong University (Australia) and Adjunct Professor of Education at the University of Western Australia. He has extensive experience in liaising with representatives at all levels of government and educational organizations within Australia and overseas on assessment, standards and particularly the use of measurement information in informing system level planning; monitoring of standards; and, utilizing data for improving school level teaching and learning.

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Topic: Assessing, Measuring and Reporting on the Graduate Qualities of University Students: A Practical Example

Professor Dr. Krishna Vedula

Dean Emeritus at the University of Massachusetts, Lowell, **USA**

Dr. Krishna Vedula is recently retired Professor of Chemical Engineering and Dean Emeritus, Francis College of Engineering, University of Massachusetts Lowell. He is the founder and executive director of the Indo-Universal Collaboration for Engineering Education (IUCEE). Dr. Vedula is globally known for his research in processing and properties of materials for high temperature applications. He is a Fellow of American Society for Metals (ASM) and a Fellow of the American Society for Engineering Education (ASEE). He is also Past President of International Federation of Engineering Education Societies (IFEES).

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Topic: Achieving Global Excellence in Engineering Education through Outcomes Based Education

Professor Dr. Yong Lim FOO
Assistant Provost (Applied Learning)
Singapore Institute of Technology (SIT), **Singapore**

Dr. Yong Lim Foo is the Assistant Provost (Applied Learning) at the Singapore Institute of Technology (SIT). He is the Director of Engineering Programs-designate where he is responsible for all the engineering degree programmes at SIT. He started the inaugural Applied Learning Conference (2018) in Singapore to bring together industry and educators on the discourse of pedagogy, practice and perspectives. Dr. Foo is a member of the Board of Governors in Singapore's Institute of Technical Education.

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Topic: Disruptions in Higher Education -The Future of Work and Learning

Dr. King Chong
Educational Development Manager
Teaching and Learning Centre
Lingnan University, **Hong Kong, China**

Dr. King Chong obtained his PhD degree from the School of Management, University of Surrey in United Kingdom. He possesses over 15 years of professional experience in quality assurance and quality enhancement of higher education. He actively participated in the development of a quality assurance mechanism underpinning the Hong Kong Qualification Framework (HKQF). Dr. Chong also has substantial experience in promotion of Outcomes-based Approach to Teaching and Learning (OBATL).

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Topic: Outcome Based Education: The Experience of Lingnan University

Professor Dr. Habibul Haque Khondker
Department of Social Sciences
Zayed University, **United Arab Emirates (UAE)**
Member, Bangladesh Accreditation Council (BAC)

Dr. Habibul Haque Khondker is a professor at the Department of Social Sciences at Zayed University, Abu Dhabi, UAE. Dr. Khondker received Andrew-Mellon pre-doctoral fellowship at the University of Pittsburgh. His achievement also includes the outstanding faculty award at Zayed University in 2013 and Distinguished Alumni Award from the University of Pittsburgh in 2012. He is the co-president of Research Committee, Social transformation and Sociology of Development of International Sociological Association and a member of the executive council of the Global Development Network. He is an expert member of the Bangladesh Accreditation Council.

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Topic: Globalization of the Universities: Challenges and Opportunities

Dr. A.K. Enamul Haque
Professor of Economics
East West University, **Bangladesh**

Dr. A.K. Enamul Haque is the Professor of Economics at the East West University. He received the prestigious Commonwealth Scholarship and completed his PhD from Canada in Natural Resource Economics. After returning to Bangladesh, Dr Haque started teaching at the University of Chittagong. He then moved to the Bangladesh Open University and contributed towards standardizing distance learning in Business education in Bangladesh as the first Dean of the School of Business. Dr. Haque joined the first private university in Bangladesh in 1996 and contributed towards standardizing private university education systems in Bangladesh and the Department of Economics at the North South University. He joined the East West University in 2004 and developed the Department of Economics. He has worked in the United International University to establish its Department of Economics and was an honorary advisor to BRAC University's Department of Economics. His researches are published in many national and international journals. He is a founding member to establish the South Asian Network for Environmental Economics and is currently an advisor to SANDEE- a program of the International Center for Integrated Mountain Development in Nepal. He has published books and research articles with Cambridge University Press, Oxford University Press, Springer Nature and with many other publishers. He is an editorial advisory board member of the Indian Journal of Ecological Economics, and Journal of Social and Economic Development.

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Topic: Assessing the Outcomes using various Assessment Techniques

Dr. Amanullah (Chanchal) Khan
International Development Practitioner in
Education and Public Policy, **Australia**

Dr M. Amanullah (Chanchal) Khan is a well-recognized development practitioner and an academic with special interest in education, governance, outcome-based learning, and results-based monitoring and evaluation (RBM&E). He has served as a senior academic at the University of Melbourne, who is also one of the founding members of its Development Studies Programme. Dr Khan is currently the International Team Leader and Lead Adviser to the Secondary Education Sector Investment Programme (SESIP) in Bangladesh funded by the Asian Development Bank (ADB). Dr Khan has been also teaching as an adjunct faculty in the development studies program at the East West University (EWU), Bangladesh.

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Topic: Hither Outcome-Based Education (OBE) at the Tertiary Level: How far are we in Managing Change?

Preface

The Institutional Quality Assurance Cell (IQAC) of East West University hosted a two-day international symposium webinar on **"Transition from Traditional to Outcome-Based Education: Call of the Hour"** on 13-14 November 2020. The IQAC arranged inaugural and closing session before and after the technical session. Hon'ble Education Minister, Dr. Dipu Moni, MP, graced the inaugural session as chief guest, while Professor Dr. Kazi Shahidulla, Chairman, University Grants Commission of Bangladesh presented as special guest. Professor Dr. Mohammed Farashuddin, Chief Adviser and Founder Vice Chancellor chaired the event. Professor Dr. M.M. Shahidul Hassan, Vice Chancellor gave welcome speech. The closing session was attended by Professor Dr. Sanjoy Kumar Adhikary, member of Bangladesh Accreditation Council as chief guest and Professor Dr. Habibul Haque Khandker, Zayed University, UAE, graced the event as special guest. Professor Dr. M.M. Shahidul Hassan, Vice Chancellor chaired the closing event. Professor Dr. Ziaulhaq Mamun, Pro-Vice Chancellor remarked the concluding speech and Professor Dr. Basanta Kumar Barmon, Director of IQAC concluded the session as moderator of the event.

Hon'ble education minister Dr. Dipu Moni, MP, inaugurated the symposium webinar and said that COVID-19 pandemic gave some opportunities in particular country's online education system and it will bring some positive changes in the education sector in future. She also said that the government is emphasizing on the need for our students not only the traditional but also skilled based education in various disciplines to become skilled citizens of international standard. She urged that all tertiary institutions in the country to take the call to both applied and fundamental research seriously and also find innovative and effective ways of linking up with the industry, the corporate world and academics in universities abroad - to engage in quality, strategic research, targeted at finding practical solutions to real life problems in our society and thereby actualize research findings to develop our society. She pointed out that the university should focus on research and innovation and share the knowledge and ideas with others that make the students of global citizens. Finally, she gave thanks to East West University to organize this international webinar and wishes grand success of the symposium.

Professor Dr. Kazi Shahidullah, Chairman, University Grants Commission of Bangladesh, pointed out in his speech that and the course contents and course curriculum, and teachers should be updated with basic needs of the industry that help to prepare the students to compete in local as well as global job markets. He also emphasized to improve the quality of higher education focusing on outcome-based education rather than traditional education. He also made similar conclusion on online education like to hon'ble education minister. Finally, he concluded that the theme of the symposium is certainly commendable and timely and wishes the success of the symposium and give thanks to East West University for hosting this type of international symposium webinar where the world-renowned professors shared their expertise knowledge on higher education.

Professor Dr. Sanjoy Kumar Adhikary, member, Bangladesh Accreditation Council observed the two-day webinar and proudly concluded in the closing session that only East West University is a pioneer of Bangladesh to arrange this type of international symposium webinar. He also urged that East West University would host similar type of international seminar on higher education. Outcome based Education is a burning issue in the higher education of Bangladesh, especially in the sector of private universities. Similar conclusion was also made by the numbers of attendees and panelists to listen the world-renowned distinguished professor's talks and well organize of the webinar. He believed more of such arrangements in the country will facilitate the gradual progress of the quality culture in higher education.

