CHESS SENSATION:

Joyce Nyaruai, a TU-K Third Year Engineering student qualifies alongside other nine chess players to represent Kenya in the global event to be held in September 2016 in Baku, Azerbaijan.
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4. School of Information and Communication Studies
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FROM THE VICE-CHANCELLOR

I wish to take this opportunity to warmly welcome the First Year students who have joined the Technical University of Kenya. Your decision to join this great institution will definitely change your future forever. The experience and knowledge you will gain while here will define your future social and career prospects in a way you may never have imagined. As a student, you will learn skills and get to interact with other students and lecturers from all parts of Kenya and get to meet others from other countries, races and backgrounds.

As a student, you are expected to take charge of your time and exercise the highest level of self discipline. This is the only way you will succeed and graduate at the end of your course within the given time limit.

I also would like to wish the members of staff and faculty a happy and prosperous 2016/2017 academic year. The brand new academic year gives us yet another opportunity to serve humanity and help propel our country to greater heights of development. To achieve our targets, more effort and focus is therefore required from us all in whichever capacity we are working.

The recent signing into law the Engineering Technology Act 2016 and the Bill provides for the standard that guarantees safety and monitors security risks. As a university, we are proud that a Third Year student, Joyce Nyaruai (Electrical and Electronics Engineering Major) is among the nine that qualified to represent Kenya during the 42nd Edition of Chess Olympiad, a global event that kicks off in September this year in Baku, Azerbaijan. The event will bring together participants from more than 150 countries. Nyaruai’s Chess exploits is commendable because it has confirmed that, apart from academic work, students can still engage in hobbies that may end up changing their career paths forever and bring fame to TU-K and the country at large. We wish her the best of luck.

In addition, TU-K students are doing very well on the innovations front. As narrated in this issue, our students have come up with innovations that, if well harnessed and commercialised, will offer solutions to a myriad societal challenges and also improve the inventors’ own economic fortunes. I wish to emphasise that TU-K Chemical Society (KCS). The move is set to shift the University from the traditional way of chemical handling and operations that is paper-based to computer-based, an international standard that guarantees safety and monitors security risks.

According to TU-K Chemical Science and Technology Head of Department Dr Austin Ochieng, the training, which was held at the University’s Samsung Lab, is the second in a continued process to ensure that the University is compliant. “International standards of chemical handling now call for safety and security of chemicals either in learning and research institutions, industries or at any other point,” noted Dr Ochieng.

Some chemicals that may be accessed by unauthorised persons can be combined to make deadly explosives. Dr Ochieng indicated that computer-based chemical management ensures high security for sensitive chemicals as well as regulated access and control.

The traditional paper-based chemical management gives limiting factors such as minimal security and easy access as well as marginal warning on the hazardous state of individual chemicals; also, the computer-aided management can be done online and handlers can quickly tell the chemical component type and quantity.” added Ochieng.

The four-day training programme was held in collaboration with Chemical Security Program (CSP) and TU-K and was sponsored by the US State Department. Also present were officials from the Kenya Chemical Society (KCS).

Some of the key areas of training were chemical inventory management system installation, set-up, access control and audit, barcodes and barcode readers and scanners, standard operation procedures, chemical reception, and best practice on storage and retrieval.
It was a sigh of relief for The Technical University of Kenya students and the engineering fraternity in general, after President Uhuru Kenyatta assented to the Engineering Technology Bill 2016.

The President signed the bill at State House in the presence of the Speaker of the National Assembly Justin Muturi, Head of Public Service Joseph Kinyua, Clerk to the National Assembly Justin Bundi, Majority Leader in Parliament Aden Duale, Bomet Women Representative Cecilia Ngetich and Solicitor General Njee Muturi.

The Engineering Technology Act 2016 provides for the regulation, practice and standards of engineering technologists and technicians. Bachelor of Technology in Engineering graduates and those pursuing diploma courses in allied engineering fields have over the years been frustrated by lack of a relevant regulatory board. The Engineers Board of Kenya (EBK) only registers and regulates graduates holding Bachelor of Science in engineering degree yet the discipline has other cadres of workers that play a critical role in the profession. The technicians, technologists and crafts persons are the ones who bring to life the designs by engineers. They are the ones who do the actual work of engineering while engineers only design and supervise. This makes it very important that anyone practising any aspect of engineering must have a sound background and ascribe to professional standards set and monitored by a regulatory body.

The new bill outlines the requirements to be fulfilled when applying for a practising licence and requires engineering technologists and technicians to obtain licences before they can practice.

Through the Act, an Engineering Technologists and Technicians Registration Board will be established to, among other things, issue licences to qualified persons.

The Board will have power to enter and inspect sites where construction, installation, erection, alteration, renovation, maintenance, processing or manufacturing works are in progress to verify that engineering professional services and works are undertaken by registered persons under the Act. The Board will also ensure standards and professional ethics and relevant health and safety aspects are observed in line with Occupational Safety and Health Act, 2007.

Members of the Board will have unfettered powers to enter and inspect business premises for verification purposes and for monitoring works, services and goods rendered by professional engineering technologists.

The Board will have power to recommend for the suspension of any engineering technology professional services, works, projects, installation process which are done without meeting the set standards. It will also set standards and conduct professional examinations for the purpose of registration where applicable.

Bomet Women Representative Cecilia Ngetich was the face of the struggle in Parliament as she pressed her colleagues in the August House to accept and approve the bill. The late Prof Wilson Ogola and Prof George Thumbi (both of TU-K) played a central role in conceptualising and drafting of the contents of the bill before it got into Parliament.
CARNEGIE AFRICAN DIASPORA FELLOWSHIP PROGRAM TO SUPPORT 57 PROJECTS IN AFRICA

The Technical University of Kenya (TU-K) has been selected by the Carnegie African Diaspora Fellowship Programme (CADFP) to host an African Diaspora scholar to work on a collaborative project on strengthening the newly co-developed curriculum for the Bachelor of Technology in Medicinal Chemistry. The scholar is expected to help in making the programme practically oriented to produce graduates with extensive hands-on experience.

This is in line with TU-K’s motto of “Education and Training for the Real World”. In this endeavour, Professor Rachel Ndonye, a Fellow from Montgomery College, Rockville, Maryland, USA, together with members of the Department of Chemical Sciences and Technology, will design and incorporate relevant practical experiments in line with international best practices, taking into account local market demands and expectations.

In addition, she will facilitate the adoption and utilisation of various instructional delivery methods that are meant to increase student engagement and participation that are tolerant to the diversity of students’ needs; that motivate students; and that allow students to develop critical thinking and problem solving skills.

The scholar will also participate in the mentorship of female students at the TU-K in matters science and technology. Professor Paul Shiundu, the Deputy Vice-Chancellor (Academics, Research and Students), will lead the project.

The impact of the collaboration on campus and the community shall include, a co-developed four-year curriculum for B.Tech in Medicinal Chemistry that is practically oriented and relevant to the needs of the labour market with well-defined programme objectives and learning outcomes.

TU-K will improve its teaching methodologies among teaching and technical staff in pedagogical skills and student-centred approaches to teaching and learning. The university will have an operational inquiry-based experiments for the B.Tech in Medicinal Chemistry programme; strengthen its outreach activities and have a robust industrial attachment programme where proper partnerships are established between TU-K and relevant industry players. The university will expanded cultural and educational opportunities for students connecting learning and discovery with the needs and priorities of the communities that TU-K serves. The expansion of the university’s portfolio to cover training of technologists as well as fully-fledged professionals in specialised programmes with a strong practical component to ensure that its graduates are well prepared for the world of work in line with the institution’s motto of “Education and Training of the Real World”.

