

# INDEX

<b>05</b> P	REFACE: St	trategy Process
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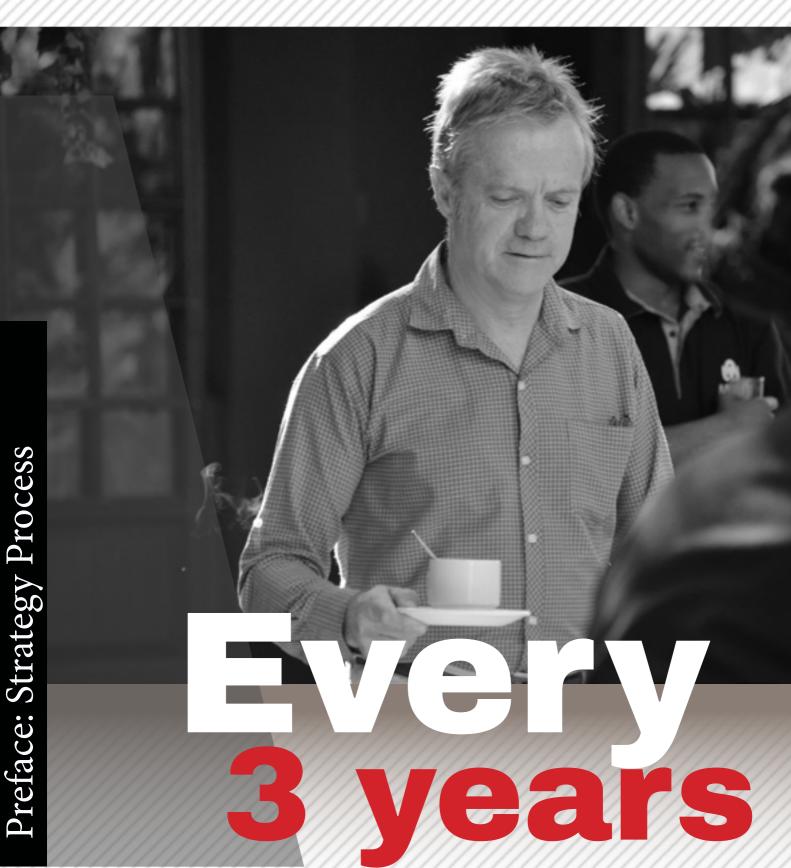
- **O9 IT@NWU:** supporting registration process
- RESEARCH: meet the NWU's Research Enablers
- **LOOKING BACK:** NWU's first e-learning module
- **PROF LIQWHA SIZIBA:** eFundi more interactive by the day...
- **EFUNDI'S PROFILE SPACE:** know your students
- IT @ VAAL TRIANGLE: enchances computer skills
- **UODL CENTRES:** receive Wi-Fi installation
- IT@NWU: promote student IT services at Open Day
- **29 DIY SERVICES:** simplify your life by using the APPS in the DIY Service Portal
- **ASAUDIT**: Prof Dan Kgwadi, Vice-Chancellor, North-West University
- **ECAR 2016:** IT@NWU online survey





- **37** RANSOMEWARE: isn't going away any time soon!
- 39 WIFI@NWU: NWUWIFI vs. NWU-GUEST
- **41** TRAVELLING SOON: make the most of it!
- 43 PERSONALIA

# MR BOETA PRETORIUS: Chief IT Director



# "ALTOUGH IT FACED NUMEROUS CHALLENGES IN 2016, WE KEPT OUR FOCUS ON OUR MISSION..."

2016 was characterised by numerous challenges in the Higher Education environment: #feesmustfall, budgetary constraints, the fluctuating exchange rate and political uncertainties are only a few. The NWU experienced its own challenges relating to the restructuring project. IT slowed down but was definitely not derailed by these events and we kept our focus on the mission of IT namely:

- ► To align IT strategies and value disciplines with business strategies and become a strategic business partner;
- To improve the balance and apply the optimal value disciplines between the five functional areas of IT by moving from a low value support focus towards a higher maturity level in terms of business value for Research, Teaching and Learning, while sustaining the maturity of Administrative systems

and shared services.

We really stuck to our guns to make a difference in the core business of the NWU. We were very active in the research domain, from capacity building activities to research data management. For the first time ever we took part in grant proposals and were part of the R30 million allocation to the National eScience Post Graduate Teaching and Training program. The NWU and UCT IT departments initiated the Africa Research Cloud which is a computing and storage cloud platform, available for all researchers in participating Universities and a key enabler of the activities of the Institute for Data Intensive Astronomy. New partners like UP, UWC, SKA and Wits will most probably sign up in 2017.

IT will be a core contributor to the successful implementation of the new Teaching and Learning strategy and we are therefore equipping ourselves to move into this new era and to support the strategic goals of the strategy.

Like everyone else our budget is also under severe pressure and therefore we are always on the lookout for "value for money solutions". In 2016 we have introduced Swift storage which is substantially cheaper than traditional enterprise storage.

IT always aim to align itself to the institutional vision, mission and goals and whenever there are major changes we will re-evaluate our current strategies.



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**MEET MR DANIE STOOP:** Perfect timing to join forces...



# STAFF OF ELECTRONIC SERVICES, ARE FAMILIAR FACES ON THE NWU POTCHEFSTROOM CAMPUS, BUT HAS NOW MOVED TO IT@NWU DUE TO RESTRUCTURING

Danie Stoop and the staff of Electronic Services, are familiar faces on the NWU Potchefstroom Campus, but has now moved to IT due to restructuring. Danie is sad to let go of the electrical division, but very excited to become involved in electronic systems on all three campuses.

He says due to the ever increasing digital content of electronic systems, a marriage between IT and electronics is inevitable and the timing is perfect due to exciting emerging technologies, of which the promising Internet of Things (IoT), is only one.

Danie allowed us a small peek into his life. Starting out as a kid in Potchefstroom, he attended school and university in the same town. Danie is therefore a proud Alumni of the NWU and whilst he started his studies on the Potchefstroom Campus, he finished studying Electrical and Electronic Engineering on the Vaal Campus when the faculty of Engineering moved over there in 1987. Danie still remembers having no

tarred roads between the hostels and class rooms and shaking the mud from your legs in class during summer!

Afterwards Danie joined a company working on energy scheduling. After a year he was called back and started as a temporary lecturer at EE Engineering and have not left the NWU since.

Danie became a professional engineer in 1996. He completed a Masters in digital communications in 2000 and accepted the position to head up Electronic Services on Potchefstroom campus in the same year. With that, he moved from the engineering faculty to the services side of the NWU. In 2014, electrical services and municipal accounts were added to his portfolio and he became Director of Electrical and Electronic Services on PC.

Danie is married to Marlise and the couple are blessed with three teenage sons roaming their home! In the light of this, he also served on several school governing bodies, often as chairman in the past few years. During 2016, Danie decided he was now ready for a

#### Perfect timing to join forces...

"...the ever increasing digital content of electronic systems, a marriage between IT and electronics is inevitable and the timing is perfect due to exciting emerging technologies, of which the promising Internet of Things (IoT), is only one..."

new adventure and was promptly elected to the Council of the NWU where he currently serves.

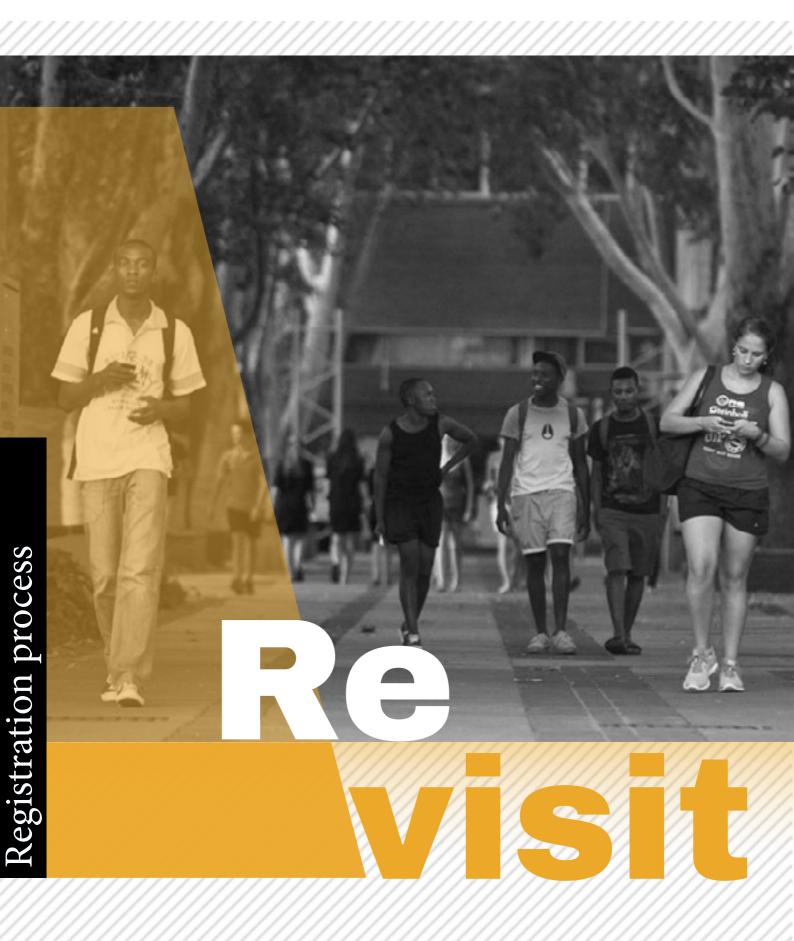
Danie enjoys spending time with his family in nature and also likes to be busy with a small woodwork project. The wood lathe is his favourite creative tool, however he finds little time for the latter.

