1-Experiential Learning in Higher Education: A Talk on Perspectives and Challenges
Dr Audrey Juma, Director Notre Dame Institute of Education, director@ndie.edu.pk
The talk on higher education and experiential learning will focus on the issues and challenges facing the modern pedagogy.

2-An Experiential Learning Exercise at CBM
Baber Saad Khairi, visiting faculty, IoBM, bkhairi2004@yahoo.co.uk
The aim of this paper is to contribute to the study and application of relevant experiential learning for business school students in management subjects. Two courses, Principles of Management for MBA (Executive) students and Organizational Behaviour for undergraduate BBA students, have been used to compare and contrast the application of various methods to enhance learning ending with a term report based on a field-based experience. In this context, the author analyzes the key indicators influencing learning and absorption of theoretical concepts garnered from the experience. Analysis of the experiential learning based on student responses and their grades based on observation and academic data were used to understand factors that influence grades in experiential learning. It was concluded that there was a relationship between applications of efforts to satisfactorily complete an experiential learning project. The key variables in this quest of experience-based knowledge were trust, satisfaction, comprehension, initiative and usefulness.

3-Quality Enhancement in Experiential Learning: From Theory to Practice
Rubina Masum, PhD Scholar, Hamdard University, rubinamasum@gmail.com
The paper examines the integration of theory and practice with regards to experiential learning (EL) designed to equip students with knowledge and skills relevant to the workplaces. Despite offering numerous long standing theories on students’ enhanced learning experiences, enacting upon quality experiential learning programs has proven to be challenging for the three pronged stake holders—educationists, students and employers. To encapsulate the parameters of experiential learning in line with industry’s selection procedure, the paper explores the process of teaching and learning by employing the three orientations of transmission, transaction and transformation, proposed by Miller and Seller (1985). The paper advocates promoting experiential learning through the collaboration between teaching faculty and industry personnel; and need analysis of students’ preferences for providing them with enriching learning experiences relevant to their area of interest. The provision of valid and reliable assessment tools for experiential learning is highlighted to enable students’ for job placement according to meritocratic standards. Limitation and delimitations of the paper are identified and the challenges of measuring the nuances of unpredictable, context-dependent EL outcomes are suggested for future research.

4-Effectiveness of Inquiry-Based Learning in Teaching Chemistry to IBDP Students
Ambreen Mustafa, Beenish Mustafa; MBA Students, IoBM, std_18179@iobm.edu.pk
This is an action research conducted to see the difference in the results of the monthly tests of students by comparing traditional teaching methodology and Inquiry-based learning (IBL) in teaching Chemistry to International Baccalaureate Diploma Program (IBDP) students in Pakistan. The students were asked to research and prepare presentations on a topic to be presented in the classroom. Through this teaching methodology, the students were actively involved in learning, and were able to relate the knowledge and application of Chemistry to real-life. The results show that there is an improvement in the results of the students using Inquiry-based learning (IBL) in monthly tests conducted at the end of the unit. They develop critical thinking skills through questioning, researching, analyzing, comparing, debating, and summarizing. The students have endorsed IBL through their reflections on the teaching methodology. The researcher noted that the students gained more confidence through presentations in comparison to traditional teaching methodology where they listened to the lectures only. However, in Inquiry-based learning, they were the ones communicating the information. Although, researches prove that (IBL) is only applicable for sciences, but this teaching methodology can be used in other social sciences courses too.
5-Journey of a Mathematics Teacher and Its Influence on Teaching Mathematics
Zeenar Salim, IoBM scholar, Munira Amir Ali, AKESP; zeenarsaleem@gmail.com

Educational reforms in general and in mathematics education in particular expect teachers to teach for conceptual understanding. One of the key reasons for promoting mathematics teaching for conceptual understanding is to enable learners to make sense of mathematics content and develop mathematical skills rather than memorizing mathematics formulae and regurgitating in the examination without conceptual understanding. It is evident that traditional teaching and learning approaches of mathematics teaching in most cases have become abstract and impracticable. The paper explores the possibility if mathematics teachers bring change in their practices which are influenced by their prior experience, beliefs and perception about mathematics. This study, therefore, attempt to explore a teacher’s experiences of learning mathematics while at school and at university and her approaches in teaching mathematics, using narrative inquiry methodology. The findings reveal that when a teacher experiences mathematics as rigid body of knowledge, having pre-determined rules and formula that are to be memorized, she would do the same with her students and is likely to remember and apply formula that she has shared. This way, studying mathematics becomes creative, interesting and meaningful. Thus, it is recommended to explore the experiences that facilitates or hinder teachers to learn mathematics conceptually and design appropriate teacher professional programs accordingly, so as to improve teaching practices.

