All abstracts have been published in the form that they were received from their respective authors.
Over the last decade, the concept of students as partners has been a focal topic of discussion all over the world. Education systems are actively working to make a model where students actively engage with the existing learning architecture, providing constant feedback, which has fueled a shift from traditional modes of teaching. However, there are multiple challenges involved with perfecting such a system, where finding an ideal balance in terms of the responsibilities and powers of all the stakeholders is incredibly crucial.

The students of the Aga Khan University, in collaboration with the institution’s Center For Innovation in Medical Education (CIME), have attempted to bridge the divide between students and their educators. This notion has led to the creation of The Society for Promoting Innovation in Education (SPIE), managed by 8 student leaders and their teams with one CIME advisor. This student-led society has actively worked since its inception in 2017 to promote innovation in teaching and learning methods, community engagement and research. Just this year alone, it has impacted 300 plus students through organizing high-fidelity simulation sessions, wet labs, community interventions, research symposiums, competitions and faculty-student networking sessions. SPIE has identified and worked towards bridging various gaps between students from the Medical College and the School of Nursing and Midwifery, as well as between Under-Graduate and Post-Graduate students by providing a platform to build functional inter-student partnerships. Moreover, SPIE has fostered the culture of peer learning and mentorship. It has helped to create a symbiotic ecosystem, where undergraduate and postgraduate students from all years support and learn from one another as well as faculty.

All the accomplishments of this student society are a testament to the untiring commitment of the students as well as the CIME, which has been dedicated to the campaign for connecting with students and understanding their needs. This has facilitated a comfortable yet professional space where evidence-based methodologies are employed to attain better results. The mutual trust has not only encouraged students to partake in a self-designed process of learning but has also empowered them to go beyond the call of duty and innovate.

The notion of students as partners is a promising concept and it challenges the traditional hierarchy and existing notions of authority. We must be cognizant of the fact that the learner of today has a very unique set of needs and capacity to contribute. The focus of this talk will be to unravel the components of traditional learning systems and how to develop a symbiotic relationship between students and educators such that all the stakeholders are involved in the development of the learning experience. In order, illustrate this shift; we will be presenting the model of SPIE as an example of a collaborative endeavor to empower and inspire other students to take control of their learning.
Hamis Juma

Do our learners know exactly what and why they are learning? This has been a dilemma for many learners, my friends and fellow students being a good example of it. How helpful is what we learn in school in a real-life situation: do we use our education in real life?

While discussing the role of our education and its provision in our schools, the debate is never-ending. In the long run, education has a role to prepare an individual to adjust well in society. We are producing graduates who are no longer valid in the current era. But the real question is: do we allow learners to decide what they are learning? Or are we forcing them to learn whatever comes their way and forcing them all to wear the same size shoe no matter their size?

We have to think about how to teach students how they can learn and focus on competencies, intrinsic motivation and the role played by the environment. Being exposed to new competencies, I have reflected on my practice and know that we have been all wrong and muddle the learners with an unnecessary flood of information, which is invalid as they step out of school into the real world. Now the learning has been personalized and is inclusive to each individual learner. So, what are we going to do? Teaching our learners how to learn is the first answer to solving the mystery.

Anam Noor Ehsan & Shamsher Ali Pasha

New technologies, as well as access to an array of resources, have revolutionized the ways in which people learn, and have also increased the curricular demands amongst higher education students. Some aspects of learning deemed ‘too challenging at this level’ by experts, or unnecessary by predetermined curricula, are in fact exactly what goal-oriented students seek in order to provide them with a greater depth of learning. This not only allows them to pursue their interest and gain expertise in specialized areas but also allows them the opportunity to be at par, if not exceed, their counterparts in the global arena.

The main focus of this experience-based TED Talk is to highlight how gaps in curricula or seemingly complex educational activities can be made possible by introducing teaching and learning via peers or mentors, in the form of colleagues, seniors and postgraduate students teaching undergraduate students. Not only does this allow for a wider breadth of available learning opportunities, but also, as in accordance with the theme, much more effective learning in higher education.

As senior members of the Society for Promoting Innovation in Education, our experience in running peer or post graduate mentor-led innovative learning activities (including simulation-based learning classes and hands-on wet labs) has taught us how incredibly enjoyable participants found the learning process. With a formative course in place, sans the pressure or scrutiny of faculty
members, students thrived as their own desire to gain knowledge was their primary motivator for learning, and there was more ease and reduced hesitancy when queries arose. The overwhelming outcome was that students got the opportunity to learn what would otherwise be impossible and felt much more confident in what they learned. Generally, the effectiveness of informal teaching protocols and some form of mentorship has been evidenced to improve outcomes in numerous ways in other environments as well.1,2

Therefore, we wish to emphasize the great efficacy peer and mentor teaching and learning strategies have within education. The possible implication of this talk is enabling official structures that use peer and mentor teaching and learning at their core to form, thus improving the quality of these programs further and enabling greater recognition of involved individuals. This, in turn, would have a chain effect and may motivate more students at both the postgraduate and undergraduate levels to partake in such activities, creating mutually beneficial learning scenarios and higher caliber students in a variety of fields.

References:


Against the Odds: A Reflection of the Experiences of a Student Mother with an Infant in Pursuit of Higher Education

Mercy Sikuku & Mweru Mwingi

Guiding Question:

How do student mothers pursuing a Master’s manage their learning and motherhood?

Many women in Kenya pursuing tertiary education already have families and small children. The decision to advance their education is motivated by a number of factors, including the desire to attain higher education which is associated with the accomplishment of personal goals such as a good job, career advancement and financial freedom. Given that opportunities for higher education with scholarships are rare, such offers are not to be ignored. For these reasons, mothers with infants will dare to pursue further education whenever scholarships come their way. Undertaking an intensive Master’s programme is a challenge on its own and is exacerbated when the student is a mother with an infant in a foreign country without family support. The balance between studies and motherhood is both a journey of mixed feelings from anxiety and despair to resilience and hope. This talk includes the reflections of a student mother with an infant on the daring journey of the pursuit of knowledge through further education. It is about making hard choices that interface personal and social lived experiences.

The retrospection and introspection not only illuminate the challenges, ambivalence and struggles student mothers experience in pursuit of higher education, but also reveal the friction that arises in the balancing of academics and motherhood. The coping mechanisms employed by student mothers to overcome the challenges are discussed as well as lessons learnt from the whole experience and the empowerment that results from making hard choices.