At Electronic Services' new home, they are known as ES and have been mandated to take responsibility for electronic systems across all campuses of the NWU. This is a tall order, so they started out small by moving electronic maintenance to the campus IT divisions on Vaal and MC, executed respectively by the very able

teams of Aldine and Claudia and an able contractor. On PC our own staff will still be doing electronic maintenance. Services will soon be extended to include design and installation of new electronic systems across all campuses.

Aligning ES with IT, will take time and wisdom and so will the alignment of electronic systems across all campuses, but will be accomplished in the same way as eating an elephant – one bite at a time!

**IT@NWU:** supporting 2017 registration process



# REGISTRATION SUCCESS ARE BASED ON CLEARLY DEFINED PROCESSES

"The new academic year is off to a good start with enthusiastic students registering on all three of the North-West University's (NWU) campuses. As on 26 January nearly 7 000 first years have already enrolled. The NWU's target for first-year enrolments for 2017 is 8 894" (Jacobs, 2017). In the light of the latter, IT@ NWU plays a vital role to keep the "systems going".

#### **SPEEDING UP REGISTRATION...**

Mr. Tom (snr) Cato, Manager: Undergraduate and Honors Administration, informs that: "Technology delivers valuable support during the registration period..."

As he explains, in the past students were mostly registered by means of a manual process, by following the web registration route, a lot of pressure are being relieved from the registration office. Using pc labs across the campus would in reality enable a vast majority of students to register simultaneously, resulting

in a registration time of 4 to 5 minutes per student. Alta (aka) van Zyl, Section Head: Undergraduate and Honors Administration: Records concurs: "In order for successful student registration it is important to keep in mind, that the minimum fees for registration should be paid first, otherwise registration will be , otherwise registration will be deemed provisional... technology definitely plays an immense part to ease our task..."

#### PLANNING AHEAD...

A detailed report was drafted at the completion of the 2017 registration by Mr. John Molefe (IT consultant). Afterwards it was submitted to Me. Rika Nieuwoudt (IT manager), in order to evaluate the process. Learning from past experiences and reflecting upon the previous issues, it is possible to rectify the anticipated pitfalls ofthe upcoming year's registration process.

#### On behalf of IT@NWU...

We thank all our students and our staff for their patience, assistance and support in order to contribute to a successful registration process.

#### **FUTURE PLANS**

Mr. Bashir Ahmed (programmer) revealed that there are definitely interesting changes to follow on the User Interface of the Web Registration site. IT Business System Development and Support, are looking into changing the "look and feel" of the Web Registration site to tie in with the overall web theme of the University.

#### **OVERALL IMPRESSION**

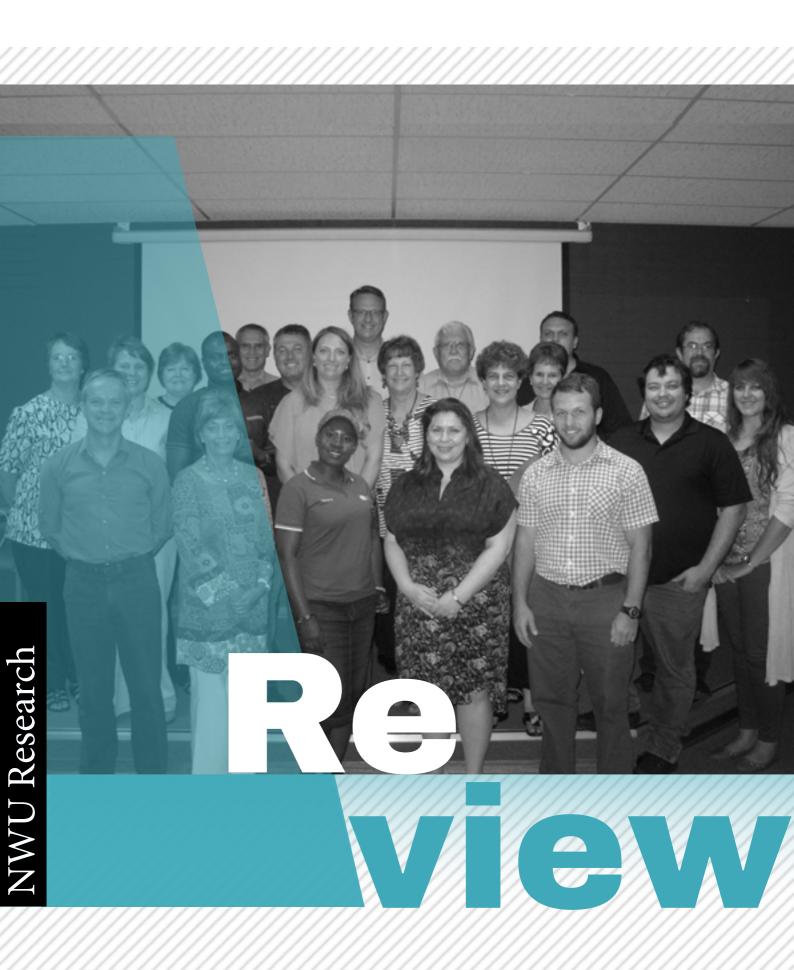
"With our annual planning meetings in September /October, we gather our stakeholders together. A number of 25 to 26 meetings are being held throughout the year with the stakeholders, including IT. Due

to our close cooperation with IT, we already know where most of the loopholes are and during the years we have identified the problem areas", reveals Tom. The main purpose of these meetings are to streamline the registration process. And to build on a positive outcome for the forthcoming registration. Some of the points on the agenda include:

- reflecting upon the error reports and
- ITHelp logs,

to determine the common denominator and to determine the corresponding actions. Alta concluded: "the support we receive from IT are excellent!" Source: North-West University News. 26 Jan. 2017. Registration process at the North-West University http://news.nwu.ac.za/registration-process-north-west-university Date of access: 26 Apr. 2017.

**RESEARCH:** meet the NWU's Research Enablers



### DUE TO THE CHANGING LANDSCAPE OF RESEARCH, PROJECTS OFTEN NEED MUCH MORE SPECIALISED TECHNOLOGY ...

Traditionally employees in an academic organisation's support services were seen as service providers only when it came to research projects. Due to the changing landscape of research, projects often need much more specialised technology and expertise and include larger, interdisciplinary teams. Support staff are frequently not only fulfilling a service provider role, but in many instances have to become a collaborator and embed themselves in research teams.

Why do we use it?

#### **EQUIP STAFF**

Through the activities of the eResearch Initiative and other related initiatives at NWU, it has become clear that new skills, networks, vocabularies, and mentorship models are needed to help service providers transition into the role of collaborator. Line managers and decision makers should also be made aware of the changing landscape of research support and should be equipped to help their staff face new challenges and exploit new opportunities.

#### **INAUGURAL RESEARCH ENABLERS EVENT**

In January this year NWU eResearch ran its inaugural Research Enablers Event where staff from IT, libraries, the research support office, technology transfer and innovation support, amongst others met to discuss their various roles in supporting specifically research data management. Nearly 30 people participated in this very interactive workshop and everybody had the opportunity to share how they are currently supporting research and where they are experiencing challenges.

The guest speaker, Pip Willcox (director of the Centre for Digital Scholarship at Oxford University) shared some of her experiences in terms of the changing role of research support staff. Pip's visit to the NWU was jointly funded by the Digital Humanities Association of Southern Africa (DHASA) as this coincided with the inaugural DHASA conference in Stellenbosch. Staff from the NWU Digital Humanities Initiative has played a key role in bringing the enabler events to life,

#### **Nearly 30 people participated**

in this very interactive workshop and everybody had the opportunity to share how they are currently supporting research and where they are experiencing challenges.

along with IT, the research support office, and the libraries.

#### THE MAIN AIM

The main aim of the event was to provide a platform for building a community of empowered research support staff (or research enablers). Feedback from participants was very positive and it was agreed that the aim was met, as several participants had the opportunity to meet new colleagues in various departments playing complementary roles in terms of research support.