As far as printed media is concerned, 23 daily newspapers have covered the news. The following 23 daily Bangla and English newspaper gave fascinating coverage on the international symposium webinar on **"Transition from Traditional to Outcome-Based Education: Call of the Hour":** The Daily Prothom-Alo, The Daily Jugantor, The Daily Kalerkantho, The Daily Sun, The Financial Express, The Jaijai Din, The Banik Barta, The Bangladesh Pratidin, The Asian Age, The Bangla News, The Janakantha, The Lekhapora24, The Shomoyer Alo, The Campus Time, The Daily Adhikar, The Shikka Barta, The EducationBD, BBS, The Amader Shomoy, The Daily Campus, The Independent, and The Daily Sangbad.

The webinar was registered by 470 faculty members and researchers/academicians as attendees from 32 private and 24 public universities of Bangladesh, and 5 universities of the USA, India, Hong Kong, China, and UAE, and 100 participants registered as panelists in the webinar. A significant number of registered participants attended in the two-day international symposium webinar.

A significant attendees and panelists outside of EWU have praised that the arrangement and quality of the speakers of the webinar was outstanding, and it is a time demanding symposium (call of the hour) which removed many confusions. They have given thanks to the EWU authority and requested to organize this type of international seminar/symposium in the future.

A poll was conducted about the overall impression of the symposium and interestingly as it appeared the overwhelming majority was very impressed by the way the symposium was organized and managed both substantively and technically. Following is the chart reflecting the assessment of the participants:

OBE Webinar Poll Result - Nov 2020

0%
0%
3%
22%
75%

■ Excellent   ■ Good   ■ Satisfactory   ■ Bad   ■ Poor
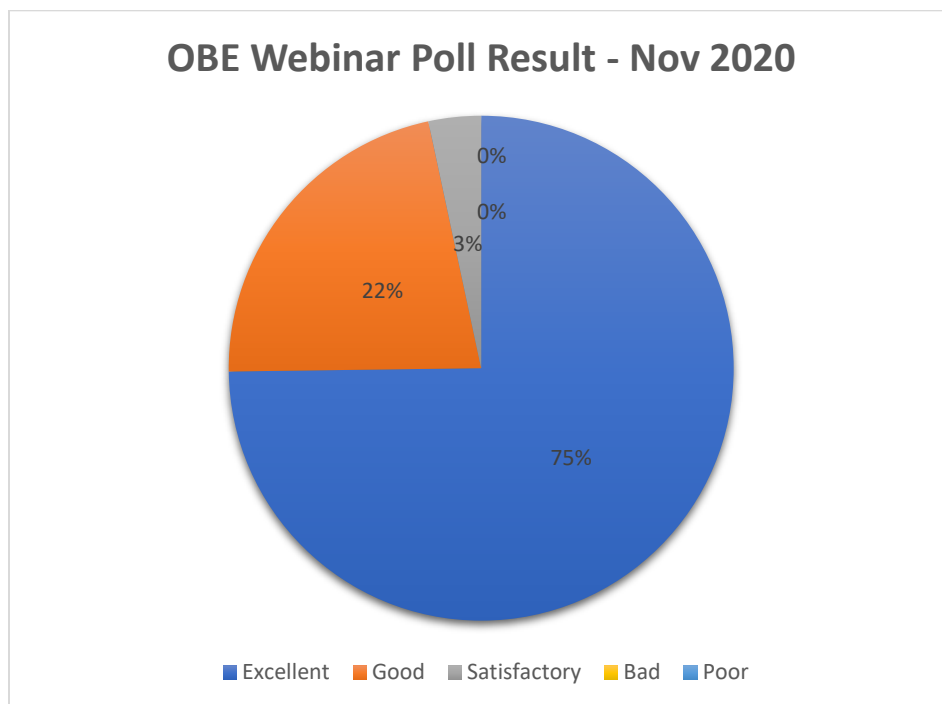
Furthermore, a post-symposium survey was launched too in order to get the detail reactions of the participants on the important things like usefulness of the sessions, quality of contents &

relevance, quality of the Q&A sessions, ability to generate sufficient interests among the participants, the effect of the webinar etc. and the responses were very positive in all cases.

The reactions of the general mass in the social media were very positive too as they appeared in Facebook and YouTube.

In a nutshell it has been very encouraging to conduct such a successful program and this program no doubt has uplifted the image of the EWU university in Bangladesh.

Given the extraordinary need of such a transformation in education sector and our first successful step towards the initiation of such a transformation, this could be an opportunity for EWU to make a move forward, initiate more tangible programs such as organizing training, seminar, conferences, and the like, with a view to strengthening our know-how bringing in global best practices. This could be a golden opportunity for us to be a pioneer and thrive going forward in future. Also, possibly EWU can work with UGC hand-in-hand for possible policy interventions to foster greater enabling environment in higher education sector in Bangladesh.

The world renowned distinguished Prof. Dr. Tom Ward, Deputy Vice Chancellor Leeds University, UK, and Prof. Charlotte Holland, DCU Institute of Education, Dublin City University, Republic of Ireland; Prof. Dr. Krishna Vedula, Dean Emeritus of the University of Massachusetts in Lowell, USA; Professor Dr. Yong Lim Foo, Singapore Institute of Technology; Dr. King Chong, Manager, Teaching and Learning Centre, Lingnan University, Hong Kong, China; Professor Dr. Jim Tognolini, The University of Sydney, Australia; Professor Dr. Habibul Haque Khondker, Zayed University, United Arab Emirates; Professor Dr. A. K. Enamel Haque, East West University, Bangladesh; and Dr. Amanullah Khan, ADB shared their expertise knowledge about the changes in higher education, SDS4 and the education systems during pandemic in their universities. We expect that the participants have learned a lot from them, and the recommendations of the symposium will certainly help us to develop our educational models.

Technical Session-01

Accelerating Action on Sustainable Development Goal 4 of the UN 2030 Agenda for Sustainable Development: Progressing the Integration of Education for Sustainable Development and Global Citizenship in Higher Education Curricula and Practices

Speaker

Dr. Charlotte Holland

Associate Professor, School of STEM Education
Innovation and Global Studies, DCU Institute of Education
Dublin City University, Director of RCE Dublin,
Republic of Ireland

Session Chair:

Professor Dr. A. F. M. Saiful Amin

Department of Civil Engineering
Bangladesh University of Engineering and Technology (BUET)
Chairman (Acting) and Vice Chairman
Board of Accreditation for Engineering and Technical Education (BAETE), Bangladesh

Summary

In the hour-long session, Dr. Charlotte Holland, Associate Professor, School of STEM Education, Innovation and Global Studies of DCU Institute of Education, Dublin City University and Director of RCE Dublin from Republic of Ireland presented her paper on "Accelerating Action on Sustainable Development Goal 4 of the UN 2030 Agenda for Sustainable Development: Progressing the Integration of Education for Sustainable Development and Global Citizenship in Higher Education Curricula and Practices." The session was conducted by the Session Chair, Dr.

A. F. M. Saiful Amin, Professor, Dept. of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Bangladesh.

Dr. Holland's presentation was divided into three parts- a brief discussion on the concept of sustainability and sustainable development, discussion on sustainability in context of higher education and suggestion on different ways for integrating sustainability in context of higher education. Dr. Holland started her discussion with the origin of the term 'sustainability'. She informed how the term was used in German Forestry circles in the 17th century by Hans Carl Von Carlcwitz who advocated sustainable use of forest resources.

Then, she pointed out how sustainability happens in different levels, at home, at community, at national or regional and global level. In this discussion, Dr. Holland referred to the Brundtland Report of 1987 which officially states that humans are damaging the planet and quoted the popular definition of the term 'Sustainable Development' -"development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Later, she discussed about the interdependency of society, environment, culture, and economy, terming them as the four cornerstones of sustainability. At this point, she put emphasis on the importance of a healthy and just society, viable economy, sound environment and cultural accommodation for sustainability.

Next, Dr. Holland discussed about the challenges for sustainability. Explaining the term 'Anthropocene', she pointed out how the earth's system is getting impacted by different human activities. Talking about the 'Great Acceleration', she showed how socio-economic trends during 1950s had outcomes in 2020. She elaborately discussed on how harmful gases and other particles like plastic, and such have increased, and natural resources have decreased over time. Based on the discussion, she opined how 75% of the species on earth can get extinct if the current trends in humans continue. Then, Dr. Holland mentioned the 17 global challenges for sustainable development as pointed out by the United Nations' Agenda 2030. She urged addressing these challenges within the target period for enabling prosperity for across the world.

