ELDEC 2017

4th e-Learning and Distance Education Conference

Envisioning the Future: Rethinking, Reshaping, Redesigning Education

20-21 November 2017

Virtual University, Lahore, Pakistan

Welcome note from the Rector

On behalf of the ELDEC2017 organizing committee, I am honored and delighted to welcome you to ELDEC2017, the 4th e-Learning and Distance Education Conference, which is being organized by the Virtual University of Pakistan in collaboration with University of Education, the Higher Education Commission and Punjab Higher Education Commission. The two-day conference is being held on November 20-21, 2017 at Virtual University and University of Education.

ELDEC2017 will help in bringing academicians and educationists from variety of disciplines together and will provide a platform for sharing their experiences of the use of ICT in education in variety of novel and innovative ways. I am sure all participants will have an opportunity to network among colleagues while enjoying all activities during this pivotal event. Our technical program is rich and varied with 5 keynote speeches and around 25 technical papers split over 5 sessions in two days.

As a Chief Patron of ELDEC2017, I know that the success of the conference depends ultimately on the many people who have worked in planning and organizing both the technical program and supporting social arrangements and all members of the organizing team who have all worked extremely hard should be duly recognized.

I look forward to interacting with and learning from you. I wish you to have a wonderful conference with a lot of knowledge being shared in these two days.

Dr. Naveed A. Malik [S.I.]

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VUP warmly welcomes you to ELDEC 2017

4th e-Learning and Distance Education Conference

Distance Education (DE), a novel trend in the realm of higher education emerged almost half a century ago with a focus to facilitate learning for those who were geographically distant. With reference to e-Learning in Pakistan, Virtual University of Pakistan (VUP) holds a leadership position, being the pioneer of technology-based education with the objective of providing quality distance education to all. The University has not only introduced a new trend in education but also opened up new avenues both for educators and learners. The course material has been made freely available through broadcast television, DVDs and YouTube, which is extensively used by students and faculty members alike from other universities, both formally and informally.

In order to keep pace with the ever-changing trends in ICT, VUP has always realized the need of a platform where innovative developments in e-Learning can be exchanged and discussed by all stakeholders. e-Learning and Distance Education Conference (ELDEC) is the practical realization of this need. VUP has already organized three Conferences in this regard and now host the 4th e-Learning and Distance Education Conference (ELDEC 2017) with the theme "Envisioning the Future: Rethinking, Reshaping, Redesigning Education". This Conference will provide a useful forum for participants to share their experiences under this theme and will provide opportunities for networking that may lead to extended collaboration in Distance Education and e-Learning among individuals and institutions. We are very excited to welcome all the participants at this vibrant platform.

Key Notes Speakers

Prof. Dr. Tian Belawati Former Rector, Indonesia Open University, Indonesia *Re-shaping Open University for the Digital Era*	
As information and communication technology (ICT) continues to evolve, students also expect changes in many aspects of distance education (DE) practices. Distance education institutions are now expected to deliver services that are more personalized, faster, and of higher quality. Open universities historically deliver massive distance education with highly standardized services and therefore less personal, and thus often considered as second class education. Within the past decade, open universities have been adjusting their systems to address the expectation and evolving to becoming modern distance learning institutions. Applying ICT for administration system is simple but that was not the case for instructions. There are many complications as access to and literacy of ICT are limited. The speech is going to illustrate how one of the biggest open universities in Asia, Universitas Terbuka, is approaching its transformation from a distance education university that delivers conventional DE into one that caters the whole spectrum of DE schemes.	*November 20, 2017* *11:00 am*
Prof. Dr. John Arul Phillips Dean, School of Education & Cognitive Science Asia e University *The Learning Revolution: Impacting Curriculum, Assessment and Pedagogical Strategies in Higher Education*	
The learning revolution brought about by the rapid growth of internet tools and technologies, digital content and mobile devices calls for a transformation of higher education. The paper examines how the learning revolution is reshaping what we teach (or curriculum), how we teach (or pedagogical strategies) and how we assess learning (or assessment). The rise of MOOCs, OERs and access to massive amounts of digital content has triggered the need to re-evaluate what we teach. Similarly, various internet technologies, artificial intelligence and mobile devices has prompted the need to exploit how we teach. Technological innovations, learning analytics and platforms has provided insight into how to holistically assess learner performance using an assortment of tools. The authors illustrate with examples how the learning revolution impacts curriculum, pedagogy and assessment in their institution such as access to remote areas, adapting to low language proficiency, motivating adult learners, assessing learning and others.	*November 20, 2017* *1:45 pm*
Dr. Zahid Majeed Director International Collaboration & Exchange Office Allama Iqbal Open University *Accessible Online Course Design for Differently Able Students*	
The 21st century is a digital century, everywhere learner is engaged with ICT for knowledge, information and learning. Students in a class can vary by gender, race, ethnicity, culture, marital status, age, communication skills, learning abilities, interests, physical abilities, social skills, sensory abilities, values, learning preferences, socioeconomic status, religious beliefs, and other factors. Few decades back it was difficult or impossible for the differently able students/people to do or learn things according to their special needs. ICT revolution and developments made it accessible and usable for them. Providing multiple ways for students to gain knowledge, demonstrate knowledge, and interact goes a long way toward making a course accessible to all students, including those with special needs/disabilities. For course	*November 20, 2017* *4:00 pm*

designer, much helpful to know a bit about the thousands of assistive technologies that people with special needs/disabilities might use to provide input to the computer and gain access to the output. They do not need to be familiar with all of the capabilities of these devices, but it is important to know how they are used and understand some of their limitations. For example, screen readers have the capabilities to skip from link text to link text in a web page and from heading to heading in a document. These features allow individuals who are blind to skim through a web page to find resources that are linked from the page and through a document to gain an overview of its content and organizational structure. These functions are only useful if web document creators make the text of links meaningful (for example, "DO-IT newsletter" rather than "click here") and appropriately structure headings (for example, using the Style feature of Microsoft Word so that the screen reader knows what text forms a heading). In 2015 my friend (blind) from Thailand and me taught an online learning course to inclusive classroom. We designed the course to be accessible to students who had a broad range of challenges, including those related to vision, hearing, learning, attention, and mobility. We employed the latest technology of the time e-mail, discussion list, Gopher, file transfer protocol, and Telnet. All online materials were in a text-based format, and videos which were mailed to the students were presented in VHS format with captions and audio description. In the course, there were about seven students with visual impairment, two hearing impaired and four physically disabled. We found no student requested an accommodation or problems of accessibility or usability. Our accessibility efforts benefited not only students with special needs/disabilities but more without disability. In conclusion, although the technology today is more advanced and diverse, the basic issues are the same when it comes to accessibility. Faculty and instructional designers need to make sure that screen readers can access content in a text-based format; that content is accessible by using the keyboard alone; that videos are captioned; that content is presented in a clear, consistent, structured format; and so on.	
Dr. Munawar Sultana Mirza Virtual University of Pakistan *Standards for Quality Tertiary Level e -learning: Practices and Problems in Pakistan*	
	November 21, 2017 9:00 am
Dr. Rauf-i-Azam Vice Chancellor, Univerity of Education, Pakistan	
This talk will draw upon analogies from various industries as well products & services offered by them and the way education is following the track of those industries thus evolving into a service delivery system that gives out more and more customized outcomes. The talk will also cover how technology is shaping and facilitating this evolution and how the fourth industrial (technological) revolution is promising to return to the humanity what was taken away by the first industrial revolution.	*November 21, 2017 11:15 am*