TU-K will be able to nurture networks and create champions for outreach as an integral part in positively influencing female students in high schools to pursue science-based programmes.

This is one of 57 projects that will pair African Diaspora scholars with one of 41 higher education institutions and collaborators in Africa to work together on curriculum co-development, research, graduate teaching, training and mentoring activities in the coming months. Professor Ndonye is one of the 169 African Diaspora scholars who have been awarded Fellowships to travel to Africa over the first three years of the programme. The project spans all disciplines from agroforestry to e-learning modules for nursing, and from ethnomusicology to military mental health.

This innovative fellowship programme facilitates engagement between scholars born in Africa who are now based in the United States or Canada and scholars in Africa on mutually beneficial academic activities. The programme is managed by the Institute of International Education (IIE) in collaboration with United States International Education (IIE) and the Carnegie Corporation of New York.

The Carnegie African Diaspora Fellowship Programme (CADFP) Advisory Council, comprised of academic leaders from Africa and prominent African Diaspora academics, has embarked on quick growth, quality, impact and uniqueness of the program, which allows African universities to take the lead in proposing projects that meet their needs and hosting African Diaspora scholars at their institutions.

Fulton Fellowship Award

Dr George Okwadha

TU-K SCHOLAR WINS ACU TITULAR FELLOWSHIP ’2016

The Chairman Department of Civil and Construction Engineering, Dr George Okwadha (left) has been awarded the ACU Swansea University (United Kingdom), Fulton Fellowship. Dr Okwadha will carry out research on determination of Pozzolanic activities of leguminous crop plants, to be used as partial replacement of cement in concrete manufacture. He will work in Collaboration with Dr Clare Wood of the College of Engineering, Swansea University. The research is unique in that it will reduce overdependence on cement as a concrete making material, therefore reducing construction costs.
SIX EASY WAYS TO SOLVE THE ACCREDITATION SAGA

Friend once asked me to help her identify a post-Diploma Undergraduate programme in Civil Engineering. Having looked at her technical background and working experience, Bachelor of Technology was ideal. “Will this B.Tech qualification lead to accreditation?” Tough question, but my personal observation was, “You do not join university to seek accreditation, but to acquire skills and knowledge.”

According to the Concise Oxford English Dictionary, Luxury Edition, to “Accredit” is to “Give official authorisation or recognition to, or “to authorise (a diplomat or journalist) to be in a place or to hold a post.” In the context of our discourse, Accreditation is the formal authorisation issued to a trained individual or an entity to the membership of a professional body. In Kenya, there are various professional bodies that induct professionals like engineers, architects, quantity surveyors, journalists, lawyers, accountants, public relations practitioners, physicians, scientists, among others.

Accreditation is vital to the way of doing business. In fact, it helps to improve the quality of life by placing checks and balances on major processes and engagements. The control measures facilitated by these professional bodies ensure disasters are prevented and crises resolved. Accreditation regulates the design, implementation and completion of crucial development projects in the public and private sectors, and ensures the stipulated standards are met every step of the way. It instils the much-needed discipline and ethical standards amongst practitioners.

However, accreditation to professional bodies has lately stunted many universities in Kenya, leaving students disenfranchised and misinformed. Sadly, students have been known to lay emphasis on accreditation at the expense of the actual delivery of the university curricula. Furthermore, the hard-line stance taken by the accreditation bodies has only but perpetuated uncertainty and panic amongst students, and has triggered a sort of runaway, eventually leading to student unrest, indefinite suspension of teaching and learning, and such extreme measures as closure of the affected institutions.

During recruitment, employers outline the scope of the job in question by first asking for the academic qualifications of the applicants, followed by the requisite working experience. Then and only then, do they ask for membership to respective professional bodies, although as an added advantage. The order of these requirements cannot be reversed. This is quite telling as to where stakeholders’ priorities lie in higher education and professional training.

There are professionals trained in various areas of specialisation that have no accreditation bodies to associate with, but when assigned duties or consultancy contracts, never disappoint. These individuals rely on their academic qualifications, flawless workmanship, impeccable creativity and attention to detail, and without looking up to any professional bodies, they have their ultimate output widely celebrated. All said and done, below are easy proposals, which if implemented, will go a long way to ease the accreditation stalemate, for the good of our students, and for sound development of the crucial areas of national concern. Some of these criteria may already be in place, but follow-up and enforcement is key.

1. Peer Mentorship
   In every accreditation body, members are classified by area of expertise, academic qualification and professional experience. There should be an arrangement where the senior and more experienced members of a professional body are assigned and expected to develop new talent by mentoring the newly-inducted or yet-to-be-inducted members, and sharing professional knowledge and experience for posterity. To encourage peer mentorship, the senior members should then be allowed to use their mentorship track record to raise their profiles.

2. Clear-cut Mandates
   There is need for definition of roles according to every entity’s core business. For instance, teaching, learning and research are the core business of universities and colleges. The accreditation bodies, while exercising their mandate, should let the Senates and Academic Boards of the institutions to develop curricula. It is important to have these accreditation bodies weigh in on these curricula as stakeholders at every stage of curriculum development and review. They should not be seen to antagonise universities or disallow good students, but offer timely corrective measures to areas of deficiency. When tension, grandstanding and the usurping of each other’s roles take centre stage, there is bound to be student unrest.

   The Commission for University Education (CUE) is a very important player in curriculum development and higher education in general, and as such, should be the superior accreditation body for academic programmes. Sadly, some accreditation bodies have been quick to disregard the academic programmes that have been duly accredited by the CUE. In that case, the Government should endeavor to separate these roles.

3. Entrance Examination
   World over, certification is the easiest and most straightforward way to test a professional’s mettle and aptitude. Upon satisfaction of the University’s Senate and Board of Examiners’ requirements, a graduate should be subjected to properly outlined and moderated entrance examinations by the relevant accreditation body. Moreover, this is the most appropriate yardstick to gauge the credibility of the graduate and that of the corresponding learning institution and curriculum. The structure of the entrance examination should be elaborate, with different phases that incorporate written tests, Presentation and Exhibition, and Practical examinations with specific emphasis on real-world projects where appropriate, in conjunction with industry. A student who meets the stipulated requirements and satisfies the board, should therefore, not be judged by their respective training institution.

4. Inclusivity
   There is need to establish an association of all industry players, as far as accreditation to a given professional body is concerned. The Commission for University Education should steer this, and constitute membership from the institutions, employers’ associations and the professional bodies. Further, this umbrella body should constitute the various subcommittees to take charge of reviewing the accreditation process of their respective areas of specialisation. During curriculum development, the accreditation bodies, through these subcommittees, should work in tandem as industry trends and demands are concerned. The Government needs to extend its goodwill to facilitate the setting up of the joint board, with a view to build consensus.

5. Review of Licenses
   The accreditation process should implement and enforce identification mechanisms, confering of professionals, and revoke the same, should need arise. This license should be renewable, and its use should be subject to stringent conditions to guard against professional negligence or unprofessional conduct. Any projects handled by the licensee must be above board and the licensee’s reputation subjected to periodic appraisal.

A student who meets the stipulated requirements and satisfies the board, should therefore, not be judged by their respective training institution.

