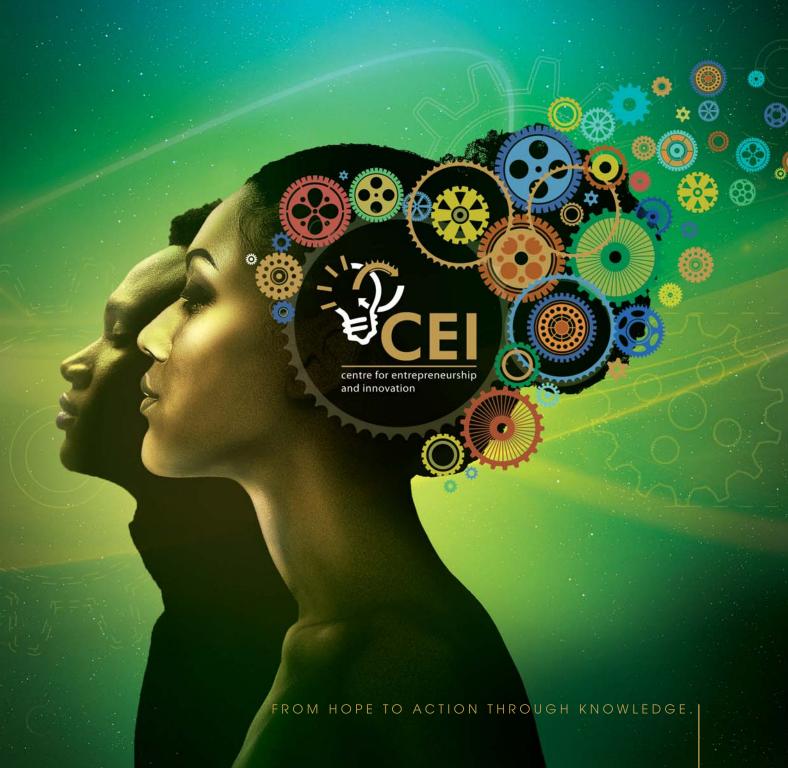
2018

Student Entrepreneurship Report



THE ENTREPRENEURIAL MINDSET







2018 Student Entrepreneurship Report

Compiled by Charleen Duncan

Director, Centre for Entrepreneurship and Innovation







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The Centre for Entrepreneurship and Innovation (CEI) coordinates entrepreneurship-related activities at the University of the Western Cape, fosters entrepreneurship development on and off campus. Together with external stakeholders, the CEI advocates the value of entrepreneurial thinking to students and staff of UWC, supports networking among graduate entrepreneurs, conducts research on entrepreneurship and hosts projects that expose students to real-world entrepreneurship and business innovation.

of the CEI

Entrepreneurship training at the CEI is focused on skills transfer and practical support to students who are starting up or already running a business. Students are not confined to learning the theory associated with starting a business; they also work on actually starting up their own business or improving an existing one.

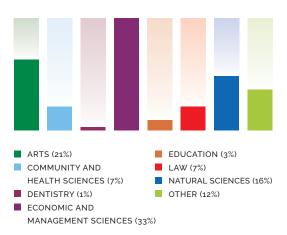
The CEI's entrepreneurship training programmes offer applied entrepreneurship skills development. The training is in the flipped classroom mode, in line with modern teaching methodologies. Programmes are typically a blend of online and in-class instruction, practice and feedback, successful role model reviews and case studies. All training focuses on experiential learning, guided by professional trainers, industry experts and leaders in innovation.

CEI programmes are typically six to eight weeks in duration, without tests and exams but with a strong focus on measurable outcomes, chief among which are enterprise start-ups or clear demonstrations of working towards such business start-ups. Outcomes are measured at each stage of training, including during the business idea refinement process, actual

market testing of prototype products or when participants pitch start-up ideas to a panel of experts or potential investors. The CEI supports the teaching and learning of practical entrepreneurship skills such as opportunity recognition, business ideation and refinement, innovation, value proposition testing and pitching to investors. For maximum impact, the CEI utilises experts in fields such as business planning, marketing, e-commerce, product development and finance in its programmes, and enables participants to engage directly with venture capitalists, funders, experienced entrepreneurs, government stakeholders and industry leaders.

The CEI programmes in 2018 attracted 638 student participants, a marked increase on 2017, when we hosted 274 students. The figure below shows that we were again able to recruit participants from across the faculties, albeit with an expected strong showing from the Economic and Management Sciences faculty. Our success was aided by the fact that programmes were designed to fit seamlessly into the academic programme and students also worked during vacations and over weekends when required. A highlight in 2018 was the number of employment opportunities we created with SACTWU through the AwearSA Fashion Show.

FIGURE 1: DISTRIBUTION OF STUDENT PARTICIPANTS BY FACULTY







The 2018 Student Entrepreneurship Programme

UWC/ Metropolitan FINLIT Challenge

APRIL-MAY 2018

The Challenge was born of the realisation that the vital life skill of financial literacy is not being taught in the school system and is lacking among South Africa's youth. The programme ran from 6 April to 11 May 2018 and saw 30 UWC students work in teams to design an innovative financial literacy programme for Metropolitan, a division of MMI Holdings.