This reflection is nested in the question: How do student mothers with infants pursuing a Master’s manage their learning and motherhood?

Curiosity Promotes Motivation and Enhances Engagement in Active Learning


Curiosity is an essential ingredient to support active engagement in the learning process of the students of all disciplines, including nursing education. A desire to obtain more knowledge and skills by investigation, inspection, or exploration is known as a curiosity. Curiosity is highly significant as interest originates out of it and it is serves as a catalyst for motivating and engaging students in active learning. When a child becomes curious about something, he/she engages him/herself in search of it, and achieving a little clue about it motivates him/her to do so. It is a fact that curiosity makes learning enjoyable and productive. Many students are curious, always asking questions and seeking every answer. The laws of physics would have never formulated if Sir Isaac Newton was not curious, and without curiosity, penicillin would have never been discovered by Alexander Fleming. Curiosity provides motivation and is just as important as intelligence in
determining how well students do in studies or learning.

An enthusiastic teacher often flavours the class with anticipation and pleasure. Anticipation engages the student to participate and stimulates them to explore. Thus, the teacher’s enthusiasm sparks the curiosity of students, and this starts their motivation to learn. Teachers’ enthusiasm can lead to better teaching evaluations, a positive attitude towards teachers, better student performance, and improved classroom behaviour.

This idea is not only supported in the literature; my own experience as a student of Aga Khan University has also made me realize and reflect on the importance of student curiosity. We have been provided with many opportunities by our teachers to engage in the learning process actively. The strategies of learning planned by our teachers, such as research projects, role plays, group discussions, and presentations, have helped to enhance curiosity in us, which motivates us to learn and discover more.

Furthermore, it is curiosity and the urge to learn that motivate us to keep trying hard and to not to give up during stressful times. The active learning experiences at SONAM have thus helped us to become more curious than ever before.

**4O114 | AKUx Talk | Dear University**

Qirat Rafiq & Shimama Kanwal

Back in 2015, I told a friend of mine that I wanted to do something that would include me wearing a formal suit with a suitcase. I always dreamt of becoming someone who would sit either in a bank, or somewhere in an office. And trust me, every second person who knew me wouldn’t think before imagining me as a lawyer, or a business lady. To your surprise, my dad also kept telling everyone that his daughter is going to pursue CSS. Also, I was 15 when my mother agreed to let me travel to Germany all alone. This is when I realized wherever I go, whatever I do, I’ll always have them by my side.

Long story short, everyone who has been through the rollercoaster of stress and tension that happens after intermediate and before you actually get an admission in some university will relate to this. You get sleeping disorders, hopelessness, uselessness, self-doubts and whatnot. And then comes society who would constantly bug you. Around all this chaos, I didn’t go for any other profession I dreamt of. Instead, became something nobody would ever imagine, not even me. Because whenever my mother visited AKU, she would tell me how blessed the mothers of these nurses are.

Aga Khan university has helped me boost my self-esteem a lot. Because when it all became centered around striving hard, learning new skills, meeting new people, thinking out of the box, challenging yourself, and thinking innovative things every day, this is when I realized that I am an AKU student. Waking up early in the morning, struggling; not to get better grades, but to become a better person and to consider yourself as your own biggest competitor in order to improve every day.

For, dear University, you taught me to express what I feel; you pruned me to make me realize that everything can be achieved through hard work, commitment and consistency. You taught me to triumph over
all obstacles that may hinder my destination. I’m glad I was taught not to stress about marks but rather work on self-evaluation.

If I begin counting all the achievements I have had in my life, I suppose that most of them would cover the achievements I have had because of you. Two years here, and I have started my never-ending journey of empowerment, a journey of discovering my hidden talents, a journey to improve the quality of lives of my community and my people, a journey of believing in myself. I am proud I am stepping up to it.

The first time I introduced myself as an AKU student, internationally, I realized how good it feels to be a part of it. To have people admire you because you are a part of AKU. An institution full of amazing people with tons of creative ideas. Thank you for bringing out the best in me, and for making me discover the hidden talents in me.

4E128 | ePoster | Effectiveness of Variety and Low-Cost Strategies for Self Breast Examination Demonstration

Uzma Nizar Khimani & Aawaizia Imtiaz Ali

Self-Breast Examination (SBE) is a skill which a female can use to detect any abnormality in her breasts. Early identification of breast abnormalities plays an important role in decreasing mortality due to breast cancer. Furthermore, this technique provides an opportunity for disease prevention through free of cost screening. Considering that the prevalence and mortality rates of breast cancer in Pakistan are 34% and 16.1% respectively (Sarwar & Saqib, 2017), it is necessary that every female performs this examination on herself so that any developed cancer can be managed appropriately. During our third year community rotation, we conducted a teaching session on SBE in which we used various learning strategies, including low-cost models such as a balloon model for hands-on practice, a chart as a visual aid for the direction of hands, and a video for a complete process of SBE. Upon conducting the evaluation, learners showed adequate retention of the process of SBE because of the techniques used, and accurately re-demonstrated the complete technique on the same low-cost model. Evaluation showed the effectiveness of these strategies, since the knowledge recall and re-demonstration for this strategy was most effectively done by learners. Through this family-based teaching, we learned that the use of various strategies improves learner understanding because learners learn through different ways, like visual, auditory and kinesthetic methods (Russell, 2006). Furthermore, the use of low-cost material to develop a breast model along with a demonstrational video helped participants to practice the SBE skill in front of the facilitators. This promoted the learners’ competency in, and commitment to, performing SBE in their everyday lives.

References:


4E89 | ePoster | Teaching on Eating Behaviours in Adolescents
Farzeen Khowaja, Asima Hamid & Syed Mehboob Ali Shah

Background:
On April 1st, 2019, we visited an urban community as part of our clinical where we were assigned to give teaching to community people as a requirement of our teaching Learning Principles and Practices course. This was a two weeks intensive exercise. We interviewed two different families according to the prescribed family assessment tool. After taking their history, we identified many problems in both families. However, through participatory approach and considering the family concerns, we chose the unhealthy eating behaviors in adolescents as the topic for our project.

Purpose:
The purpose was to educate adolescents on healthy eating habits.