A perfect example is The Technical University of Kenya, which has earmarked at least two semesters for internship, popularly known as the Industry-Based Learning (IBL), in which learners are given an opportunity to gain real-world experience. This concept could not have borne fruit without the support of the employers and other industry players. To prevent the accreditation policy from being punitive and disadvantageous to some students, the accreditation bodies should advocate for graduates to return to industry for post-qualification and pre-employment experience. The accreditation bodies should themselves institute mechanisms to assess the progress of the apprentices before formal induction into membership of the professional bodies.

Parting Shot
This article should not be interpreted to belittle the importance of accreditation. The Engineers Act 2012 offers great insights and benchmarks for accreditation into the engineering profession, and the recommendations above share the same school of thought. The part of the Board’s mandate that includes setting up a School of Engineering and the Kenya Academy of Engineering and Technology to advise the National and the County Governments on policy matters relating to engineering and technology is as far as industry trends and demands are concerned.

– Alex Wamone is an employee of the Technical University of Kenya
AKUNO ATTENDS STOCKHOLM MUSIC AWARDS

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rof Emily Akuno, the Executive Dean, Faculty of Social Sciences, attended this year’s Polar Talks held at the Culture House, Stockholm, Sweden. The Polar Talks organised by The Polar Music Prize, is an international series of inspiring talks and lectures on cutting-edge topics. Artists, scientists, creatives and opinion makers coalesce around the central theme of “The Power of Music”.

The 2016 Polar Music Prize was awarded by H.M. King Carl XVI Gustaf to renowned Swedish song writer Max Martin and celebrated Italian operatic coloratura Mezzo-Soprano Cecilia Bartoli at the Concert House in Stockholm, Sweden on 16th June 2016. This year marks the 25th anniversary of the prize that has honoured, among others, Quincy Jones, Pink Floyd, Peter Sellars, Ray Charles, Ravi Shankar, B.B. King, Youssou N'Dour and Stevie Wonder.

It is one of the most prestigious and unique music prizes in the world, celebrating the power and importance of music. It is awarded to individuals, groups and institutions for international recognition of excellence in the world of music. Started in 1989 by the late Stig Anderson, the prize is managed by Marie Liden, Anderson’s daughter.

The award ceremony was held on Wednesday 15th June by Polar Talks and was held at the Culture House, Stockholm. The talks comprised of lectures, panel discussions and interviews, with speakers and topics drawn from the music world of technology, science and education, looking into latest trends within music and creativity. This year’s talks included a panel discussion on access to music education, support, funding and the engagement of the private sector, in what went on to articulate the need for concerted efforts to avail quality music learning opportunities so that excellence and quality are nurtured, while participation is assured for the success of music education.

The not-to-be-missed talks focused on some of the myriad ways that music can produce powerful outcomes across a range of social, artistic and scientific disciplines. Music has the power to change the world and the Polar Talks inspires all who attend to do just that.

This year’s talks included a panel discussion on access to music education, support, funding and the engagement of the private sector.

TIME IS RIPE FOR LOCAL FILM CONTENT

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graduates in creative arts now have ripe ground to produce fresh local film content that is on high demand in Kenya and internationally.

Digital migration, technology penetration in Kenya as well as local film industry capacity building is opening up and reshaping the film environment for the youth to explore their talents and make a living. This is according to Kenya Film Commission CEO, Ms Lizzie Chengoti.

“Fresh African content is most sought after by international players, it is our sole responsibility to take up the opportunities we have to tell our ‘African Story’ through our own narrative,” the CEO said.

Ms Chengoti was speaking to Communication and Media students from eight universities during the 6th edition of the ‘Campus Film Symposium’ held at the Technical University of Kenya auditorium. The event was an initiative by the publishers of Film Kenya Magazine. The three-day film screening event was organised by FilmVue, in conjunction with TU-K’s Department of Journalism and Media Studies.

Ms Chengoti also noted that the Government is putting up pillars to support independent film makers that include capacity building for independent film makers and asked the students to enroll in professional film and arts associations that give them a stepping ground to the industry once they graduate.

“As we market the country as a film destination, we have realised that the symposium aims at establishing a film culture among students. “We want to cultivate a tangible passion for local content delivery, the incorporation of industry players in the programme through group discussions and presentations enables networking and career development potential for film and media students, said Mr. Irura.

The Chair of the Department of Journalism and Media Studies Dr Joyce Owmoja, welcomed participants to TU-K and called for concerted efforts by all film industry stakeholders to ensure content production meets local and international standards.

“The vision behind this campus based programme is to tap into the vibrant and creative minds of students looking to venture in Film and TV production by providing an opportunity for interaction and appreciation of the art that is storytelling,” she said.

The symposium ran for three days and culminated in a 60-hour film challenge.
Prof Wilson Ogola, a tenacious researcher, committed educator and engineer in the Department of Mechanical Engineering died suddenly at his home in Nakuru on July the 19th aged 59.

Prof Ogola, who was also the National Chairman of Technical and Vocational Education and Training Authority (TVETA), and the Director, University- Industry Partnerships, was as an accomplished scholar in the area of Mechanical Engineering and was a family man who loved his wife and children dearly.

Stunned colleagues at TU-K spoke of Professor Ogola’s intelligence, calmness, and commitment to bettering the university.

“Prof Ogola was a valuable member of the TU-K family for 6 years, and we are deeply saddened to learn of his death,” said Prof Muumbo who is the Dean Faculty of Engineering, Science and Technology. He was dependable man and true to his word. He worked tirelessly to ensure that both students and staff of engineering found purpose in their daily engagements. His contribution to the development of the Kenya Engineering Technicians and Technologists Act was selfless to say the least,” added the Dean.

Prof Ogola joined TU-K as an associate professor in 2010 and was promoted to full professorship in 2015. He taught various courses in the Department of Mechanical and Mechatronic Engineering.

Dr Eric Ogur, the Director, Centre for Engineering, Innovation and Production, described Prof Ogola as a frontline soldier who Championed technology programmes at the university and in the country that are now handy in building self-dependence and industrialisation through innovations and technology start-ups.

“He wore on his sleeve a solid hand in growing technology and innovations, he was a hard worker and a man who ensured everything on his docket was done well,” Dr Ogur said.

Dr Ogur also noted that Prof Ogola played a key role in putting together the Engineering Technologists and Technicians Bill set up a regulatory body housing the engineering technologists, technicians and craft persons in Kenya. The bill is currently going through the National Assembly procedures before accent by the President.

Kenya Technical and Vocational Education and Training Authority (TVETA) Director General Dr Kipkirui Langat, described Prof Ogola as a mentor to several scholars and those he interacted with ensuring they achieve their potential.

“Prof, it is sad that you are no more. You have been a mentor to many and you sacrificed a lot to ensure everyone who passed through your hands achieved his or her potential. Although you are gone, we will never let your spirit die,” Dr Langat wrote on his Facebook page.

Prof Ogola was an associate member, Institute of Mechanical Engineers - UK, Engineering Council, Kenyan Society of Agricultural Engineers and the Association of Medical Engineers (Kenya).

He had scholarly interest in the area of Mechanical Engineering (composite materials) and Mechatronics Engineering and was honourable Secretary at the Institution of Engineering Technologists and Technicians.

Prof Ogola is survived by his wife, Scholastica Otieno, his sons, Kenneth, Stephen, and Peter; and his daughter, Mercy.

He was laid to rest at his rural home in Migori County on August 5, 2016. He will be dearly missed by the entire TU-K Community. May his soul rest in eternal peace.
HOW MOBILE PHONES ARE DISRUPTING TEACHING AND LEARNING IN AFRICA

By Gina Porter Senior Research Fellow, Durham University

Children playing on a phone

Mobile phones have become ubiquitous in Africa. Among younger users, basic phones are most common. But more pupils are accessing smart phones that can connect to the internet – and taking them along to school.