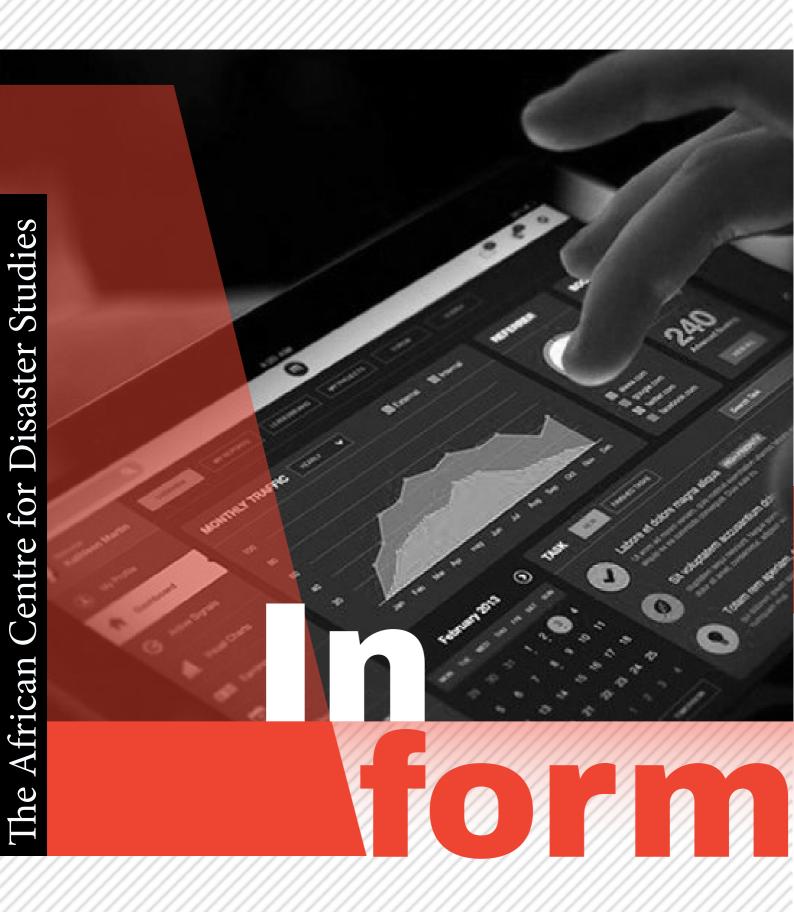
#### MORE ABOUT THE RESEARCH ENABLERS EVENT

The guest speaker will be Dr Aleksandra Pawlik from the New Zealand eScience Infrastructure who has been involved in research support for several years (both in the UK and in New Zealand). We look forward to another exciting opportunity to strengthen collaborations with our enablers.

#### **CONTACT US**

eresearch@nwu.ac.za alternatively use our twitter handle @NWU\_eResearch

# **SURVEY ANALYTICS:** views of Prof. Dewald van Niekerk and Gideon Wentink



# "WE ARE CONSTANTLY USING IT IN OUR PROJECTS WHERE SUR-VEYS ARE NEEDED...."

"Use it as a survey for your classes and see if you like it. Mobile devices remains expensive but with S.A. your field researchers can load the app to their own iDevice or Android device and this saves you a lot of money and a few trees!" Says Prof Dewald van Niekerk, Director of the African Centre for Disaster Studies.

#### **FIRST ATTEMPT**

"We first used Survey Analytics for a research project in 2013/'14 that ran in Malawi, Madagascar and Mozambique. Survey Analytics was ideal because we could upload the questionnaires on a number of mobile devices, give the devices to our colleagues in the three countries and have them collect the data on our behalf (often in rural areas with no network coverage)." says Mr GideonWentink.

Prof van Niekerk also added:"The tool allowed us to collect data in English, Portuguese and French and all the data was written to one collective database.

We could easily track surveys in real time and also see which questions were not answered satisfactorily and we could remotely make corrections and send to all devices."

#### HOW CAN SURVEY ANALYTICS BENEFIT THE STUDENTS?

"Survey Analytics is an excellent tool for any researcher, be it novice or expert, because it can do basic analysis of your data and if you are not completely satisfied, you can export the raw data in various formats (Excel and SPSS to name but two) for the experts to analyse. This is a great tool for students doing research because the data is analysed as soon as it is entered into the system." Explains Mr Wentink.

#### ANY POSITIVE COMMENTS?

"The few times we were not certain how to code specific questions, the online help we received from Survey Analytics was outstanding. Within half an hour someone was able to assist us with what we needed to know." says Mr Wentink.

#### BEWARE OF THE FOLLOWING

Prof van Niekerk informs that: "When working remotely charging of mobile devices remains an issue (especially where there is not electricity). Making solar changers part of your research kits is a very good idea. In Malawi the research team had to modify a generator to deliver a charge to their devices. Luckily nothing was burned down!"

#### OFFLINE FORM COMPLETION

Prof Dewald states that:" Once the device is loaded with the questionnaire it can be used wherever. When you enter a Wi-Fi/internet environment then

#### Why Survey Analytics?

"...It is an user-friendly tool which comes with brilliant back-office support. We needed a mobile solution which can be used in limited connectivity environments like many African countries.."

the data syncs to the cloud-based database."

#### **GOOD NEWS**

This service is free of charge and available to staff and students.

#### **PREREQUISITES**

You will need an internet connection for most of the Survey Analytics functionalities. (Although it is possible to set up your form for offline completion.)

#### **HOW TO REQUEST THIS SERVICE**

Navigate to Survey Analytics in your web browser and register if this is the first time you will be using this product.

#### HOW TO REPORT A PROBLEM WITH THE SERVICE

Log a ticket or contact your IT Service Desk at Mafikeng, Potchefstroom Vaal Triangle.

#### OTHER RESOURCES

Procedure to register on the Survey Analytics platform.

#### TIP: LOGIN DETAILS SURVEY ANALYTICS

Remember to use your NWU# and password to login, to ensure a service free of charge.

Click to visit the Service Catalogue page

**13** 

# **LOOKING BACK:** NWU's first e-learning module



# 4 FEBRUARY 2002: THE FIRST E-LEARNING MODULE, AGLE 111 KICKED OFF...

The Ferdinand Potsma Library was buzzing with activity in the pc-lab due to the institutionalisation of the compulsory module AGLE111. A pc lab with 200 computers were strictly reserved for this module.

#### MORE ABOUT THE HISTORY...

The decision was taken to implement AGLE111 (Introduction to Academic Literacy) as a fully online module. A project team worked diligently to finalise the e-learning platform of the University, named Alexander at the time, as well as the course content for the 8-credit (80 study hours) module. The team consisted of subject matter experts as well as staff members from IT and Academic support services. Alexander was later renamed to Varsité that served as the Learning management system of the NWU until 2007.

#### **COMPLEXITY OF THE PROJECT**

Having 2400 students on the Potchefstroom Campus and 350 students on the Vaal Triangle Campus doing the module in a brand new home-grown sys-

tem, presented more than a few challenges. With no scheduled face-to-face time, students and their lecturers had to embrace ???this first technology based self-study module.

#### COMPARED TO 2017

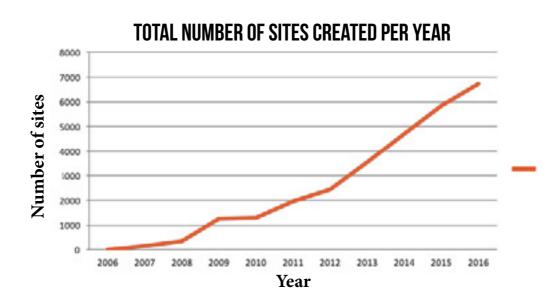
eFundi, the NWU's implementation of Sakai, is the LMS currently used and has replaces Varsité in 2007. The NWU is one of six tertiary institutions in South Africa that uses a Sakai implementation, and has one of the thousands of implementations worldwide. The NWU is also part of the 300 Sakai adopter community members.

In 2002 busy times saw 200-240 concurrent users in Alexander. After the success of the first online module, lecturers started using the various functionalities of the platform to support and supplement the faceto-face time they had with students.

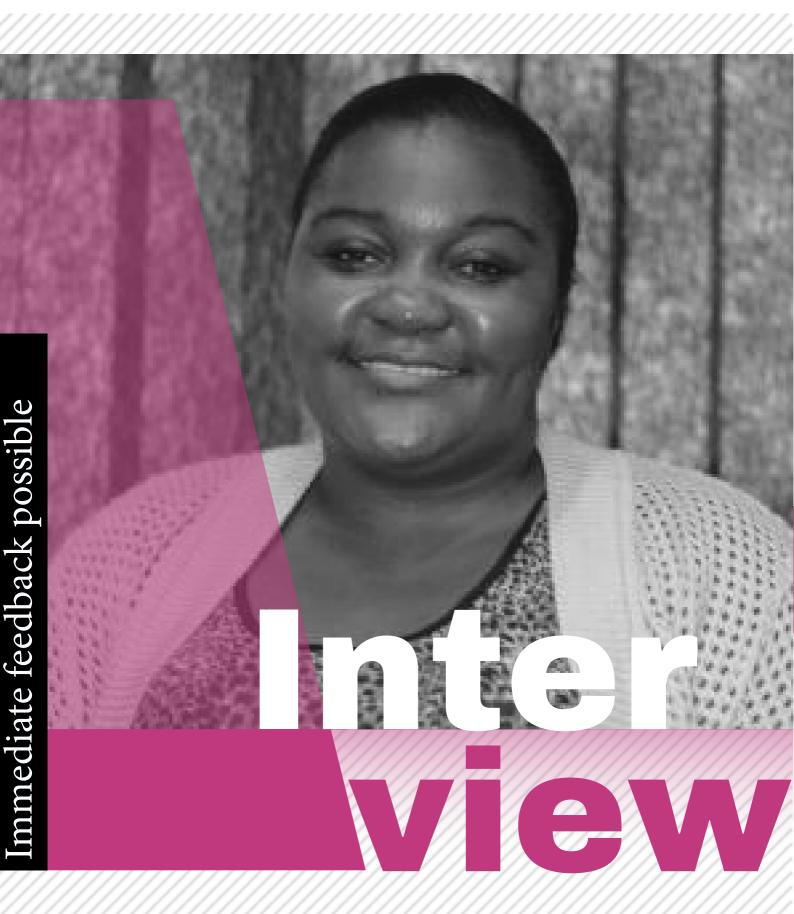
In 2017, eFundi gets logged into more than 30000 times every day. More than 10000 concurrent users is the norm rather than the exception. A steady growth in the creation of sites has occurred over the last few years (see the diagram below). Almost all of the modules offered at the NWU have corresponding sites in eFundi and eFundi has become a mission critical system for Teaching and Learning that students and lecturers cannot do without.