#YouthStartCT EntrepreneurialChallenge

APRIL-JUNE 2018

The CEI assisted the City of Cape Town's Annual #YouthStartCT Entrepreneurial Challenge (#YSCT 2018) in 2018. Participation included serving on the adjudication panel that selected the finalists and winners of the competition. UWC also donated prizes to the competition, which ran from 16 April to 20 June and involved 85 youth entrepreneurs.



Accelerated Excellence Programme

18-20 JUNE 2018

The Accelerated Excellence Programme was designed and run by Mashauri and the CEI and presented at the Protea Hotel, Stellenbosch, on 18–20 June 2018. Fifteen selected students participated in the three-day event.





Global Entrepreneurship Summer School (GESS)

SEPTEMBER 2018

In September 2018, 33 students from 12 countries attended the seven-day GESS at UWC to debate innovative and entrepreneurial solutions to the global challenges of consumption and sustainability. It was the first time GESS had been convened in Africa.



OneBio

UWC partnered with OneBio to launch a new mini-incubation programme at the University. The idea is to nurture opportunities for building a South African bio-entrepreneurial and biotech capacity-building ecosystem and to develop biotech entrepreneurs. The programme selected 15 science-based entrepreneurs, most of whom had postgraduate qualifications in their fields.

AwearSA UWC Fashion Show

JULY-SEPTEMBER 2018

Possibly the most exciting and challenging programme on the 2018 CEI calendar, AwearSA was a partnership between the CEI and the South African Clothing and Textile Workers' Union to stimulate entrepreneurship and 'buying South African' in the clothing industry. A programme of training workshops in July and August culminated in a fashion show on 1 September put together by 150 UWC students.

Dentistry Private Practice Simulator

The Simulator is a new facility at the Faculty of Dentistry Tygerberg campus in which the CEI will assist final-year BChD students to learn how to operate a dental practice and grow their businesses.

School of Pharmacy Community Engagement Elective (CEE)

The CEI partnered with the UWC School of Pharmacy to develop entrepreneurship and entrepreneurial thinking within the new CEE elective. The uptake of the elective by six students in 2018 provided an opportunity for a collaboration to implement a design thinking approach to the challenge of how to improve chronic medicine use in the Delft community.

Entrepreneurship Development in Higher Education (EDHE)

EDHE is a new programme of Universities South Africa (USAf) which promotes entrepreneurial education in the higher education sector. The CEI participated in its activities and the CEI Director is a co-leader of the EDHE Community of Practice (CoP) for Entrepreneurial Universities, one of three CoPs through which the EDHE is promoting engagement between entrepreneurship academics and professionals at higher learning institutions.







The Entrepreneurial Imperative and UWC

BY MICHAEL H MORRIS, PHD, EXTRAORDINARY PROFESSOR OF ENTREPRENEURSHIP, UNIVERSITY OF THE WESTERN CAPE AND PROFESSOR OF ENTREPRENEURSHIP, UNIVERSITY OF FLORIDA



We live in a time when entrepreneurship has never been more critical to our futures. Across the globe an entrepreneurial revolution is taking place, with new ventures starting in record numbers.

Entrepreneurs are creating the majority of the new jobs, generating most of the innovation, earning a disproportionate number of the new patents and producing much of the new wealth.

Entrepreneurship takes many forms. The most obvious form involves creating new survival, lifestyle, managed growth and aggressive growth

Across the globe an entrepreneurial revolution is taking place, with new ventures starting in record numbers.

MICHAEL H MORRIS

businesses. Yet, we also find entrepreneurs launching social ventures to address health care problems, poverty, gangs, the environment and other societal problems. Corporate entrepreneurs are revitalising established stagnant companies, while public sector entrepreneurs are innovating inside large government bureaucracies.

These entrepreneurs come from all races, genders, ethnicities and age groups. There is no single prototype of the entrepreneur. In fact, they tend to be more different than they are alike. More critically, entrepreneurs are not born, they are made. Every citizen of South Africa is rich in entrepreneurial potential. The question becomes how we nurture and support their development.

The entrepreneurial revolution has important implications for South Africa and UWC in particular. The problems across this great land are significant, but the opportunities are even greater. The future of the country lies in the hands of the entrepreneurs of today and tomorrow. UWC must play a central role in producing these entrepreneurs and they will come from everywhere on the campus.

What exactly should the University be doing? While part of the challenge is helping students understand how to start new businesses that are sustainable, many students will not launch ventures when they graduate. Much more important is the need to nurture the entrepreneurial mindset in all students. We must produce more entrepreneurial artists, scientists, social workers and health care professionals.

The entrepreneurial mindset has two elements. It is both a way of thinking (attitudinal) and a way of acting (behavioural). From an attitudinal perspective, it is getting students to see themselves as agents of change, recognising that anything can be done better, becoming more opportunity-driven, embracing innovation and change, and developing a tolerance for failure. The behavioural component involves an action orientation, a readiness to experiment and adapt, a willingness to take calculated risks, creativity in using the resources of others and tenacity in overcoming obstacles.