Phones are often used in school whether they’re allowed or not. Although they can enable valuable access to information, they also bring new responsibilities and dangers. It’s remarkably common for classes to be interrupted by phone use – disrupted sleep because of cheap night calls, time wasted on prolonged sessions on social networks, and harassment. In the survey of three countries, here only 8% of children in the survey owned their own phone, compared with 16% in Ghana and 51% in South Africa. Nonetheless, in Malawi, 35% of children said they had used a phone in the week before the survey. In Ghana the number was 42% and in South Africa it was 77%.

Children often borrow phones from each other, their parents, other family members and neighbours.

Children’s use of phones

Some pupils, particularly in South Africa, use their phones to access sites like Master Maths for help with homework. But the positive benefits mostly seem to be limited to mundane tasks such as contacting friends to check on homework or using the phone as a calculator. Much information from pupils and teachers was more negative: academic performance affected by disrupted classes – due to teachers as well as pupils using their phones – disrupted sleep because of cheap night calls, time wasted on prolonged sessions on social networks, and harassment, bullying and pornography.

Class disruption from pupils’ phones

Groups with young people, teachers, parents and key community members across 24 locations - eight in each country. These varied from poor city neighbourhoods to rural hamlets.

We followed this up with a questionnaire to about 3,000 young people aged between nine and 18, 1,500 young people aged between 19 and 25 in the same 24 locations.

The survey of children aged nine to 18 years shows that mobile phone use is much higher than ownership figures might suggest. Ownership of phones was lowest in Malawi, the poorest of the three countries. Here only 9% of children in the survey owned their own phone, compared with 16% in Ghana and 51% in South Africa. Nonetheless, in Malawi, 35% of children said they had used a phone in the week before the survey. In Ghana the figure was 42% and in South Africa it was 77%.

Children often borrow phones from each other, their parents, other family members and neighbours.

Children need reminders

Pupils need reminders not to publish personal information on the internet and to tell their teacher, a parent or carer if they access any information that worries them.

It is important that teachers have asked us how to promote responsible phone use in school. Here are some suggestions.

Pupil phone use: It is important to have a clear school policy on pupil phone use. To inform parents about this and to explain the reasons behind it. If the school has decided to allow pupils to bring their mobile phone to school for instance, because of travel problems – but not to use it in school, then pupils could be required to put a name tag on their phone and deposit it with a staff member, using a register, before school begins. In this case parents or carers must be given a phone number for urgent messages.

If the school allows pupils to use mobile phones in class as calculators or to access the internet, pupils and their parents could sign an “acceptable use” agreement each term. This would promote effective use of class time and their own and other pupils’ safety.

Pupils also need reminders not to publish personal information on the internet and to tell their teacher, a parent or carer if they access any information that worries them. Parents must be encouraged to help their child follow the school’s guidelines. Asking them to sign an acceptable use agreement together with their children will help.

Teacher phone use: Teachers’ mobile phones should be switched off and left in a safe place during lesson times. If teachers are using their phones when pupils are banned from doing so, pupils may become resentful. Staff should not contact pupils from their personal mobile phones or give their mobile phone numbers to pupils or their parents. This would help teachers maintain sound professional practice.

Promoting responsible phone use in school

Pupils need not disclose

If pupils receive unwanted, unpleasant or upsetting calls or texts. This was almost equally true for boys and girls.

Distribution and viewing of pornography is also widespread, as older boys were often willing to disclose. A few – even primary school pupils – mentioned sexting.

On the behaviour of those in authority over them but even if not all were truthful, these figures are of concern. Many head teachers also spoke about the problem of teacher phone use, saying they found it difficult to regulate.

Other problems include disturbing levels of pupil bullying and harassment. In the survey of enrolled pupils who use a phone, 16% in Ghana, 28% in Malawi and 55% in South Africa said they had received unwanted, unpleasant or upsetting calls or texts. This was almost equally true for boys and girls.

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EXCITING EXPERIENCE AT THE FOREIGN AFFAIRS MINISTRY

Ms Juliet Kasisi Kiio, an International Relations and Diplomacy student at Technical University of Kenya’s School of Social and Development Studies, narrates her internship experience at the Foreign Ministry.

From coursework to the new world of diplomacy and international relations practice, corporate operations, and administrative duties, an internship opportunity at Kenya’s Foreign Affairs Ministry rapidly elevated my worldview, shaped my career and fostered my confidence.

As part of my bachelor’s degree coursework, we are required to have a three-month internship experience. The opportunity at the Ministry goes beyond the basic coursework requirement; I am now a confident diplomat-in-the-making with a feel of field practice and responsibilities that I am proud to have achieved.

I can handle communication duties that meet professional standards, deal with administrative operations including planning, protocol, liaison among other responsibilities that have since muscled my hand in the field of international relations and diplomacy.

Part of my responsibilities at the Ministry was to carry out protocol and liaison duties during local and international conferences.

My internship colleagues from other universities and I were lucky to participate in two international conferences that were held at Kenyatta International Convention Center (KICC) in Nairobi with the Foreign Affairs Ministry taking the lead in ensuring part of the planning and execution of the events was carried out flawlessly.

The two conferences were the Fourteenth Session of United Nation Conference on Trade and Development (UNCTAD 14) and the Sixth Tokyo International Conference on African Development (TICAD VI) that brought together Heads of State, Governments and Ministries as well as prominent players from the business world, civil society and academia to tackle global trade and economic development issues.

UNCTAD 14 was held from 17th to 22nd July 2016 while TICAD VI was held between 27th and 28th August. Kenya is the first country to host TICAD VI conference in Africa.

For this reason, we (interns) were appointed among other Ministry officials as protocol and liaison officers where we got a golden opportunity to attend side seminars, main conferences, and exhibitions.

We are required to have a three-month internship experience.

The opportunity at the Ministry goes beyond the basic coursework requirement; I am now a confident diplomat-in-the-making with a feel of field practice and responsibilities that I am proud to have achieved.

I learnt vast cultures from across the world, appreciating diversity from the simplest of mannerism as making greetings. Delegates I interacted with include personalities from China, Japan and Germany.

I also worked side by side with professionals who act on behalf of the country in various capacities in terms of bilateral and multilateral duties, international trade and commerce, international security, politics, tourism, among other key socio-economic and political dockets of international relations and diplomacy.

Part of my duties at the Ministry included corresponding with Kenya’s Embassies and Missions, drafting of diplomatic letters, as well as receiving telephone calls from various Embassies as well as helping in issuance of appointment letters.

My interaction with diplomacy professionals and office administrative staff of high standing at the Ministry was a great learning experience and the highlight of my career.
FIVE-YEAR GREAT LAKES LAND GOVERNANCE BLUEPRINT LAUNCHED

The Technical University of Kenya (TU-K) is part of the Great Lakes academic and research land administration institutions building a five-year plan for the regional land administration and governance.

In a workshop held in Rwanda recently, Strengthening of East African Land Administration Network (SEALAN) together with the Horizon 2020, brought together 15 Great Lakes Region academic, research and professional representatives to develop the network’s strategic plan, business plan, and research policy.

The workshop identified short and long-term research and advocacy skill gaps that call for strengthening of collaborative explorations in the East and Central African Region.