ELDEC2017 Program

Day 1 – Monday November 20, 2017 (at Head Office, Virtual University of Pakistan)		
Time	Sessions	Speaker/ Resource Person
8.00 am	Registration	
9:00 am – 10:00 am	Inaugural session	
9:00 am	Recitation from the Holy Quran and English Translation	Mr. Abdul Quddoos Durrani, Virtual University
9:05 am	Welcome Address and Introduction of ELDEC	Dr. Naveed A. Malik, Rector Virtual University of Pakistan
9:25 am	Souvenir/Shield Distribution	Chief Guest & Rector
9:30 am	Chief Guest Address	Dr. Arshad Ali, Executive Director HEC, Former Rector, National Textile University
9:55 am	Vote of Thanks	Dr. Masroor Ellahi, General Chair ELDEC2017, Virtual University
10:00 am – 11:00 am	Group Photo and Tea Break	
11:00am – 1:00pm	1st Technical Session (Auditorium, VUTV Building, Virtual University of Pakistan) Session Chair: Dr. Najma Najam	
11:00 am	Re-shaping Open University for the Digital Era (Keynote Speaker)	Dr. Tian Belawati
11:30 am	1. Ayesha Zafar. *Design of Integrated Modules in the Clustering of Adaptors and Innovators in an Online English Language Software*	Ms. Ayesha Zafar
11:45 am	2. Dr. Muhammad Khalid Mahmood and Prof. Dr. Muhammad Ramzan. *ICT Integrated Teaching in Schools: School Teachers' Attitude, Familiarity and Practices*	Dr. Muhammad Khalid Mahmood
12:00 pm	3. Sadaf Fatima. *Use of Technology for Teaching Speaking Skills in ELT Classrooms of Pakistan*	Ms. Sadaf Fatima
12:15 pm	4. Dr. Quratulain Hina, Dr. Saira Nudrat and Mahek Arshad. *Interplay Between Educational Technology and Classroom Management*	Dr. Quratulain Hina
12:30 pm	5. Yousaf Khan. *Tech-Knowledgy: Rethinking, Reshaping and Redesigning Assessment for Learning in Virtual Learning Environment Framework*	Mr. Yousaf Khan

	(Vlef)	
12:45 pm	6. Muhammad Adnan Ayub and Farman Ali Khan. *Evaluation of Two Sides of the Same Coin (Learning Management Systems and Outcome Based Assessments)*	Mr. Muhammad Adnan Ayub
	Shields' distribution to Presenters and Session Chair	
1:00 pm – 1:45 pm	Lunch and prayer break	
1:45pm – 3:45pm	2nd Technical Session (Auditorium, VUTV Building, Virtual University of Pakistan) Session Chair: Dr. Munawar Sultana Mirza	
1:45 pm	The Learning Revolution: Impacting Curriculum, Assessment and Pedagogical Strategies in Higher Education (Keynote Speaker)	Dr. John Arul Phillips
2:15 pm	7. Shumaila Zawar, Rizwana Noor and Farman Ali Khan. *Evaluation of Affective Computing Based E-learning Systems*	Mr. Shumaila Zawar
2:30 pm	8. Dr Saira Nudrat, Dr Quratul Ain Hina and Mahek Arshad. *Social skills development analysis in Distance Education*	Dr. Saira Nudrat
2:45 pm	9. Asma Sharif Akhtar. *The Impact and Significance of Active Learning on Distance Education System*	Ms. Asma Sharif Akhtar
3:00 pm	10. Dr. Quratul Ain Hina, Mahek Arshad and Saima Mehar. *Demographic Diversity Effecting Teacher's Perceptions Related to Quality of Research Produced in Distance Education*	Ms. Mahek Arshad
3:15 pm	11. Dr. Afshan Huma. *Exploration of skill set for e-leadership at AIOU*	Dr. Afshan Huma
3:30 pm	12. Nighat Jamal. *French language learning through distance education in Pakistan*	Ms. Nighat Jamal
	Shields' distribution to Presenters and Session Chair	
3:45 pm – 4:00 pm	Tea break	
4:00pm – 6:00pm	3rd Technical Session (Auditorium, VUTV Building, Virtual University of Pakistan) Session Chair: Dr. Mahmood Ahmad Bodla	
4:00 pm	Accessible Online Course Design for Differently Able Students (Keynote Speaker)	Dr. Zahid Majeed
4:30 pm	13. *Qanita Bokhari, Sundas Moughees and Jalil Asghar. Learning Multiple Languages Using Computer Technologies in the Developing World*	Ms. Sundas Moughees
4:45 pm	14. *Dr. Tayyaba Zarif, Dr. Safia Urooj and Rashid Hussain. The perception of e-learning at higher education level: The learners' sight*	Dr. Safia Urooj
5:00 pm	15. Muhammad Sulman and Afsheen Masood. *e-Learning Management Strategy as Predictor of Academic Motivation, Self-efficacy and Academic Performance of Graduate Students*	Mr. Muhammad Sulman