Nurturing this mindset is easier said than done. The key is to move toward a competency-based model of learning. Education must be accountable for helping students improve on defined competencies. In our research, we have identified 13 core entrepreneurial competencies. These include:

- opportunity recognition
- · opportunity assessment

- · creative problem-solving
- · resource leveraging
- · querrilla skills
- mitigating and managing risk
- planning when nothing exists
- · value-based innovation
- · building and managing networks
- · the ability to maintain focus yet adapt
- · implementation of something novel or new.

These are competencies that tend to resonate inside organisations of all sizes and types. They represent a source of advantage for individuals, companies and communities. The challenge is to embed them in the curriculum, reinforce them and measure student progress on each of them. Mastery of competencies becomes a central measure of assurance of learning.

Our experiences with competency-based learning suggest that traditional classroom lectures must be coupled with novel approaches to experiential learning. Introducing more opportunities for students to learn by doing enables them to apply academic concepts, frameworks and tools in real-world settings. They learn from experimentation, making mistakes and adjusting.

The term 'deliberate practice' has been used to describe this kind of experiential learning. Much like great pianists or gymnasts who tie their success to hours and hours of practice, the question becomes how many times students are required to practice creativity, innovation and entrepreneurial behaviours as part of their studies.



The key to nurturing the entrepreneurial mindset is to move toward a competency-based model of learning.

With entrepreneurship, a wide variety of experiential learning approaches become possible. Examples include entrepreneurship dormitories, internships with entrepreneurial firms, mentoring programmes, campus-wide business plan and elevator pitch competitions, student incubators, student consulting projects, entrepreneurial audits of established firms, seed investment funds, on-campus student-run ventures, community engagement projects, and much more. While some of this can be integrated into existing courses, much of it is termed co-curricular programming. Here, the concern is with the percentage of learning that should happen outside the classroom. In the most entrepreneurial environments, such learning can exceed 50%.

There are also ample opportunities with curricular innovation. Apart from offering majors in entrepreneurship within business schools, many universities are offering entrepreneurship minors that are open to students across the campus, where prerequisites are eliminated. In addition, there are opportunities to create entrepreneurship courses within disciplines across the campus. Examples include entrepreneurship and the arts, the psychology of entrepreneurship, entrepreneurship and the built environment, pharmacy and entrepreneurship, environmental entrepreneurship, and others. A different approach involves building modules based on individual competencies such as opportunity recognition, tailoring them to a particular discipline and dropping these into existing courses.

Building entrepreneurial universities begins with the faculty. An interesting question concerns how faculty members see themselves. Do their self-concepts centre on being a teacher, an educator, a researcher, a scholar, or some combination of these? Or, instead, do they see themselves as academic entrepreneurs? An academic entrepreneur is one who recognises opportunity in the university context, develops innovative approaches to capitalising on the opportunity, takes calculated risks and perseveres in overcoming obstacles and implementing change.

Making entrepreneurship a core pillar of UWC's mission is consistent with the history of the University. Arguably, UWC has a legacy of entrepreneurship. Whether it was finding ways to ensure that historically disadvantaged South Africans receive a high-quality education, having to creatively address resource constraints as a historically black university, contributing to the struggle to eliminate apartheid, or working with communities to support economic progress among those who are most vulnerable, the University has always been about the entrepreneurial mindset.

As we look to the future, the University can play a leadership role in the social and economic development of South Africa. A key to fulfilling this role is the empowering potential of entrepreneurship and how it infiltrates the entire campus. As this Student Entrepreneurship Report makes clear, a solid foundation has been established through the programmes of the Centre for Entrepreneurship and Innovation and elsewhere on campus. The question becomes how this foundation can be built upon. It is exciting to consider where things can go from here.



As we look to the future, the University can play a leadership role in the social and economic development of South Africa.



04)

UWC/ Metropolitan FINLIT Challenge

Empowering young people is our new strategy – and specifically empowering them so that they can find employment.

ELSIE GOVENDER, METROPOLITAN



For most adults, financial literacy – the skill and knowledge to make effective financial decisions about the use, security, saving and growth of their financial resources – is acquired in the course of living rather than something they were formally taught.

The UWC/ Metropolitan FINLIT Challenge was born of the realisation that this vital life skill is not taught in the school system and is sorely lacking among South Africa's youth. The Challenge, which ran from 6 April to 11 May 2018, saw 30 UWC students work in teams to design an innovative financial literacy programme for Metropolitan, a division of MMI Holdings.

"Empowering young people is our new strategy – and specifically empowering them so that they can find employment," says Metropolitan's Elsie Govender. "This project allows us to do this, as well as help us address the critical need for financial education among young people."

The experience, including a compulsory internship (initiated by CEI), grants participants practical knowledge about design and entrepreneurship from concept to prototype, marketing and implementation. And for the winning team, there's the opportunity to work with a professional design team to implement their financial literacy programme.

"The winning students will be recognised by one of the country's top financial institutions," CEI's Director Charleen Duncan says, "and will also help youth across South Africa become financially literate. That will help develop entrepreneurial spirit and ability – and the next generation of successful job creators, innovators and world changers."

The internship opportunity for the winning team will expose them to the corporate world and actual participation in the project team that will bring to life the programme they designed.