6-Teacher’s Learning Experience through Relationship: A Case of Community School in Karachi
Zeenar Salim, Muhammad Youusuf Sharjeel, zeenarsaleem@gmail.com

Teaching and learning process in classroom plays a pivotal role in developing students’ knowledge and skills. Therefore, students’ attendance in the classes is considered to be an important determinant of their performance in the school. However, there still persists a great concern regarding students’ absenteeism across the educational levels in many of the countries. This study has explored the relationship between academic performance and attendance of seventh graders in community school setup in Karachi, Pakistan. A quantitative study was conducted. Report cards and attendance records of a sample of 94 seventh graders were obtained. Pearson’s Correlation was applied to find the correlation of students’ attendance and their academic performance. To further analyze, the differences between performances of the students with good, mediocre or low attendance, ANOVA was applied. Findings revealed that the students’ performance and attendance are strongly and positively correlated (r=0.824, n=94, p=<0.000). Moreover, the students who attended more than 80% of the classes have achieved higher scores than those who have mediocre and poor attendance. This implies that attendance is an indicator of students’ performance, and therefore teachers, school management and parents need to realize the importance of students’ attendance. Moreover, they must join hands to improve the attendance of the students in the school, to improve the overall students’ performance.

7-Experiential Learning: An Effective Route for Shaping Behavior of an Individual
Waqar Ahmed, Mahjabeen Khan, vaqaraq@gmail.com

This paper discusses the use of experiential learning to shape the behavior of an individual. The existent research accepts learning is occurring, but does not rightly address the significance of learning to the progression. Learning is a fairly long-lasting change in behavior or knowledge owing to experience in a specified context. Changes in behavior, as a result of momentary functional deviations, are not learning. Concurrently, there is authorization that we can learn something, but not behave regarding that new learning until sometime much later. As the objective of the study is to understand the varying phenomena of behavioral modifications among students, after going through the experiential learning, qualitative research was employed in the research with phenomenological method with n=3 experiential learning facilitators and 1 student. There were certain evidences to support the phenomena, despite many challenges, that experiential learning is reasoning and strategy in which teachers intentionally draw in with students in direct experience and centered appearance so as to expand information, create abilities, and illuminate qualities. It also helps students to develop their interpersonal and intrapersonal skills while engaging in the activities with diverse participants.
8-Learning from Challenges in Implementing Experiential Learning in B.Ed
Safia Urooj, Shagufta Shehzadi, KU; Muznah Fahim, College of Teacher Education, Safiaurooj786@gmail.com

Retention is best when the learner is involved in the process of experiencing with hands on practice. Experts in the pedagogy assert that learning occurs around 20% when we hear, but and we learn 90% when we do things ourselves. The purpose of this paper is to investigate the challenges faced by teacher educators in practicing experiential learning in B.Ed. (Hons) class rooms. The paper also focuses on how teacher educators in B.Ed (Hon) programme at the University of Karachi learned to manage things through experiencing various things in the sense of creativity and conceptual understanding. The research focus is on difficulties in conceptual understanding and perceptions of teacher educators about experiential learning in B.Ed. (Hons) class room on the basis of difference in opinion according to gender, significance of resources and deficit of skills for strategic planning and implementing the activity. The study was conducted in mixed research paradigm with n= 120 teacher educators as a sample. The tools are five-point Likert scale questionnaire, observations and focused group interview for authentic data collection. The findings reveal that the challenges are in conceptualization of the experiencing learning and relevant strategies in the context of B.Ed (Hon). Recommendations include organized in-house professional development strategies and teaching portfolios to best grasp the challenges effectively.

9-Student Optimism – Grading of an Experiential Learning Project
Nawaz Ahmad, Sarwat Nauman, IoBM, nawazahmad_pk@hotmail.com

In order to obtain good grades, students involve themselves in hard work according to the best of their ability, yet an experiential learning project makes it even harder to attain the grades that the students are aiming for. Researches have shown that students are generally optimistic about their grades, yet no research has been conducted in Pakistan to gauge student optimism in grades with regard to experiential learning. This study is an attempt to gauge empirically whether students are optimistic regarding their grades in their experiential learning project. A sample of 106 students is obtained via purposeful sampling technique enrolled in a private university enrolled in a course. After being involved in an experiential learning project, they were asked their expected marks which were compared later with their actually obtained marks. A pair sample t-test is applied to figure out whether the average of perceived marks is statistically different than the average of actually obtained marks. The average of expected marks exceed by 2.14 which is statistically significant at 99.9% confidence interval.

10-Provision of Skillful Learning Environment During Early Years of Life of At-Risk Children
Nadia Razzak, Sana Akhtar, Ph.D. Scholars, Dept of Special Education, KU, madiharazzak@yahoo.com