5:15 pm	16. Abida Parveen. *Curriculum, Instruction and Assessment*	Ms. Abida Parveen
5:30 pm	17. Tahir Ramzan. *VU Voice GDB*	Mr. Tahir Ramzan
5:45 pm	18. Dr. Sadaf Zamir Ahmed, Hina Zamir and Obaid Ullah. *Need and provisions of Information and Communication Technology in Pre-Service Teacher Education programs*	Dr. Sadaf Zamir Ahmed
	Shields' distribution to Presenters and Session Chair	
7:00 pm	Gala Dinner (VUP Head Office)	
Day 2 – Tuesday November 21, 2017 (at University of Education, Township Campus, Lahore)		
9:00am – 11:00am	4th Technical Session Session Chair: Dr. Huma Lodhi	
9:00 am	Standards for Quality Tertiary Level e-Learning: Practices and Problems in Pakistan (Keynote Speaker)	Dr. Munawar Sultana Mirza
9:30 am	19. Kamran Khan and Farman Ali Khan. *Exploiting metacognitive learning strategies for Self-Regulated learning in web based learning environments*	Mr. Kamran Khan
9:45 am	20. Nauman Ahmed Abdullah and Dr. Munawar Sultana Mirza. *Entry Qualifications of Students as Predictor of Academic Performance in Various Degree Programs*	Mr. Nauman Ahmed Abdullah
10:00 am	21. Moazzam Ali Tarar. *Online Educational Contents: How to Make Them More Effective in Pakistan?*	Mr. Moazzam Ali Tarar
10:15 am	22. Mustafa Hameed, Nadeem Akhtar and Malik Muhammad Saad Missen. *Comparative study of teaching first programming language in distance learning using lecture based approach and project based approach*	Mr. Mustafa Hameed
10:30 am	23. Abdul Rehman Abbasi, Paras Rajper and Yaseen Ahmed Meenai. *Towards Incorporating Online Active Learning Classroom Pedagogy in Training Curriculum*	Mr. Abdul Rehman Abbasi
10:45 am	24. Muhammad Hamza and Asif Ali Asif. *Effects of terrorism on Education and policies*	Mr. Muhammad Hamza
	Shields' distribution to Presenters and Session Chair	
11:00 am – 11:15 am	Tea Break	
11:15am – 1:15pm	5th Technical Session Session Chair: Dr. Intazar Hussain Butt	
11:15 am	(Keynote Speaker)	Dr. Rauf-i-Azam
11:45 am	25. Salma Naz. *Role of distance and e- Learning in empowerment of women through expansion of higher education in Pakistan: Potentials and*	Ms. Salma Naz

	Opportunities	
12:00 pm	26. Muhammad Safdar Bhatti and Rafia Mukhtar. *Studying the Role of E-Learning on ESL Learners as Digital Natives: A Survey*	Mr. Muhammad Safdar Bhatti
12:15 pm	27. Zaira Maamoor. *Impact of organizational culture, structure and Knowledge Management System（KMS）on Employee Performance – SMEs Perspective*	Ms. Zaira Maamoor
12:30 pm	28. Iffat Ali and Dr. Zahid Yousaf. *Educational Broadcasting: Exploring Challenges for Participatory learning among students*	Ms. Iffat Ali
12:45 pm	29. Fozia Shaheen and Mamoona Khalid. *Distance Education System for Rural Women and its impact on Women learning: Current Challenges and Future Strategies with reference to the Pakistan*	Ms. Fozia Shaheen
1:00 pm	30. Nehala Mumtaz and Masooma Zehra. *Impact of E-learning on learning at Out of School Children School*	Ms. Nehala Mumtaz
	Shields' distribution to Presenters and Session Chair	
1:15 pm – 2:00 pm	**Lunch and prayer break**	
2:00pm – 3:30pm	**Closing Ceremony**	
2:00 pm	Recitation from the Holy Quran and English Translation	Mr. Abdul Quddoos Durrani
2:05 pm	Reflections on the Conference	Dr. Tian Belawati
2:10 pm	Recommendations of ELDEC2017 & Concluding Remarks	Dr. Naveed A. Malik, Rector Virtual University of Pakistan
2:20 pm	Shields' Distribution	Chief Guest & Rector
2:40 pm	Address by Chief Guest	Dr. Mohammad Nizamuddin, Chairperson PHEC
3:00 pm	Vote of Thanks	Dr. Rauf-i-Azam, Vice Chancellor, University of Education
	Tea Break	

1st Technical Session

(Session Chair: Dr. Najma Najam)

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1. *Design of Integrated Modules in the Clustering of Adaptors and Innovators in an Online English Language Software* **(Ayesha Zafar)**

University of central Punjab (UCP)

This paper discusses the process, challenges and results of development of an online English Language learning system which is designed to use integrated modules of language at the Faculty of Information and Technology, University of Central Punjab. This system is for academic purposes and caters the need analysis of designed activities from a Pakistani student's perspective in a second language context. The pedagogy of the system is adapted from Transparent Language Online and the division of units and activities incorporates Declarative Accelerated Blended Learning. Moreover, the designed content enables the discrete profiling of learners which is based on their knowledge profiles, cognitive profiles and learning profiles. This profiling provides individualized instructions and foster language learning process. Furthermore, it separates two main clusters which are adaptors and innovators whereas the sub clusters are visual-spatial, read-write and auditory-musical. Its prototype is currently being evaluated at FoIT. The initial results depict that the online English learning software supports self-paced learning, encourages low affective filter and its modified lessons make learning fun.

2. *ICT Integrated Teaching in Schools: School Teachers' Attitude, Familiarity and Practices* **(Dr. Muhammad Khalid Mahmood and Prof. Dr. Muhammad Ramzan)**

Karakorum International University

This study aimed at investigating a connection between integration of technology in teaching learning process and teachers' attitude towards Information Communication Technology (ICT) their ICT familiarity and practices for use of ICT. Male and female teachers with different academic background and experience were selected randomly from three districts of the Punjab. Total 1200 randomly selected teachers participated in this descriptive study. Researchers developed two instruments one for measuring 'attitude towards ICT' and other for measuring ICT familiarity and practice for use of ICT tools and resources. Both the questionnaires were administered simultaneously, a demographic information sheet was also administered along with instruments to collect demographic information. Male teachers had relatively positive attitude towards ICT as compared to female teachers. Newly inducted educators had significantly better attitude towards ICT as compared to old experienced teachers. There was significant difference between attitude of teachers in urban and rural schools but use of ICT was significantly different. Urban teachers were better in using ICT resources especially due to better internet connectivity in urban areas.

3. *Use of Technology for Teaching Speaking Skills in ELT Classrooms of Pakistan* **(Sadaf Fatima)**

COMSATS Institute of Information Technology (CIIT)

This research paper would study the technology used in modern language classrooms of Pakistan and point out the best possible and innovative uses of these technologies in the language classroom for Pakistani teachers and students alike. The main focus of this paper would be on improvising the speaking skills of the multilingual, multidiscipline Pakistani university students who come from both

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urban and rural backgrounds. Many universities still are not equipped with the high-tech technology which can support both teachers and students in learning English language.