#### eFundi: our current Learning Management System

This service is a web-based eLearning, collaboration and research management system. It is designed to help lecturers and researchers create many different types of course and project sites, with varying levels of complexity. eFundi offers a broad spectrum of features, the popularity of the web-based system is apparent, taken the diagram below into account:



**PROF LIQHWA SIZIBA:** eFundi more interactive by the day...



# "FIRST TIME USERS... YOU NEED TO DIVE IN, DO NOT ASSUME THAT THE STUDENTS KNOW, HOW TO USE EFUNDI, THEY LEARN THROUGH TEACHING"

The Tests and Quizzes is an ideal tool to enable immediate feedback... "In all honesty, if you have to do some of these activities manually, the students would have waited very long... especially taking into account my class size..." she stated.

#### STUDENT ENGAGEMENT

"With the forum tool I have created different chat conversations. The students may engage in different groups and follow certain threads. Sometimes some students even go the extra mile and start their own threads..." Interestingly she says: "Students use the eFundi Chat room tool to discuss assignments because some do not have WhatsApp. How it then works is that we have our mainstream AGLE chatroom – and the students have their own chatroom to discuss relevant issues amongst themselves." Another favourite according to Prof Liqhwa is the Wiki tool. Whereby Group assignments are being done: "The main ad-

vantage is, it allows me to see who has contributed what, as well as to follow the students' progress... I can jump in where they need help."

#### FLIPPED CLASSROOM APPROACHES

Prof Liqhwa mentioned that Resources is also a very helpful tool in itself. "I don't just dump materials in resources - we find it quite useful during the flipped classroom approach. Students utilise resources to obtain materials as well as to upload their own reflections. These reflections are done in class and are then afterwards shared via resources."

#### HER PERSONAL FAVOURITE

"I like Turn-it-in particularly because the students can view their own reports. The students can edit their assignments afterwards, upon the report that was generated. I Turn-it-in as a learning tool, especially for the first years."

#### Thumbs up to the team...

"... She reveals that she teaches a lot of students – about 400-500 students and in order to communicate with them you need to be hands on – the good news is, eFundi supplies the platform."

#### **CHALLENGES AND FUTURE PLANS**

"I am also thinking about using avatars on eFundi... Currently, I am working on a project with Mianda Erasmus (lecturer Psychology modules) where we are trying to integrate academic literacy skills within the mainstream subjects/disciplines of the students. In this case we are integrating the module content with psychology...."

#### MY MOTIVATION?

"I start using eFundi in order to teach smart" – Prof Liqhwa found that she can distribute more information to students 'in their time and their space' by means of the technology..."

#### NOTE OF ADVICE

"First time users... You need to dive in... do not assume that the students know how to use eFundi, they learn through teaching"

She further states that if you are familiar with eFundi, push the envelope a bit, and use new functionalities by preparing and designing your lectures in such a manner...

You will be amazed, eFundi is much more than a Google drive...

# **EFUNDI'S PROFILE SPACE:** know your students



### "I USE THE PROFILE SPACE ON EFUN -DI TO GET TO KNOW MY STUDENTS BETTER..."

"I ask them to complete this in the first week. They add a photo of themselves and some info. This space on eFundi is very much like Facebook, with a wall, friends, pictures, etc." says Me Mianda Erasmus, lecturer for first year and honours level psychology modules on Mafikeng campus.

#### WHY TECHNOLOGY

"Due to the large numbers in my classes, it's difficult to have a more personal relationship with my students. Technology allows me to communicate with them regularly and to close that gap. The virtual space allows me to be closer to my students and reduce some of the challenges of the large class.

My PowerPoints are colourful and aim to cater for all the different learning styles my students might have." (injected humour and the like).

#### MOST FREQUENTLY USED EFUNDI TOOLS

"On eFundi I make use of most of the tools: Announcements, Assignments (with the use of turnitin for all assignments to teach students about the similarity indexes of their work and to help them develop

and avoid plagiarism), Calendar, Test&Quizzes, Polls, Dropbox, Wiki, Chatroom, Roster, Stats and Sign-up. Test&Quizzes: The survey option in this tool also allows me to..... used to help students to revise after every chapter. Also allows me to get feedback from students about my teaching and the different technologies I use in order to tweek these practices."

#### OTHER TECHNOLOGY

Apart from eFundi, I use other technology to assist me in my blended learning approach, like Facebook (posting photos taken in class during activities or demonstrations, motivating, sharing interesting and relevant posts, platform for students to communicate with each other), Twitter, AnswerGarden, QR codes, QuizUp, Clickers, Backchannels, etc. I also make short concept videos using Screencastomatic and moviemaker about more challenging concepts. I upload these on eFundi for students to view.

#### INSPIRATION

"I've used technology from the beginning, but as I learn from others, attend workshops or get new inspiration or info (for example about our students' profiles and what they prefer), I continuously adapt, try new things out and expand the virtual classroom."

#### WORD OF CAUTION

"Today's students are exposed to a lot of technology around them and are often mostly comfortable with

#### Interactive participation

"I often do activities in class where students use their mobile devices. When I use QR codes for example, they scan on the code, which might take them to an activity online, give them instructions or give them a link or document to read."

technology (although it's a big trap to fall in the assumption that they all are techno savvy and ready to use these technologies...). However, regardless of whether they at ease with it or not, skills and knowledge about technology will definitely be something they will need and use in their future jobs, so exposing them to it now, will help them for the future."

#### **FUTURE PLANS**

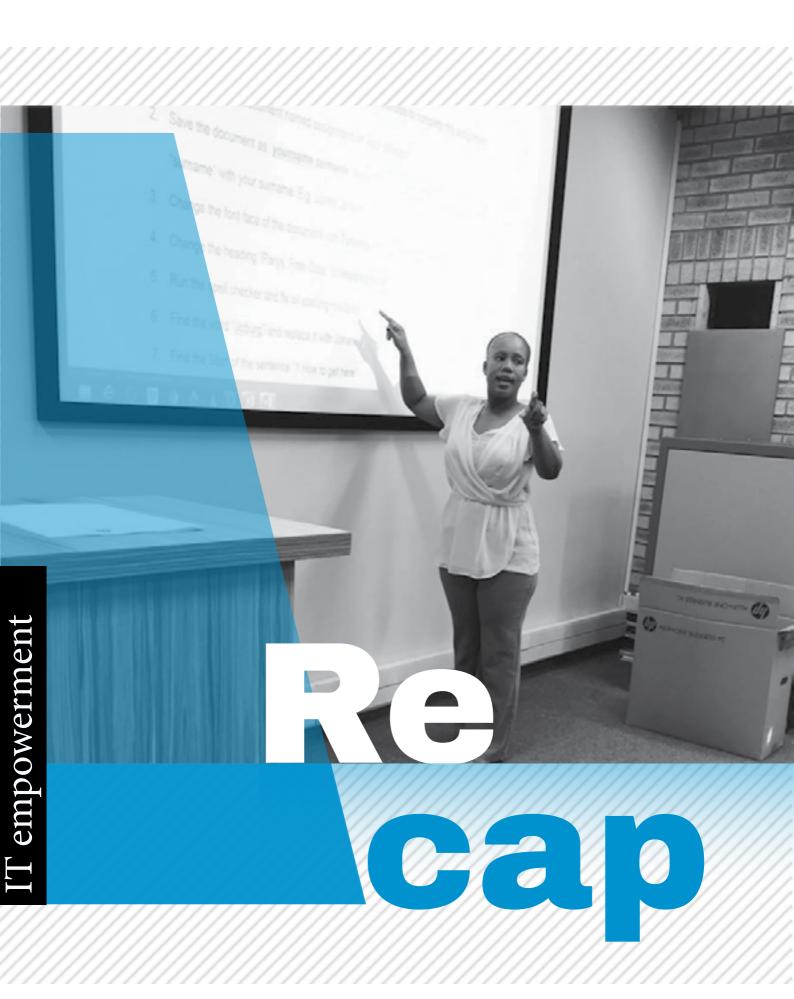
Blogs is a new feature on eFundi – I'd like to use it in my 2nd semester module this year.

#### LASTLY

I have learned by now that one should always have a backup plan ready in case technology fails you! Unfortunately it is very possible and it does happen that some of the equipment are not functional or that the Wi-Fi is off at the moment that you want to do your interesting, interactive activity involving technology. Being flexibility and creative is the key!

Important to use technology to ENHANCE learning, not just because It is available or to do something we have done before.

# IT @ VAAL TRIANGLE: enchances computer skills



### MICROSOFT'S FREE TRAINING SITE, DIGITAL LITERACY AIMS TO FURTHER THE ESSENTIAL FUNDAMENTAL TECHNOLOGY SKILLS

"We identified the need after the first year IT Induction event." claim me Letta Tefo, Junior Service Desk Consultant at Vaal Triangle Campus. According to Letta students participated in a test after the presentation. "Students who scored below 65% were encouraged to attend the Basic Computer Skills classes." she explains.

"We start off with Basic Computer Skills: this includes the introductory basics for Word, Excel and Power-Point. In addition we provide a Template in order to familiarise the students on how to write an Assignment."

When it comes to MS Office, Digital Literacy helps a great deal to boost the students' skill set.