"This gives them multiple layers of exposure in not only coming up with the idea but also implementing it, developing it and making it fit for market," Duncan says.

"We believe that the students are best placed to provide an innovative solution to teaching financial literacy because they experience the challenges of handling money on a daily basis," Govender says.

After advertising the opportunity on campus, 171 individual applications were received, of which 36 were approved and four teams competed in the challenge. The teams were taken through four innovation workshops guided by members of Innovate South Africa and CEI staff, where they were trained in design thinking to guide the design process from concept to prototype. By May, the teams were ready to showcase their prototypes.

Precious Penny emerged as the clear winner, with Imali Trekkers as the runner-up. Imali Trekkers designed iMali Tracker, a budgeting tool that helps students track their monthly income and expenses and rewards them if they attain their saving goal. The arcade-type iMali Tracker machine would be linked to a mobile application and website.

Precious Penny designed a game to help youth learn more about financial literacy. With the support of CEI facilitator Brian Adams, they developed a game with several levels, with challenges based on real-life scenarios that young people face.

The challenges test players' ability to prioritise and manage finances and make financial decisions. At the

end, the game gives players feedback indicating what financial decisions they would have to make in real life.

"The game is really fun and beneficial because it teaches people about different topics in finance based on what they lack, and possesses a high value in increasing people's financial literacy levels," Adams notes. "There are also great incentives and physical interaction throughout the game mixed in with practical financial advice."

The winning team consisted of Kefilwe Rasedie (PhD Management), Welan Spogter (4th-year BCom), Thandile Nododile (1st-year BSc), Siyavuya Gwanya (1st-year Law) and Ayavela Ngayi (2nd-year BA).

"Our hard work has paid off, and we are excited for the internship opportunity with Metropolitan," Welan Spogter says.

CEI Director Charleen Duncan said all the teams thought outside the box and showed true entrepreneurial spirit.

We believe that the students are best placed to provide an innovative solution to teaching financial literacy because they experience the challenges of handling money on a daily basis.

ELSIE GOVENDER







Student Profile: Siyavuya Gwanya

The CEI's strategy for advancing entrepreneurship education is to provide practical learning opportunities and multiple interfaces within the community of students and staff that together foster an intellectual climate conducive to entrepreneurial thinking. The experiences of Siyavuya Gwanya in 2018 are a good illustration of this approach.

"I am a first-year law student. I arrived at UWC with no direction as to my purpose on campus besides my studies, until I visited the CEI centre and met Mr Brian Adams, a business strategist who told me more about the CEI and listened to my business idea.

"Mr Adams advised me of a business pitching competition where I could go and pitch my idea. I was nervous and afraid as I had never pitched and had to do it in front of other students and people I didn't even know. But I went and I ended up making the winning pitch that evening. Many doors opened for me at University after that day. I become more comfortable on campus with the friends I had met through the pitch.

"I was later informed about a competition where Metropolitan wanted 30 students to develop ideas for ways to increase financial literacy in young adults. I had the opportunity to be in a team with awesome students and we used our entrepreneurial minds to came up with a strategy which saw us winning the overall competition. Winning was amazing but the opportunity that we were awarded was the most exciting part. We were able to refine our strategy at a company called Elevator, where we spent three weeks as interns, putting together a top-class pitch for Metropolitan.



"My involvement with the CEI led to Opexa, a company that I co-founded with Sivuyile Makatesi. Opexa is an entrepreneurship incubator that will help drive entrepreneurship on our campus and get students to use their skills to start and run small businesses. The company has successfully hosted

several seminars and workshops, where entrepreneurs could come together and work with experts towards their business goals. Among these were a social entrepreneurs workshop in partnership with a Red Bull division called Amphiko and an opportunity we organised for student designers to showcase their garments to Truworths and possibly join the Truworths design team.

"I also attended the boot camp to prepare for the AwearSA Fashion Show that was put together by students with the aid of mentors. We were given the opportunity to host a fashion show through a six-week mentorship journey wherein the students got to do everything, from the planning to the marketing and finally the execution of the show. I was given the role of Senior Production Manager and my duties were to ensure all teams were on the right track and had all they needed to execute their tasks.

My main goal is to see UWC become an institution where entrepreneurship is valued and seen as a very important aspect to have among students.

SIYAVUYA GWANYA





I was invited to help mentor and share my experiences with University of Cape Town students who were also given this wonderful opportunity by WearSA. This fashion show even allowed me to feature on radio stations and television.

"Another highlight was receiving a Special Award for Entrepreneurship for Opexa, after a company called the Greater Tygerberg Partnership felt that I was the best candidate for the award. The award made me realise that entrepreneurship is my home as it is something that I'm very passionate about.

"I definitely see entrepreneurship as a formal career in the near future, as I believe it's the only way to move towards being a first-world country. Many view entrepreneurship only as starting a business and making money, not knowing it is way more than that. That is what I strive for, getting people to start realising the importance of entrepreneurs and an entrepreneurship development.