Need Assessment:
For in depth need assessments, we drafted a questionnaire to identify adolescents’ diet preferences and eating behaviors. The findings of the need assessment showed similar patterns in both of the families, such as consuming carbohydrates, fats, proteins, less vitamins, good cholesterol, caffeine and less fiber, however fruits and vegetables were less preferred than other food groups. Both families consumed fast food 1 to 2 times every week. In addition, when they are angry, they eat more. They usually have snacks, and because of that they used to miss their scheduled meals, such as lunch and sometimes dinner.

Planning:
As our target audience was adolescents who fall in the age group of 11-18, we planned interactive teaching on the basis of pedagogy. We planned interactive strategies such as an animated video, pictorial charts, a food pyramid, reinforcements on participation, repetition, making their own food plates, and questions for evaluation. Four year 3 students conducted this project in a live community setting.

Implementation:
We delivered our content in the hall of a religious centre. We introduced our topic and listed the advantages of our teaching in order to orient children and direct them towards the learning. The video is a source of effective learning for both visual and auditory learners and they can gain much information from it. Salina (2019) mentioned that through surveys it is identified that videos are a source of stimulation and a way of reinforcing the main ideas which are taught during class. We used the animated video to explain the importance of different food groups. To explain the desired quantities of different food groups, we used the food pyramid to portray the different stages in the pyramid and grab the attention of the participants for fruitful learning. All the strategies were planned to involve students in different activities, such as making their own plate with different food items, five finger rules, videos, giving rewards for right answers, visual aids, and use of charts as a board which assisted us to execute our plan effectively. (Hinchliffe, 2000). We also hung some charts on the pole to attract participants. This idea contributed in developing a good learning environment for the learners, which is an essential component of pedagogy (Landau, 2004). To evaluate their learning, we asked them to make their own plate on the basis of learning about different food groups and we asked them to incorporate all the food groups essential for their growth and development.
and reinforced the learning with a reward. According to Dhadeech (2009), Game is a useful tool that helps to induce self-learning and it promotes problem solving skills. Game-based learning is a strategy in which we incorporate educational content into entertaining games. It also enhances communication and social skills through teamwork.

**Project Evaluation:**
After 3 days, we reevaluated the productivity of our learning. We found out that participants have discussed with their parents what they had learnt and asked them to help modify their diet plans. Now they have improved their eating behavior by reducing the amount of junk foods and are mindful to include all the food groups in their diet. It was a learning experience for all of us where we were able to apply the classroom concepts of our teaching principles and practice course in a real-life setting. Also, this strategy has helped us to explore what are the best possible learning strategies that can facilitate the learning experience of the target audience.

**References:**


4P04 | ePoster | Steps Towards a Satisfied Student Life with Constructive Learning and Practical Integration

Amber Mawani & Marya Akbar Ali

Nowadays, student issues are dominant in any university, especially high ranked universities such as Aga Khan University, where students are demanded to be a better version of what they are and expected to be multi-taskers. One issue is leading to several issues: shorter semesters lead to study burdens, consequently increasing psychological problems such as stress and depression. Therefore, we intend to initiate shorter semester breaks. A long semester with separate initial months of theoretical knowledge and ending months for clinicals will help students to integrate all the acquired knowledge easily during clinicals. A study that we conducted by interviewing 2nd year BScN students of Aga Khan University revealed that students get confused and depressed performing clinicals along with exams and theory week. It results in lower grades and deviated concentration on clinicals which dually hinders. It can be practical knowledge or theoretical. Online classes with appropriate podcasts can be used as alternatives to save time and students can utilize the extra time for extra curricular activities. This can fulfill the motto of university to make students not only better, but the best version of themselves.
Students will be able to be practically, intellectually, and emotionally stable. They will get the chance to pursue their career along with interested hobbies facilitated by university. From this proposal, we intend to make student life a memorable and skillful experience throughout their life.

4E29 | ePoster | Knowledge, Attitudes, Practices and Barriers in Use of Evidence-Based Medicine Among Resident Physicians in Aga Khan University Hospital, Nairobi

Megha Unadkat, Caroline Mbuba, Anthony Ngugi & Dorothy Kamya

Background:
Evidence based medicine (EBM) helps clinicians to integrate latest research evidence into their daily clinical practice for best possible outcomes (1). There is a need for all healthcare professions to adopt it in order to provide scientific, safe, efficient and most cost-effective care. Postgraduate residents are at the frontline of healthcare delivery and all medical institutions should strive to produce practitioners of EBM. Studies have shown that physicians are still struggling to adapt to this paradigm shift in the practice of medicine, especially in Sub Saharan Africa (SSA) (2)(3).

Research Questions:
1. What is the knowledge, attitudes and practices of EBM among resident physicians at AKUHN?
2. What are the barriers that impede the practice of EBM among resident physicians at AKUHN?

Methods:
A convergent parallel mixed methods study was conducted. The quantitative questionnaire was sent to all current AKUHN residents via an online survey application called Survey Monkey®. Purposive sampling was then used to identify 18 participants for the qualitative study. In-depth interviews (IDIs) were conducted to gain an understanding of the knowledge, attitude and practice of residents towards EBM and their perceived barriers.

Results:
A total of 101 residents participated in the quantitative study and 18 were interviewed for qualitative study. The mean scores for knowledge, attitude and practice of EBM among residents were 73.88, 66.96 and 63.19 respectively. There was no significant association between knowledge/attitude of EBM and sex, age, department and year of residency but there was a significant association between department and year of residency with practice of EBM. The most common barriers faced by residents were lack of time, lack of EBM skills and patients’ unawareness about EBM.

Several key themes were identified from the qualitative findings. Residents again demonstrated good knowledge and support of EBM but practice remained low. Main themes that characterized the EBM barriers were: lack of motivation, lack of time, lack of skills, patient overload, lack of resources, intimidation from patients and fear of challenging the consultants.

Conclusion:
There is a good understanding and support of EBM among residents at AKUHN. The practice of EBM rated high from quantitative findings but was not supported by qualitative findings. Major barriers identified were lack of time and lack of skills to practice EBM.
Implications:
AKUHN aims to promote excellence in modern medical education, research and evidence-based health care and spends vast resources on subscription to EBM resources. Therefore, the findings of this study demonstrate the usage of and attitudes towards these resources and will aid the institution/library and other teaching institutions on which resources are highly valued by residents.