#### **TESTING**

Students are given class exercises to measure their level of understanding with regards to the lectured content.

#### HOW CAN STUDENTS ARRANGE FOR TRAINING?

Letta explains that:"We post the training schedule on the Notice board, and more information in this regard, is available at Building 9A-105.

#### IN ADDITION

Microsoft offers free online courses with certification that can assist to enhance computer skills and to advance your career. The *Digital Literacy* site focuses on fundamental technology skills while *Imagine Academy* concentrates on more technical courses such as MS Word, MS Excel etc.

#### WHO MAY USE THESE MICROSOFT TRAINING?

"... The good news is: it is available to students and staff..."

#### THE AIM OF MICROSOFT'S FREE TRAINING SITES?

Microsoft's free training site, digital literacy aims to further the essential fundamental technology skills, as well as expanding the basic understanding of computers, non-official certification are available upon completion of these courses.

#### IT Training@NWU for staff

Please send us an email for any IT Training requests that are not addressed in our calendar.

#### **MAFIKENG CAMPUS**

Building A1, Room 131 (+27 18) 389 2370/1 mcITtraining@nwu.ac.za

#### POTCHEFSTROOM CAMPUS

Building F20, Room 106 (+27 18) 299 2700 i-oplei-f20-106@nwu.ac.za

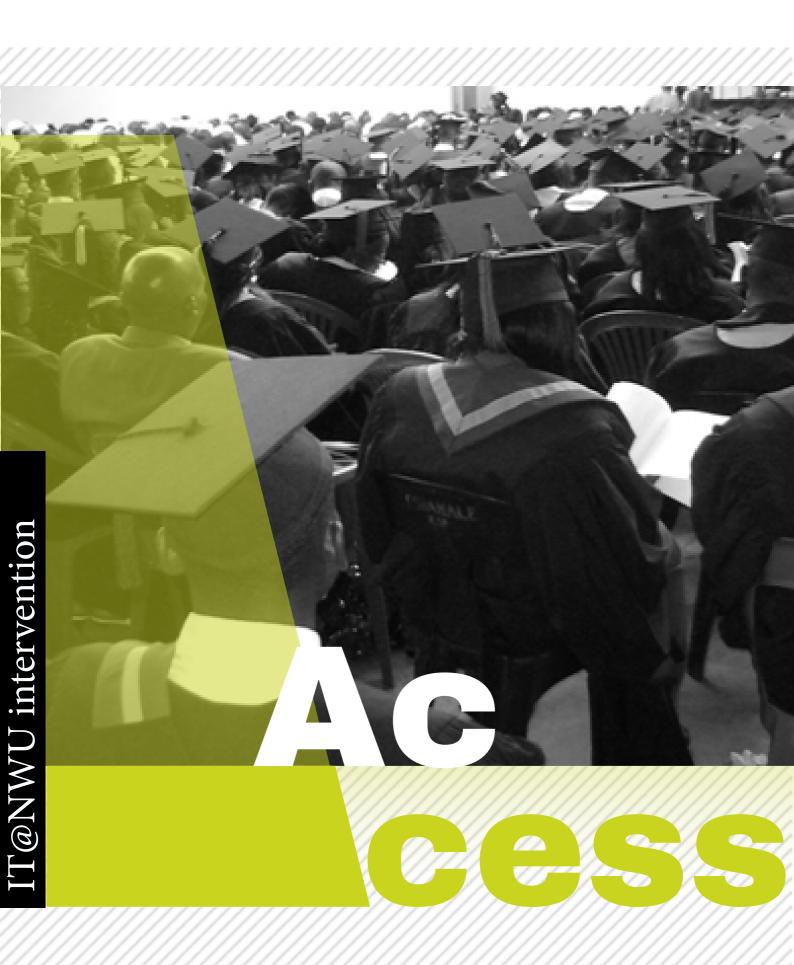
#### **VAAL TRIANGLE CAMPUS**

Building 8, Room 120 (+27 16) 910 3321/4 v-it-training@nwu.ac.za





## **UODL CENTRES:** receive Wi-Fi installation



# UNIT FOR OPEN DISTANCE LEARNING (UODL), REGIONAL CENTRES WERE EQUIPPED WITH WI-FI & INTERNET...

A request was logged by Prof Manie Spamer, Executive Director of UODL, requesting IT@NWU's assistance, in the matter mentioned above.

The project included: equiping regional centres with wi-fi and internet, to supply the students with the means to access recordings, as well as all live sessions, from any location.

The team from IT@NWU who assisted in this regard were: Wim Rankin (Infrastructure administrator), Ivan Koortzen (Infrastructure administrator) and Jimmy Venter (Infrastructure administrator).

#### **BACKGROUND**

The majority of these students consist of unqualified or underqualified practicing teachers, improving their qualifications through Open Distance Learning. Interactive whiteboards (IWB) are used at all Learning Support Centres (LSCs) to broadcast live sessions to students enrolled for distance education programmes at the NWU (UODL).

All sessions are recorded (Panopto) enabling students that could not attend live sessions to download recorded sessions at a time convenient to them.

#### NWU UODL BACKGROUND

Students who are not able to connect to IWB sessions

or watch captured lectures on their own may attend IWB lectures at 65 UODL LSCs across Southern Africa. Each of these centres have up to four interactive whiteboards to which synchronous computer mediated conferencing lectures are conducted to students. At the centres, students may utilise computers to download captured lectures and gain access to a variety of electronic services at the university. An ADSL line or alternative internet access have been installed at LSCs to enable students to access teaching and learning. Students utilizes the resource centres at each of the LSCs to access all resources.

#### **EXAMINATIONS AND ASSIGNMENTS**

These students write examinations at 107 examination centres across Southern Africa, from where paper examination scripts are transported to Potchefstroom, where they are marked by hand. The UODL Assignment and Examination Department (Pieter Vermaak, also visiting USQ) receives approximately 375 000 paper assignments and examination scripts annually. The numbers of assignments and examination scripts may increase as other faculties at NWU are now joining ODL offerings. For selected programmes eFundi are utilized whereby assignments could be submitted and resources accessed. Students may submit assignments at LSCs whereby centre managers courier these assignments to the NWU.

#### Limited internet access...

As a result of limited internet access and computer literacy on the part of many of the students studying through UODL, a paper-based correspondence model has been in use...





## WIRELESS ACCESS POINTS: selected UODL centres

Remote network management equipment, redundancy connectivity provision and wireless access points are progressively being installed at selected UODL centres which will enable students who use their own devices to obtain access to university services as well as obtaining general Internet access.

While all ODL examinations and most assignments are still hand-written, some ODL students are now spontaneously utilising information communication technologies (ICT) by submitting assignments through email and eFundi.

UODL is in the process of expanding ODL provision to students of other NWU faculties besides the Faculty of Education Sciences. Some of these students already partake in fourth generation distance education activities, utilising the SAKAI learning management system (LMS) called eFundi. As a result, some assignments are submitted through the LMS as well

# THE SITUATION ANALYSIS REVEALED INTERVENTION DEMONSTRATION:

Lecture capturing initiated to extend flexibility of synchronous interactive whiteboard lecturing sessions

Improved redundancy in power provision, internet provision at UODL main facilities

#### Limited internet access...

As a result of limited internet access and computer literacy on the part of many of the students studying through UODL, a paper-based correspondence model has been in use...







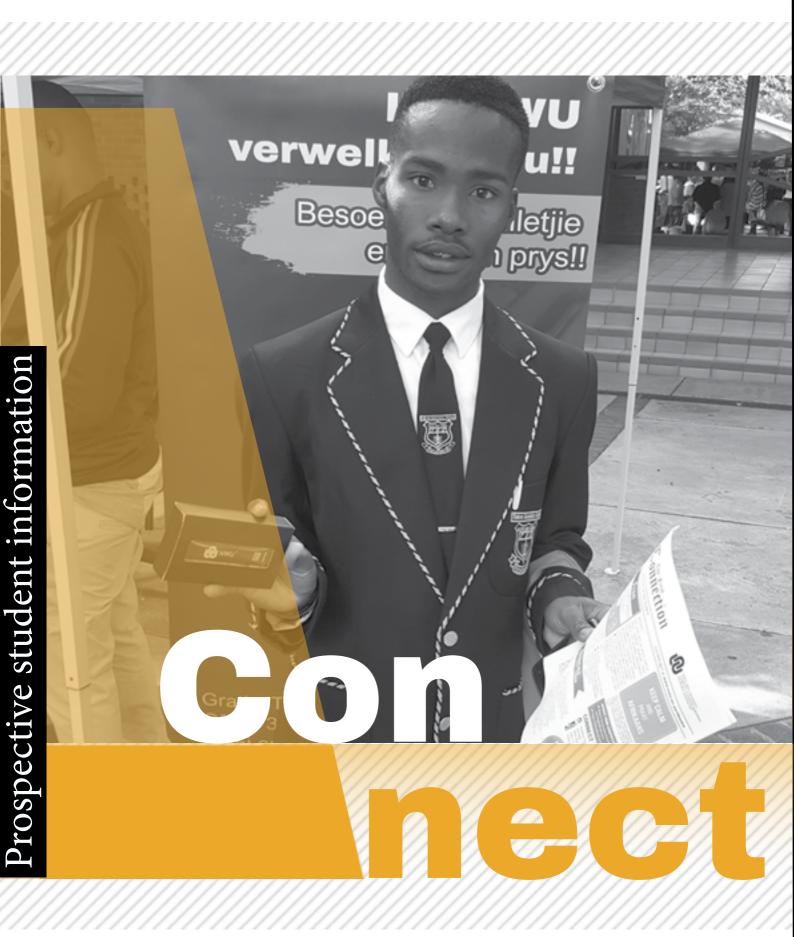
#### **UODL** support approximately 36000 open distance

learning students, across all nine provinces of South Africa and in Namibia. *The list below shows the UODL Centres which IT@NWU equipped with Wi-Fi so far:* 