The following study is comparative in nature. The study investigates the impact of the provision of experiential learning to “At-risk children” between ages of 0-8 years. At-risk children are those who are so weak and vulnerable that they have chances to develop any disability. It was hypothesized that children who receive experiential learning environment become more skillful. The sample of the study comprised n=50 children (25 each in control and experimental group) selected through simple random sampling. The portage guide Pakistan’s model was used as a study tool. The portage guide covers five major domains of development including physical (gross and fine motor both), communication, self-help skills, social skills, and cognitive domain. The tool was used as a helping guide to train parents to work with their children in home settings. Only the parents of children included in the experimental group were provided opportunity to learn about the portage guide and apply it in their daily routine. While parents of children of control group did not receive any special learning program awareness. The demographical information of children was collected and summarized through percentage. The hypothesis testing was done by using chi-square statistical method. The results revealed that parents and children working with the portage guide did find it easy to learn different skills effortlessly and quickly. By analyzing the result, it can be recommended that a comprehensive training program is needed for parents so they could help their at-risk children in early years of their life to become more independent and skillful.
This paper looks at experiential learning as a means of enriching students’ learning experience by inculcating analytical and evaluative skills to better understand the issues and problems in their contexts of learning. There is a serious need to make students aware about the alternate ways of thinking, which the teachers can enhance through the strategy of questioning as classroom pedagogy. This paper argues for the need of teachers to learn correct ways of asking higher order questions, which can encourage the thought processes of students. However, generally the teachers’ preference is more bent towards behaviorist than constructivist approaches to teaching, and needs to be replaced by critical thinking skills (Chun, 2010; Savery, 2009), for increased cognitive readiness for tasks that involve abstract and deductive reasoning (Cotter & Tally, 2009). By taking Clinton Golding’s study as a model which built on Richard Paul’s method of Socrates questions, the study shows how thinking-encouraging approach enables and empowers students to think for themselves, rather than leading them to understand a body of knowledge. The paper reports on a research study in students’ four business communication courses in which 55 students were involved in experiential learning projects. Before stepping into the real field to collect data, students’ critical thinking was enhanced through the higher order questioning, first by the teacher, and then by colleagues within their groups through the questioning strategy. The results show students’ preference for such pedagogical interventions, and the outcomes are strongly suggestive of improved thinking for making critical judgments and evaluating decisions based on their experiences.

12- Learning Experiences in the Context of Information Communication Technology in Social Studies in Grade VIII
Samar Iqbal, IoBM, iobm.sam@gmail.com
This research reveals the fact that authentic learning can be promoted through incorporating teaching strategies and technology. This research pointed out that the use of ICT is by and large the most effective way to learn. Many school teachers are adopting more and more interesting ways to use technology in their social studies classes, which not only stimulates students learning, but also helps them to use and experience their cognitive skills based on their own research. Through this research one trained teacher of public school was engaged with 30 students of VIII grade to conduct pre-test and posttest of ICT integration in social studies discourse and provided ample resources to perform the task. A set of 30 students, their parents and 1 teacher were chosen to be the part of this study. All participants belonged to grade VIII of S.St class and all participants were female. One teacher was chosen for this action research on the basis of her ICT training done before. Triangulation in data collection was applied by opting for quantitative and qualitative modes of data collection and tools. The purpose of this research is to incorporate ICT in Social Studies and enhance teaching and learning process through different collaborative tools. Overall, data analysis reveals that use of ICT in Social Studies had great impact on teaching-learning process. This research reveals that teacher, parents and student’s perception has been shifted in favour of use of ICT in Social Studies. Teacher’s strong technical skills helped students to work more efficiently and collaboratively. Student’s interest has been increased to learn more through videos and social networking through face book.

13- Experiencing Examination System and Students’ Performance in Admission Test
Shairose Irfan Jessani, M Yousuf Sharjeel, IoBM, shairose.jessani: @akesp.org
Entrance test for students who pass their intermediate public examinations for the purpose of admission in higher secondary school is an important aspect for the parents, teachers and the students alike. These examination results have a dominant influence on future professional objectives, social dynamics, learning strategies and content selection of the students. The reason is based on the centrality of admissions to higher secondary school of repute in Pakistan. These admission test results are determinant of students’ career and future directions. This comparative study examined the academic performance of two groups of students; affiliated with two different examining boards. A quantitative research study was conducted to determine the effect of two examination systems in the admission test with n=132 students through random sampling. Cumulative scores were compared through independent sample t-test at α = 0.05 level of significance through SPSS. Findings revealed that there is a significant difference in the
college admission test performances of students affiliated with different boards. The study implies that public examination system can play a significant role in improving the quality of education. If the pattern, processes and focus of examination were changed, it would have greater impact on teaching and learning and performance of students seeking admission in higher secondary school of repute.

14- Experiential Learning through Creativity in School Classroom
Shahida Mohiyuddin & MBA Students, IoBM, shahida.mohiuddin@iobm.edu.pk
Teaching MBA students the subject Creativity in Education at IoBM Department of Education, we came across many new ideas and theories. Discussing those theories and ideas and exploring them through activities and discussion. While reflecting and observing in real situation, we discovered many ideas. After discovering new ideas, we tried out these ideas in real classroom. One teacher selected Grade three at a famous Montessori while the other selected early childhood classroom at Lahore Grammar School. The third teacher worked with three primary class students at her tuition centers. The finding of the study demonstrated that the children in classroom become more interested and immersed in the lessons. Children draw figures and play with colours. Children were thrilled when they discovered new figures and shapes. One of the major benefits of learning and teaching students found that the lessons with creativity students require less memorization. Children were able to use higher order thinking and became independent learner.