The barriers of EBM identified in this study should inform policy makers within AKUHN and the Nation’s education system on how to tailor trainings and interventions to enhance the culture of EBM through regular workshops, trainings and by integrating EBM into Undergraduate Medical Education (UGME) curriculum.

4E116 | ePoster | Importance of Needs Assessment and Androgogy to Teach Adults how to Reduce Obesity
Rozina Tajddin, Kazima Sarbaz, Salima Murad & Shehzadi Sami ul hayat

“Obesity is one of the emerging epidemics in Pakistan; with a quarter of Pakistan’s population falling in the overweight or obese category” (Hassan & Hassan, 2017). The increasing burden of obesity is extensively found among adults and children. There is a strong association between obesity and non-communicable diseases, especially hypertension and diabetes. “The insulin resistance linked with obesity leads to the development of other cardiovascular risk factors, including dyslipidemia, hypertension, and type II diabetes” (Zanella, Kohlmann, & Ribeiro, 2001). For this reason, community education for the prevention of excess weight gain is very important to minimize potential and existing health issues. A recent community teaching project was conducted by year three students of Bachelor’s in Science of Nursing, as an objective of “Teaching Learning Principles and Practice” course. The teaching took place in an urban setting in Karachi. We conducted teaching on “How to reduce obesity”. We selected the audience by randomly selecting two families, and we identified that their priority health issue was obesity with the help of the “Family assessment tool” and “Prioritization grid”. An in-depth need assessment of the clients was very important, as obesity is not a new term for the community; people now are aware of different aspects of obesity. The need assessment tool helped us identify their learning needs. The need assessment tool we used was a combination of structured and unstructured questions adapted from Survey Monkey’s obesity survey. A detailed need assessment helped us identify the learning areas of the audience, which majorly included diet and exercise teaching along with ways to monitor their weight and health. As the learners were adults, we utilized andragogical learning and teaching approaches to motivate and engage them for lifelong learning. For example, the audience made their own diet plan, engaged in discussion and simple case studies, and identified the causes and complications themselves through gaming activities. Our teaching method was based on the theory of constructivism. “Constructivism is a theory of learning which focuses on self-regulatory processes of struggling with the conflict of what is known and what is the new insight. Teachers who base their practice on constructivism, give the chance to students to create concrete experiences to find patterns, ask questions, defend their ideas and interpret the concepts” (Fosnot, 2013).
The results of the evaluation after teaching showed greater motivation and knowledge in clients to bring lifestyle modifications as they verbalized that they learned what they were hoping for. There was also a greater retention of concepts due to continuous engagement during teaching, as evidenced by the evaluation conducted at the end of the activity. Conclusively, the results showed that it is very important to conduct needs assessments before teaching and to use andragogical approaches when teaching adult learners. We could not assess long term aspects of this teaching on our clients due to the short amount of time to conduct the project.

References:


4P85 | Paper Presentation | Technology at its Best: Experiences of Master of Education Course Participants in Class

Elias Mwangeka & Philemon Righa

Transformative teaching and learning occur when Information Communication and Technology is put on a pedestal. As a powerful tool in education, ICT can build collaborative networks that surmount the equity and accessibility gaps that have long existed. Furthermore, the use of ICT in classrooms and other educational contexts carries with it enormous benefits. Numerous research studies, for instance, have linked the use of ICT in teaching and learning to not only increased student motivation and engagement, but also improved student outcomes (Bonk, 2009; Boster et al., 2007; Hibbing & Rankin-Erickson, 2003; Morgan, 2015; Robin, 2008). In addition, ICT is a 21st century phenomenon that has become a universal tool for education. Without this tool, the ever-growing and changing educational needs and aspirations may not be realized. However, despite these notable benefits of embedding ICT in pedagogy, teachers and education practitioners are still grappling with how to use and apply ICT in teaching and learning (McKenna & Proctor, 1998; Robin, 2008). Additionally, the gap between teachers who are ICT enthusiasts and those who are ICT conservatives seems to be widening each passing day. It is worth noting that the ICT environment is highly dynamic, hence failure to keep up with the changes may have a negative impact on teacher efficacy, which in turn impedes educational achievements. Many institutions of higher learning are not fully utilizing technology in ways that can boost everyday learning, which underlines the need to scale up the acquisition of effective pedagogies and technologies. One fact that remains is that technology is here to stay (Gibson, 2001). Therefore, adopting, adapting and appropriating ICT for pedagogy is the gateway to transformed students’ learning. Various technological innovations that accommodate teaching and learning
continue to be developed. These innovations provide flexible opportunities for studying in higher institutions of learning by aiding students and faculty to combine various technological tools in teaching and learning. This has transformed how students in universities interact with knowledge and skills. Through these various platforms, the students’ learning is greatly transformed in that they have the capacity to remember, understand, analyze, evaluate and create knowledge. This then calls for higher institutions of learning to provide their learners with authentic learning experiences that will enable them to use and apply technology effectively.

**Key words:** teacher efficacy, synchronous, asynchronous, virtual learning environment, in-service teacher education.

**References:**


**4P115 | Paper Presentation |**

**Assessment for Learning: Students’ Learning Experience at Aga Khan University**

Rajabu Shafi & Grifin Nyeko

Assessment for learning (AfL) is recently considered a significant way to improve learners’ achievements when it is well incorporated in classroom teaching and learning. Research has shown that the practice of AfL helps students to know where they are, where they want to go and how to reach there (William, 2011). The Aga Khan University Institute of Educational
Development, East Africa (AKU-IED, EA) make use of AfL in its one-year program of the Master of Education. The experience presented here focuses on the teaching and learning practices at AKU-IED, EA. It has become an institutional educational policy to practice AfL during teaching and learning.

However, course participants’ adoption of AfL practice is not straightforward in putting into practice the AfL techniques in existing classroom teaching and learning. The main question for this study is: what are the practices of AfL in higher education to enhance students’ achievements? To answer these question three subsidiary questions were asked below:

i. What is the students’ perception of AfL in higher education?
ii. Which AfL strategies enhance effective learning in higher education?
iii. What factors facilitate the practice of AfL in higher education?

The aim of the study was to explore the extent to which course participants (CPs) at AKU IED EA 2019 experience the practice of AfL in their one-year Master of Education program in enhancing effective teaching and learning in higher education. Survey questionnaires were used to collect data on the practices of AfL as an approach to enhance classroom learning in higher education. This design is selected based on the fact that questionnaires look for the state of a certain phenomenon and offer an explanation of the respondents’ practices (Newby, 2014).