Pretoria - Susan Strijdom Training Centre, Durban - Durban teachers centre, Witrivier - Laerskool Witrivier, Polokwane - Tabernadei, Parow - Laerskool Parow-wes, Vryheid - Hoërskool Pionier, Kuruman - Kuruman Campus, Port Elizabeth - Hoërskool Cillie, East London - MCS Business College, Rustenburg - Oom Paul Skool, Polokwane - PEMPS, Graskop - Hoërskool Panorama, Ladysmith - Windsor Park High, Matatiele - Bergview College, Mkuze - Laerskool Mkuze, Oudtshoorn - Suid-Kaap Kollege, Eshowe - Methodist Church, Newcastle - New Castle Senior Primary School, Queenstown - Ikhala Public Further Education, Vryburg - Hoërskool Vryburg

Port Shepstone - Marburg High, Empangeni - 50 Tanner Street, Ermelo - Ligbron Akademie, Johannesburg - Weltevreden Primary School, Welkom - St. Helena Primêre Skool, George - Glenwood School, Upington - Upington College, Kingwilliams Town - MCS Business College, Bisho - Bisho L/H Primary School, Giyani - Giyani EMPC, Mthatha - Khanyisa High School, Secunda - Die Gereformeerde Kerk, Tzaneen - Better Best Education, Malumulele - Madsihizi College, Bethlehem - Hoërskool Voortrekkerhoogte, De Aar - De Aar Campus, Springbok - Namaqa Campus.

**IT@NWU:** Promote student IT services at Open Day



### INVALUABLE INFORMATION WITH RE-**GARDS TO IT SERVICES WAS SHARED** WITH INTERESTED UNDERGRADUATE **STUDENTS**

IT@NWU formed part of the various activities characterised by information stalls and exhibits. Prospective students had a change to find out more about the IT services available to them. This include amongst other free services like Office 365, Wifi and Internet. Upon asking a question, the prospective students were eligible for a prize draw, this created quite a buzz of curiosity!

## **SEE WHAT OUR STAFF HAS** TO SAY...



ITUMELENG SENGATI "Open Day gave the students a change to eperience campus life and what IT@NWU can offer ... "



PHILLIP ENGELBRECHT "Great opportunity to show prospective students what IT@NWU have to offer..."

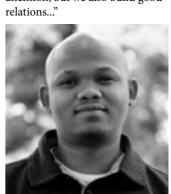


HILTON SECHELL " Great inisiative... Help students to make decisions about their future..."



DEHANN VAN KRADENBURG "The presents helped quit a lot... we made a positive investment in our prospective students.."





"The presents definetly caught the

ADRIAAN JUYN

HOUSTON MATTHEWS "Good interchange, allow for better understanding of the self-help options available"



CARL DU PISANI "We were able to introduce the prospective students to the IT services available to them ... "



TUMI SEGONE "Good interchange, allow for better understanding of the self-help options available"











**OUR** LUCKY DRAW **PRIZES** 



STUDENT IT SUPERVISOR

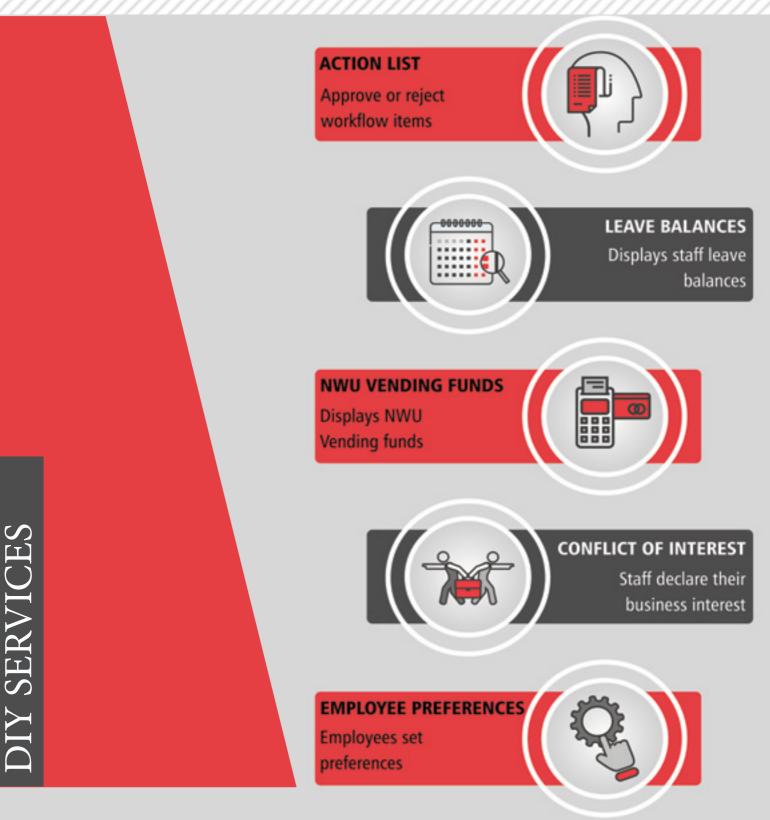
Thys Snyman

Thys says: "Some of the typical information the students wanted to know is, how does the University's internet work?"

The main aim, was to inform prospective students about:

- Free internet
- Free IT support
- Access to Microsoft Office 365 ProPlus.

## **DIY SERVICES:** simplify your life by using the APPS in the DIY Service Portal



# NAVIGATE TO WWW.NWU.AC.ZA CLICK ON THE "DIY SERVICES" LINK IN THE PAGE FOOTER







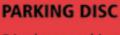
#### **NEED HELP?**

Each DIY service has its own contact person. The "How-To Guide" link on each App icon will disclose the needed information.



#### TAKE NOTE:

Please use Mozilla Firefox or Chrome as your default browser. The portal does not function optimally in Internet Explorer.



Displays parking discs of a person







**ASAUDIT**: Prof Dan Kgwadi, Vice-Chancellor, North-West University



## HOSTED BY NORTH-WEST UNI-VERSITY THE ROOTS LIFESTYLE CENTRE, POTCHEFSTROOM 19-20 APRIL 2017

The purpose of ASAUDIT is to promote and advance the use and support of computing. ASAUDIT strives to promote professional skills and conduct in university ICT management and to serve as unitary voice for the South African Higher Education IT profession and to provide mutual support mechanisms to its participating members by encouraging development and application of standards and best practices through the sharing of expertise among members and colleagues in organising informative events.