The East African network covers three thematic areas including land administration, land governance, women and vulnerable groups.

“The major challenge facing the African continent is to rapidly and cheaply map millions of unrecognized land rights” said his paper explored the need for engagement between scholars and players in sharing of ideas and experiences that safeguard progress in land administration.

“The conference discussed ways that can be pursued to guarantee inclusiveness, suitability and reliability, building capacity and ensure better land information and more tenure security contribution to wider society and progress towards the sustainable development goals,” said Ouna.

Panelists at the 17th Annual World Bank Land and Poverty Conference in held in USA

LAND ADMINISTRATION STUDENT PRESENTS PAPER IN WASHINGTON

Technological University of Kenya Land Administration student was among several scholars and land management and development players from across the globe who recently convened in Washington DC, to exchange ideas and experiences on land administration.

Victor Ouna, a 4th Year Bachelor of Land Administration and Information student presented a paper titled: Development of a Geoportal for Effective County Land Administration: Case study of Nairobi City County. His paper focused on the use of technology for gathering information on land that can be harnessed for purpose of revenue collection.

Speaking to TU-News after attending the conference, Ouna said his paper explored the need to seek ways to improve taxation efficiency in the county government systems through technologies and that there was a need for engagement between scholars and players in sharing of ideas and experiences that safeguard progress in land administration.

“The conference discussed ways that can be pursued to guarantee inclusiveness, suitability and reliability, building capacity and ensure better land information and more tenure security contribution to wider society and progress towards the sustainable development goals,” said Ouna.

The 17th Annual World Bank Land and Poverty Conference was attended by over 1,000 participants from more than 100 countries and brought together stakeholders from governments, academia, civil society, development communities and private sector to discuss issues that affect land administration.

Part of the conference agenda was methodological innovation for land related impact research, monitoring and globally comparable land data generation strategic for expanding coverage, reliability, transparency and suitability of land.

Administration, service delivery, innovation in recording of rights, mapping and land data utilisation, fostering discussions on land policy design and implementation, impact evaluation and progress monitoring and the latest research carried out. Key components that formed part of the discussion points were urban land management strategies for city development and affordable housing, tenurial determinants of land use changes, landscape development and soil rehabilitation and enhancing tenure security for common lands and natural resources for local development.

Ouna emphasised the importance of Kenyan universities in sponsoring students to attend such forums where they can groom their ideas, experience and expertise that are critical in solving global challenges,” he noted.

Panelists at the 17th Annual World Bank Land and Poverty Conference in held in USA

Victor Ouna

RESEARCH

SEALAN workshop participants in Rwanda

20 May-August 2016

CONFERENCE
TU-K’S AERONAUTICAL STUDENTS TRAIN ON KQ’S DREAM LINER

The Technical University of Kenya (TU-K) Vice-Chancellor Prof Francis Aduol, has emphasized that students pursuing Aerospace and Aviation Engineering program at the university have to attend Industry Based Learning (IBL) outside the university for one solid year. Such a move he noted, will ensure that they are imparted with the right skills and are exposed to the prevailing happenings in the world of work. “Students must be instilled with discipline and imparted with the right skills. They must be exposed to the hands on skills before graduating. This will enable them become relevant in their field of study,” added the VC.

Prof Aduol said this when he accompanied Aerospace and Aviation Engineering students to an academic trip to the national carrier Kenya Airways (KQ). He was received by KQ Technical Director, Martyn Haines, head of Technical Services, Roy Sifuna, head of Base Maintenance, Peter Marere among others. Accompanying the VC from the university were; Executive Dean, Faculty of Engineering Sciences and Technology (FEST) Prof Alex Muumbo and Chairman Department of Aerospace and Aviation Engineering, Prof Faustine Ondore.

The VC who toured the KQ hangars and the 787 Dream Liner, said he was impressed by the training students received as far as technical work was concerned. He further noted that there will be a framework for formal recognition of qualifications gained from IBL, so that students’ competency and their ability to perform a technical task, are graded for the overall credits for a given academic year.

The Kenya Airways technical managers explained that TU-K was the first Kenyan university to give the airline students in aerospace and aviation engineering discipline. TU-K has established partnership with KQ and other stakeholders in the field of Aerospace & Aviation Engineering. Students from the university have been receiving hands-on training at the facilities of KQ and have been allowed academic group visits.

Chairman Department of Aerospace and Aviation Engineering Prof Faustine Ondore pose for a picture with students.

Alumni of TU-K employed by KQ to maintain its fleet of aircrafts.

The Vice-Chancellor Prof Francis Aduol in the cockpit.
REPRIEVE TO MOTORIST AS NEW TYRE REPAIR MACHINE INNOVATED

Motorists will soon be able to repair badly punctured tubeless tyres, with guaranteed durability and high quality finish.

The Automatic Tyre Vulcanising Machine, a refined innovation borrows from a combination of market tyre-repair technologies, as well as industrial and home-customised solutions.

The Tyre Vulcanising technology is largely a remote-controlled machine that repairs tyre cuts depending on variables including tyre kind, quality and thickness. The Vulcanising machine subsequently gives heating and curing timeframes that includes injection of a coolant agent.

According to the innovator, Elijah Mugo, a Fourth Year Mechanical Engineering student at the Technical University of Kenya, the machine repairs up to 4-inch tyre cuts in a process that takes between five to 35 minutes.

“This innovative solution is aimed at giving a solution to motorists guaranteeing a drop in costs, durability and efficiency,” said Mugo adding that the repair process is remotely controlled.

From a home-made tyre repair solution that is manually controlled using screw jack for the grip and paraffin stove to heat the working surface, the Vulcanising Machine improves on the solutions giving uniform compact pressure and applying controlled pressure resulting in guaranteed durability and high quality finish.

“The process took me close to an hour, with poor finish and a bulge. From my engineering knowledge, I thought I could give a solution targeting motorists who live in upcountry and travel across rough terrains, and of course to ensure durability, efficiency and cost cutting,” he adds.

Mugo is now working on a formula to customise repair patch with brands.

He is already in talks with tyre manufacturers and corporates to support his bid in growing the new technology.

“Without cooling the surface and applying controlled pressure leaves the repair with a bulge that would not last before tearing,” he notes.

Mugo says he developed the idea after he was driving in his Subukia hometown got a large tyre cut where he sought a local service from a local tyre repair shop that uses a stove, screw jack and a rim as a working surface.

“The process took me close to an hour, with poor finish and a bulge. From my engineering knowledge, I thought I could give a solution targeting motorists who live in upcountry and travel across rough terrains, and of course to ensure durability, efficiency and cost cutting,” he adds.

Mr Elijah Mugo shows how Tire Vulcanizing technology works

“A tyre is hydraulically mounted on a working surface, with a raw patch on the puncture area allowing an operator to sets the heating time and waits for an alarm to go off once the patch is treated,” – Elijah Mugo

COST-EFFECTIVE SOLAR IRRIGATION TECHNOLOGY TO AUTOMATE FARMING

A TU-K student has invented a prototype solar-powered irrigation system. The technology is environmentally conscious and is envisaged to cut down on farming costs and improve efficiency.

The Automatic Solar Irrigation Management System (ASIMS) is tailored for arid and semi-arid areas. If adopted and commercialised, it will end the need for the use of petroleum-powered generators and water pumps.

According to the innovator, Mr Japheth Karisa, the project was developed with multifaceted knowledge borrowed from mechatronics; mechanical and electronics.