The study has shown that CPs are confident with techniques, skills, and competencies on the practice of AfL. It has become clear from course participant experiences that the practice of AfL resulted in effective teaching and learning. The AfL experience has helped CPs to assimilate how to shape effective teaching and learning skills and make learners own their learning.

This paper points out the significance of integrating AfL in higher education to enhance effective teaching and learning. The CPs’ experiences of AfL have delivered a significant foundation for enhancing teaching to effective teaching and learning practices in higher education. This paper has implications for all levels of education; however, these experiences apply to the context of higher education.

Keywords: Assessment for learning, learning experience, effective teaching, and learning.

4P44 | Paper Presentation | Simulation Based Technologies in Clinical Skills Sessions Improve Confidence and Satisfaction among Medical Students of Pre-clinical Years

Muhammad Bilal Mirza, Satwat Hashmi, Anjiya Sulaiman, Samar Zaki, Rehana Rehman & Rozmeen Akbar

Background/rationale:
Simulation based medical education (SBME) has emerged as an effective tool for providing clinical skills education in a safe environment with hands-on learning experience. Clinical skills teaching involves live simulated patients, mechanical simulators, or a combination of the two referred to as the integrated sessions. At the Aga Khan University, the Centre for Innovation in Medical Education (CIME) has a vast array of simulation-based technology which can be utilized to enhance the learning of students. Clinical skills sessions
for MBBS students attending the Aga Khan University begin in the pre-clinical years. This presents an opportunity to integrate the simulation-based technology early in their clinical skills training.

**Research question:**
The objective of the study was to determine the effect of integrated simulated clinical skills sessions on the perception and attitudes of students towards their learning.

**Method(s):**
This cross-sectional study was carried out using a mixed method with both quantitative and qualitative portions. First year undergraduate medical students, after informed consent, were enrolled during their Respiration and Circulation Module. The mechanical simulator utilized was Harvey®, a life size, cardiopulmonary patient simulator with the capability to replicate normal and abnormal cardiovascular and respiratory findings.

**Findings:**
Quantitative analysis showed that more than 90% of the students believed integrated sessions were effective in achieving the learning objectives and found them enjoyable and motivating. 80% of the class expressed confidence that these sessions covered the necessary content mentioned in the curriculum and that they felt confident about acquiring the required knowledge and developing the required skills to perform necessary tasks in a clinical practice. Qualitative analysis revealed that these sessions enhanced understanding of the subject matter and student engagement during sessions.

**Conclusion:**
Integrated clinical skills sessions improve student interest, engagement and promote student confidence. SBME has a role in clinical skills teaching and should be implemented in undergraduate medical teaching in an integrated format.

**Actual or potential implications:**
The use of mechanical simulators may aid faculty members in making sessions more hands-on and interactive. Simulators may also make it easier to appreciate the normal physiological findings and incorporate clinical vignettes into the teaching sessions.

**Research Questions:**
1. Does the SSI-based teaching contribute towards improving grade IX students’ argumentation skills with a particular focus on the complexity of arguments?
2. Does the SSI-based teaching contribute towards improving grade IX students’ argumentation skills with a particular focus on the quality of arguments?

**Background/Rationale:**
Advancements in science, technology and education highlight the significance and necessity of engaging science students in Socio-Scientific Issues (SSI)-based argumentation and enabling them to make informed decisions.

**Method:**
The purpose of the current research was to explore the efficacy of SSI-based argumentation in the context of biology.
(genetics) for improving grade-IX students’ argumentation skills focusing on complexity and quality of argumentation. The study was conducted as a pre-experiment in a public school in Karachi, Pakistan. All of the grade-IX students \( n = 44 \) of the biology group were recruited as a sample. However, 38 students provided their responses to writing frames for both the pre- and post-test. After being taught a unit of 12 lessons (45-minutes each) on genetics, students were explicitly instructed argumentation skills (through Toulmin’s model of argumentation) in one 45-minute session and engaged in oral and written argumentation in further three 45-minute lessons. Data was gathered through pre- and post-instruction detailed written argumentation of students on writing frame. The writing frame consisted of an SSI-based scenario with guiding questions. Students were supposed to read the scenario, take a stance and then provide written argumentation in the light of written argumentation. In order to answer the two research questions, the data was analysed twice using separate methods for complexity and quality of argumentation. The findings indicated an increase in the argumentation skills of grade-IX students. The difference between pre-test to post-test complexity of argumentation was considered significant (Wilcoxon signed ranked \( W = 553; Z = -4.940; p < 0.01 \)). Also, the effect size \( (r = 0.80) \) was considered as a large effect size. Similarly, The difference in the level of quality of grade-IX students’ argumentation was also found significant (Wilcoxon signed ranked \( W = 528; Z = -5.005; p < 0.01 \)) with a large effect size \( (r = 0.83) \).

**Conclusion:**
The findings can be concluded by saying that the strategy of teaching science through argumentation about SSI has been found efficacious for improving the complexity and quality of grade-IX students’ argumentation skills in the context where most of the students are unaware of SSI-based argumentation.

**Implications:**
The findings are also important because they add to the literature for the area where there has been a dearth of research in the field of SSI-based argumentation. In addition, the current study provides an example of a tried and tested model of SSI-based teaching and learning. Moreover, the study has developed a pattern of intervention for researchers who would like to take the same line of inquiry.

**4P139 | Paper Presentation | The Student Experience in the M.Ed. Programme**

Nthenya Makali & Thomas Abudho

A learning experience is a situation where learners are exposed to situations and activities that enable them to develop desired knowledge, skills, values and attitudes (Kenya Institute of Curriculum Development 2019). The experiences that the students go through contribute, to a great extent, to the overall performance and attitudes towards the program. Getting a Masters degree is a dream of many people who hold a first degree. At Aga Khan University – Institute of Education East Africa, the Masters in Education (M.Ed.) program lasts one year and the assurance of completion within the stipulated time puts course participants at an advantage over students from other universities. It is a competitive and rigorous program and for students; to qualify they must undergo a
rigorous selection process. This paper will look into the M.Ed. experience from the perspective of one student. This will include the student’s understanding of what the M.Ed. program is, the outcomes expected in doing the M.Ed., positive factors that facilitate learning in the program, the challenging factors, the different interactive pedagogical approaches, and the student experiences of the selection criteria for admission into the program. Lastly, it details the competencies required for one to undertake a M.Ed. course. The paper illustrates the outcomes of the experiences ranging from culture shock, renewed independence and interests, significance of networking, language development and other windows for personal development and how these have a complementary relationship with the learning process and learning outcomes. Being a full-time program that requires being away from one’s family and off from employment, and on the other hand a unique program from what the students have previously been accustomed to, at the end of the day the students are bound to weigh out the dividends. The end product is a transformative learning experience founded on theory to practice. The experience leads to a number of questions in the mind of the students: questions about opportunities to implement their learning and skills acquired on completion of the program and about what comes after the Masters in Education. What are the possibilities of maintaining the networks developed, and how can they make a re-entry back into the context they came from? These questions may not only be significant for the student, but if well considered, have the potential to improve the quality of education offered by the institution in order to achieve AKU-IED graduates’ expected learning outcomes and desired competencies.