15- Identifying the Impact of Experiential Learning for Student’s Career Development
Farhat Jahan, Khadim Ali Shah Bukhari Institute of Technology, farhatresearcher@gmail.com
This study focused on identifying the impact of experiential learning for student’s career development. Specific objective was to focus on the students who attended internship program to have experiential learning by getting knowledge, skills and abilities for enhancing their career development. The sample size of this study identifying the impact of experiential learning was n=150 respondents as different university students and professionals working in small and medium enterprises of Pakistan. The data was collected by interviews and convenience sampling techniques. The highly effective experiential method i.e. internship was used to find out the importance of experiential learning for students’ career development. Students are able to find their professional career interesting through internship experience. Experiential learning enables students to apply their expertise outside the classroom environment. Student’s knowledge, skills and abilities are enhanced when they assimilate theoretical knowledge of class room lectures with the experience in the real world. Experiential learning is one of the best ways for university students to know about their field of interests and to achieve their specified goal in career development.

16- Experiential Learning and Employee Performance
Muzammil Ghayas, Samiullah Khan, Javed Hussain, Zaira Wahab, Iqra University, muzzammilghayas87@gmail.com
This paper aims to discuss the relationship between the experiential learning and the employee performance. The data were collected from 250 employees who are currently enrolled in different universities and their respective supervisors. Hence there were 500 respondents in all. Results indicated that the project-based learning and the problem-based learning have positive association with the employee performance, whereas nature of work mediates the relationships between the project-based learning, the problem-based learning and the employee performance.

17- New Approach to Experiential Learning in Environmental Understanding and Food Consumption: Evidence from a Business School in Pakistan
Abduralrauf Farooqi- Muhammad Faisal Yaseen- Arisha Maham, IoBM, dr.afarooqi@iobm.edu.pk
The abstract entails simplifying basic conceptual environmental understanding of atom, environmental science-definition by diagram and equation, thickness of atmosphere and geothermal energy-source, oxygen as absolute essential for aerobic living beings, clarifying myth of oxygen inhale and carbon dioxide exhale, air as absolute important for living environment using creative techniques and understanding conceptual green, green business, green management, and green marketing. Students were experientially exposed to conducting social environmental research having objectives 1. To share the particulate matter and sulfur pollution levels of free air recorded in Korangi Creek area. 2. To quantify daily food intake compared to 16 kg estimated average air intake per person per day andtrends by gender and age.
This required questionnaire development, collation of quantitative daily food intake data of student’s family members compared to air intake per person in Karachi. For this purpose, questionnaire and collation methodology was explained, discussed, field tested, and the required training imparted to collate data. Those who collected incorrect measurement were required to repeat observations. The air pollution levels measured at a private university campus indicated that particulate matter and sulfur content in free air were between 11 and 200 times higher than the allowable safe limit. The food intake results indicated that it was highest in 49 year’s age group at 1.4 kg or 7.1 percent and lowest in 0-1 year’s age group at 0.1 Kg or 0.7 percent of the estimated 16 kg air intake per person per day and that female in all age group consumed significantly less food than males in Karachi. These findings coincided well with food intake results of another study.

18- Individual Assignments & Creativity: New Ways of Thinking

Maroof Bin Rauf, University of Loralai, Balochistan, Mahmood ul Haque Siddiqui, Association for Academic Quality, Karachi, maro_of@yahoo.com

This study is based on the Faculty of Social Science of a public sector University of Karachi. 340 students of 8 departments who are enrolled in Education discipline as subject were selected for the research population. In all type of university exams, assignments are used as a tool for formative and summative assessment. But usually in social sciences domain, it seems that students are not participating or doing it willingly. They plagiarize the content from books or internet and copy paste it for the fulfillment of particular assignment. There is no innovation and creativity. As the students lack interest in it, how would assignments determine authenticity? The purpose of the assessment is not fulfilled. Therefore we feel that the process of assignments must be interconnected with the student’s practical life, experience, interest and be able to assess the intelligence of students. Multiple Intelligence theory by Dr. Howard Gardner was selected for this practical research. First of all, researchers have developed different creative assignments to relate them with curriculum then the assignment were distributed in different sections; students were also given the time frame, rules and instructions to accomplish these assignments.

Questionnaire was selected as a tool for research for all the population. Two students from each department were also selected for the interview. This selection was made by simple random sampling. Received data was analyzed with frequencies and tables. Extensive recommendations were also formulated.

19- Learning from Psychological Impact of the News Coverage On the Youth in Pakistan in the Context of Terrorism and Disasters

Erum Hafeez, IoBM, erum.hafeez@iobm.edu.pk

This research study aims to study the psychological effects of the media coverage of terrorism and disasters on the consumers of the news content especially youth in Pakistan. It seeks to investigate how such coverage is likely to influence the mental wellbeing of the young audience of the news. As the media coverage of violence and terrorism is being intensified after 9/11 and is now easily available to the Pakistani audience following the privatization of news channels in the country after 2002, there arises a need to study the effects of such exposure. This research is thus being planned to assess the possible impact of the media coverage of conflict and terrorism on young viewers. Questionnaire was based on the Mental Health Inventory (MHI-38).