The combined technologies detect soil moisture and water level deep in the soil, simultaneously switches pipe valves on and off, automatically breaks water flow when water storage facilities are full and inversely opens valves to the tanks when they are empty.

Mr Karisa, a Bachelor of Engineering in Mechatronics finalist, said his innovation employs soil moisture sensors in detecting water level to the depth of plant roots.

“The process of soil moisture sensors activate a relay to a micro-controller where valves are in turn automatically opened to allow water flow to the irrigation line,” Karisa explained.

When water gets to a set soil depth, another relay is generated to break water flow.

“Several researches on soil type, texture, length of time the soil takes to hold water among other important studies should be conducted to set system standards,” he notes.

The one of a kind technology is tailored for arid and semi-arid areas. If adopted and commercialised, it will end the need for the use of petroleum-powered generators and water pumps.

“Several researches on soil type, texture, length of time the soil takes to hold water among other important studies should be conducted to set system standardization,” – Karisa

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“A tyre is hydraulically mounted on a working surface, with a raw patch on the puncture area allowing an operator to sets the heating time and waits for an alarm to go off once the patch is treated,” – Elijah Mugo

Mr japheth Karisa inventor of The Automatic Solar Irrigation Management System

farmers spend a lot on money on purchasing diesel to power water pumps and generators, this is not only expensive but also leaves the environment in a terrible state from air pollution and river pollution emissions that would have been mitigated by the use of substitute solar energy," he explains.

“What I am developing ensures water used in irrigation is kept at a minimum, through the use of soil moisture sensors, the irrigation solution also cuts down on wastage since most of the irrigation system components are automatic.”

Karisa is looking forward to partnering with agricultural, development and financial institutions in bringing the project to fruition.
VC: SUSTAINABLE DEVELOPMENT GOALS ARE ACHIEVABLE IN AFRICA

The end of world poverty will mark the success of the Sustainable Development Goals. This declaration was made at the CAPA International Conference in Mombasa, Kenya. The theme of the June 2016 Conference was “Strategic Involvement of TVET Institutions towards the Attainment of Post-2015 Sustainable Development Goals in Africa.”

While speaking at the conference, The Technical University of Kenya Vice-Chancellor, Prof Francis Aduol drew parallels between the Sustainable Development Goals (SDGs) and Kenya’s very own blueprint, the Kenya Vision 2030, diffusing the scepticism surrounding the feasibility of both blueprints. As long as the SDGs can be achieved, the Kenya Vision 2030, just like many such economic blueprints in Africa, can, and will succeed,” Prof Aduol explained, adding that all that is needed is goodwill from the relevant stakeholders.

Prof Aduol was addressing delegates from member-institutions of various Commonwealth African countries. In his presentation, Prof Aduol made sense of industrialisation trends of South-East Asian countries like Taiwan, South Korea, China and India, and the Latin American nations of Brazil and Mexico. He explained why African economies could learn from the case studies. The presentation laid emphasis to the relevance of Sustainable Development Goals to African populations, adding that if the SDGs could be achieved in Africa, the whole blueprint would have been achieved. This is because Africa accounts for a whopping 42% of world poverty.

The presentation also outlined the vital role of education in the achievement of the SDGs, with special focus on technical education. Prof Aduol described the creation of technical universities from the existing Technical Vocational and Training (TVET) institutions as a first, using The Technical University of Kenya as a special case study. He added, however, a lot needed to be done to resolve emerging issues such as students’ negative attitude to the Bachelor of Technology (B.Tech) programmes.

“Heads of institutions, need to spearhead the delivery of technical education curricula, also sensitise students, parents and other stakeholders on the importance of the B.Tech programmes” – Prof Aduol

Heads of institution, need to not only spearhead the delivery of technical education curricula, but also sensitise students, parents and other stakeholders on the importance of the B.Tech programmes,” Prof Aduol said.

The Vice-Chancellor also observed that it was ironical for agriculture to be the mainstay of the African economy, yet Africa still relies on food and food products from the rest of the world, i.e., Europe. In fact, Africa’s economic growth in the past few years has been mainly driven by the performance in the world economy of other African countries.

“Africa is not in the developing category yet. Agriculture contributes to a larger portion of Africa’s economic growth than Europe, yet in terms of volume of production, the smaller percentage in Europe is still far much bigger than Africa’s agricultural output,” Prof Aduol added. This, he said, could change if the continent would integrate technology to its agricultural activities.

He attributed Africa’s sluggish performance in the world economy to its failure to train technicians and technologists in sufficient numbers. His presentation observed that European countries were performing very well because of the special priority accorded to technology and innovation. The Vice-Chancellor also explained that the reason African governments still invite Chinese and other far-eastern contractors to take over mega infrastructure projects is because they have been training engineers for decades, at the expense of technical expertise. “If TVET is given the appropriate attention and more technicians and technologists are trained, Africa will rise and become equally competitive in the long run,” he added.

SCHOLARS, EXPERTS CHALLENGE STUDENTS ON INNOVATIONS

He asked the students to look for such opportunities and come up with innovative ideas to come up with quality products that can attract potential customers locally and internationally. They can only achieve if they do thorough research, seek advice from experts, visit professional bodies, innovators. Professor Gituro Wainaina - Director General Vision 2030 (Delivery Secretariat) said that for Vision 2030 to be achieved, integrity, competence and skills must be anchored on the innovation and Technology. Prof Wainaina said that there is need for young people with skills, discipline, hard work, and competence to bridge the gap in order to achieve Vision 2030. He asked young people to venture into business-oriented technology and not seek for formal employment alone. He gave an example of the recent Uber Cabs as an indication of innovation and technology that worked perfectly. He urged youth to have a clear vision of competitiveness and to act, be creative, have the right assets and capability to compete in the market.

He asked innovators to make use of social media for marketing and research on products that go viral, pressing that young people must embrace and make sense of technology in order to improve the lifestyle of people and improve the economy.

In attendance were Dr David Muturi CEO Kenya Institute of Management and Miss Miriam Mukami CEO Kenya Institute of Management [KIM] Dr Muturi talked of Management and Innovation Leadership in the 21st Century.
A team of TU-K Electrical and Electronic students has developed a multifaceted innovation to curb examination irregularities. The innovation builds a two-fold system merging together a technological generation and a multilayered packaging procedure envisaged to automate handling, transfer and storage of examination materials. At every stage, the system relays security information to cloud storage facilities to ensure data safety. It is an ingenious inception structured to weed out unauthorised personnel from accessing examination papers. The project's scope captures entire security measures from the packaging process down to exam administration.

According to Eston Oboch, the lead innovator developing the Exam Irregularities Mitigation System, the technology mobilises computer application, mobile telephony services, internet connectivity and scanning machines that are used to electronically read generated serial codes and QR scans. “By developing an examination packaging with four layers each embedded with different automated electronic mechanisms, we make it very difficult for unauthorized persons to access the papers, and if they manage, several alerts would have been escalated to the control unit where action ought to be taken,” Oboch explains.

The process includes reading of embedded applications within each level of the multilayered compartments during compartmentisation. “From the traditional two-layered packaging system, we are developing a superior four-layered package system with inbuilt security measures. At every level of handling, a security measure is automatically dispatched to the central control unit,” says Oboch.

The team is capitalising on technology to give credible solution to the raging exam irregularities menace. Other team members are:

- Christopher Lechuta, Tracy Langat, Obadia Kioko, Caroline Kerubo, Eric Musyoka, Mwangi Micha, Maurine Munala, Abraham Mautine all pursuing Bachelor of Engineering in Electrical and Electronic Engineering drawn from different years of study at TU-K.