The paper would focus on the use of technology with an English language teacher's perspective for better teaching. The students would benefit from it as to how technology can help them in English language learning in classroom with instructions of teacher and in isolation when teacher is not present to direct them. The methodology of this research paper would be holistic in nature i.e. including both qualitative and quantitative data gathered from observation, literature review and survey conducted on teachers linked with ELT.

4. *Interplay between Educational Technology and Classroom Management* (Dr. Quratulain Hina, Dr. Saira Nudrat and Mahek Arshad)

National University of Modern Languages (NUML)

Research was based on assessment of teachers' competencies for the use of educational technology on classroom management. It was further divided into six further objectives keeping in view the six sub factors used for the teachers' competencies (Technology Operations and Concepts, Planning and Designing Learning Environments and Experiences, Assessment and Evaluation, Productivity and Professional Practice, Social, Ethical, Legal, and Human Issues and Planning of Teaching According to Individual Differences and Special Needs) and their effect on classroom management. The research was based on the correlation–descriptive style of study. All the teachers (11092) serving in the universities of Islamabad were considered as the population of research. Considering public and private sector as major sub sections of population, stratified random sampling technique was used to select a sample of 162 respondents. Data was collected by using two adapted scales (Educational Technology Standard Scale and Classroom Management assessment Scale). For the purpose of analysis majorly regression analysis was applied. Teachers' competencies were not found effective for the classroom management as a whole as well as none of the sub factor was having significant impact on classroom management. Thus it was concluded that the teachers at present are not effectively competent in the use of educational technology, so there is a dire need to train our teachers related to these skills. It is recommended that such courses may be the core part of the teacher education content. Online courses, web links, and collaborative approaches can be used to train the already inducted teachers.

5. *Tech-Knowledgy: Rethinking, Reshaping and Redesigning Assessment for Learning in Virtual Learning Environment Framework* (Yousaf Khan)

PITE. KP, PESHAWAR

The paradigm shift is needed from pedagogy to andragogy in the form of pendulum (author, 2017) and the andragogical practices to develop knowledge to wisdom by using 8Ts Iterative Cycle Model (author, 2017) for transformational, self-regulated and continuous learning when using ICT tools and technologies in community of practice: Learning and development. This paradigm shift from traditional to e-learning requires rethinking, reshaping and redesigning in Assessment for Learning in Virtual Learning Environment Framework (VLEF). The researcher (author, 2014, 2015, 2016 & 2017) purpose of the study was developing teaching, learning and assessment in integrated form so

that the Virtual Learning Environment Framework (VLEF) is facilitated for the self-regulated and continuous learners in the community of practice: Learning and development. It will help in effective instructional design for virtual learning.

The objective of the study was learner's need analysis for tech-knowledgy: rethinking, reshaping and redesigning in Assessment for Learning in Virtual Learning Environment Framework (VLEF). The nature of the study was historical and qualitative. The methodology used was Critical Discourse Analysis and literature review. The finding of the study revealed that when knowledge is dynamically created and iteratively developed in Virtual Learning Environment Framework. The learners using pendulum of pedagogy and andragogy to transform and transfer learning through self-regulated mechanism, using (8Ts iterative cycle model of andragogy) need continuous assessment for learning (as feedback) through self and peer assessment in authentic and collaborative learning communities. Hence, it was concluded that in tech-knowledge there is need of rethinking, reshaping and redesigning in Assessment for Learning to develop a model for open and flexible Virtual Learning Environment Framework for curricula and institutions.

6. *Evaluation of Two Sides of the Same Coin (Learning Management Systems and Outcome Based Assessments)* **(Muhammad Adnan Ayub and Farman Ali Khan)**

COMSATS Institute of Information Technology (CIIT)

Recently due to the increased calls for accountability in higher education sector from the professional accreditation bodies, institutions of higher education have focused intensively over developing mechanisms regarding assessment of students learning outcomes. Current process of compiling different dimensions of learning outcomes is typically paper based, which lack accuracy and efficiency. Therefore, the need arises of developing an automated mechanism that can easily relate, learning objects and course level activities with program goals as well as institutional mission. On the other hand, higher education institutions have deployed their learning repositories and course level activities over Learning Management Systems. LMSs have the potential to capture and store, along with grades, every course related activity such as quiz, assignment, project, discussion and exam. However, research indicates that the use of LMS for the learning outcome assessment is still a less focused area. Therefore, at first, the aim of this research is to review literature to identify criteria for the learning outcome assessment keeping in view the accreditation bodies requirements. The next step is to evaluate the LMSs suitability with respect to the defined criteria. The last step of this research focuses on incorporation of built in feature of learning outcome assessment within LMSs. This knowledge driven intelligent system is aimed to enable LMS to formulate course and program level learning outcome assessment based on student artifacts such as quizzes, assignments, exams.

2nd Technical Session

(Session Chair: Dr. Munawar Sultana Mirza)

7. *Evaluation of Affective Computing Based E-learning Systems (Shumaila Zawar, Rizwana Noor and Farman Ali Khan)*

COMSATS Institute of Information Technology (CIIT)

With the fast expansion and enhancement of technology in the recent years, e-learning emerged as the new paradigm of modern education, and subsequently consideration of affective states in

learning processes are more and more acknowledged. In this regard, various models and research prototypes have been proposed and developed by the researcher's community. The aim of these models and prototypes is to recognize, synthesize, and understand the human's emotions through different ways. The approaches commonly include voice recognition, facial expressions detection, measurements of physiological signs, and behavioral data. This study takes into account the usefulness of these models and systems, and also presents an evaluation method. The primary step of this evaluation is to identify the main features of existing learning systems. The next step deals with developing an appropriate evaluation methodology. In order to identify the features of learning systems, we consider the features that are most important for learning process. Later on, Affective computing based e-learning system were evaluated based on these features. This research takes into consideration the features such as affective states of learners, affect detection techniques, and characteristics of learning systems. Afterward six commonly used learning systems were evaluated based on these features using Fuzzy Logic the learning systems are EMASPEL tutoring framework, MYSELF learning system, Autotutor, Eve, Duffy, and Gerda tutoring system. Ultimately results in an e-learning system that is richer in terms of features related to affective computing.