Going to the second part of her presentation, Dr. Holland focused on education for sustainability which is the 4th of those 17 goals for Sustainable development by the United Nations. She starts

this discussion with UNESCO'S definition of education for sustainability. She then explained several ideas related to this particular sustainable development goal (SDG) like global citizenship education, interconnection between gender equality and human rights and education, national education policies, curricula, teacher education and student assessment.

Dr. Holland later on divided 'education for sustainability' under 3 sub points with a reference to UNESCO - a) sustainability knowledge, b) sustainability competence, and c) sustainability-oriented mindset / disposition. She defined sustainability knowledge as something dealing with the ideas of sustainable development goals, which functions in interdisciplinary and trans disciplinary contexts for sustainability. Then she elaborated and discussed sustainability competence under 8 sub points - systems thinking competence, anticipatory competence, normative competence, strategic competence, collaboration competence, critical thinking competence, self-awareness competence, and integrated problem-solving competence. To find the answer of the query - whether it is possible to change human minds to foster sustainability-oriented mindset/ disposition, Dr. Holland defined human nature, and ethical disposition at first. Then She talked on the formation of human nature and how it effects our perception of nature and our future decisions. She placed our ethical disposition at the center of all of our decision makings. Providing two examples from an individual's position, as well as from the New Zealand's government's position, Dr. Holland argued how being careful towards the living and non-living portion of the world altogether - is important for obtaining ethical disposition. Her proposal at the end of the section remained that - is it is necessary to displace human minds from the thought that we are the ruling race in the entire planet, and the advancement in science should not be used behind the development of human race merely, rather behind the development of the overall improvement of the entire environment.

In last section of her speech, Dr. Holland posed two questions to critically ponder on - i) 'how do we integrate education for sustainability into the curriculum?', and ii) 'how do we monitor and assess it?' Due to lack of time Dr. Holland responded to the first question only, with references to 'Bolton model', 'Built in model', and 'rebuild' or 'redesign model'. The last model, rebuild/ redesign model has the highest amount of impact upon society, as it involves rebuilding entire

programs. However, it is not popular among established universities as revisiting the whole existing curricula, omitting and rebuilding it is quiet challenging, Dr. Holland mentioned.

In case of improving pedagogic practices, lecture based, or didactic model of teaching is discouraged. Rather a certain way of teaching should be adopted where the head, heart and hand of students would be involved to solve real problems out there in the society. Reorientation of the thinking pattern of the students is necessary according to Dr. Holland, so that they become really passionate about sustainability. In terms of learning approaches - authentic real-world learning, constructivist learning, experiential learning, disruptive learning, trans-disciplinary learning, and self-dependent / independent learning are important according to her.

In her final commentary on wider university sustainability practices, Dr. Holland strongly posed that - there is no point in integrating sustainability merely in the curriculum if it's not reflected in the wider university. University authority must take it under serious consideration that what the student are experience out of their lecture halls in terms of sustainability practices. The university itself should invite students to actually engage in projects, internships and research that helps the university become a model of sustainability.

At the end of the her speech, Dr. Holland addressed questions regarding - facing challenges in promotion of skills and lifelong learning in context of Ireland; promoting sustainability in Bangladeshi education having the threats of climate change in our backdrop; assessing capability of Educational reformation to promote sustainability single handedly, as well as role of Open Education and Open Educational Resources in achieving sustainability; differentiating between competency based education and outcome based education; implementing outcome based education with less number of university teachers involved in industrial consulting activities/research etc. The session was called to an end by the session chair conveying special thanks to Dr. Holland for her auspicious and engaging address.

Technical Session-02

Improving Higher Education during a Pandemic

Speaker

Professor Dr. Tom Ward
Deputy Vice Chancellor (Student Education)
Leeds University, UK

Session Chair

Dr. A. K. Enamul Haque
Professor, Dept. of Economics
East West University, Bangladesh

Summary

Professor Dr. Tom Ward, Deputy Vice-Chancellor (Student Education), Leeds University, UK delivered his speech on "Improving higher education during a pandemic" and highlighted how Leeds university responded to the pandemic situation, the lessons learned in the past few months, and also how this experience has changed the look towards the structure of higher education. One major issue that needs to be understood from this experience is that measuring the outcome of higher education is difficult and complex territory and the traditional method only measures a small segment of the outcome.

Professor Ward emphasized the fact that physical presence at the university is important as how a student can receive information and absorb which was substituted by remote learning due to the pandemic situation. He explained how the staff, the student, and he responded to this new setup. Although the time to commute to the workplace was saved, back-to-back meetings were exhausting and sometimes needed rapid decision making without further delving into the matter.

Many students and staff were without the proper or poor IT support and enough physical workspace at home. Apart from these, the administration had to make a rapid decision of how to assess the students' performance as they were determined to graduate the students timely. He emphasized the early decision was better than the right one as that built confidence among the students and parents.

As Leeds university had already a better IT setup and was contracted with Microsoft, it paid off during this uncertain time by building enough capacity. However, the reliance on complete online communication is not free from cyberattacks and they had to bring a balance between openness and security.

The timely graduation of the medical and nursing students helped the national health service by providing enough manpower which the country was suffering from at the moment. The laboratory machinery and researchers were lent to help in finding a solution to the pandemic.

Professor Ward highlighted that their response to cope with this migration from in-person class to an online-based education system was rather a tactical reaction than a strategic action. However, this changes the way one should look at future delivery in higher education. Simply posting the learning materials online cannot be considered as an online way of teaching. A hybrid model needs to be developed that will work whether one is taking the course in-person or online. The traditional assessment method which involved a written exam fails to measure deep learning and may be substituted by assessing how a student would respond in the workplace, such as report writing. For courses that require laboratory experiments, virtual labs, and design studios will help to reduce the campus presence.

On a positive note, Professor Ward said that the student adopted the new complex virtual learning environment and interactive learning event, and eventually they were more optimistic as confidence build up. But he also said that measuring the outcome should not be limited by the grades and their annual earning rather it should de be decided by how they contribute in the radically changing world.

In the question-answer session, Professor Ward was asked to suggest a way of conducting a practical exam. In response, he said that at Leeds they reduced the number of practical that are

needed to demonstrate the outcome for which the on-campus facilities were extended. The second question was directed to the teaching method of a lab-based course. He replied that the curriculum needs to be redesigned so that most of the lab work can be done in a virtual lab while a small segment will require in-person presence in the lab. To respond to the status of digital poverty in UK, he acknowledged that there is no doubt that it exists. One of the questions was about cyber harassment and he responded that the only way to tackle this is to build effective monitoring of such activities and articulate standard behavior and most important of all enforce them. He emphasized that contact hours were less important than engagement time to answer a question regarding the change in contact hours. He understands that content can be delivered in any way, but effective learning comes through how one interacts and engages the student in the learning process. A question was asked about the learning management system used in Leeds university and he said that they mainly use Zoom, Blackboard, and Teams. The last question was about whether the employers were confident about the recent graduates. Professor Ward said that they have talked to the employers and arranged for skill sessions after graduation (if needed) to help the graduate students to brush up their skills which they were unable to do.

The overall session was very interactive and enjoyable and gave some thoughts and new ideas about how one can prepare oneself with the new paradigm of teaching.

Technical Session-03

Assessing, Measuring and Reporting on the Graduate Qualities of University Students: A Practical Example

Speaker

Professor Dr. Jim Tognolini

Director, Centre for Educational Measurement and Assessment (CEMA)
Faculty of the Arts and the Social Sciences
The University of Sydney, **Australia**

Session Chair

Professor Dr. Hasnat Muhammad Alamgir

Dept. of Pharmacy
East West University, Bangladesh

Summary

Following his opening remarks on how essential it is now to deal with the "Transition from Traditional to Outcome-Based Education", Professor Dr. Jim Tognolini argues that the process of globalization in the 21st century as well as an uncertain future apropos of job market has necessitated graduate qualities (GQs) as the actual outcome of education for a graduate student who may not survive without GQs, i.e., disciplinary knowledge (i.e., critical thinking and problem-solving skills) and 'higher order thinking skills' and 'soft-skills' (i.e., creativity, communication, cooperation, cultural competence and influence etcetera). However, mentioning his doubt and tension about assessing and measuring GQs in reality, Professor Tognolini has shared both a bottom-up approach with reference to the "University of Sydney Strategic Plan 2016-2020" and a comprehensive measurement theory to give us a message: practice what you preach. Last but not least, he has pressed on the importance of building rubrics in this regard along with its proper

validation to reach the final destination. In addition to this, he has also acknowledged the challenges in this regard.