“The innovation aims at restoring confidence among education stakeholders, students and parents,” Langat adds that security measures and relayed data is kept secure in a remote location.

Maurine Munala, another team member indicates that embedding security measures at every stage makes everyone accountable either on individual capacity, team or as an institution.

“At every stage, a user who interacts with the packages are required to enter their credentials that should match captured details,” says Oboch. Details such as deployment numbers, names and mobile numbers are pre-captured.

Transfer of the materials from different hierarchies is monitored from a central storage facility to regional, county facilities systematically, as well as to the examination centres. At those stages, the material data codes are verified against those captured at the database. “You realise most leakages are made a few hours before administration of the exams, that means unscrupulous persons access the papers beforehand and share it, largely through social media or mobile phone documents sharing applications,” explains Oboch.

The team behind innovation of Exam Irregularities Mitigation System (EIMS)
The 2016 Africa Tech Challenge was hosted by the Technical University of Kenya (TU-K) for the third time in a row.

The event attracted participants from Uganda, Ghana and Zambia are represented in the challenge, making it an international competition.

The competition was launched in 2014 as an initiative of AVIC International - a Civil Engineering firm based in Nairobi in partnership with the Ministry of Education, Science and Technology. AVIC International, a global player in the marine and offshore industry, aims at curbing unemployment, producing hands on graduates as well as entrepreneurs.

According to the AVIC's international Project Manager Xin Zhang, the objective of the competition is to spur a culture of entrepreneurship among the youth by encouraging them to utilise their technical capabilities and creativity to be self-reliant through job creation.

The competition was officially opened by TU-K Vice-Chancellor, Prof Francis Aduol who emphasised on the importance of the competition and its impact on students in enabling them meet the requirements of the industry. “Consider this as a great privilege for yourselves and for us as a university to tell the world what we can offer. The training is in line with the university’s tradition of seeking the input of industry practitioners and professionals in the training activities, and integrating an elaborate and practical entrepreneurship programme,” he said.

While speaking about the role of Technical Training Institutes (TTI) in enhancing quality education in the country and beyond, the VC explained that technical education plays a vital role in human resource development by producing skilled manpower, enhancing industrial productivity and improving the quality of life.

“Kenya, as most African countries, has been left behind in the economic transformation by countries which were at par in the 1960s; this is mainly due to the slow pace of industrialisation. The lag in industrialisation can be attributed largely to the lack of skilled manpower,” he noted.

The Africa Tech Challenge has so far transformed the lives of so many ambitious, intelligent Kenyan students by offering them the necessary support and training in order to pursue their dreams.

The winning three teams were awarded cash prizes of Sh200,000 each, scholarships to study in some of China’s best technology universities and internship in renowned tech firms.

In a way from classwork and laboratory sessions, a team of music lovers, artistes, dancers who occasionally gathered for jam sessions, music competitions and theatre, have now pooled together under a club at the Technical University of Kenya where students are honing performing arts skills.

TU-KLive Art, focuses on contemporary and performing arts and draws membership from various schools in Engineering, Business, Architecture, Information Science, Biology, and Hospitality among others.

The club chairman Sammy Makumi said the group runs an Open Mic Session every Thursday between 5:30 pm and 8:30 pm. “The weekly event at the university features vocalists, instrumentalists, poets and dancers with scheduled performances, and competitions,” said Makumi who with several artistic creations exhibit and sell their works. These include African collections, souvenirs, graphic, photography material, design wear among others.

“Dada Collections, one of the groups in the club is already making money selling African wear, souvenirs, bracelets,” noted Makumi.
Q&A WITH KENYA 7S STAR

TU-K's Information Technology student shining in 7s rugby game

Clubs: Impala Saracens
Nickname: Majei
Profession: Information Technology
Positions: Scrum half / centre / Backrow
Facebook: Robert Aringo
Twitter: Majei_
Instagram: Majei_

Q. How did you become interested in rugby?
A. I was actually a basketball player. I was bullied into playing by a couple of friends back in high school at Saint Mary's School, Nairobi.

Q. At just 23 you boast of numerous national Sevens caps and chairman’s select participation. What has it been like representing your country at such a young age?
A. I guess the territory comes with the experience over the years of playing. It is a wonderful experience stepping into the park each time to represent the 40m+ Kenyans who rally behind you.

Q. Describe the experience of being part of Kenya’s maiden Sevens series crown in Singapore, shocking reigning champions Fiji
A. Wow!! I have never lived such a moment in my life because back in high school I just dreamt about it and for it to become a reality to be engraved in the books of history is something I’m very proud of and the good feeling will stay with me for a long time.

Q. What are your other career highlights at club level?
A. To be honest, my club run at the Resolution Insurance Aringo held high by teammates after the team won the Singapore 7s tournament

ROBERT “MAJEI” ARINGO

Impala Saracens hasn’t been the best, playing second fiddle every now and then but my biggest highlight was when I was chosen in my maiden year of my call up to the national 7’s to captain the team throughout the 7’s circuit. Big shoes to fill and we did have a good season.

Q. Who has been your biggest inspiration in your career?
A. I would say former Kenya international, Innocent Simiyu. He is a humble bloke and with all his achievements in his rugby career he still has the humility to guide and help you not only on the pitch but also off the pitch.

Q. Which team do you look forward to playing the most and why?
A. As of now I would really like to represent Africa as a continent in the Leopards, to be honest locally I can speak about being capped for the national 15’s sides and a appearances for the national 7’s side so I guess the next step is taking over Africa then I guess the world.

Q. What does your typical daily diet consist of?
A. (Laughs) that’s a well-kept secret, but I love pizza so I occasionally sneak in a cheat meal every now and then.

Q. What does a typical day’s training include?
A. Rugby is not a game for the faint hearted. From getting up at 6 to hit the gym then a pitch session and then end it with an endurance session isn’t easy amidst that attend classes and then another evening session. Doesn’t seem appealing, but all in a day’s work I guess.

Q. What training drill do you dread the most?
A. The strength and conditioning Kenya 7’s bench push us hard. But I really dread the 2Kms run.

Q. What advice would you give to any young, aspiring sports players?
A. Do what you love and love what you do. And always give your 100% in every single thing you do be it sports, school, work or life in general.
NYARUAI QUALIFIES FOR CHESS OLYMPIAD

A casual observation of friends playing chess inspired Joyce Nyaruai to develop a passion for the game of wits that is Chess. She threw in her hat into the ring and what started with a couple of losses became a launch-pad into a career in the game. Joyce Nyaruai, is now heading to the 42nd World Chess Olympiad that will be held in in September in Baku, Azerbaijan, to represent Kenya and battle the global grandmasters for the coveted Chess title.

The Championship will bring together participants from more than 150 countries.

The Third Year student at Technical University of Kenya (TU-K) majoring in Electrical and Electronics Engineering, is among nine chess players, four women and five men that will represent Kenya in the global event that kicks off in September this year.

Her Olympiad qualification was unexpected because rarely do individuals move from armature to professional chess in less than two years.

“Engaging Chess masters in local and regional tournaments, solidified my hand in the game and eventually gave me the thrust to the World Championship,” said Nyaruai during an interview.

Joyce has travelled across the continent battling in various categories including junior tournaments, women categories and open boards.

“I have taken on Egyptian, Namibians, Ugandans chess champions and even Kenyans. In each board, I became better and learnt a new skill,” said Nyaruai.