8. *Social skills development analysis in Distance Education* **(Dr Saira Nudrat, Dr Quratul Ain Hina and Mahek Arshad)**

National University of Modern Languages (NUML)

Distance education is meant for an indirect mode of sharing and transforming knowledge through binding an invisible relationship with the students living far away from the institutions. Within this scenario, role of the tutor becomes more critical. In formal system of education, students can have face to face interaction with the teacher in case of any query. In distance education, access to the teacher is comparatively limited. That is why the importance of tutor is placed on high priority. It is the tutor only who can maintain students' motivation level high in education. This can only be possible through effective and attractive social skills practices by the tutors. In this context, the research was developed with the objective to assess the level of social skills development among the tutors serving at distance education institutions. Further the research focused on mutual comparison of tutors on the basis of their gender, age and qualification. The population of the study was comprised of all the tutors serving in distance education institutions situated in Islamabad. Random sampling technique was used to draw a sample of 115 tutors. For the sake of data collection, a social skills assessment scale was used. Tool was divided into eight sub-sections representing significant social skills. The results of the study proved that the scale was reliable (as testified by Cronbach Alpha). The data obtained highlighted that majority of the respondents had below average level of social skills. With reference to other dimensions of age, gender and qualification, there were no significant difference in social skills development ability. Thus, it is recommended first of all that distance education institutes may provide training sessions specifically focused on communication skills for the tutors. Tutor-students tutorials may also be monitored by a senior member from the institution with the aim of developing good rapport between the two. Objective and subjective kinds of evaluation may be obtained from the students as a permanent feature of distance education. It may also be an effective measure that distance institutions develop a work ethics manual for tutors. Most importantly tutors may be appreciated through incentives exclusively for their social skills incorporated during tutorials throughout the semester.

9. *The Impact and Significance of Active Learning on Distance Education System* **(Asma Sharif**

Akhtar)

National University of Sciences and Technology (NUST)

In this paper we will be focusing on how active learning can help in enhancing the learning of different types of learners in distance education system. Active learning is a well-established process in which learners are involved in different sort of learning activities, for example reading, writing, conversation, or solving different problem in the context of their curriculum that endorse analysis, synthesis, and evaluation of class environment. Distance education is a well establish term used in the modern world of education as it helps to educate a huge population who cannot be the part of regular education system. It has been observed that there are some exceptional advantages of distance education system. For example, there is an amplified admittance to learning which is liberated from constraints of time and space which is the biggest benefit and very encouraging for a potentially assorted group of learners. The relation between active learning and distance education will be well established as it not only helping in educating many people but also increase the learning performance of students.

This paper investigates the challenging environment of distance education system and how active learning can fulfill the learning outcomes. Pedagogical practices along with active learning can play transformative role in enhancing the learning process. Active Learning improved subject understanding, critical judgment and problem-solving abilities, and constructive attitudes towards learning in association to traditional way of delivering lecture.

10. *Demographic Diversity Effecting Teacher's Perceptions Related to Quality of Research Produced in Distance Education* (Dr. Quratul Ain Hina, Mahek Arshad and Saima Mehar)

National University of Modern Languages (NUML)

The research was based on six objectives. The research was designed to compare the perceptions of the teachers related to quality of research on the basis of gender, sector, age, academic qualification, professional qualification and teaching experience. The research was based on descriptive- comparative style. All the higher level distance education institutions of Islamabad were considered as the population of the research. The researcher used the convenient sampling technique to draw the sample for the study. 66 teachers contributed in the data collection process among which 30 were from public and 36 were from private sector. To address the research variable (Quality of Research), a questionnaire was developed by the researcher in the light of theoretical parameters given by Obiageil crystal oluka, shaofa Nie,Yi sun (2014). Research quality assessment scale was divided into 7 sub sections (Clarity In Aims/ Questions, Study Method, Data Collection, Research Context, Data Analysis, Results and Ethical Approval) and was based on 34 items in total. It was found that that in the perception of teachers, students were somehow better in "clarity in aims" and "study methods". However the condition of "data collection, understanding research context, data analysis, finding results and getting ethical approvals" need improvement. There was no statistically significant difference found in the perceptions of the teachers related to quality of research on the basis of gender, sector, age, academic qualification, professional qualification and teaching experience. It is recommended to improve the research quality in distance education system that each department may maintain a research library within the departments for the case of assess of the students. It is also recommended that the research counselor or mentor may be hired specially in distance education institutions only to ensure full time availability of guidance service for research students.

11. *Exploration of skill set for e-leadership at AIOU* (Dr. Afshan Huma)

Allama Iqbal Open University （AIOU）

Twenty first century is marked for technological boost in all aspects of life. Even the socialization patters of human beings are changing drastically and today when someone thinks of his/her friend the range of friendships, it is no longer limited to one geographical region. Information Communication Technology has made it possible for all of us to think and link beyond borders. People in leadership positions now find it an unavoidable need to connect to the world around them and keep pace with fast changing work environment. Educational Leadership in particular has multiple goals for communication inside and outside the institutions and organizations. The literature review conducted for this paper show multiple skills and aptitude needed for the leaders of 21st century for becoming successful e-leaders. We cannot imagine to move forward without developing our human resource and grooming them as per need of the time. This paper is based upon a qualitative study conducted at AIOU for exploring the skills and aptitudes of departmental heads. Google form was used to collect data electronically from 40 individuals. The study findings shall be very useful to inform the planners and managers of distance education about what is yet to be acquired in the form of skills set among the people in the leadership positions. The scope of this study goes beyond distance education institutions in a way that it highlights the needs of training for the leaders of education in general too.

12. *French language learning through distance education in Pakistan* (Nighat Jamal)

University of the Punjab

Learning foreign languages was once considered a hobby, but multilingualism has now become an essential skill to meet the challenges of the modern integrated world and global economy. However, research on foreign language teaching remains one of the most neglected areas in Pakistan. This study analyzed the current methods of French learning via distance education and hybrid learning in Pakistan while investigating the obstacles in achieving the requires level of competencies according to international standards. The role of tutor, who should be a motivator and facilitator to satisfy the needs of French learners, was also studied. At the same time, this study compared the impact of IT resources, social networking applications and tutorials on learning French via distance education. To accomplish this task, questionnaires and semi-structured interviews were conducted to collect data from adult learners of French language who completed French online course from Allama Iqbal Open University and University of the Punjab. This research pointed out the critical areas that need to be addressed specifically as compared to traditional language learning methods. Analyzing distance language learning facilities in developed countries, It has pointed out various significant issues of French learning via distance education in Pakistan. The research further revealed the role of self-motivation, self-evaluation and self-directed learning in studying foreign languages via distance education in general and French language in particular. The article concludes that computer literacy, learner friendly web based courses, interactive sessions and feedbacks are inevitable measures to create effectiveness in distance based French language teaching & learning mechanism.