Technical Session-04

Achieving Global Excellence in Engineering Education through Outcomes Based Education

Speaker

Professor Dr. Krishna Vedula
Dean, Emeritus at the University of Massachusetts
Lowell, **USA**

Session Chair

Professor Dr. Arshad M. Chowdhury
Dean, School of Engineering
BRAC University, Bangladesh

Summary

The symposium was on "Achieving Global Excellence in Engineering Education through Outcomes Based Education" focusing on the opportunities and possibilities of integrating outcomes-based education (OBE) in engineering pedagogy.

The session chair, Professor Dr. Arshad M. Chowdhury, Dean, School of Engineering, BRAC University, Bangladesh kicked off the session with a short overview of the topic and a brief introduction of the speaker, Dr. Krishna Vedula, Dean Emeritus at the University of Massachusetts, Lowell, USA.

Dr. Vedula emphasized the importance of creating and maintaining an ecosystem within an institution for a smooth transition from traditional education to OBE. He compared that as much as an equilibrium is necessary to make the natural ecosystem function, similarly various programs and activities are needed to maintain the quality of the ecosystem of engineering education.

He talked about how Indo Universal Collaboration for Engineering Education (IUCEE) can help build such ecosystems across global engineering academia. He is also currently working towards the same goal as the Executive Director of IUCEE. Over 50 institutions and over 100 volunteer global experts are currently part of the IUCEE consortium. Members of the consortium benefit from the expertise of a global network and from sharing and collaborating with each other. By becoming a part of the consortium, institutions could focus on priorities such as NBA accreditation by ABET, funding for projects and programs such as DST, academic research and publication, collaborations with international institutions and experts, NIRF ranking, online delivery of courses, industry collaboration to improve student placements, patents, national and international visibility and many more.

However, to achieve these outcomes, institutions need to go through an accreditation process to ensure graduate learning outcomes such as knowledge base for engineering, problem analysis, investigation, design and use of engineering tools which are common and easy to attain. On the other hand, more importantly, this process also focuses on attributes that are crucial for transition into OBE such as individual and teamwork, communication skills, professionalism, impact of engineering on society and the environment, ethics and equity, economics and project management, life-long learning etc. Most of the traditional approaches fail to achieve these outcomes, and that is where OBE can make a major difference. Similarly, ABET (USA) graduate learning outcomes focus on practical multidisciplinary implications which result into efficient and result oriented real-life solutions.

According to Dr. Vedula, to achieve these outcomes is not rocket science, rather than making students go through the curriculum only, these non-technical skills are what will make them employable. We have expert and experienced faculty members who can teach the traditional curriculum well, but these skills were never part of the equation being taught in the classroom and so these (skills) need to be integrated within the curriculum itself. To keep these in check, the 'mantra' that IUCEE promotes is, "I am teaching, are they learning?" as the outcome is what's important. Furthermore, we need to get our students out of their age-old habit of rote-learning. As the teachers also experienced the same learning process back in the days when they were students, it is going to be challenging for them as well to introduce this new approach of teaching

and learning to their students. However, memorized knowledge cannot yield consequential outcomes when it is about the application of theoretical knowledge to achieve pragmatic success. As a result, students should receive hands-on experience to ensure their employability and success when they will join the workforce in future. At the same time, our students' perspectives need to be changed in the sense that they should start considering the field of entrepreneurship by which they are going to be job creators instead of job seekers.

Students can learn engineering only by doing engineering but instead they are only learning and never using it. Thus, teachers need to make students look at a problem, identify different parts of it, communicate with relevant parties, and use existing resources to mobilize a solution by prototyping, testing and finally bringing in the product. Dr. Vedula referred to this concept as an informed design process. He also added that projects are everywhere and thus students must do projects not just in the final year but in as many courses as possible in the curriculum to achieve these outcomes. Project-based learning should be practiced for every subject, not only for the engineering stream. It is because project-based learning can guarantee students' active participation in the learning process. It helps students learn how to plan and implement an idea outside the curriculum. Students should not learn only to pass the examination but also to become able to think critically, independently, and authentically. Project based and experimental learning will help students acquire these skills. Teachers also need to learn how to incorporate such project heavy course-works in their teaching process. For example, sustainable development goals, grand challenges for engineering etc. can be incorporated within those projects. Fortunately, IUCEE provides the ecosystem for project based and experiential learning. This new approach of education will assist their students to participate actively, think critically and plan accordingly, which in turn will enable them to take their own responsibilities of learning.

This transition is not easy as most faculty members would want to use the old way of thinking to achieve the outcomes in the new way. Thus, IUCEE is developing courses and workshops as part of ecosystem initiatives for both students and faculty. IUCEE also provides Engineering Educator Certification to formalize the integration of OBE in engineering education and emphasize on student learning outcomes with the motto of "learning teaching by doing teaching." In this regard, Dr. Vedula explained the importance of proper teacher training in order to achieve the

objectives of OBE. According to him, we cannot expect our students to get accustomed with this new strategy of education until and unless the educators are making themselves familiar and comfortable with this non-traditional teaching method. Having an MSc and/or a PhD is not sufficient for teachers to realize the significance of OBE and implement it in their teaching process. These degrees can enhance their content knowledge; however, they have to learn how to teach to become effective teachers. As a result, IUCEE has also launched Engineering Projects in Community Service (EPICS) to seek solutions for local issues through engineering. In January, it is organizing an annual international conference for faculties to share and collaborate on Transformations in Engineering Education.

At the end of his talk, Dr. Vedula welcomed East West University to join these initiatives. Later on, Dr. Chowdhury initiated a discussion on ways to incorporate OBE in assessments. Dr. Vedula suggested that projects and such experiential learnings can be documented, monitored, and thus assessed. These documentations may also help to achieve the required accreditation as an evidence of experiential learning. Dr. Chowdhury also pointed out that teachers often face challenges to assess students on their practical works in an online classroom. Replying to that, Dr. Vedula suggested report-oriented submissions of students' projects. He also talked about "flipped classrooms" where a classroom becomes a discussion platform for students and teachers based on the recorded lesson provided earlier. Followed by some questions during the question-and-answer session, Dr. Vedula put emphasis on the use of online academic tools even when the pandemic situation is over. He suggested that to manage projects for a large group of students, a teacher also has to go through a process of learning to know how to teach better in challenging environments as such. The session ended with a thank you note from both the speaker and the chair.

Technical Session-05

Disruptions in Higher Education -The Future of Work and Learning

Speaker

Professor Dr. Yong Lim FOO
Assistant Provost (Applied Learning)
Singapore Institute of Technology (SIT), **Singapore**

Session Chair

Professor Dr. Sarwar Hasan
Dept. of Computer Science and Engineering
United International University, **Bangladesh**

Summary

Professor Dr. Yong Lim Foo, Assistant Provost (Applied Learning), Singapore Institute of Technology (SIT), Singapore, presented his talk on "Disruption in Higher Education: The Future of Work and Learning". He highlighted that Singapore is a small country with a population of 5.69 million. Its GDP is USD 363 billion and per capita GDP is USD 64 thousand. The only resource they have is their people. So, it is important for Singaporeans that their education system will be able to equip the young people and the working adults in terms of coping with the changes happening all around the world. They are concerned about both the groups because if all of them are not employed in the small piece of land there is not much they can do. There is a big change in the Singaporean education system. Back in the 70s and 80s they only had one university and 2 polytechnics. Since 1990s there is a quick level up in terms of the higher education system. They need to make their people adapt to the changing phase of industry.

In today's competitive world, disruptions can come in many forms. In terms of teaching and learning, there are technological disruptions. At least from Singaporean perspective they have

lots of industries in the hi-tech area. For the first time in many years, they are training a group of students or graduates for the workforce in different roles according to the industry gap. It helps them to get a good start in their career path. They have to come up with a kind of pedagogy that can adapt to new world that we are dealing with. A lot of students now a days have to go through relearning and up scaling throughout their whole career. We live in the era of disruptions. In terms of the industrial set up most of the industries are on the hi-tech sector. In as soon as 15 years approximately 40% of the jobs will be replaced by technology. We need to make sure that our current workforce is up to date.