It is arbitrarily assumed that the viewers who frequently witness such incidents are likely to suffer from anxiety and depression, which may lead to psychological distress, loss of emotional control and sometimes even suicide. It also aims to explore how the prevalence of symptoms of psychological distress is likely to harm the students’ perception of life. Students looking at the other students endlessly, seeing their misery, and identifying themselves with them, makes the whole media exposure extremely traumatizing to the worst limits.
20- Learning from Experiences in the Context of Climate Prediction by Data Mining Techniques
Saadia Karim, IoBM, saadia.karim@iobm.edu.pk

The purpose of this paper is to analyze the climate change in Pakistan, identify the issues related to weather disaster and experiment accurate weather prediction approaches. The creation of approach is based on role of using different algorithms and their comparisons based on calculating the past 5-year (2010 - 2015) data on 12 attributes. The flow diagram shows the steps included in the process. The result is obtained by using WEKA 3.7.13 (latest version 2015). The KNN algorithm and memory-based reasoning algorithm shows the accuracy of weather forecasting. The BPANN algorithm is used to analyze the data set in earlier projects. The KNN algorithm and memory-based reasoning algorithm Decision tree shows the accuracy of predicting weather forecasting. The KNN is used with Bayesian approach in this research. The attributes which are used in this research show relationship between them and many of them work as independent variables. Since, for weather prediction, these attributes are very important, the investigator used dependent or independent variant factor based on time and date. The KNN algorithm using Bayesian classifier proves accurate result compared with memory-based reasoning of Decision Tree and BPANN trainlm and trainbr.

Track 2-Engineering Education: Day 1, Session 3d: Parallel Session in Room-211

3R's-Reduce, Reuse & Recycle-A Sustainable Direction Towards Green Economy
Rabia Hassan, IoBM, Saadullah Ansari, Bilal M Khan, NUST, rabiahassan_92@hotmail.com

Currently go green terminology and applications are expanding worldwide; however in developing countries like Pakistan; awareness regarding this term among people is negligible. The limited resources are being used up rapidly. Their improper wastage is not only leading to underutilization of such limited resources, but also significantly contributing towards regional and global climate changes. According to the study conducted by WHO, it has been estimated that in coming 35 years only 25% of world resources will be available per capita resulting in serious socio-economic impacts. In order to maintain and efficiently utilize the available resources the implementation of 3R’s- Reduce; Reuse & Recycle policies should be made and adhere to especially in developing countries to not only save already limited world’s resources but also contribute significantly towards controlling over climate changes. This paper focuses over such strategies and methodologies that promote the use of the 3R’s. The authors provide firsthand experience of organizing orientation programs at schools; colleges; universities and conduction of public awareness seminars. All these surveys will be analyzed and conclusion will be drawn on the effectiveness of delivering such seminars and their impact towards reduction in consumption of resources and moving towards sustainability of Green Economy.

Success Story
Bilal Bhatti, Quality Assurance Engineer, Shaheen Air Line, Karachi.

Experiential learning is a powerful form of learning in which students develop an integrated and holistic understanding of the issues and skills. I designed and made Robotic Arm in 4th semester which at that time used to be made by final year project students. Constructing the Robotic arm was a great experience because for the first time I was using heavy torque motors with micro controller. I had to type a program of around 1000 lines. Calculation of angles comprised the adjustment of degree of freedom in movements. It was all learning through experience. It was the first time I was doing it. But it was my confidence; passion and hard work that led me achieve my goal. That was not the end; rather it was the beginning because in very next semester I moved further and constructed a robot.

After 5th semester I participated in Pakistan largest robotic competition named as NERC (National Engineering Robotics Competition) in this competition the robot was to perform a task using color sensors within 4 minutes. My Robot could not perform well, but I learned through experience in that particular competition and was able to identify my mistakes and learn new things such as new components used by other teams. In 6th semester I participated in National Robotics Competition organized in FAST University Karachi. The winner of the competition was to be given a chance of going to Mumbai India for another robotic competition, but still the logics
were new. I used my learning from my last competition and made a better BOT this time. I achieved first position and got selected for upcoming robotic competition in 2012.

On the other hand, I started teaching Robotics in PAF KIET so that I could transfer my knowledge and experience to my juniors. Almost 150 students registered in first ever robotic class in KIET.

Day by day, I got more refined and effective in making line following robots. After preparing students I made a team which organized first robotic competition of PAF KIET named as ROBO QUEST. On 4th Feb 2012, I represented Pakistan and my University PAF KIET in IIT BOMBAY INDIA. My BOT could not perform well due to some errors, but I learned through my mistakes and also learned a lot from Indian students.

This experiential learning was one the best of its kind. Interacting with International students on International platform such as India. During my 7th and 8th semesters I participated in no. of National competitions and got top position in almost all the events. Not only was this, but the students who attended my Robot classes, now able to participate in different national events too. I feel really honored to tell that Robotics team on CES got 2nd position in their first competition held in FAST Karachi. I hope that the undergraduates will find experiential learning beneficial to their studies and personal development.