4P35 | Paper Presentation | Innovative Ways of Student Engagement for Active Learning in Science Courses of Nursing in the Four Year Baccalaureate Program

Rabab Khawaja, Ateefa Alnoor, Sofia Bibi & Pakeeza Haqiqat

Active learning strategies with innovative ways are now being used in the face-to-face teaching as a method of engaging students in their learning. A number of studies talk about the benefits the students have shown through their student attitude, knowledge, critical thinking skills and more when using the active learning method in their Biochemistry, Anatomy and Physiology, Microbiology and Pathophysiology science courses. It has been observed by science teachers that active learning is better as it helps to motivate students, and helps them retain material and develop thinking skills. In the science courses of nurse education, these are very much in use for developing the critical thinking qualities in nursing students. Simply, the nurse educators apply the process of active learning by engaging the students with the content. By applying active learning strategies in science courses of nursing education one could clearly see how the students get engaged with the content. Some of these activities are demonstrations, interactive simulations or games, debates, small group discussions, videos, blended learning, mini science lab projects, formative evaluations, pre post quizzes, and hands-on activities, such as carrying out a procedure firsthand. These methods promote analytical thought. Our experiences show that the science courses
which have used cooperative learning and inquiry-based activities, like mini science projects or investigations, engage students more in active learning. Students learn best when they actively participate in the learning process.

The purpose of this paper is to highlight that students remember more and learn more deeply when they're actively engaged with the material in the science courses. Instead of just listening and recording, they're playing with it, solving problems and actively figuring out how to connect the material to what they already know. And when you do that, it sticks longer, and you develop a much deeper understanding of what is being taught than just a set of terms. Active learning is a process that has student learning at its center. In science courses of nursing, the focus of active learning is the process which is used to make the students learn. Group work, role-playing, pair share, flipped classroom, mini research projects and collaborative exercises are exciting ways to diversify nursing students' classroom experiences and to incorporate active learning into teaching.

Thus, to conclude, this article describes classroom activities using various teaching strategies and explores their impact on student knowledge and perceptions. The strategies presented in this paper can help instructors create asynchronous online environments where students can enjoy the benefits of active learning, so that institutions of higher learning can deliver high quality educational experiences and achieve their core missions of transforming students and the world—not only in their face-to-face classes, but in their online classes as well.
selection process. Each interview is subjective to the applicant; hence interview content also factors in for residency selection.

This is a Retrospective Cohort Study which will take place at Aga Khan University in Karachi, for a period of two years. A population of 1200 post-graduate students from the Class of 2006-2018 will be a part of this study from which a sample size of 247 students has been chosen at 95% confidence interval. The study will assess the relationship between certain factors and their likelihood of increasing the chances of getting matched into a residency program. A total of 16 factors will be assessed in the duration of this study.

These factors include:

Honours in basic sciences and clinical years [2], Extra-Curricular Activities (ECAs), Research, USMLE [3], Gap Year, Letter of Recommendation (LoR), Electives, Class Rank, Scholarship [5], and Financial aid.

Demographic Factors: Age, Gender, Nationality, Relationship Status, Number of children, Interview (a subjective factor for each subject of the study hence this information will be collected via Likert Scale)

Published research shows that younger age, involvement in student organizations and leadership roles, research and work experience along with higher GPA lead to greater chances of getting matched into residencies [6].

The data collected will be analysed and interpreted. Through this research, it will be determined whether there is a positive, negative or no relationship between the factors and matching into residency programs.

References:


4P10 | Paper Presentation |
Exploring Masters of Education Student Experience of Practicum at Aga Khan University, Institute of Educational Development, East Africa

Davin Kemunto Getembe
The aim of the practicum is to enable the pre-service teacher /in-service teacher to reflect on and discuss general professional issues with experienced teachers. The school authority, school leaders and teachers become involved in the process (Mattsson, Eilertsen, & Rorrison, 2011). Furthermore, the principle of teacher education is to train and produce effective practicing teachers. The question of how to achieve this is an important aspect among educators in the world. This is due to the many challenges facing the teaching profession, such as globalization, the development of technology, diversity among learners and the growing of knowledge of how people learn and how to enable students to attain 21st century skills which include critical thinking, creativity, collaboration, communication, digital literacy, and problem-solving. At this point, it is important to note that these challenges affect both in-service and pre-service teachers. One of the approaches that has been used to produce an effective teacher is to integrate the practicum aspect into teacher education (Tuli & File, 2009).

Contrary to this, CPs’ experiences of this exercise indicate that time allocated for this exercise is too short for the CP to initiate, implement, evaluate and improve an innovation. This tends to compromise the expected outcome by the CP and the practicum host. Also, there is mistrust between some hosting schools and the CPs in that the host views the CP as an investigator or researcher as opposed to a teacher. Additionally, most schools use Kiswahili as a language of instruction, hence creating a challenge in communication, especially to CPs from Uganda who can hardly speak Swahili. Also, some CPs are assigned to schools with learners with various challenges and disabilities such as cerebral palsy, mental retardation, physical impairment, and sensitive issues, while they have inadequate skills to counsel and handle such learners. Furthermore, some schools have very high numbers of students in classes and limited resources for instruction, hence affecting the teaching and learning process.

This presentation will therefore lead to collecting data from the CPs through interviews and questionnaires on their practicum expectations, how long the practicum should take, which activities should be included, and how other assignments should be organized to avoid spilling into practicum period. The findings will be beneficial to the faculty in planning when allocating CPs to various centers and will address the need to include special education as a course in the programme.