The recent tension between all the big powers has caused some of the issues. There is also impact on the global supply chain. All these disruptions make the people redundant in themselves. In Singaporean context if we look at the employment outcome and the education system, global forces are changing how people live and work. As there is now Covid pandemic the disruption is intensifying. The gap between those embracing change and those falling behind is growing. The graduates are not ready for the workplace because they learn the traditional skill set. In terms of industry, they are not perfectly prepared. To minimize this problem, some countries are creating a bridge between academicians and professional bodies by which they are connecting workplace and universities.

As the impact of disruptions many job roles will be vanished and many new will be created. So, curriculum has to be updated. There are plenty of jobs, but they are not skilled enough to be hired. Ordinary jobs are disappearing, but ordinary people are still there. In the universities, many people are concerned about the undergraduate and postgraduate degrees. 40% of their people go to subsidized higher education. Down the line the degree becomes obsolete because of the changing world. They are shifting their lenses from the traditional to modern undergrad education. SIT (Singapore Institute of Technology) wants to build skills, not degrees. They include skill sets that are really required by the industry.

Applied learning bridges academic knowledge and skills with real world applications. They need to have a strong nexus with industry and use industry problems as capstone projects and adapt

applied learning pedagogies. Programs at SIT are practice oriented and industry focused. There are questions related to different industry issues & challenges.

When they offer degree programs, they also want to contextualize those to industry. For example, in a typical gaming company there are programmers, artists, game designers etc. So, they are shifting focus in more or less to programming, more on the design according to the job. So, by the time graduates will have a portfolio of projects and when they join the company, they will know how to work with each other. Artist will know how to work with the programmer. In the traditional system artist only studied art and had a hard time to cope with the industry. With the new approach companies are also happy. Students are better prepared for the industry.

SIT has physiotherapy, occupational therapy, diagnostic radiography etc. The students all go through the same module until they go to more senior level. For example- a physiotherapist will look at a stroke patient through his or her own lens. But they know how different their colleagues will be. They can adapt to diversity. SIT helps prepare their future colleagues, equip the current students. They are building opportunities for students from various disciplines to take challenges. Tech, touch, and context- all components are important in this regard. They bring all of them together.

SIT has IWSP, Integrated Work Study Program. They see that as an effective scaffold to authenticate learning. They want the students to keep open eyes for all the workplace challenges and opportunities that they can implement. Longer work attachments pay off for SIT graduates. They pick up valuable skills like communication skills, teamwork in the industry context etc.

Skill Future is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points. Institutions like this for example all the universities, polytechnics, they do not just train their new students; they also help the working adults to continuously upgrade. Government also invests in people so that they can upgrade by doing useful courses. Next bound for skill future: they are working with mid-career workers, enterprise, to help them transform.

They are developing beyond the traditional university module. They are moving toward Skill Future work study degree. Students (high school or in workplace) come in and they upgrade

themselves, prepare themselves for the workplace. The learning process is changing to meet the needs of the shareholders. Faculty and the institution need to be aware of the changes and requirements of the industry to upgrade the curriculum.

Technical Session-06

Outcome Based Education: The Experience of Lingnan University

Speaker

Dr. King Chong

Educational Development Manager Teaching and Learning Centre
Lingnan University, **Hong Kong, China**

Session Chair

Professor Dr. Md. Tofazzal Islam

Dept. of Biotechnology
Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh

Summary

Dr. King Chong has years of experience in education research and is currently working as the Educational Development Manager at the Teaching and Learning Centre of Lingnan University, Hong Kong, China. Below is the summary of his valuable speech delivered at the symposium:

Dr. Chong provided a brief overview of higher education institutes in Hong Kong. One particular thing he mentioned that out of the 9 public universities in Hong Kong, 8 are self-accredited, which means these universities do not need any external approval to launch a new course. The private universities, however, do not have the self-accredited status.

In the next part, he described the journey of Hong Kong's shift to OBE (outcome-based education). He mentioned that it was a two-step process: the first step focused on the inputs and processes to ensure that universities achieve the desired quality of teaching. It was carried out in two rounds- one in 1996-97 and 2001-03. After the second round, authorities were ensured that the internal process has improved they moved onto outcome-based education in 2005. He then mentioned the steps that were taken a Lingnan University to implement OBE. The Lingnan

University is one of the eight public universities in Hong Kong and maintains low student-staff ratio in major courses. Furthermore, the university emphasizes on out of class activities (i.e extracurricular activities) and has a fully residential campus. The shift to OBE can be summarized into the following actions:

Curriculum development at the course and programme level

Criterion-based assessment

Compliance

Evidence collection

Annual program review

He called this an 'OBE Loop' as after program review, then repeat all the steps in the following academic year. In Lingnan University, another term, Outcome Based Approach to Teacher and Learning (OBATL) is used which focuses on what the students come out with from the course and activity rather than what the teachers intend to teach. Teaching is based on Intended Learning Outcomes (ILOs) which is at both course and program level. The learning outcomes are categorized as the following:

Knowledge Outcomes

Skill Outcomes

Attitudinal or affective Outcomes

Each program must have outcomes to cover all these categories for advance development of the graduates. There are also some institutional learning outcomes which are common set of ability expected from all the graduates irrespective of their major and level of study. The action verb sets from Bloom's Taxonomy helps a teacher to design the learning outcomes. There should be constructive alignment of intended learning outcomes which decides the destination of the students in terms of ability, the teaching and learning activities which is the path the students are expected to follow to attain the outcomes and lastly, the assessment methods which is the measurement of the arrival of the students of the destination.

Dr. Chong then showed the Micro-framework of OBATL followed in Lingnan University for design of course and the learning outcomes. The framework is student centred and focuses on active learning which promotes the student to think and participate rather than just listen and absorb the knowledge. The learning in teaching should be related to real life experience. Therefore, after designing the learning outcomes, teachers should think what activities can experience the students about the outcomes. Finally, the teachers have to find the assessment methods to know the students' learning outcomes effectively.

An example of constructive aligned course outline of Social Work with Youth is shown with teaching and learning methods and the assessment methods. In order to assess the outcomes, certain sets of rubrics are required. There are two modes of assessment, Criterion Referenced Assessment (CRA) and Norm Referenced Assessment (NRA). Criteria based assessment is preferred mode in OBE which is also student centred. In a rubric, there are some essential parts. They are as follows:

Criterion: It describes the characteristics to be assessed which is aligned to an outcome.

Standards: It specifies the quality achieved.

Description for each performance level: Briefly describes the standards and the characteristics of that standard.

A scale of points: Assigns grades or marks to each standard.

Example of a standard rubric was shows in a five-point scale. It should be in compliance with OBATL and the evidence should be collected about how well the students have achieved the learning outcomes which are done with several surveys from students, graduates, alumni and also their employers. In the annual program review, all these should be incorporated.

There is a professional development program for the newly joined faculty members at Lingnan so that they get familiar with ILO and self-improvement. In OBE, quality improvement is as important as quality enhancement. The presentation ended with the discussion on the technology used to enhance innovative teaching and learning. A summary of the session was discussed briefly as reflection and lessons.

The session ended with questions from panelists and participants. All the questions were asked and answered live.

Technical Session-07

Globalization of the Universities: Challenges and Opportunities

Speaker

Professor Dr. Habibul Haque Khondker
Department of Social Sciences Zayed University
United Arab Emirates (UAE)
Member, Bangladesh Accreditation Council (BAC)

Session Chair

Professor Dr. Chowdhury Faiz Hossain
Dept. of Pharmacy
East West University, **Bangladesh**

Summary

Professor Dr. Habibul Haque Khondker, Department of Social Sciences, Zayed University, United Arab Emirates (UAE) presented talk on "Globalization of the Universities: Challenges and Opportunities"

In this technical session, Professor Dr. Habibul Haque Khondker discussed about the idea of globalization, the conceptualization of globalization and how this idea of globalization is dealing with the present realities of the global condition affected by pandemic and the economic downturns. He also addressed the issue of globalization of university and how university can play a role in the process of globalization.