3ʳᵈ Technical Session

（Session Chair: Dr. Mahmood Ahmad Bodla）

13. *Learning Multiple Languages Using Computer Technologies in the Developing World* **(Qanita Bokhari, Sundas Moughees and Jalil Asghar)**

University of Central Punjab (UCP)

Using interactive, immersive and adaptive language software based on the latest technologies and state-of-the art teaching pedagogies for effective language learning is essential to survive in this global village. Initial findings of the paper suggests that instead of replicating a conventional classroom using 4G communication technologies with a smart phone, we should rethink and redefine how people acquire their knowledge about language, its connection with cognitive process, thoughts and practices, and how to model this knowledge computationally. Transparent Language Systems made a paradigm shift in pedagogy when it replaced conventional pedagogy with an interactive and game-like fast feedback environment. This paper proposes another paradigm shift requiring an equally innovative mix of the right pedagogy and the latest technology to create a futuristic classroom which provides low-cost solutions to the problems faced in acquiring communication skills, anywhere, anytime by anyone.

14. *The perception of e-learning at higher education level: The learners' sight* **(Dr. Tayyaba Zarif, Dr. Safia Urooj and Rashid Hussain)**

University of Karachi

There is the diversity of andragogycal approaches in teaching & learning process at higher education level generally & with the integration of technology specifically therefore gradually e-learning is being implemented at higher education level. E-learning is a innovative way of learning witch enhanced the educational paradigm. The primary objective of the current study was to explore the perception of the learners about e-learning. The study was descriptive and exploratory by nature. The population of study was the learners of postgraduates level of public sector universities of Sindh. Randomly 40 percentage public sector universities were selected as target population. From each university fifty learners selected randomly from the different departments of faculty of social sciences as a target sample. The questionnaire was used as a research tool. The positively & negatively worded items were developed on the basis of many steps, first main concepts / themes which were concluded after conceptual frame working on e-learning, secondly discussion with the experts of department of information technology. The data was analysed as per research questions & related items with the help of percentage. The findings revealed that the learners have the perception of e-learning with the variations. The study was recommended to encourage the usage of e-learning at higher education level.

15. *E-Learning Management Strategy as Predictor of Academic Motivation, Self-efficacy and Academic Performance of Graduate Students* **(Muhammad Sulman and Afsheen Masoo)**

University of Central Punjab (UCP)

This research purports to investigate the impact of learning management strategies on academic motivation, perceived self efficacy and academic performance of graduate students. It was hypothesized that learning management system, the way the education imparting is done impacts the academic motivation, perceived self-efficacy and academic performance of Graduate students. The sample comprised of 200 students accessed from various educational institutes extending online and on campus educational services. The measures comprised of The University Students

Motivation Scale, the Learning Self-efficacy Questionnaire v.3 (Neil, 2008) and academic performance was assessed through previous three exams aggregate percentages. An indigenous demographic questionnaire was also administered on the respondents. The data was analyzed using SPSS v.21.0. The independent sample t-test analyses were undertaken to find out the differences between two groups of students i.e. those seeking education at camp us and those seeking education through online learning management system. Inferential analyses revealed that that there are significant differences in the means of self-efficacy, academic motivation and academic performance of students seeking online vs campus based educational services. LMS proved to be the significant predictor in indicating the academic motivation and self-efficacy of online vs. campus based students. These findings carry strong implications for educationist and practitioners alike.

16. *Curriculum, Instruction and Assessment* **(Abida Parveen)**

Punjab Curriculum & Textbook Board, Lahore

The aim of this research work was based on 'Curriculum, Instruction and Assessment'. It tried to highlight the gaps which were found in the curriculum of early childhood education in Punjab Province. It analyzed whether the curriculums of early childhood 2006-7 & 2017 were according to the requirements of Punjab province. Different issues related to the society and curriculum were analyzed. Six areas (Personal and Social Development, Language and literacy, Basic Mathematical Concepts, The World Around us, Health Hygiene and Safety and Creative Arts) were evaluated. Expected Learning Outcomes (ELOs) were also matched with students' needs. For this, a random sample of subject experts was selected for review committee meeting. Their opinions were collected. The collected data was presented in the reduction chart. The results proved that the gaps were found in the curriculum of childhood education 2006-7 & 2017. A few recommendations had given for the improvement of early childhood education curriculum according to the needs of Punjab province.

17. *VU Voice GDB* **(Tahir Ramzan)**

Virtual University of Pakistan (VUP)

This ongoing research work has proposed audio moderated discussion board instead of text moderated discussion board for VU students. The researchers of this work have gathered feedback about proposed system to analyses its pros and cons. Writing any query or question in English, Urdu and Roman Urdu or framing of question or query in English, Urdu and Roman Urdu is complex task; mostly students are not able to understand the answer from respective instructors just because the communication gap or lack of art of questioning. An audio based question and answer system can help students to ask questions conveniently just like real class room environment and audio answers from instructors can make ease for students to get their concepts clear.

18. *Need and provisions of Information and Communication Technology in Pre-Service Teacher Education programs* **(Dr. Sadaf Zamir Ahmed, Hina Zamir and Obaid Ullah)**

University of Wah

Technology have changed the trends of teaching and learning. ICT have changed conventional classrooms into student centered classroom with focus on Information and communication technology and has changed teaching practices for prospective teachers by making intuitive sessions of teaching .The objectives of the study were: 1. To find out need of ICT in teacher

education programs. 2. To explore basic provisions of ICT in pre-service teacher education programs. 3. To highlight strengths and weaknesses of ICT in pre-service teacher education programs The study was descriptive in nature .Survey method was used for data collection. All faculty member of universities of Rawalpindi served as population of the study .Convenient sampling technique was used for selection of faculty members of 2 university of Rawalpindi. Interview was used as a tool for data collection. Findings showed that integration of ICT is there in teacher education programs but faculty members of universities are facing barriers in implementation of ICT .as there are inadequate resources and limited training for faculty members.