4P61 | Paper Presentation | Post Graduate Medical Education in Dar es Salaam: Experiences, Strengths and Opportunities

Akampa Mukuve, Mariam Noorani, Miten Patel & Mandela Makakala

Background/rationale:
In 2016, the Aga Khan University Post Graduate Medical Education programme of East Africa added 2 new programmes at the Dar es Salaam campus onto the already existing Family Medicine programme. Since inception, both residents and faculty have faced challenges and have also found numerous opportunities to successfully implement the programme and graduate their first batch at the end of 2019. Reflecting upon and sharing the teaching
Research question:
What are the experiences upon completion of the 1st group of residents from AKU, PGME in Dar es Salaam, Tanzania?

Methods:
Personal reflections and experiences by residents and faculty.

Findings:
Five residents will be completing the programme by the end of 2019 at AKU PGME in Dar es Salaam. All of them expressed satisfaction with the level of training and competence achieved.

Reflection by the residents reveals that the key strengths of the programme are e-learning tools, experienced faculty, well-resourced facilities, evidence-based medical practice, non-threatening/ cordial relations with faculty, and paid residency.

Memorable experiences of the residents include placements at the esteemed London School of Tropical Medicine, elective surgical practice at rural district hospitals and the national referral hospital, and rotations at the Aga Khan Outreach medical centers.

Challenges that need to be addressed from the residents’ perspective include schedule clashes, contract obligations between the university and hospitals, work load, faculty adjustment to modern learning methods, and evaluations.

Reflection by faculty show that the key challenge was the transition process from a service-based practice to an academic practice. This was mitigated by collaborative workshops with faculty from AKU Nairobi campus and the networks of teaching and learning (TL_net). Faculty were trained on the principles of medical education, including methods of teaching, assessment and feedback.

Dissertation supervision and lack of research experience was another hurdle that was faced by faculty. Interventions to encounter this include establishing a research committee, conducting research workshops with support from Research office in Nairobi, and linking up with colleagues from the SONAM in Dar es Salaam.

More needs to be done towards establishing a research culture and increasing faculty engagement in academic activities.

Conclusion:
Amidst many challenges, the programme has risen from strength to strength and now has residents from years I to IV. It has been a learning experience for both residents and faculty. Many opportunities of growth have arisen and have been seized throughout the process.

Starting the residency programme in Dar es Salaam was a worthwhile venture and a positive experience for both faculty and trainees and will go a long way in improving the quality of health care and medical education in the region.

Actual or potential implications:
This success story should inspire taking on new challenges, including expansion and initiating Master of Medicine degrees in other departments and other post graduate programmes.
The popularity of the existing programmes is evidenced by the annual increase in number of applicants.

**References:**
AKU library
PGME office archives

**4P71 | Paper Presentation | Teaching and Learning through a Workshop: the Hands-on Experiences of Graduate Students**

Vivian Maikweki, Mweru Mwingi, Mercy Sikuk & Linet Agele

This presentation is a reflective essay on the experiences of graduate students in the use of workshops as a method of teaching and learning. Based on experiential learning, workshop pedagogy involves having a concrete experience with the content being taught and the methods used. The learners reflect on the experience and based on their reflection they develop new ideas about the content being taught. The learner then acts on the new ideas by applying them experientially.

As graduate students undertaking the Gender in Education course, one of the requirements for the successful completion of the course was to design and deliver a workshop for secondary school students on concerns related to Gender in Education. To achieve this outcome, the workshop required a needs analysis, the design and development of a teaching and learning materials, delivery of and an evaluation the workshop.

Important pedagogical content knowledge is gained and skills essential to teaching are developed through the workshop design and development phase. Cognitive and psychomotor skills can be realized if the workshop is properly planned and executed. The assessment of one’s own practice and attitudes is necessitated in the course delivery to enable self-reflection and introspection. Various skills are learned, including planning, research, design, creativity, critical thinking, communication, presentation and collaboration.

Each phase of the workshop provided a forum for learning. The workshop development phase taught us that it is important to conduct a needs assessment to determine the need to be addressed prior to workshop design. An assessment enables one to select content that is relevant to the needs. Secondly, it is necessary to identify the audience in order to determine the choice and level of the language to be used in preparation of training materials and the execution of the workshop. Activities in this phase therefore included the development of a workshop training manual that was relevant, appropriately timed and tailored to suit the needs of the participants. At the same time, the training manual afforded the flexibility for changes that arise in the course of workshop delivery.

In the delivery phase, lessons learnt included the fact that a workshop is a hands-on experience and therefore teaching and learning should actively involve the participants. The activities conducted should be engaging and meet the set objectives. Finally, evaluation is important when using workshop pedagogy since it provides an avenue through which the participants can give feedback to assess the effectiveness of the workshop. Through evaluation, gaps can be identified and improvements can be made in future workshops.
From engaging in the process described above, we transformed from amateurs to skilled users of the workshop as a teaching and learning pedagogy. Our teaching proficiency improved from engaging in activity-based strategies such as small group discussions, problem-solving, and video questions. At the same time, the workshop pedagogy helped us as instructors to create an environment in which the learner is more likely to be involved, thereby creating the motivation to learn.

With respect to teacher competence, we were able to build and strengthen our teaching abilities as we developed a workshop manual, facilitated discussions, organized interactive sessions, and provided constructive feedback to students, and from the experience advanced our collaboration, intrapersonal and interpersonal skills.

Following the success of the workshop discussed above, the same teaching and learning strategy was adapted to respond to a different set of needs during school practicums. We transferred our knowledge and skills by peer coaching colleagues who had no experience of how to handle a workshop, and jointly delivered workshops for students and teachers with notable evidence of peer learning on their part. Our ability to successfully transfer our own learning to others has enhanced our teaching efficacy.

4O122 | Short film | SIMWARS Brings New Aspects to the Learning Experiences of Nursing Students

Shafi Ullah, Awais Abdul Rahman, Seema Baig, and Anila Rahman

SIMWARS is a healthcare simulation among healthcare professionals. This competition is assessed by a jury in clinical scenarios. SIMWARS facilitates learning opportunities for the healthcare professionals to develop their practical skills and knowledge and take the right interventions with their team members to enhance effective decision-making abilities and communication skills into the practical form.