Recently the idea of de-globalization has become well-known especially after the pandemic. People began to say that this pandemic has been caused by globalization and its time to retreat from globalization. And this kind of rhetoric has been fueled by President Donald Trump and others. But this idea of de-globalization began since 2016-2017. The February 2017 issue of

Foreign Affairs – a premier journal of international studies – had a whole issue devoted to the discussion of de-globalization. They talked about Brexit and the election of Donald Trump as examples of de-globalization. The main platform for the candidate Donald Trump was his anti-globalization rhetoric and his anti-globalization position. In most of those discussions, they reduced globalization only to economic globalization. This kind of reduction approach has to be prevented in order to rescue the true meaning of globalization. We need to think of globalization not just as economic relationships and integrations of economies around the world rather we need to broaden the scope and meaning of globalization to accept the multiple views and plural ideas to capture.

There is not only one form of globalization. Every time there is an economic downturn, people start talking about end of globalization without realizing that there has always been ups and downs in the economic systems globally. Roland Robertson – one of the leading pioneers in conceptualizing globalization sociologically – thought of globalization as compression of the world and our growing consciousness of that compression. And this idea is tied to McLuhan's idea of global village that the whole world is now very much within our everyday discussion. We define globalization as a macro-social historical process which is both entangled and contingent. It is not a one-way flow of developments. There are contractions, contingencies and all kinds of upheavals. But deep down, the process goes on. Globalization is much more than simply integration of world economy. It is a process which transforms and gets transformed. It is a series of inescapable entanglements which need to be kept in centre in our discussion of globalization.

Globalization is not static. This is a dynamic process. The globalization process must change and adapt to newly emerging conditions if we are to plan more effectively for global pandemics, financial crises, economic inequality, and imbalances in population's movements through migration. These are forces that might impact the very idea of globalization.

Professor Khondker talked about the thin theory and the thick theory of globalization. The thin theory was popularized by a famous journalist Thomas Friedman. It focuses on economic globalization and homogenization, meaning that the world is becoming same. But we all know that the world is not being homogenized. So, the thick theory of globalization or sociological

globalization focuses on heterogenization. The world is becoming more and more complex. This thick theory gives rise to the concept of globalization which combines glocalization with local input and university is a very good example of a glocalized institution – it is not globalized. So, if we accept thin theory of globalization, then there is a process of de-globalization because that is the economic, narrow, and homogenized view. But if we accept the thick theory, the march of globalization will continue.

In order to historicize the idea of globalization, Professor Khondker identified three different phases of globalization - phase 1 starting from 200 BCE to 1492 (Eurasian globalization 1), phase 2 from 1500 CE to 1999 (Atlantic globalization) and phase 3 from 2000 CE to Eurasian globalization 2. We are now in phase 3 and this is a new form of globalization that we are dealing with. In an essay by Amartya Sen in 2002, he is reminding us that over thousands of years globalization has contributed to the progress of the world through travel, trade, migration, spread of cultural influences and dissemination of knowledge, science and technology. He gives the example that around one millennium ago the high technology was paper, printing press, gunpowder, magnetic compass, and all to be found in China. And since then, these technologies have gone from the east to the west. The decimal system is a well example that Amartya Sen points out. Arab mathematicians got this from India and then from the Arabs, Europe got those ideas. So, there was a knowledge transfer, a technology transfer from the east to the west. And the western scientific developments were directly dependent on the ideas and concepts that travelled from the east to the west. So, we really need to think out of the box and get out of the Atlantic view of globalization and broaden it that for a long time the globalization was actually fueled by the ideas developed in Asia.

Therefore, the takeaway point about globalization is that it is a historical macro-social process. It is a process of processes. It is multi-dimensional and involves cross border mobility and connectivity. So, the concepts and ideas such as cosmopolitanism, glocalism (Robertson), isomorphism (John Meyer) are central in understanding globalization of higher education.

Higher education drives, and is driven by, globalization. We play a role in the process of globalization as we are being continuously affected by the process of globalization. So,

globalization is a phenomenon of increasing worldwide interconnectedness that combines economic, cultural, social, and political changes. Higher education develops human resources, therefore, integration between applied education and industry is essential to focus on what kinds of human resources they need. There is an excellent contribution of Henry Etzkowitz who is the pioneer of the Triple Helix idea to talk about the relationship between universities, industries, and governments. In terms of globalization of higher education, we need to look at cross border flows of ideas, students, faculty and financing, coupled with developments in information and communication technology and how these are changing with the environment for higher education. This implies both increased collaboration and competition between countries and institutions on a global scale.

The challenges of globalization are the environmental cost and extreme social inequality. To move forward, we need to redefine the role of education. The primary task of university is to produce global citizenship. And that can only come through global education. It will create a cosmopolitan culture and that will foster understanding across cultures. We need to develop empathy, mutual respect, and appreciation of difference.

Professor Khondker concluded his session by remarking that we need to understand the differences, appreciate the differences, embrace the differences and we need to create a cosmopolitan world view before we can enter into the advanced phase of globalization and this global higher education. COVID-19 has created the opportunity for closer global cooperation and interdependence.

Technical Session-08

Assessing the Outcomes using various Assessment Techniques

Speaker

Professor Dr. A. K. Enamul Haque

Department of Economics
East West University, Bangladesh

Session Chair

Professor Mostafa Azad Kamal

Dean, School of Business
Bangladesh Open University, Bangladesh

Summary

Prof. Dr. A.K. Enamul Haque, Professor of Economics, East West University, presented his talk "Assessing the Outcomes using various Assessment Techniques"

Professor Mostafa Azad Kamal began the session by welcoming the participants of this webinar followed by a brief note on the biography of the distinguished session speaker - Dr. A. K. Enamul Haque. The topic of the presentation was "Evaluation of Educational Performances". This informative presentation focused on the assessment techniques for assessing the outcomes of the provided education. The speaker stressed on the purpose of education at the beginning of the talk, followed by a brief introduction on the history of education and various educational models from different timelines and regions. In his talk, he identified the 21st century education system as a discipline-based education which is aimed to achieve the national goals and brought multi linguistic groups to one national community. Along with the theory, practice and system-based evaluation - critical thinking is also introduced to the pedagogy of learning in this system.

At present, not only the learner group is heterogeneous but also the learning objective is heterogeneous. However, as the education system is becoming more standardized, it was also becoming very rigid due to time, space, institutional, as well as system constraints which created gaps between the needs and supply of different stakeholders of the educational system like learners, parents, educator, employer and the government. Dr. Haque highlighted the importance of educators in producing an output of the education which is learners having global competence, skill and critical thinking obtained through multi-track learning systems to achieve the national economic and development goals.

The speaker identified the modern education system as a complex system that needs a paradigm shift in curriculum design, program outcome, teachers' training and evaluation tools to ensure achievement of complete competence of certain skills of the learners along with values like honesty, integrity and understanding of culture and society. To implement such evaluation, different strategies like self-evaluation by the students, competence-based experiments and creative testing can be introduced by the educators. The tools for modern education evaluation could involve a combination of structured and objective based mechanism which may include in-class quizzes, home assignments, oral presentations, group work and field learning. Dr. Haque shared his experience on student performance evaluation with the participants of the webinar through infographics. He also shared his non-classroom-based evaluation strategies - both online and offline - with the audience.

The speaker ended his presentation with the concluding remark that evaluation of provided education should not only involve classroom-based examinations, but it should be a blend of all the assessment techniques which in turn will ensure the success of outcome-based education.

Afterwards, Professor Mostafa Azad Kamal started the question answer session one by one. A participant, Parvez Abbasi, asked whether there is an inevitable tradeoff between democratization and greater access to education and its inherent quality? Dr. Haque stated in response to this question that because education no longer belongs exclusively to the elitist and is given to all, the issue, in this case, is that the expansion has been too rapid even to establish teachers of good quality. He emphasized that instead of relying solely on the ability of teachers

to assess education, it should instead be the target of students to achieve it. He then added that education must fulfill the outcome, which is not necessarily a skill but rather a critical thinking outcome.

After that, Dr. Lal Mohan Baral and Rajib Lochan Das inquired if peer evaluation can be effectively applied in a workable way for undergraduate students? The discussion on the subject by Dr. Haque was that we are used to the one-dimensional performance evaluation method in which a set of questions are given, and students respond to them and are graded between 0-100. He states, however, that the rubric is a strong mechanism for assessing the success of students. He shared his personal experience of giving his students a rubric with a grading scale of five parameters to judge their peers which worked. He pointed out that we need to have trust in students.

For that, he gave an example of Oberlin College, USA, in which students give examinations without any invigilation and that if anyone uses unfair means during examinations, their students report it to the student's body, and they evaluate.