"My main goal now is to see UWC become an institution where entrepreneurship is valued and seen as a very important aspect to have among students. We have such awesome people at the CEI and a space that is designed for it. All we have to do is become more aware and educate ourselves about this great space and the future business careers that are possible. Many big companies were started at varsity or by varsity friends and I would love to see such companies started at UWC. I honestly thank the CEI team for growing entrepreneurship at UWC."





OneBio incubates Biotech Entrepreneurs



Several stakeholders in the field of bioinformatics have initiated an exciting mini-incubation programme at the University of the Western Cape. The idea is to identify and nurture opportunities for building a South African bio-entrepreneurial and biotech capacity-building ecosystem.

OneBio, Africa's first biotechnology business incubator, provides life science start-ups with funding, business support, lab facilities and office space, mentorship and access to networks, international markets and large corporate partners.

In 2018, OneBio began designed this programme in conjunction with UWC after recognising the advantages of working with a single ecosystem and

accessing resources provided by the UWC Technology Transfer Office.

With the general aim of stimulating and supporting bio-entrepreneurship, and specifically gauging the scope, maturity and volume of start-up project applications, science-based entrepreneurs were invited to join an intensive tailor-made bio-entrepreneurship programme.

Twelve submissions were received of which seven were included in the incubator programme. Of the applications received, more than 60% of prospective entrepreneurs held an MSc degree or higher, most applicants were single entrepreneurs and 75% of the applicants were at an early or idea stage. Four

postgraduate students at the IMBM were among the seven "budding biotech innovators" selected for OneBio's first mini-incubation programme. The projects and students that made it into the first round were:

A-Grow offers customised biofertilizers containing a unique mix of microorganisms, plant growth promoting substances and soil-and-plant immunising bacteriophages. The combination of a biofertilizer with phage therapy makes their product and concept unique (phage therapy is a cuttingedge, safe and environmentally-friendly alternative technology to conventional pesticide treatments) (Randall Fisher, Danielle Leukes, Katrien King).

AsterChem proposes to make THC-free cannabinoid products, including the *Heli*-CBG oil and a *Heli*-vape pen, produced from the South African plant *Helichrysum umbraculigerum*. The business will provide a safe and sustainable source of cannabinoids to the South African market. Metabolic profiling will be employed to ensure that every batch has a similar chemical composition (Kanyisa Ndatha, Kirsty Botha).

BioID will formulate a highly specific method of human identification, incorporating an individual's gDNA or microbiome, as a means of improving the security in existing identification technologies (Bryan Mundia, Jody Koopman).

BiliGen Bioscience is developing a multiplex DNA-based diagnostic test for the detection and differentiation of TB DNA in clinical samples (Mawethu Bilibana, Andile Masiko).

HaloPhyle will use industrial reject brine to produce carotenoids, which are of great interest in many scientific disciplines because of their wide distribution, diverse functions and interesting properties (Anesu Conrad Moyo).

POC-Diagnostics seeks to use nano and biotechnology for the development of a multi-use point-of-care device that can be used to diagnose several disease conditions and reduce the cost and turnaround time of disease diagnostics (Yamkela Mbandezi, Lauren Swartz).

TBNano is designing a novel pulmonary drug delivery system for the anti-tuberculosis drug, isoniazid (Joseph Mitanda Mutenga, Retsepile Maphasa Ephraim).

The teams participated in a week-long programme from 20 October to 2 November 2018 during which they were introduced to the fundamentals of taking a biotechnology concept to market and were provided with insights into the frontiers of this particular industry.

The highlight of the week was a pitching event held at the Cape Innovation and Technology Initiative in Woodstock, Cape Town. The teams competed for laboratory services from the Centre for Proteomics and Genomics Research (CPGR) to the value of R50,000 and a three-month residency with CPGR/OneBio to further develop the winning idea and business model. After participants presented their business concepts to a panel of judges drawn from government and industry, the competition was won by Kirsty Botha and Kanyisa Ndatha (IMBM) for their business concept, AsterChem. The second prize was awarded to Anesu Moyo (IMBM) for his HaloPhyle concept.

Although not awarded a prize, the business concept of Katrien King, Danielle Leukes and Randall Fisher (IMBM) raised a lot of interest.





O7 AwearSA UWC Fashion Show

The Wear SA campaign was not only launched to encourage people to buy South African, but also to encourage entrepreneurs and designers to take on the challenge of reviving the South African textile industry.



On the face of it, the fashion and textile industries seem among the most accessible to entrepreneurs, Not only is cloth among the oldest known manufactured goods but it can be made by hand with rudimentary tools.

However, in the cutthroat world of globalised modern industry, the road from access to success is strewn with many obstacles for the entrepreneur. In South Africa, and particularly in Cape Town, the industry has

seen horrendous job shedding and business closures as the country has been flooded by cheap imports in the democratic era, often exacerbated by illegal evasion of duties and taxes. With an average of seven people depending on the income of one clothing worker, the effects of job losses on communities have been devastating. The crisis moved the South African Clothing and Textile Workers' Union (SACTWU) to launch the Wear SA campaign to encourage people to buy South African, but also to encourage

entrepreneurs and designers to take on the challenge of reviving the South African industry.