Human Factors in Aviation Safety: An Experiential Learning Study from Air Crash Investigations
Irfan Yousuf, IoBM, Bilal Muhammad Khan, NUST, irfanbadar1988@gmail.com

Airlines transportation is one of the fastest and emerging modes of traveling; however it requires several safety regulations which need to be implemented in order to be safe while travelling. Among all the critical failures that can occur during any flight; air crash is among the most fatal of them all. Although several different levels of safety regulations are in place to avoid such deadly accidents; in spite of all the precautionary measures, still quite a few air crash incidents are reported by world’s aviation authorities. Aviation safety has many levels that comprises mainly three broader categories namely flight management; air worthiness and human behavior. Almost 75% of all the crash investigations directly or indirectly points towards the human in the loop error which led to fatality. This paper presents case study and solutions towards flight safety to optimize the human performance by implementing the safety regulations; improving the aviation legislation and airlines operations strategy. The study explores the plethora of accidents that took place to push forward the envelope of flight safety. The experiential learning from accidental investigations adds a new paradigm of research in this field and contributes as a major impetus for the betterment in aviation safety system.

Improving Pakistan’s Rural School Education through ICT Infrastructure Deployment.
Javed Ahmed Samo, Indus University, Bilal M Khan, NUST, j.ahmedsamo@indus.edu.pk

In 21st Century, Information and Communication technology played enormous role in every aspect of life from small business to enterprise level for processing volumes of data. Utilization of ICT tools such as computing devices and internet are common to every age of modernization. ICT has a great social impact to provide different applications on different socio-economic development project, but in education, there are still lots of work to do. Specially, in Pakistan which is already facing lots of problems in education in rural/least developed areas of the countryside like: old teaching practices which cause students alienated, students are unaware from the power of education, untrained teaching staff, absence of teachers in schools and limited resources utilization. In this paper we are proposing a model for integrating ICT preliminary in schools in rural/least developed areas of Pakistan for managing better Management Information System including digital attendance system, online trainings and deploying visual aids in academia to promote the education system and build interest among the student of rural/least developed areas of the country for the betterment and strengthen.

Role of Renewable Energy to overcome the Short Fall of Power: Experience of PHILIP’S MORRIS 450kwp Project
Zahid Manzoor, IoBM; Bilal M Khan, NUST, zahid_manzr@hotmail.com

Renewable energy plays a vital role during energy crisis by generating alternative power without further damaging the environment. The generation of power using such alternative sources is a very active area of research and there is a huge space available for modern industrial units to fill the gap. In order to void that gap Philip’s Morris
introduces such energy generation technique. The company daily load is up to 2MW with a total energy of 35.8MWh per day; however this huge dependency of energy is reduced by installing a solar system of 450kWp on the roof top of Philip’s Morris. This system generates approx. 693 MWh of energy yearly with a specific yield of 1540Kilowatt of hours per kilo watts per year. By installing solar system, the firm saves millions of rupees in their utility bill of grid and also contributes towards green environment by reducing foot print of carbon dioxide emission. This paper provides case study of the implementation of the project as well as the feasibility for such projects in future to reduce the dependency over energy sector and move towards self-reliance in generating greener and cleaner energy.

Cooperative Learning and Partnership Building: Empowering Graduates to Compete in the New World Economy
Professor BS Chowdhry, MUET, c.bhawani@ieee.org
In the present time, universities, education regulators and teachers are involved in discussion on how to best prepare engineers for future jobs in the industry. In this regard, questions such as “Should industry standards be taught as a discipline for its own sake or for the body of knowledge, skills and values to be derived from it (or both)?” and “Are projects executed during study as part of curriculum sufficiently providing the students exposure required to deliver on real-world job projects?” remain central issues in shaping the approach of teachers and policy makers alike. To address these questions, approaches such as Cooperative Learning, may provide opportunities for promotion and adoption of best practices, developing linkages with industry, stimulation of innovation and diversity in engineering education in keeping the pace with changing scenario of world. The idea of Co-operative learning is to intertwine academic and practical training in an architecture that puts equal emphasis on theoretical knowledge as well as skills required for practical jobs. By introducing mandatory placements in companies and merging them in to study cycle of a degree course, future graduates could be better prepared for jobs nationally and internationally respectively.

Impacts of Lack of Planning in Construction Projects on Society: Evidence from Karachi
Muhammad Bilal Yasser, Seema Ansari, IoBM; Sheikh Muhammad Yasir, UIt; Rabia Bilal Bilal M Khan, NUST; std_19406@iobm.edu.pk
It is inevitable for a developing nation to focus on the development of infrastructure since the growth of economy of a nation is tied to the infrastructure which supports trade and other businesses. Rail roads, motorways, highways for transportation and structures of power generation and supply, natural resource extraction and transportation are always in focus in one part of the country or the other. In this fast pace of development, governments and other related organizations seldom take into account the impact of the construction activities over the society. Relevant institutions do conduct feasible studies for the siting and design of structure, however, when it comes to the resolution of issues that are faced by the people who are directly affected by the construction activities, it seems as if no heed is paid to the assistance of the affected people. In this paper we are making an effort to show, based on our experience, how improper planning of construction activities gives rise to issues that are upsetting for the inhabitants of the city of Karachi by studying different projects that are under-construction. The relationship of the problems with planning is explained and guidelines for the management and planning of activities are proposed that can lead to reduced sufferings of the inhabitants.