4th Technical Session

(Session Chair: Dr. Huma Lodhi)

19. *Exploiting metacognitive learning strategies for Self-Regulated learning in web based learning environments* **(Kamran Khan and Farman Ali Khan)**

COMSATS Institute of Information Technology (CIIT)

Self-Regulated Learning in web based learning environment deals with the completion of educational goals and learning tasks without any guidance or external help. In this regard, various solutions of Self-Regulated Learning strategies are composed to measure the learning process of the learner. Researchers put their efforts to formulate and regulate the cognitive and metacognitive strategies of Self-Regulated Learning process using the psychological measurement methods. Therefore, this work exploits the metacognitive strategies of Self-Regulated Learning using the Evidence Centered Design based on the trace log of the learner activities in web based learning system. The results showed better improvement in measurement of learning and consideration of limitations and implications are also discussed. Trace file log provide the evidences of engagement of learner in system and learning patterns of cognitive and metacognitive learning strategies in web based learning environment.

20. *Entry Qualifications of Students as Predictor of Academic Performance in Various Degree Programs* **(Nauman Ahmed Abdullah and Dr. Munawar Sultana Mirza)**

Virtual University of Pakistan (VUP)

Academic performance of students has always been an area of concern for educational institutions as it is a key indicator of institutional quality. In order to have a better quality output the higher education institutions set some admission criteria such as scores on specified international standardized tests, previous academic qualifications of students or a combination of the two. Virtual University of Pakistan (VU) is a technology based distance learning institution that facilitates students who are unable to attend traditional institutions of higher education for a variety of reasons. It was of interest to the researchers to study the entry qualifications of students i.e. the admission criteria, as predictor of their academic performance in various degree programs at VU. Data of 5983 graduates of two years masters programs in 2015 and 2016 were taken as sample. Their entry qualification scores and cumulative scores of their previous academic qualifications were taken as predictors of their performance (CGPA) in relevant degree programs. The results showed positive moderate and significant correlation between Cumulative scores and VU CGPA. Predictions, however, from previous academic scores were only amounting to 12.1%. Scores of

students grouped as high achievers correlated significantly more with the VU CGPA as compared to the students grouped as low and average achievers on the basis of both cumulative scores and entry qualification. Low achievers on entry qualifications were showing negative relationship with VU CGPA. The reason of low scorers performing better at VU can be attribute to the fact that deficiency of all entrants with third division, low entry score, is met through a compulsory zero semester to be qualified with a minimum CGPA ≥ 2.0 before proceeding to the first semester of the program. Results are significant for policy makers and relevant departments of the University.

21. *Online Educational Contents: How to Make Them More Effective in Pakistan?* **(Moazzam Ali Tarar)**

Allama Iqbal Open University（AIOU）

The emerging trend of offering online educational programs in Pakistan requires a thoughtful consideration of local needs & learning pattern of the students. This paper attempts to offer linguistics, technological and artistic insights for developing and enriching the online educational contents by keeping in view the social and cultural aspects of the Pakistani students. By drawing insights from various theories of psychology, the objective of this paper is to offer a set of suggestions to the educational institutions and course developers to think and develop course contents to ensure maximum learning in minimum time with lower costs in an attractive way.

22. *Comparative study of teaching first programming language in distance learning using lecture based approach and project based approach* **(Mustafa Hameed, Nadeem Akhtar and Malik Muhammad Saad Missen)**

The Islamia University Bahawalpur

This is the beauty of distance learning programs that attract students with heterogeneous educational background. In this context, it become complex for instructors of first programming language courses to teach students with a uniform approach. Understanding of programming languages is as crucial as it is the core of any CS program. This study aims to find out suitable approach for teaching first programming language course (FPL) to CS and non-CS background students. We conducted face to face interviews with four instructors two times for each once in fall semester and once in spring semester. Focused group discussions were conducted with the students of experimental groups taught by instructors under study in both semesters. Majority of the instructors, report that they prefer LB approach instead of PB approach because of overhead time required to plan and evaluate projects. On the other hand those students showed interest toward PB learning who have prior knowledge of programming languages. Students with non-CS background demonstrate tendency to like LB approach. Instructors with balanced or reduced workload and students with CS background preferred PB approach for learning programming language. We recommend hybrid cycle, 3 weeks LB approach followed by 1 week PB approach, four cycles for each semester in order to balance the workload and increase in student interest towards learning programming language.

23. *Towards Incorporating Online Active Learning Classroom Pedagogy in Training Curriculum* **(Abdul Rehman Abbasi, Paras Rajper and Yaseen Ahmed Meenai)**

Pakistan Atomic Energy Commission（PAEC）

Company XYZ with more than 5000 employees, who are scattered throughout the country, has very

demanding training needs both at the entry level and for the continual training programs. The training center of the company can cater on-the-job and lab equipment training requirements, however, the effectiveness of the classroom training has found to be an area of concern as indicated by both external evaluators and internal management. Based on relevant literature support, the training manager decided to test active learning classroom (ALC) pedagogy as the most effective approach to transform the classroom learning from a boring exercise to an exciting experience for the learners. The training manager uses some pilot studies to establish the viability and interest of stake-holders towards the proposed solution along with conduction of on-line survey polls to address the problem areas related to ALC pedagogy. The results of on-line survey polls when analysed quantitatively, suggest that an overwhelming majority of learners and trainers support ALC as one of the key solution for effective training. The results also indicate that ALC would bring creativity and critical thinking. This may essentially be a cost-effective solution if implemented with online technology, for a scattered population of learners.

24. Effects of terrorism on Education and policies **(Muhammad Hamza and Asif Ali Asif)**

Virtual University of Pakistan (VUP)

"With guns you can kill terrorists, with education you can kill terrorism."
— Malala Yousafzai

In this study, we will explore and investigate different aspects of modern education. Particularly this study classifies into study of education, policies and decision making, and terrorism. The First Part deals with policies and their comparisons. Second part deals with Terrorism and security and its effects on education, technology, research (scientific), Policies and their implementation. Third Part will shed light upon Technology and its role in the education sector. Modes of education delivery and related technologies, especially IT and computer technologies. And then finally in last part, the interrelations between the above aspects will be studied. The most important factor in the study will be the policies of education, and especially their effects on Modern modes of education; i.e. Distance Learning and E-Learning. The study will be conducted with miscellaneous methodology comprising of mostly qualitative methods like views of the Bureaucrats and other Decision Makers. This will be conducted through Interviews, Different editorial reports and as such. We will also note some case studies. But we may also try some of quantitative methods like simulation. In the end we will deduce some results and conclusions and may come up with some ideas and suggestions.
In the end we salute to all the martyrs who has given their life for the sake of education.