In 2018, the CEI and SACTWU issued the challenge to students and AwearSA was born. Two hundred students responded, of whom 150, most of whom has zero experience of any aspect of producing a show, attended fit-for-purpose training designed and presented by one of Cape Town's most experienced production and events companies, Planet Productions.

A two-day mentorship boot camp in July was followed by an intensive six-week mentorship programme that also incorporated Student Entrepreneurship Week in August. Students drawn from every faculty, discipline, year, culture and personality had their people and organising skills tested under pressure as they learned and worked in teams to deliver the creative input, production, logistics, marketing and event management tasks required.







The climax of the project was a wildly successful on-campus fashion show on 1 September attended by 1,000 guests. The proceeds of tickets sold at R50 each were donated to Ikamva Lethu, the UWC bursary fund that was initiated by the student leadership following the #FeesMustFall crisis.

For many participants, the eye-opener was not only what they learnt about entrepreneurship and event management, but realising when they visited factories and spoke with SACTWU workers about their difficulties, that their simple act of buying clothes linked to globalisation impacted on poverty in South Africa and the countries of origin. One student was so blown away that she now intends starting a non-governmental organisation related to the industry.









Global Entrepreneurship Summer School

GESS develops young entrepreneurs and challenges them to create innovative, high-impact businesses that solve society's myriad challenges.

PAT PILLAY, CEO, LIFECO



In September 2018, 33 students from 12 countries attended the seven-day Global Entrepreneurship Summer School (GESS) at the University of the Western Cape (UWC) to debate innovative and entrepreneurial solutions to the global challenges of consumption and sustainability.

GESS is a unique education programme initiated in 2008 by the Social Entrepreneurship Akademie (SEA) in cooperation with leading university-based entrepreneurship centres in Munich (Technical University of Munich's Unternehmer TUM, Ludwig-Maximilians-Universität München's LMU
Entrepreneurship Center and Munich University of Applied Sciences' Strascheg Center for Entrepreneurship). In 2016, Tongji University in Shanghai and Tecnológico de Monterrey in Mexico City joined the programme.

They were followed in 2018 by Cape Town, where the innovative impact business LifeCo UnLtd South Africa convened the first GESS ever held in Africa.

"GESS develops young entrepreneurs and challenges them to create innovative, high-impact businesses that solve society's myriad challenges. Through GESS, we are striving to build a generation of champions who will challenge the status quo and go on to change the world," says Pat Pillay, LifeCo's chief executive officer.

Charleen Duncan, the Director of UWC's CEI which hosted GESS, says, "UWC was an ideal host for GESS 2018 because of our location, our achievements and our history of social and economic empowerment."

GESS takes place on four continents with each summit attended by no more than 35 students. Students can apply to attend the summit of their choice although competition is stiff, with about 1,000 applications annually for the 140 places. The programme is open to all undergraduate and graduate students aged 18 to 35, from any field, with the proviso that they must have been enrolled at a university in the same calendar year as the GESS that they wish to attend. All participants have to enrol in the MOOC 'Enabling entrepreneurs to shape a better world' presented by SEA to be able to attend GESS. Other requirements are reasonable proficiency in English and paid expenses such as the tuition fee, insurance, flights and entertainment (the host provides accommodation in shared dorms for eight nights, full board and public transportation).

At GESS, students work in international and interdisciplinary teams, each with a coach who provides feedback and technical assistance. Each team tackles a different region-specific challenge within a broad theme and must develop an idea that presents both a sustainable impact on society and a self-sustaining, profitable business model. In 2018, the broad GESS theme was 'Consumption' (no mere hot button issue, with the UN predicting a global population of 9.6 billion in 2050 requiring triple the available natural resources on Earth to sustain the way the world currently consumes).

Participants benefitted from a series of interactive input sessions by renowned entrepreneurs who provided teams with complementary knowledge. At the end of the course, each team pitched its idea and business model to a wide public audience.

UWC LLB student Khumoetsile Tsintsing was one of the South African students at the 2018 GESS in Cape Town.

"The memories of GESS feel more like a dream," he says. "How often can you say that you have learned from peers as far out as Mexico, Germany, Brazil, China, India, Italy, Austria, Switzerland and Morocco?"

Khumoetsile feels that UWC students should be encouraged to apply to GESS 2019 as he was able to hold his own in the challenging environment, which was quite intense. "My studies have helped me become efficient in crafting killer questions," he says.

His group addressed the problem of gentrification and took an innovative approach to the issue.

"We sought to create an enterprise which would act as an intermediary between the investors, property developers, new and existing businesses and the community members of the area undergoing gentrification," Khumoetsile says, adding that the solution they settled on was quite complex.









#YouthStartCT 2018

The CEI participated in the City of Cape Town's Annual #YouthStartCT Entrepreneurial Challenge (#YSCT 2018) in 2018. Participation included serving on the adjudication panel that selected the finalists and winners of the competition.

YouthStart aims to provide young Cape Town entrepreneurs with opportunities, practical training and mentorship that assist them to grow an existing business or get one started. The programme is open to Cape Town-based South African citizens between the ages of 18 and 35 years. The Centre for Entrepreneurship & Rapid Incubator at False Bay TVET College was appointed by the CoCT as the training service provider to implement the training component of #YSCT 2018.