DAY-2 SUNDAY, APRIL 10, 2016
Track 2-Higher Education: Day 2, Sunday 10-11:30, Session 1: Parallel Session in Room-205
Session Chair: Dr Nasreen Hussain, Parvez Jamil
21- Role of Experiential Learning in Changing Learners’ Behavior in Social Sciences
Nosheen Hussain, nhussain@smiu.edu.pk
Methods of learning in the tech era have been changed and modified to make it more effective. Experiential learning is taken as the creative method to teach concepts in a unique way. This case study aims at identifying the changing behavior of students (at higher education level) by introducing innovative and action-based teaching methodologies and by including PjBL (Project Based Learning) as a part of experiential learning (ExL). Different teaching methodologies were adopted for three groups of students studying the subject ‘History of Art’ during 3 different semesters. They were interviewed at the end of semester. Behavior and interest level of students were kept in consideration. Study proved that students showed higher level of interest in activity-based learning as they feel the sense of interaction, involvement & exploration. They also experienced empowerment in discovering knowledge on
their own. Students’ feedback revealed that engaging methods include fun element in the process of learning and pressure converts in to an exciting activity. It also helps in building confidence by giving them chance of dealing with real-life based situations & provides them exposure. Study suggests that PjBL learning should be highly based on the topic so the students are able to relate to it. Instructors detailed observations and feedback will help them in improvement. Innovative techniques should be used from the planning phase to the execution and presentation phase. Suspense element will be helpful in maintaining students’ curiosity till the end. Repeating one activity, project or method with the same students will cause boredom and lack of attention and attraction for learners.

22- Learning from Experience to Teach Reading in Grade II: Evidence from Teaching Practicum
Maria Jawed Khan, Afshan Rafat, KU

Reading skills is pivotal in a man’s life course to survive competently and effectively. One cannot image difficulties of illiterate experiences in his life and its ripple effect on the country’s progress. Therefore the target to select early grade students for developing reading difficulties is basically a foundation step to prevent these young students from reading failure. The purpose of this research report was to work on reading difficulties of grade II students to measure the level of reading difficulty and intervention needs of students in a public-sector primary school in Karachi. The study focused on resolving measures to draw a workable plan for the prevention of failure in reading.

A mixed approach research was employed in the study. Researchers worked with n= 79 Grade II students in a Karachi-based school to seek how best reading difficulties could be addressed and prevented. The goals of the project were to identify causes of reading difficulties in grade II students in public sector schools, to apply strategy to prevent reading difficulties and to observe the expected results. To accomplish the goals, researchers adopted interview method and observation. Video recording and checklist also formed the basis of the report. Study found that teacher’s early intervention helps young children read better and effectively.

23- Experiential Learning through Reciprocal Teaching in the Context of Secondary English Classes
Kiran Dadabhoy, Dr. Nasreen Hussain, IoBM, kirandadabhoy@hotmail.com

Competent reading comprehension skills are essential especially for secondary students of English. In order to improve these skills of secondary students of English, experience-based learning is introduced using the research proven methodological intervention Reciprocal Teaching. This is a scaffold dialogue technique that is constructed upon four strategies which sound readers use to understand text: predicting, questioning, clarifying and summarizing. A sample of n= 17 students, male and female Grade 9 & 10 students participated in the research. The four strategies of reciprocal teaching were each part of the four interrelated cycles comprising activities which the students worked through. A general plan comprising activities, teaching resources, observation schedules and checklists was developed and were used for data collection. Assessments held before and after the interventions were examined to assess the changes that took place due to the intervention. When the results of the pre and post intervention assessments were compared, the students showed a significant amount of improvement in grades as well as their ability to effectively comprehend the text which proved the technique to be a successful one. In essence, the implication for teachers who teach reading comprehension at any level is that through modeling of comprehension strategies (i.e., predicting, clarifying, summarizing, questioning) they can assist students in applying the strategies when reading and promote experiential learning.

24- Learning Experience through Transition: Student as Teacher in the Context of Self-esteem
Erum Bashir, NDIE, erum.bashir17@gmail.com

Experiential learning is the most discussed topic these days. Learning plays an important role in the life of an individual. But this learning is not free from individuals’ own experience. Every individual goes through different experiences in life and these experience lead person towards direction and contributing in self-esteem either negatively or positively. The study was conducted using reflective mode of inquiry in which the researcher looked into her own account of teaching and learning experiences. This paper reveals researcher’s own learning experience through transition as a student and teacher in the context of self-esteem. This paper is reflective in nature and
researcher’s own case study about her professional experience and how those learning experiences contributed in researcher’s professional self-esteem in terms of self-confidence, performance, empowerment etc. The main findings of this case study informs that researcher’s experiences during the journey of professional teacher training and later as professional teacher served as key components in professional development, competent skills, adequate knowledge and positive feelings about her teaching and learning processes.