5ᵗʰ Technical Session

(Session Chair: Dr Intazar Hussain Butt)

*25. Role of distance and e- Learning in empowerment of women through expansion of higher education in Pakistan: Potentials and Opportunities **(Salma Naz)***

Minhaj University

Women empowerment has gain important place in international development agenda. In new millennium developmental goals gender equity and empowerment of women is also included. The Higher Education is most important agent in empowering women. Empowerment in fact is a course of action that encompasses all means and structures of power in which important source is higher education. Distance and E-learning are paying very important role in educating the female at higher level because Pakistan is a traditional society whereas due to social pressure it is very difficult for female to acquire higher education by attending universities on regular bases. Distance and e-learning has become important ways to educating the women even in remote areas. in this context in Pakistan AIOU and VU are playing very impressive role and providing opportunity to female to enhance their educational status and without disturbing their duties at home. In this way they are removing the hurdles in the path of women education. Present study explored the role of distance and e- learning in empowerment of women through higher education. The findings of research report that distance and e- learning has basic role in educating women at higher level for empowering them. The study is qualitative, descriptive and analytical in nature. Conclusion is drawn on the bases of findings and recommendations are given in the light of conclusion.

26. *Studying the Role of E-Learning on ESL Learners as Digital Natives: A Survey* **(Muhammad Safdar Bhatti and Rafia Mukhtar)**

Allama Iqbal Open University（AIOU）

E-Learning is an emerging trend to educate the masses having fewer opportunities to access educational institutions as formal students. Its bright future can easily be predicted. It can also serve as a powerful tool in learning a second language. In this digital era, ESL Learners have grown up with a plethora of technology tools at their finger-tips and have also earned the title of "Digital Natives". Their excessive use of technology in and outside the classroom has led the teachers to make an ample use of technology based tools for language learning purposes. The current study is an intention to check the role of E-Learning to accelerate the learning capabilities of ESL Learners as digital natives. A survey was conducted among the of TEFLers of Bahawalpur region. A questionnaire was prepared to check their attitudes towards E-Learning in a social media context. Data were collected in quantitative manner and the result was drawn. The findings of the study proved the objectives correct. The researchers' conclusion with suggestions and recommendations was also summed up at the end of the study.

27. *Impact of organizational culture, structure and Knowledge Management System (KMS) on Employee Performance – SMEs Perspective* **(Zaira Maamoor)**

COMSATS Institute of Information Technology（CIIT）

The main purpose of the study was to find out the individual and collective (to bring the novelty in study) impact of organizational culture, organizational structure and knowledge management system on employee performance. A sample of 500 SMEs working in Pakistan was taken which provided 222 usable responses. Descriptive statistics, Pearson's coefficient of correlation and regression models were used to analyze the data with the help of SPSS 20 version. It was concluded that organizational culture and KMS positively affect the employee performance and organizational structure has negative relationship with employee performance in the sampled SMEs. Moreover, all three variables have positive impact on the employee performance. It is recommended for future research perspective

to enlarge sample size, target population i.e. sectors/clusters of SMEs in Pakistan and t measure the affects on other variables like organizational performance, turnover ratio etc.

28. *Educational Broadcasting: Exploring Challenges for Participatory learning among students* (Iffat Ali and Dr. Zahid Yousaf)

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)

This study investigated the importance of educational broadcast and its impacts for learning among students of university, situated in Islamabad and Rawalpindi. The educational broadcast by campus radio which involves students in production of educational and informational programs and target students as their intended audience as well. This paper identified the need of educational broadcast, contribution in learning, content and format of the program and involvement of students. The study explores that how educational and informational needs of students are fulfilled through campus radio and what challenges are being faced. The focused group interviews were conducted in which 72 students participated and indicated how educational broadcast can be improved by ensuring students involvement. The scope and importance of educational broadcast is imperative for society like Pakistan where Radio is still chief medium of information for maximum population. Therefore, the innovative program formats and experiments in educational broadcasting can bring fruitful results and provide a platform to exchange knowledge and experience.

29. *Distance Education System for Rural Women and its impact on Women learning: Current Challenges and Future Strategies with reference to the Pakistan* (Fozia Shaheen and Mamoona Khalid)

University of Sargodha

Usually in developing countries, rural people have less opportunities and access to formal education system of the state due to fewer budgets, lack of awareness, lack of infrastructure and facilities and increase in rural population as compared to general public. Pakistan is the2nd largest populous country in South Asia having 109363831.29 people in rural areas. According to the provisional results of the sixth Population and Housing Census2017, the total population of Pakistan is 207,774,520 out of which 101,314,780 were women population. It's evident that we cannot ignore the women education for participation in social and economic development of Pakistan by reason of its strength in Pakistan. So in order to meet educational needs of such a large number of women in rural areas, distance learning is the best alternative methodology to ensure quality education in Pakistan. The proposed Study will analyse the extent to which current distance education programs and policies address the educational needs of rural women and challenges faced in the implementation of distance education programs. The proposed study is expected to introduce dynamic approaches in the context of distance education and experiments of other democratic countries utilization of distance education techniques to educate the rural women. The proposed study will highlight the scope of distance education programs and effectiveness of this approach, compatible with the ever changing need of global educational world. The study will make suggestions regarding the development and implementation of various projects for rural women learning in order to fill literacy gap between rural and urban women.

30. *Impact of E-learning on learning at Out of School Children School* (Nehala Mumtaz and Masooma Zehra)

National University of Sciences and Technology（NUST）

The education system of Pakistan, at present, is not in par with the international standards of education being implemented across the globe. In face of the commitment to the United Nation's (UN) Sustainable Development Goal (SDG).4 to be achieved by 2030, Pakistan remains unsuccessful in planning and executing compulsory reforms in education.

22 million children are out of school nationwide. To cater to their educational needs, Out of School Children Schools are established, that provide fast-track education to bring the uneducated children to the level of schooled students. They follow the same curriculum as the regular schools, but their session is tenured on six months. Majority of the courses taught are in English language, while the children at OSCS are not proficient at their second language. This gap of language is a challenge for these students, and proves to be an obstacle in the process of learning, resulting in demotivation and increased dropout rate from OSCS.

This research is to facilitate the children at OSCS with their language barriers. Where digital game based learning is a strong tool to ignite the 21stcentury skills in children, it can also be used to help these children improve their English language skills. Through mixed method approach, the effect of E-leaning (DGBL) was examined and the results were compiled and analysed to confirm a relation between improved proficiency in English language, and better learning and decreased dropout rate at OSCS. The element of "motivation" in learning was also a key consideration in the research. The paper presents relatively new concept in e-learning curriculum which is Game based learning for organizations educating out of school children and discusses its benefits in both improving their learning as well as meeting the UN's SDG.