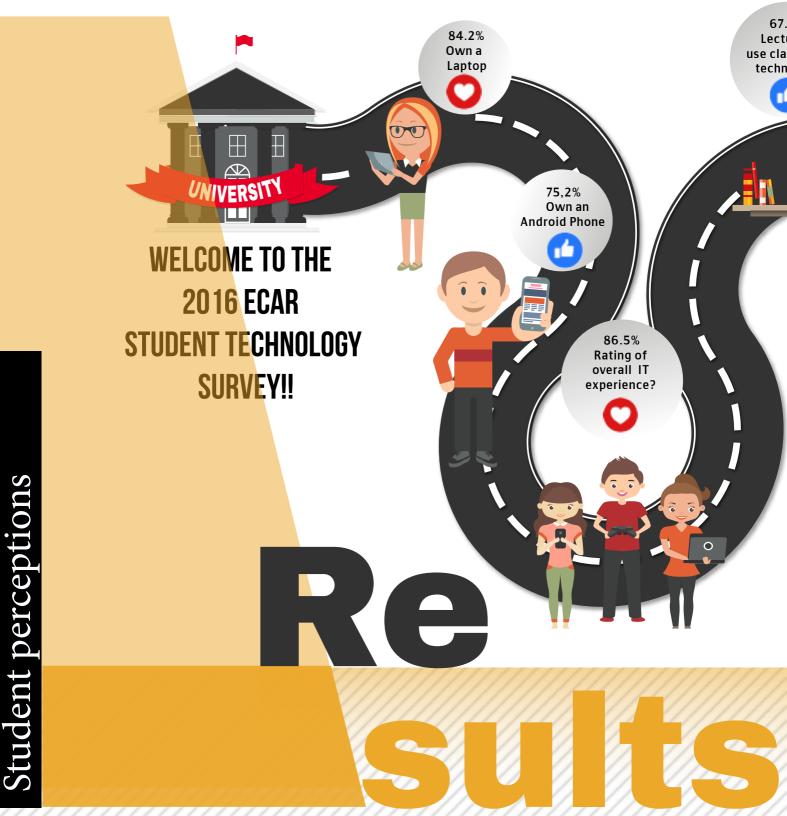


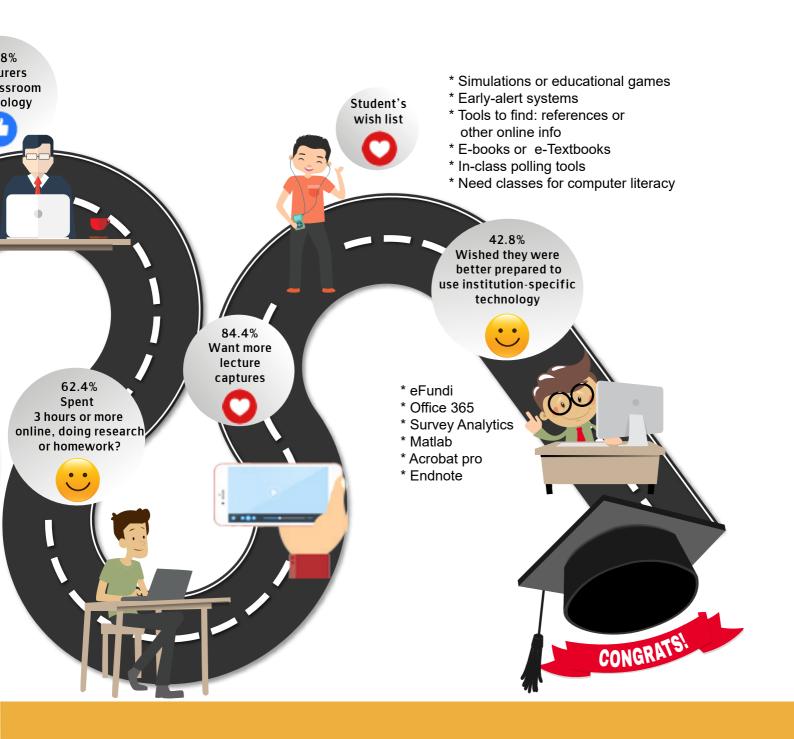
#### Click to get a glimpse of the action?

- Programme
- Video







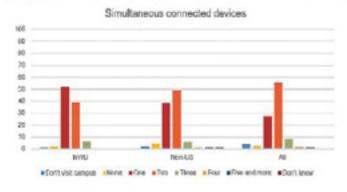


## ECAR 2016: More results

#### SIMULTANEOUS CONNECTION OF DEVICES

How many devices do you typically connect or try to connect) to the network at the same time when you are on campus?

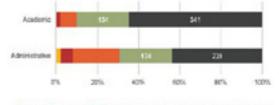
	Don't visit campus	None	One	Two	Three	Four	Five and more	Don't
MVU (§	3	10	297	222	34	2	1	1
MVU (%)	0.6	1.8	62.1	38.9	60	0.4	0.2	0.2
Non-US (%)	1.6	4.3	38.2	49.0	53	0.6	0.5	0.5
AI (%)	4.0	2.5	27.2	55.5	83	1.2	0.9	0.4



#### IMPORTANCE OF HANDHELD DEVICES

How important is it that you are able to do the following activities from a handheld mobile device?

Activity	Not at all	Not important	Moderately Important	Very Important	Extremely Important
Administrative	13	31	119	134	229
Academic	2	9	43	134	341



Not at all ■Not important ■Moderately important «Very important ■Editernally important

APPROXIMATELY 91% OF THE PARTICIPANTS FROM NWU INDICATED THAT THEY CONNECT EITHER ONE OR TWO DEVICES SIMULTANEOUSLY.

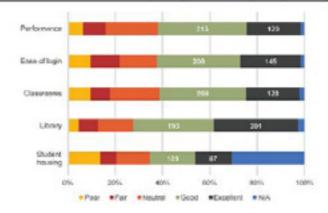
This hub provides findings from the 2016 student study, part of the EDUCAUSE Technology Research in the Academic Community research series. ECAR collaborated with 183 institutions to collect responses from 71,641 undergraduate students across 25 countries about their technology experiences. This study explores technology ownership, use patterns, and expectations as they relate to the student experience. Colleges and universities can use the results of this study to better engage students in the learning process, as well as improve IT services, increase technology-enabled productivity, prioritize strategic contributions of IT to higher education, plan for technology shifts that impact students, and become more technologically competitive among peer institutions. read more...

BACK GROUND

#### WIRELESS NETWORKS

Thinking about the past year, please rate your experience with wireless networks on campus:

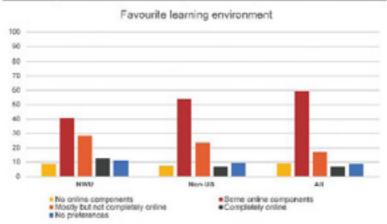
	Poor	Fair	Neutral	Good	Excellent	N/A
Reliability of access in student housing	78 13.3%	40 7.1%	80 14.2%	109 19.3%	87 16.4%	174 30.8%
Reliability of access in library	27 4.8%	45 0.0%	84 14.9%	193 34.2%	201 36.6%	14 2.5%
Reliability of access in classrooms	55 9.7%	45 8.0%	119 21.0%	208 36.7%	128 22.6%	11
Ease of login	9.5%	70 12.3%	90 15.9%	200 35.0%	145 25.0%	1.4%
Network performance	6.6%	9.3%	127 22.4%	213 37.5%	129 22.7%	1.6%



#### LEARNING ENVIRONMENTS

In what type of learning environment do you tend to learn most?

	No online components	Some online components	Mostly but not completely online	Completely online	No preferences
MWU (f)	49	229	159	69	61
NWU (%)	8.6	40.4	28.0	12.2	10.8
Non-US (%)	7.3	53.7	23.3	6.4	9.3
Al (%)	8.8	59.3	16.8	6.5	8.7



TELL US ONE THING THAT YOUR INSTRUCTOR CAN DO WITH TECHNOLOGY TO ENHANCE YOUR ACADEMIC SUCCESS?

RESOURCES 224 INSTANCES TECHNOLOGY 17 INSTANCES TEACHING STYLE
19 INSTANCES

TRAINING 8 INSTANCES

# **RANSOMEWARE**: isn't going away any time soon!



# A CLOSER LOOK: RANSOMWARE STATISTICS 2016 — 2017. ATTACKERS ARE TRYING HARDER TO INFECT USERS' COMPUTERS

#### **RANSOMWARE EMAILS SPIKED 6.000%**

A study by IBM Security found that the number of ransomware-infected emails increased 6,000 percent compared to 2015. Attackers are trying harder to infect users' computers right through their inboxes. These emails generally have attachments disguised as invoices, statements, spreadsheets, faxes or personal notes.

#### **40% OF ALL SPAM EMAIL HAD RANSOMWARE**

The same IBM study found that almost 40 percent of all spam messages in 2016 contained ransomware. That's nearly one out of every two spam emails infected with a ransomware virus that, if executed, could encrypt all data on the computer in a matter of seconds – as well as data on any shared drives or other computers on the network.

#### INFECTIONS HIT 56.000 IN A SINGLE MONTH

In 2015, the rate of ransomware infections fluctuated between 23,000 and 35,000 per month. These num-

bers ballooned to 56,000 in March 2016.

Cybersecurity leader Symantec attributed the spike to the arrival of Locky – a specific form of ransomware virus that is now the most common type of infection. Locky is typically hidden in Microsoft Word files and executed through the use of macros.

#### ATTACKS EXPECTED TO DOUBLE IN 2017

The risk assessment experts at Beazley looked at nearly 2,000 separate data breeches across a wide range of companies. Their study concluded that, despite the staggering increase in attacks from 2015 to 2016, infections are projected to continue rising.

## 2017 RANSOMWARE MAC RISK: ARE YOU PROTECTED AGAINST THE NEWEST THREATS?

ust when Mac users thought they were safe. New reports show that ransomware mac threats are on the rise. What was once considered a Windows-only problem is now causing headaches for macOS users too.

It was only a matter of time. Ransomware is exploding. In 2016, there were as many as 56,000 total infections in a single month. IBM found that 40% of all spam email now contains ransomware. Roughly 20 percent of businesses who paid the ransom shelled out more than \$40,000. Attackers are getting more aggressive and targeting a wider range of users to maximize their earning potential.

#### **Need more help?**

**MAFIKENG CAMPUS** 

Building A1, Room 131 (+27 18) 389 2370/1

POTCHEFSTROOM CAMPUS

Building F20, Room 106 (+27 18) 299 2700

VAAL TRIANGLE CAMPUS

Building 8, Room 120 (+27 16) 910 3321/4

#### A CLOSER LOOK AT OSX/FILECODER.E

The ransomware is called OSX/Filecoder.E, as coined by the malware researchers who discovered it. It's hidden in a program known as Patcher, which purports to be a "crack" that enables users to pirate software without a license key. In this case, it claims to be a crack for Mac versions of Adobe Premiere Pro, Microsoft Office and possibly other product suites. Researchers say the ransomware is not very well designed. PC World writes, "It is written in Apple's Swift programming language by what appears to be an inexperienced developer, judging

from the many mistakes made in its implementation." *read more* ...

#### PREVENTION AND RESPONSE

- Backup your data
- Verify email addresses telephonically
- If unsure, delete!!

Source: http://invenioit.com/security/ransomware-statistics-2016/

# WIFI@NWU: NWUWIFI vs. NWU-GUEST



# "WHY CAN'T I USE NWU-GUEST INSTEAD OF NWUWIFI?"

Have you ever been confronted with the question: "What is the difference between nwu-guest and NWUWIFI?" or "Why can't I use nwu-guest instead of NWUWIFI?"

If these nagging questions have kept you up at night... the following explanation might just clear the lingering mystery...