The session chair then asked Professor Sufia Islam's question if there is any link between small class size and student performance and how does class size impact learning? To respond to this question, Dr. Haque shared his personal experience of seeing a renowned professor in China teach about 20 sections remotely from his office room. Whereas in a typical classroom, the junior teachers took classes. He noted that large sections are generally seen to be taught by senior teachers. He then added that while the technique needs to be different between large and small sections, the teaching method has to be well blended.

In the last part of the session, Dr. Lal Mohan Baral questioned whether PBL (Problem Based Learning) method workable for higher education in Bangladesh and how can we distinguish between outcome-based learning OBE and PBL education? Dr. Haque addressed this query by stating that PBL is more of a skill whereas OBE is not just a skill, but also involves other factors such as human behavior, which is an integral part of learning. He points out that if human values are not known, then we will cause problems in society. He concludes by stating OBE includes performance as well as critical thinking.

This session ended with a vote of thanks from the session chair and an enormous amount of appreciation from the participants.

Technical Session-09

Hither Outcome-Based Education (OBE) at the Tertiary Level: How far are we in Managing Change?

Speaker

Dr. Amanullah (Chanchal) Khan
International Development Practitioner in Education and Public Policy
Australia

Session Chair

Dr. Ahmed Wasif Reza
Associate Professor
Dept. of Computer Science and Engineering
East West University, Bangladesh

Summary

Out of several important sessions, Dr. Amanullah (Chanchal) Khan, International Development Practitioner in Education and Public Policy, Australia, gives a presentation on a topic called "Hither Outcome-Based Education (OBE) at the Tertiary Level: How far are we in Managing Change?"

Dr. Amanullah (Chanchal) Khan, International Development Practitioner in Education and Public Policy, Australia, presented a paper on "Hither Outcome-Based Education (OBE) at the Tertiary Level: How far are we in Managing Change?" and he highlighted that outcome Based Education (OBE) has been a critical part of education discourse since the 1980s. Indeed, OBE is all about governance in education, the way accountability is ensured vis-à-vis the taxpayers, and the wider stakeholder environment, including students, and parents. OBE has gone through many trials across the spectrum of education tiers all over the world, with varying degree of success. Yet, as

an ever-evolving concept and a practice, OBE stands at a state of confusion and disarray in the secondary and tertiary education sectors in many countries, including Bangladesh despite their heightened economic growth. The conceptual clarity of OBE also remains obscure and subject to an array of interpretation. Thus, there remains a severe disconnect between the outcome of classroom learning and entry to the workplace, as well as contribution of graduates in their workplaces. Thus, institutional reforms, policy reorientation, and change management among policy makers, teachers, and students are important areas that need to be acted upon if OBE is to emerge as an important aspect of educational governance.

Outcome Based Education (OBE) is a brainchild of William Spady (1990) to bring the focus of formal education to what the students learn rather than what they were taught. OBE is a system of education giving priority to ends, purpose, accomplishments, and results. Outcomes for a higher education program are defined at three levels as program outcomes (POs), program specific outcomes (PSOs), and course outcomes (COs). The most important aspect of an outcome is that it should be observable and measurable. These are best written in a well-defined framework of taxonomy of learning. The learning can be carried to as many places as possible as a reflection of the learning one has obtained.

Outcomes are "not the score, label, grade, or percentage that someone attaches to the demonstration, but the substance and actions of the demonstration itself". Outcomes have some important characteristics which are as follows:

It should be achievable and assessable; instruction should make a difference;

It should be transparent and fair. It should indicate where learnings have not achieved; and reflect the result of learning, not process.

William Spady is clear that outcomes should state what students can do when they exit the system.

Outcomes describe significant learning, not trivial learning.

Learning is not significant unless the outcomes reflect the complexities of real life and give prominence to the life-roles that learners will face after they have finished their formal education.

Global adoption, rejection & practices:

Outcome-based education bases each part of an educational system around the world. By the end of the educational experience, each student should have achieved the goal. There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes. The role of the faculty adapts into instructor, trainer, facilitator, and/or mentor based on the outcomes targeted.

Outcome-based methods have been adopted in education systems around the world, at multiple levels, but at varying degrees of protocols and success. Australia and South Africa adopted OBE policies in the early 1990s but have since phased out. The United States has had an OBE program in place since 1994 that has been adopted and changed over the years. In 2005, Hong Kong adopted an outcome-based approach for its universities. Malaysia implemented OBE in all of their public schools systems in 2008. The European Union has proposed an education shift to focus on outcomes, across the EU. In an international effort to accept OBE, the Washington Accord was created in 1989; it is an agreement to accept undergraduate engineering degrees that were obtained using OBE methods.

Washington Accord 1989: As of 2017, the full signatories are Australia, Canada, Taiwan, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Russia, Singapore, South Africa, Sri Lanka, Turkey, The United Kingdom, Pakistan, China and the United States.

Curriculum & Outcomes:

The term 'outcomes' has broader meaning than just simply measuring learning outcomes to hold schools accountable. OBE represents a distinctive approach to curriculum that distinguishes it from either a syllabus or, in the US, what is termed a standard approach. Spady (1993) differentiates between 3 types of outcome-based education approaches.

Traditional OBE: It is based on a traditional approach to curriculum. It gives a strong focus on content and year level organization and the world of the classroom appears divorced from the so-called real world. The OBE focus is defined in terms of measuring students' mastery of the set curriculum.

Transitional OBE: The focus moves away from teaching subjects to cultivating higher order competencies, such as critical thinking, problem solving and communication skills. The focus moves from the classroom to defining what students need to be successful after graduation in terms of life-long learning.

Transformational OBE: This approach is future oriented and focuses on the broad role performance capabilities of young people and their ability to do complex tasks in real world settings, in real situations, relating more directly to life. Transformational OBE is not focused on curriculum outcomes, that is, outcomes about conventional subject areas. Learning is no longer based on year levels and the belief that students must succeed in a set period of time.

Constructivism - key upside of OBE:

Students are not passive vessels for receiving knowledge but active participants who construct knowledge for themselves. This theory is said to support 'learner-centred' teaching, hands-on learning, discovery learning and the rest. Constructivism is a psychological theory about memory and learning. (Rousseau, John Dewey and Jean Piaget, built on Hirsch, 1998)

Australian curriculum documents give precedence to constructivist approaches to learning -- learning is unique to the individual.

Learning must be active and related to the real-world in the most obvious sense.

Unlike a syllabus or standards approach, there is greater emphasis on direct instruction and explicit teaching, the OBE approach adopts classroom strategies like: group learning, individualized project work and enquiry learning.

One of the flaws in constructivism is that it takes a common-sense observation, that learning is actively constructed, and that each person internalizes learning in a unique way and distorts it to such an extent that it becomes counter-productive.

Possible strategies/ Recommendations:

A set of possible strategies have been suggested. These are as follows:

- Policy pronouncements by the governments are essential.
- Regardless of the weaknesses of OBE, it can serve as a flexible approach as it does not dictate the choice of specific education strategies or teaching methods-it only says what should be the outcome.
- New OBE schemes have also diversified in response to early misgivings about OBE.
- Make use of the diversity in the global OBE accreditation and assessment practices, and the unifying trends.
- Avoid rigidity and ensure conceptual clarity during implementation in curriculum and instructional design.
- Regular monitoring and independent assessment to understand if the system is working or not and take lessons from the past.
- Inter-institution collaboration- what works and what does not.
- Set up a proper robust assessment center with qualified and dedicated persons, not a tiny cell.
- Change management among policy makers and teachers, academics, principals, vice chancellors.
- Teachers' quality improvement, incl, special inclusion in the B.Ed & M.Ed courses (for secondary).
- Continuous changes in structure, curriculum, courses, syllabus & pedagogical techniques.
- Get rid of subjects that add no value. Links with labour market needs; access and retention in the labour market and industry; serious links with life skills approach.
- Change management:

- Change management is an integral part of OBE. A list of change managements are provided below:
- Acceptance by policymakers/institutions
- Getting rid of preconceived notions.
- Managing perceptions.
- Making change a part of academic culture.
- Training/understanding best practices.
- Understanding resistance to changes and manage resistance (from within and outside)
- Conclusion:
- OBE is the educational system preparing students to meet the highest standards of a particular profession. Higher education institutes are encouraged to implement OBE not only to be locally and globally competitive but also to work for transformative education.