A call for entries was issued on 16 April for young people to submit ideas for existing businesses that create employment opportunities for youth, or a business idea that intends employing young people. Entrants completed an online application form and/or uploaded a video of their pitch proposal. This was followed by idea generation workshops from 23 April 2018 before the official launch on the 22 May 2018.

The 85 #YSCT 2018 participants were drawn from across the metropole with 63.64% of the applicants being male. This is in line with many studies that show that women would-be entrepreneurs face more obstacles than men, including higher levels of domestic responsibility, lower levels of education, lack of female role models in the business sector, and lack of capital and assets.



From 23 May to 16 June 2018, participants attended eight training workshops based on the GrowthWheel® methodology. GrowthWheel® is a visual checklist which empowers small, medium and micro enterprises to do a 360-degree assessment of their business. The workshops were followed by four elimination rounds over a four-week period. A judging panel, consisted of experienced representatives of sponsors Small Enterprise Development Agency (SEDA), UWC CEI, CoCT and Bettr, presided over the adjudication process, which saw participants use the elevator pitch and slide deck methods of pitching their concepts.

On 20 June 2018, the top three winners were announced at a gala event. The winning business was T-Squared Clothing, an existing fashion business. Second place went to an emerging marketing business, Grey Pepper, with the third place going to Educate, which offers tutoring on an online platform. All the finalists in the top thirteen received nonmonetary prizes such as access to network partners and bespoke business support and mentoring. The top three received additional prizes, including two laptops donated by UWC, with the overall winner also receiving R10,000 cash.





Entrepreneurship Development in Higher Education

The CEI does not work in a vacuum at UWC but is part of a growing network of higher education institutions active in entrepreneurship education.

A national platform for Entrepreneurship
Development in Higher Education (EDHE) was
established at the end of 2016 within the University
Education Branch of the Department Higher
Education and Training (DHET). The EDHE
Programme is now funded through the University
Capacity Development Programme (UCDP) and the
programme has been managed by Universities South
Africa (USAf) since June 2018. The remarkable
progress made in the latter half of 2018 is
summarised below.

Briefly, the goals of the EDHE are **Student Entrepreneurship** (mobilise students and graduates resource to create successful enterprises), **Entrepreneurship in Academia** (support academics in instilling an entrepreneurial mindset within all students) and **Entrepreneurial Universities** (create a conducive environment for universities to adapt strategically and embark on projects whereby third-stream income can be generated through innovative business ideas).

The EDHE Programme aims at embedding entrepreneurship in the curriculum through flexible curriculum pathways, across disciplines.

Three EDHE Communities of Practice (CoPs) have been operating since March 2017 and meet biannually. The main objective of the CoPs is to collect,



analyse and share best practices from various events and stakeholders. The three CoPs are:

The CoP for Student Entrepreneurship – has representatives from almost all universities, ranging from academics to support professionals. The Conveners of this CoP are Malindi Kunene (UKZN) and Elli Yiannikaris (UCT GSB). The main project steered by the members of this CoP is Student Entrepreneurship Week.

The CoP for Entrepreneurship in Academia – led by Dr Thea van der Westhuizen (UKZN), this small group of mainly entrepreneurship academics will be advising on the inclusion of entrepreneurship across disciplines and approaches to embedding entrepreneurship in curricula.

The **CoP for Entrepreneurial Universities** – consists of a small group of professionals led by Dr Poppet Pillay (DUT) and Charleen Duncan (UWC CEI). This CoP focuses on the EDHE objective of establishing a baseline of entrepreneurship initiatives at South African universities.





Accelerated Excellence Programme

The fruitful partnership between the CEI and Mashauri continued in 2018. Mashauri is an innovative entrepreneurial education company that combines digital online platforms and in-person facilitation to teach entrepreneurship on three continents.

The Accelerated Excellence Programme was designed and run by Mashauri and the CEI and presented at the Protea Hotel, Stellenbosch, on 18–20 June 2018.

The 15 students that participated were selected by the Office of the Vice-Chancellor and were drawn from all the faculties. The programme was co-facilitated by Simon Gifford and Apoorv Bamba of Mashauri and the

CEI's Wesley Clarence and Brian Adams. The programme consisted of a core set of business building activities supported by talks, videos, lectures, quizzes and interactive work sessions. The students worked in groups to design a business idea, develop it into a value proposition, "market test" the idea and present their venture in a final pitching event. The facilitators and the students themselves then voted for the best idea.

The key elements of an entrepreneurial mindset had been mapped onto the attributes of UWC's '21st century graduate' in the design phase. Thus the overall objective was to assist the students to progress towards developing the desired set of attributes.

FIGURE 2: OUTCOMES AND OBJECTIVES

STUDENT OUTCOME

TO DEVELOP AN ENTREPRENEURIAL MINDSET THAT DIFFERENTIATES THEM FROM OTHERS.