25- Community-based Curriculum Development in the Context of Experiential Learning
Victoria Joseph, Qamar Bibi, NDIE, victoria.v.joseph63@gmail.com

According to Dewey, learning is done in such a manner that the child should be connected to the environment. Teaching should benefit in lifelong learning and that will only be possible with experiential learning. The study looks into some of the ways to translate conventional curriculum into practicable experiential-oriented curriculum. The High school curriculum is focused on theoretical approach in which the students are forced with rote-learning and limited to examination and getting some marks as the performance is measured in quantity. This approach prevents the creativity and independent learning and problem-solving skills of the learners. Our society needs independent thinkers, problem solvers, and self-directed learners and most importantly future leaders, who are there to lead the society in every possible manner. As teachers we should be the producers of leaders, rather than searching for leaders for our society. The study explores the significant impact of community-based-curriculum development in the context of experiential learning. The need to combine societal needs and the curricula are extremely significant and pivotal in nature. The researchers see the connection between the actions in the classrooms and the objectives to change and modify the societal set up for effective community-based learning through curricular reform process.

26- Learning from Adolescents’ Academic Stress and School Connectedness
Tooba Rahim, NDIE, tooba.samchani@gmail.com

Academic matters are the most important sources of stress for young people in both Western and Asian countries (Anderman, 2002). School experiences during adolescence have a profound effect on a learner’s future (Schorpp, 2012). Unfortunately, researches in this area are very narrow in Pakistan’s context. Therefore, schools need to devise some strategies to develop more school connectedness among adolescents to reduce academic stress during adolescence for effective learning experiences. The study focuses on the question: Can students’ learning occur more effectively by studying the relationship between adolescent’s academic behavior and school connectedness? The researcher hypothesizes that there is a positively significant relationship between adolescent’s academic behavior and school connectedness. Three private schools and three public schools generate the samples data of the study. Data will be collected through direct administration by using the original 16-item Educational Stress Scale for Adolescents (ESSA) questionnaire (Dunne, 2011) and 12-item Scale on School Connectedness (Resnik et al, 1997).

27- Exploring Strategies to Foster Learning in Business Schools: Evidence from Pakistan
Shumaila Omer, IoBM, 205, shumaila.omer@iobm.edu.pk

One of the most important factors in language learning is ‘Motivation’ (Van Lier 1996). No long term objectives of language learning process can be maintained nor achieved without motivation. For instructors in Pakistan, the motivation of learners remain a great challenge as they do not have much control over external circumstances which impact students’ behavior, yet they play an important part in shaping the experiences that take place in classes. Most of the time, the past experience of business students help teachers identify the process of motivation in classrooms. Substantial research on motivation has been done previously, but the types of strategies that can be developed in order to find the root cause of learner’s motivation can help further strengthen the role of teachers in the field of successful language teaching. This study will help improve in the English Language teaching with the positive attitude of the teacher, at the same time making the course objectives clear to the students that will help achieve better results not only from the examination point of view, but also outside the domain of classroom learning. The study will also investigate students’ motivation for learning at the beginning and the end of the English Course and estimate whether there is any change in students’ motivation for learning English after they take the English course at university. The model of Gardner’s (1985) motivation and Dornyei’s (1994) framework of L2 motivation are used as a backbone to this study.
28- Investigating the Ways of Second Language Learning: Error Analysis at Secondary Level
Muhammad Safdar Bhatti, TEFL Coordinator, AIOU, Bahawalpur

English is being learnt and used all over the world. It has become a dire need of this age. It also exercises a great influence on the elite class of the country. Its knowledge is a successful passport for employment. Both the oral and written skills are essential for learning any language. But learning a second language is never easy. Students must have to wrestle with new vocabulary, rules of grammar and sentence structure, idioms, pronunciation and much more. Some people seem to catch on more quickly than others whereas some make mistakes frequently during learning a second language. Writing is a productive skill and its main concern is to give an insight about grammatical rules and composition writing. So the current paper highlights the factors of poor writing due to lack of knowledge on the part of students and also investigates the effectiveness of error analysis which leads them to accuracy. The researcher has studied the reasons behind these deficiencies and has paved the ways which may be helpful for English language teachers to enable the students to write correct English. Sample of the study was taken from Govt. High schools of Bahawalpur. The data was collected by using pre-test, post-test and questionnaire. The participants were including 20 teachers and 200 students. The findings of the study proved the tested hypothesis. The conclusion with suggestions and recommendations was also summed up at the end of the study.

29- A Documentary on Experiential Learning in IoBM Societies
Parvez Jamil, parvez@iobm.edu.pk

Track 2-Engineering Education: Day 2, Sunday 10-11:30, Session 1b: Parallel Session in Room-211