Program Schedule
Symposium: Transition from Traditional to Outcome-Based Education: Call of the Hour
Organizer: Institutional Quality Assurance Cell (IQAC), East West University, Bangladesh
Date: 13-14 November (Friday & Saturday), 2020

Day 1: Friday, 13 November 2020

4:00 pm - 5:00 pm (BD Standard Time)		Inaugural Session	
Session Chair: Dr. A. F. M. Saiful Amin Professor, Dept. of Civil Engineering BUET, Bangladesh		**Rapporteur:** 1. Ms. Monisha Biswas, Senior Lecturer, ENG 2. Mr. Md. Shazed Ul Hoq Khan Abir, Senior Lecturer, ENG	
Date: 13 November, 2020 Day: Friday Local Time: 11:00 am -12:00 pm (Ireland Standard Time)	Date: 13 November, 2020 Day: Friday Local Time: 5:00pm-6:00pm (BD Standard Time) Presentation: 50 Minutes Q & A: 10 Minutes	**Speaker: Dr. Charlotte Holland** Associate Professor, School of STEM Education, Innovation and Global Studies, DCU Institute of Education, Dublin City University, Director of RCE Dublin, **Republic of Ireland**	**Topic:** Accelerating Action on Sustainable Development Goal 4 of the UN 2030 Agenda for Sustainable Development: Progressing the Integration of Education for Sustainable Development and Global Citizenship in Higher Education Curricula and Practices
Session Chair: Dr. A. K. Enamul Haque Professor, Dept. of Economics East West University, Bangladesh		**Rapporteur:** 1. Ms. Saiyeeda Saniya Munim, Senior Lecturer, ECO 2. Ms. Asiya Siddica, Senior Lecturer, ECO	
Date: 13 November, 2020 Day: Friday Local Time: 12:00 pm - 1:00 pm (UK Standard Time)	Date: 13 November, 2020 Day: Friday Local Time: 6:00pm-7:00pm (BD Standard Time) Presentation: 50 Minutes	**Speaker: Professor Dr. Tom Ward** Deputy Vice Chancellor Leeds University, **UK**	**Topic:** Improving Higher Education during a Pandemic

	Q & A: 10 Minutes		

Day 2: Saturday, 14 November 2020

Session Chair: Dr. Hasnat Muhammad Alamgir Professor, Dept. of Pharmacy East West University, Bangladesh		Rapporteur: 1. Mr. Ariful Islam, Senior Lecturer, ENG 2. Ms. Shahnaz Ameer, Lecturer, ENG 3. Mr. Jesan Ahammed Ovi, Lecturer, CSE	
Date: 14 November, 2020 **Day: Saturday** **Local Time:** **1:00 pm - 2:00 pm** **(Sydney Standard Time)**	Date: 14 November, 2020 Day: Saturday Local Time: 8:00 am - 9:00 am (BD Standard Time) Presentation: 50 Minutes Q & A: 10 Minutes	**Speaker: Professor Dr. Jim Tognolini** Director, Centre for Educational Measurement and Assessment Faculty of the Arts and the Social Sciences The University of Sydney, **Australia**	**Topic:** Assessing, Measuring and Reporting on the Graduate Qualities of University Students: A Practical Example
Session Chair: Professor Dr. Arshad M. Chowdhury Dean, School of Engineering BRAC University, Bangladesh		Rapporteur: 1. Ms. Naushin Nazifa Islam, Senior Lecturer, ENG 2. Mr. Refat Bin Reza Rafi, Lecturer, ENG	

Date: 13 November, 2020 **Day: Friday** **Local Time:** **10:00 pm -10:50 pm** **(USA Standard Time)**	Date: 14 November, 2020 Day: Saturday Local Time: 9:00 am - 9:50 am (BD Standard Time) Presentation: 40 Minutes Q & A: 10 Minutes	**Speaker: Dr Krishna Vedula** Professor Emeritus at the University of Massachusetts, Lowell, **USA**	**Topic:** Achieving Global Excellence in Engineering Education through Outcomes Based Education
Session Chair: Dr. Sarwar Hasan Professor, Dept. of Computer Science and Engineering United International University, Bangladesh		Rapporteur: 1. Ms. Mashruha Zabeen, Senior Lecturer, DBA 2. Mr. Reaz Hafiz, Senior Lecturer, DBA	
Date: 14 November, 2020 **Day: Saturday** **Local Time:** **11:55 am - 12:45 pm** **(Singapore Standard Time)**	Date: 14 November, 2020 Day: Saturday Local Time: 9:55 am - 10:45 am (BD Standard Time) Presentation: 40 Minutes Q & A: 10 Minutes	**Speaker: Dr. Yong Lim Foo** Professor, Singapore Institute of Technology, **Singapore**	**Topic:** Disruptions in Higher Education -The Future of Work and Learning
Session Chair: Dr. Md. Tofazzal Islam Professor, Dept. of Biotechnology Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh		Rapporteur: 1. Ms. Nuzat Nawar Tofa, Lecturer, DBA 2. Mr. Shahriyar Safat Dipta, Lecturer, EEE	
Date: 14 November, 2020 **Day: Saturday** **Local Time:** **12:50 pm - 1.40 pm** **(Hong Kong Standard Time)**	Date: 14 November, 2020 Day: Saturday Local Time: 10:50 am -11:40 am (BD Standard Time) Presentation: 40 Minutes Q & A: 10 Minutes	**Speaker: Dr. King Chong** Educational Development Manager Teaching and Learning Centre Lingnan University, **Hong Kong, China**	**Topic:** Outcome Based Education: The Experience of Lingnan University

Session Chair: Dr. Chowdhury Faiz Hossain		Rapporteur:
Session Chair: Dr. Chowdhury Faiz Hossain Professor, Dept. of Pharmacy East West University, Bangladesh		**Rapporteur:** 1. Dr. Farjana Khatun, Assistant Professor, Pharm 2. Ms. Nusrat Jahan Ananna, Lecturer, EEE

| **Date: 14 November, 2020**
Day: Saturday
Local Time:
9:45 am -10.35 am
(UAE Standard Time) | Date: 14 November, 2020
Day: Saturday
Local Time:
11:45 am - 12:35 pm
(BD Standard Time)
Presentation: 40 Minutes
Q & A: 10 Minutes | **Speaker:**
Dr. Habibul Haque Khondker
Professor, Department of Social Sciences
Zayed University,
United Arab Emirates (UAE) | **Topic:** Globalization of the Universities:
Challenges and Opportunities |

12:35 pm - 2:00 pm: Lunch Break

Session Chair: Professor Mostafa Azad Kamal Dean, School of Business Bangladesh Open University, Bangladesh		**Rapporteur:** 1. Ms. Najneen Ahmed, Senior Lecturer, Pharm 2. Ms. Rubayat Kabir, Senior Lecturer, SR

| **Date: 14 November, 2020**
Day: Saturday
Local Time:
2:00 pm - 2:50 pm
(BD Standard Time) | Date: 14 November, 2020
Day: Saturday
Local Time:
2:00 pm - 2:50 pm
(BD Standard Time)
Presentation: 40 Minutes
Q & A: 10 Minutes | **Speaker: Dr. A. K. Enamul Haque**
Professor, Dept. of Economics
East West University,
Bangladesh | **Topic:** Assessing the Outcomes using various
Assessment Techniques |

Session Chair: Dr. Ahmed Wasif Reza **Associate Professor** **Dept. of Computer Science and Engineering** East West University, Bangladesh		**Rapporteur:** 1. Mr. Md. Rezwan Siddiqui, Senior Lecturer, SR 2. Mr. Md. Mohsin Uddin, Senior Lecturer, CSE

Date: 14 November, 2020 **Day: Saturday** **Local Time:** **7:55 pm - 8:45 pm** **(Australia Standard Time)**	Date: 14 November, 2020 Day: Saturday Local Time: 2:55 pm - 3.45 pm (BD Standard Time) Presentation: 40 Minutes Q & A: 10 Minutes	**Speaker:** **Dr. Amanullah (Chanchal) Khan** International Development Practitioner in Education and Public Policy, **Bangladesh**	**Topic:** Hither Outcome-Based Education (OBE) at the Tertiary Level: How far are we in Managing Change?
Time: 4:00 pm – 5:00 pm **(BD Standard Time)**		**Closing Session**	