THE PROGRAMME CAN BE SEEN AS AN EXPERIENTIAL, CO-CURRICULAR ACTIVITY THAT WILL SIGNIFICANTLY ENHANCE THE STUDENT'S SET OF COMPETENCIES

PROJECT-BASED OBJECTIVES

- WITHIN A MULTIDISCIPLINARY GROUP, TO CREATE AND DEVELOP A
 REAL VENTURE UP TO A PRE-AGREED POINT.
- $\boldsymbol{\cdot}$ TO CONVINCINGLY PITCH THEIR VENTURE TO A PANEL OF EXPERTS
- TO LEARN THE RIGHT (LEAN) APPROACH TO OTHER INNOVATION PROCESSES (E.G., INSIDE A CORPORATE)

WHICH CONTRIBUTE TOWARDS PRODUCING THE UWC GRADUATE ATTRIBUTES OF THE 21ST CENTURY

- · KNOWLEDGE APPLICATION
- · PROBLEM-SOLVING CAPACITY
- ENTREPRENEURIAL CAPACITY FOR FINDING OPPORTUNITIES
- · CREATING LIVELIHOODS
- · ACTING FOR SOCIAL GOOD





Dentistry Private Practice Simulator

The University of the Western Cape's Dentistry Faculty, the largest dental school in Africa, produces 80 dentists and 20 oral hygienists annually.

However, preparing students for the challenges of setting up successful private dental practices has hitherto involved little more than acquiring practical experience on UWC's respected outreach programmes and clinics and heeding the advice of UWC's dentistry academics, who are all seasoned in private practice.

"Students are equipped with all the theoretical and practical skills as part of their undergraduate programme, but have very little experience in running an actual dentistry practice. Apart from exceptionally high set-up costs for this kind of business, it has been a challenge for students when having to run their own practices," lecturer Dr Soraya Yasin-Harnekar notes. "With this simulated practice, we would like to change that by giving students an opportunity to 'run' a practice."

The computer hardware was funded by Absa while the patient management software came from Med-e-mass, an industry partner. Three fully-fitted dental chairs were sponsored by private companies in the sector.

While not all dentists want to go into private practice, the reality is that the state health services offer few opportunities and many newly graduated dentists



will need to pursue entrepreneurship and business. With this in mind, the simulator will feature prominently in the Practice Management Course attended by final-year BChD students.

With the assistance of the CEI, the Simulator will potentially help to develop and expose students to the skills of entrepreneurship and innovation, including how to set up a practice and employ support staff, and the practical issues of patient bookings, billing, accounting, human resource staff management, procurement, etc.

The Simulator will launch in 2019 as soon as simulator practice training has been completed.





School of Pharmacy Community Engagement Elective

Design Thinking: Africanising chronic medicine use in the Delft community

In December 2017, the School of Pharmacy (SOP) engaged the CEI Director regarding the design of its Community Engagement Elective.

The module was designed for final-year pharmacy students to develop students' critical cognitive skills. Design Thinking (DT) is at the core of the module, requiring the students to apply a human-centred, iterative, user-oriented approach to optimise chronic medicine use in the underserved Delft community.

Six CEE pharmacy students accompanied home-based carers (HBCs) from a non-profit organisation during their routine home visits to understand chronic medicine use from the patients' perspectives. By applying the DT iterative process of "empathise, define, ideate, prototype and test", three prototypes were crafted.

Prototype 1 aimed to promote adherence to antiretroviral (ARV) medicine therapy using a tri-colour zone chart. Prototype 2 was designed to alert patients to ARV side effects using rhymes. Prototype 3 focused on a pharmacist accompanying HBCs during routine home-visits to engage directly with patients on the management of their chronic medicines.

Design thinking is a novel approach to undergraduate pharmacy teaching. It stimulates creativity and innovation to optimise chronic medicine use in the community.

Pharmacy students usually do not engage in creative thinking and are not necessarily risk-takers or open to failure. This course was developed to allow students to become change agents, creative thinkers and risk-takers. The course aimed at creating a space where students would be challenged to do things differently, think outside the box, and most importantly, engage directly with a local community.

It is this kind of approach that is required across campus if we want students to become employable and if we want to embed the UWC graduate attributes into their DNA, we need an innovative approach to teaching and learning at UWC.







Looking Ahead



UWC has a legacy of being entrepreneurial and

innovative. In its approach to finding ways to ensure that historically disadvantaged South Africans receive a high-quality education, to creatively addressing resource constraints as a historically black university, to contributing to the struggle to eliminate apartheid, and to working with communities to support economic progress among the most vulnerable, the University has always adopted the entrepreneurial mindset. Consistent with this history, the CEI's vision is to make entrepreneurship development a core pillar

of UWC's mission. The CEI is well placed to perform this role at UWC and will seek further collaboration with strategic partners, interest groups and local government departments.

With the assistance of these partners, the CEI confidently anticipates another successful year in 2019 of developing student entrepreneurship mindsets that will equip students to take advantage of the many business and career opportunities available at both undergraduate and postgraduate levels.





Centre for Entrepreneurship and Innovation

University of the Western Cape Robert Sobukwe Road, Bellville, 7535 Republic of South Africa

Private Bag X17, Bellville, South Africa, 7535

Tel: 021 959 9549 E-mail: wmehl@uwc.ac.za

http://entrepreneurship.uwc.ac.za