“My rate of chess demands a player calculates their game from the beginning to the tail-end,” Nyaruai disclosed, adding that chess requires consistency that goes beyond the chess-board.

From a humble background in Nyeri, Nyaruai draws inspiration from her father who encouraged her and could at times go head-to-head cheered on by her siblings.

In 2012 while she was at her final year at Tumutum Girls, Nyeri County, she had her first encounter with the chessboard. Days after her admission at TU-K, she spotted some college mates pushing chess pawns back and forth and slowly started to gain interest.

“I love sports, and since playing in 2013. The tournament didn’t go well and she finished in the back row.

At the Under 21 African Chess Championships, I scored 4.5 points out of nine, this was a tough tournament, I met strong opponents from Angola, Egypt, South Africa among other African countries,” she narrates.

In April this year, she was again selected to participate in Zone 4.2 Competitions bringing together East Africa countries. She scored five out nine points qualifying for the WCM title. A recognition title in Chess rankings.

From her rapid chess campaigns, Nyaruai stood a chance of making to the World Championship - Olympiad team of the 10 players who would represent Kenya in Baku.

“To qualify for Championship, a player ought to have attended at least three Fédération Internationale des Échecs (FIDE) - rated tournaments,” she explained.

Due to her hard work, Nyaruai met the threshold and was in good position to go for the Championship.

“Chess Kenya picks top 10 players in both men and women categories who have attended three rated tourneys who square off with each other and the top four qualify for the global sports event,” – Nyaruai

In this exciting news, that came during Father’s Day, and was the perfect gift for my dad who has supported me so much,” she said adding that the announcement was exciting for her fellow students, relatives and more so her trainer, National Chess Ladies coach Moses Andiwo.

When asked how she expects to perform at the World competition, Nyaruai promises to give it her very best “I will not lose without a fight,” she says.

STUDENTS

Comment from fellow students

Karim Pauline

“Congratulations girl, I’m proud of you,”

Kashmu Ali

“Congratulations Joyce”

Debbie

“Congrats and wish you the best, believe you will win it all”

Shower Ali

“Congratulations Joyce, I wish you the best of all”

Ibro Ali

“Congratulations Joyce, I wish you the best of all”

Shower Ali

“Congratulations Joyce, I wish you the best of all”

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“Congratulations Joyce, I wish you the best of all”
Chess traces its origin from India’s 7th century game of Chaturanga. In around 15th century, it became popular in Europe and the first unofficial World Chess Championship was in 1889.

Since 1924, Fédération Internationale des Échecs (FIDE), the game’s international governing body has controlled its activities including organizing biannual World Chess Olympiad championships.

This year’s Olympiad will be held in Baku, Azerbaijan in Eastern Europe from 1st September this year bringing together participants from more than 150 countries becoming the 42nd Olympiad.

Chess is however yet to be included in Olympics Games. Chess is among the 27 sports that have applied for inclusion in the 2020 Olympics in Tokyo. International Olympic Committee has since considered chess as a game and not as a sport.

Chess is a two-player board game played on a chessboard, a checkered game board with 64 squares arranged in an eight-by-eight grid.

Each player begins the game with 16 pieces: one king one queen two rooks, two knights, two bishops and eight pawns. Each of the six piece types moves differently. The most powerful piece is the queen and the least powerful piece is the pawn.

It is a ‘game of minds’ that demands high concentration, mastery of patterns, calls for stretch of plans and quick decision-making. To acquire chess mastery, players ought to critically calculate their game plan and logically execute their moves.

What Chess does to the mind is that it builds problem-solving skills. According to Edutech Chess, chess develops mental abilities used throughout life.

Chess players are smart, superior problem solvers mobilising logical analysis and deduction skills.

What chess does to the mind is that it builds problem-solving skills. According to Edutech Chess, chess develops mental abilities used throughout life: concentration, critical thinking, abstract reasoning, problem solving, pattern recognition, strategic planning, creativity, analysis, synthesis, and evaluation.

It develops children’s cognition improving good judgment and critical thinking as compared to non-chess playing peers.

Chess improves mathematical skills, planning and consequences, teaches logic, Math is about pattern recognition, logic, and the ability to creatively play around with variable in your head.

The chess-playing students become accustomed to looking for more and different alternatives which resulted in higher scores in fluency and originality, chess equally builds emotional intelligence as well as verbal skills. They therefore become expert problem solvers.

Characteristics of chess players

Chess players have strong ability to remember patterns, openings, endgames, tactics and guidelines.

They have ability to visualise moves ahead and combinations. An average position could have as many as forty possible moves. They are careful, handworkers, do a lot of calculations, reading and analysis of several chess games.

Chess players are smart, superior problem solvers mobilising logical analysis and deduction skills.

What does chess do to your mind?

Chess does to the mind is that it builds problem-solving skills. According to Edutech Chess, chess develops mental abilities used throughout life.
A combination of brains, brawn, and beauty is what led to the recent crowning of two TU-K students to represent their counties in the recently concluded Miss Tourism Kenya competition.

Helen Kimanzi was crowned Miss Kitui County while Sharon Mwangi topped the competition to win the Miss Laikipia Chapter.

Miss Kimanzi who is a 4th Year journalism student says that her interest in modelling started way back in high school but got serious in 2016 when she first participated in the sub-county level competitions at Mwingi Central where she qualified to represent her county at the national level.

On 19th June 2016, the finals for Miss Tourism 2016 kicked off at Kidundu Stadium in Central Maragoli, Vihiga with 45 counties represented in a tightly contested event that was judged over a two week period.

During the competition Miss Kimanzi says they were tested on areas of communication skills, brain work, physical fitness, confidence, public speaking skills, how best you can represent your county interests nationally and internationally and lastly on how best to spread the peace message among the Kenyan people. The peace message category carried the bulk of points and was won by the overall title winner Miss Homa Bay County, Rabella Wendy Omollo. Miss Kimanzi emerged tops in two categories; Most talented personality and as best physically fit personality.

On early June 2016, she decided to give it another go when the county announced auditions for the Miss Laikipia contest. At the auditions 12 ladies were short-listed to compete for the nationals and she emerged the winner. “We were tested on the six pillars of tourism in Kenya including: flora and fauna, culture, environment, hospitality, infrastructure and finally on promoting peace and unity among Kenyans,” said Miss Mwangi.

19-year old Sharon Mwangi is a Second Year student in the School of Architecture and the Built Environment pursuing a degree in the Built Environment (Quantity Surveying). Sharon beat 14 other contestants at the auditions to represent her county at the finals.

Miss Mwangi said her win came as a big surprise since she had not done any serious modelling in the past apart from taking part in the 2014 Miss Lucky Summer-Kasarani show, which was organised by the area MP, a competition which she won.

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With her big win, she was awarded a 1-year contract to work with the Ministry of Mining and Mineral Resources in Kitui County.

Laikipia County beauty queen Miss Mwangi is also quite athletic and played table tennis at high school as well as taking part in music and drama. She also took part in the 2015 Mr and Miss TU-K competition. She is set to launch an initiative called “Binti Utalii Initiative” which is aimed at helping individuals venture into herbal farming to produce raw materials in order to manufacture beauty products.

Miss Tourism Kenya is an annual event geared towards promotion of tourist attraction sites in all counties.
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Diploma in Technology (Food and Nutrition) (Focus on Food Science and Technology)
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Diploma in Early Childhood Education
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Diploma in Business Administration
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Diploma in Accounting
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Diploma in Business Management
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Diploma in Business Management (Focus on Information Technology)
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