The purpose is to demonstrate to the audience how SIMWARS promotes new learning experiences to nursing students on a suicidal case, a community delivery case and a road traffic accident case. The competition was conducted in three rounds. The first round included a quiz, a moulage and a suicidal and asthma attack case scenario. The second round included a community delivery case and the third round included a road traffic accident.

In total eight teams participated, each having a total of five to six members. In the first round, all teams participated in all the scenarios. Four teams were selected for the second round by the jury. In the third round, two teams were selected which competed for the final.

In the first round all teams participated in a quiz: a suicidal case scenario, an asthma attack and a moulage. The results showed that four teams, namely: CHEETAY, PUMP-IT, TRAUMA TROOPERS, and SIM-NINJAS qualified for the second round. For the next qualifying round, a delivery case scenario was enacted in which two teams, CHEETAY and SIM-NINJAS, qualified. For the final round a road traffic accident scenario was enacted in which SIM-NINJAS won the trophy.

This competition was a learning experience, especially for all nursing students. This was the first simulation in which I participated in.
This competition was an eye opener for me. Here I was able to apply my theoretical knowledge into practical knowledge. I was assigned a role in which I had to provide care to a dummy patient by monitoring the airway, breathing and circulation of the patient. By performing this task, I was able to note down recordings of the patients breathing and got a better understanding of what a good and bad reading is. I was able to educate the family member of the status. The team which consisted only of nursing students were novices and were the youngest team players having the least professional experience. This has created a new opportunity to embrace and accept new methods of clinical learning via case-based scenarios through simulations technique.

4O125 | Dramatized Dance | Mwana Hamisi (A Student who was Selected to Join AKU to Study M.Ed. Program)

Thomas Abudho, Nthenya Mwongela

After MWANA HAMISI received her admission letter and traveled to Dar es Salaam, she was warmly welcomed by the AKU – IED staff (hostel caretaker) at Ally Khan Towers. A weeklong orientation program started. She was then ushered into a rigorous M.Ed. Program.

Lectures began strictly at 8:30am to 12:30pm from Monday to Thursday every week. Every course participant was expected to be computer literate as most of the activities were done by use of computer and assignments were submitted through Moodle via Turnitin.

Then came the terminologies: Faculty, Academic paper, Moodle, Zotero, Turnitin, Academic writing, Paraphrasing, Plagiarism, Collaborative learning and Academic advisors/advisees. Submission of work through Moodle caused a lot of confusion and anxiety. Through scaffolding and collaboration with the faculty and Information Technology (IT) Staff and fellow Course Participants (CPs), MWANA HAMISI was able to make sense out of the confusion and learning became evident. The activities she was engaged in were group discussions with fellow course participants, face to face teaching by faculty and frequent meetings with the academic advisor. The most challenging activity was proposal defense, for which she had to spend sleepless nights writing in collaboration with her supervisor.

Despite the challenges, at the end of the year she was able to graduate with a Master’s degree.

4O84 | Theatrical Presentation | Elena (A Student Who was Selected to Join AKU for the M.Ed. Programme)

Derrick Odhiambo, Nthenya Mwongela & Thomas Abudho

This play is about students’ excitement at having been selected to join the Master of Education programme at The Aga Khan University Institute for Educational Development, East Africa (AKU-IED, EA) and the challenges that came with it. The play cast incorporates the collective experiences from the students drawn from the three East African countries of Kenya, Uganda and Tanzania. Among a large number of the cast include students, faculty, support staff, and others who have shaped the learning experiences of the students at AKU-IED. The play chronicles the experiences of a student as she pursues her dream. The lead character in the play—Elena—upon
receiving her admission letter to AKU, travels to Dar es Salaam and is warmly welcomed by the AKU-IED staff (hostel caretaker), at Ally Khan Towers. A one-week-long orientation programme begins. She is ushered into a rigorous M.Ed Programme. Lectures begin strictly at 8:30 am to 12:30 pm from Monday through Thursday every week, with the afternoon sessions for tutorials and personal reading. Every Course Participant (CP) is expected to be computer literate as most of the activities are done by the use of computer and assignments and are submitted through Moodle via Turnitin. Faculty, Academic papers, Moodle, Zotero, Turnitin, Academic writing, Paraphrasing, Plagiarism, Collaborative learning, Academic advisors/advisees are terms she has to learn and work with. Submission of work through Moodle causes her a lot of confusion and anxiety. To her surprise, she has to go through a mandatory practicum experience that is equally demanding and uniquely challenging! Through scaffolding and collaboration by the faculty, Information Technology (IT) Staff and fellow CPs, Elena is able to make sense out of the confusion and learning becomes evident through the activities she is engaged in; group discussions, faculty members’ actual teaching, frequent meetings with the academic advisors, and IT staff dealing with frequent computer breakdowns. However, the most challenging activity yet for Elena is the proposal defense. She has to write and rewrite it and submitting it to her supervisor leads to more corrections! She does not give up, and several more attempts later she is able to defend her proposal successfully amid a barrage of questions from fellow CPs and faculty. At the end of the year, Elena is able to graduate with a Master’s degree.

**Keywords:** Collaborative learning, Scaffolding, Challenges, Learning experiences

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**40129 | Musical composition | Collaboration and Hard Work for Achieving Effective Learning**

Valency Mbata

Creative presentation is believed to attract the audience, and as a result, what has been presented can be taken and put into action effectively. Song performance is one of the effective ways of presentation which involves creativity and may draw the audience’s attention and interest. The purpose of this presentation is to use an original song entitled “Collaboration and Hard Work for Achieving Effective Learning” to present students’ learning experience at AKU-IED EA in 2019. The song is related to the conference theme, “evidencing teaching practices for effective learning”, in two ways: firstly, collaboration and hard work can make practices of teaching effective for learning, and secondly, the song is presented by learners who have practically experienced learning, and as such their voices may serve as evidence of teaching practices for effective learning. Moreover, the song addresses learning experiences and challenges faced by participants in meeting assignment deadlines, achieving the best grades and writing a good dissertation. At the beginning of the program, participants looked at these challenges as a burden. However, through hard work and teamwork among AKU faculty, staff, and students, participants came to realize that the programs were structured in order to help them become graduates who can transform lives of people in the world through AKU education, which is now ranked among the top 100 universities in the world. Finally, the
methodology used to create the song was through writing the lyrics and then followed by recording audio in the studio.