#### WHEN ON CAMPUS THE WI-FI OPTIONS AVAILABLE TO YOU ARE:

- 1. NWUWIFI (Staff and Students)
- 2. nwu-guest (only for guests without NWU cre dentials, staying for less than 2 weeks)
- 3. NWU-Saficom (only available in Potchefstroom and Vaal Triangle, not to be used on campus as the other networks are available and supported)
- 4. Eduroam (internet access for international re search and education community, to be used with the security settings of the home university, not the visiting university)

#### WHAT ARE THE ADVANTAGES OF CONNECTING TO NWUWWIFI?

NWUWIFI will provide access to all the network services needed to complete your daily tasks. This will include GroupWise, network printing and drives. Basically this is the standard NWU network, being offered over Wi-Fi. With nwu-guest, network services (GroupwWise and network printing) will not be available. NWU guest was not designed to support large numbers of users. nwu-guest.

By exceeding that number, it is not possible to supply our guest with connectivity and the more people connected, the more nwu-guest will become unstable. It is also not as secure as NWUWIFI, which in short means a bigger risk of malware infection.

#### IF I BATTLE TO CONNECT TO NWUWIFI, WHAT CAN I DO?

If the above sounds like a typical situation.... Check a few pointers:

- 1. Is your Network password still active remember the password expires every 90 days.
- 2. Make sure your anti-virus (MSE or MS Defender) is up to date.
- 3. Driver updates visit your local IT Service Desk and have them update your system to improve functionality and stability.
- 4. can for malware We have found various mal ware (e.g DNS-unlocker) causes issues with network communication, which hampers all net work traffic and may result in slower internet speeds or worst case total lack thereof.
- 5. Check the signal strength the more bars visible, the better. If you are on the outer reaches of the signal area it will cause a lot of frustration for both you and the people connected to that specific area.
- 6. Is the area crowded Wi-Fi is a shared medium, meaning allot of users around you might strain the connections available and lead to instability, using an area less crowded, but with the same signal strength will help with stability and internet speed.

#### Where may I find help?

- Staff: Contact your IT Service Desk at Mafikeng, Potchefstroom, Vaal Triangle.
- Students: Contact your IT Service Desk at Mafikeng, Potchefstroom, Vaal Triangle.
- Guests: Contact your Institutions' IT Service Desk *read more*

#### Advantages related to each service:

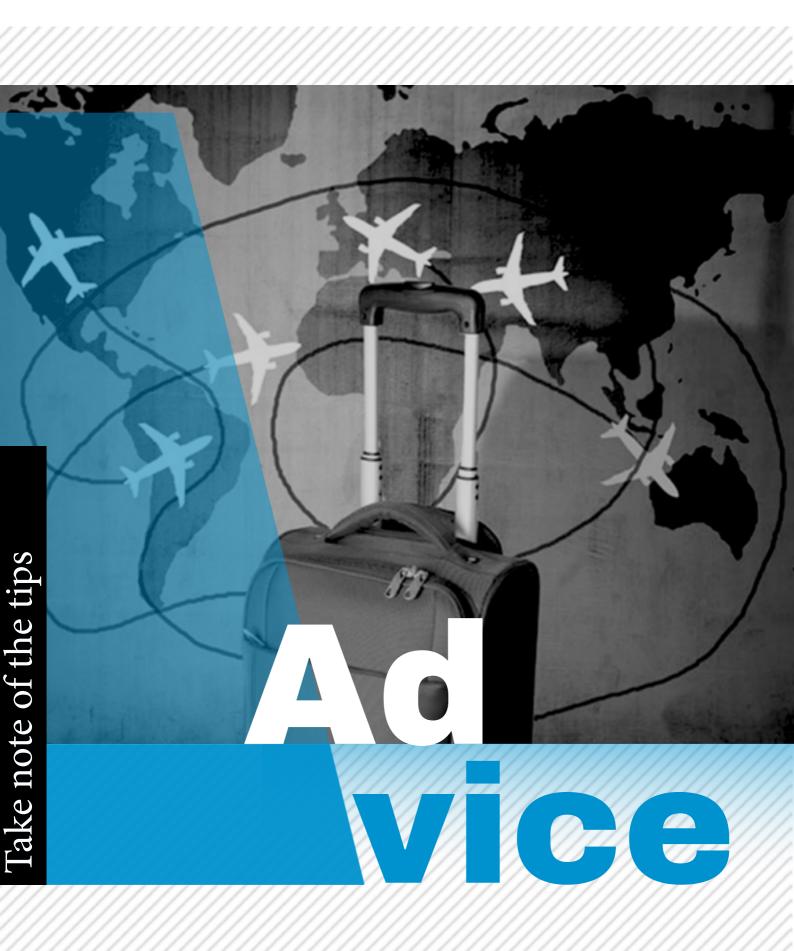
Service	Who may use this service?	What is required?	How do I login?	What can be accessed?	What is excluded?
NWUWIFI	Staff Students	✓ Bradford agent (Not necessary for Linux) ✓ Updated anti- virus (Not necessory for Mobile devices, Moc's or Linux)	University ID  Network Password  Correctly set-up NWUWIFI profile	✓ GroupWise ✓ Network print ✓ Internet ✓ Network drives	None
Nwu-guest	Guests	A working Wi-Fi card.	The hosting department will supply the credentials.	✓ Internet ✓ GroupWise	Network print Network drives

## Click to view complete table...

#### **VIEW WI-FI COVERAGE AREAS**

Coverage areas per campus: Mafikeng, Potchefstroom, Vaal Triangle.

## **TRAVELLING SOON:** make the most of it!



# THE FOLLOWING STEPS WILL HELP YOU SPEND LESS TIME WORRYING...

In order to make your traveling experience a positive one, take note of the following tips. Please test the different options before traveling.

#### **PASSWORDS**

Your password expires every 90 days. This is the password you use in conjunction with your NWU# to gain access to the majority of IT services. IT suggests you change your password before traveling to ensure that your password doesn't expire while traveling. However, should your password expire while traveling, go to efundi.nwu.ac.za and click on the Reset Passwords link. Students and Guests can obtain a new password if they have forgotten their old one. Staff and Students can change their current password (note that the old password must be provided). For more information on passwords visit www.nwu.ac.za/it/sc/password-management

#### **VPN**

"A virtual private network (VPN) extends a private network across a public network, such as the Internet. It enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network. A VPN is created by establishing a virtual point-to-point connection through the use of dedicated connections, virtual tunnelling protocols, or traffic encryption. Source: https://en.wikipedia.org/wiki/Virtual\_private\_network. Our VPN service enables the user to access the NWU network when off-campus exactly as they would when on campus with access to all services, including those services behind the NWU firewall (e.g. KFS). Staff and Postgraduate Students can make use of this service. For more information, visit www.nwu. ac.za/it/sc/vpn. Please arrange the necessary permissions and software installation before traveling.

#### WIFI

To protect your privacy, do not conduct personal transactions on Wi-Fi hotspots or public computers that request sensitive information such as bank account information, home address or your ID number. Wait to conduct these transactions on secure connections such as Eduroam.

#### **BACKUPS**

Prepare for the worst, and hope for the best. Assume that your laptop/device will get lost or be stolen. With this picture in mind ensure that you have made backups of your data. The best scenario would be to travel with a "clean" laptop/device that doesn't contain any personal information.

#### **Need more help?**

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Building 8, Room 120 (+27 16) 910 3321/4

#### **EDUROAM**

"eduroam (education roaming) is the secure, world-wide roaming access service developed for the international research and education community. When visiting other universities staff can obtain internet connectivity at any participating institutions by signing on with their own credentials. Obtain free internet connectivity. Source: <a href="https://www.nwu.ac.za/it/sc/eduroam">www.eduroam.org</a>. Watch the video (http://www.nwu.ac.za/it/sc/eduroam) that explains how eduroam works.

#### **GROUPWISE MOBILE**

On your mobile device: This service enables staff to access GroupWise through a mobile device. This is really handy when travelling.

#### For more information visit:

http://www.nwu.ac.za/it/sc/mobile-email-calendaring. **Through webmail:** Rather access your GroupWise through the GroupWise webmail functionality http://www.nwu.ac.za see bottom right of webpage

**Via the client:** The GroupWise client can also be used. The Online Address should be set as

ngwnameserver.nwu.ac.za or 143.160.36.94 and the Port as 1677.

**Caching:** Caching mode allows you to work off-line. Caching mode can be set by setting a Caching mailbox path. For more information visit

http://www.nwu.ac.za/it/sc/email-calendaring

41

# PERSONALIA



Me Claire Buckle: Matric Maths and ITIL exam
 Mr Martin Dreyer: Masters degree (Cum Laude)



#### **CONGRATULATIONS**

- If you had celebrated a birth-day: we hope you had a wonderful day.
  Mr Stephan Badenhorst: "Congratulations with the birth of your daughter Imkeli"

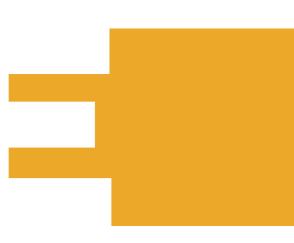


#### **CONDOLANCES**

• Mr Alex Venter & Mr John Molefe:"
Please accept our deepest condolences for your family's loss.









**RESIGNATION: Sonic Moholo** 

**APPOINTED:** Ashwin Soois as Service Desk Consultant



Should you wish to provide us with feedback, feel free to drop us an email at talk2IT@nwu.ac.za