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[www.nemisa.co.za](http://www.nemisa.co.za)  
[www.inesi.org.za](http://www.inesi.org.za)



NEMISA intends to benefit the total SA population by harnessing ICT for equitable prosperity and global competitiveness. It leads in the creation of key e-skills development strategies, solutions and practices within SA.

It is a national catalyst, collaborator, facilitator and responsive change agent in the development of SA – within the context of national goals and within a worldwide evolving information and knowledge-based environment.

## e-skills catalytic thought leadership

## Preparing educators and learners for the Fourth Industrial Revolution

### ICT for Rural Development e-Skills CoLab presents at Eastern Cape e-Learning Summit Connected Health e-Skills CoLab launches Teaching with Technology Community of Practice in Limpopo

Educators and learners need to be prepared for a technologically-advanced future. Increasing connectivity of mobile and other devices is rapidly moving the world towards the Internet of Things and the Fourth Industrial Revolution (4IR). This was the first message from Ms Lorna van der Merwe, Acting Coordinator of the ICT for Rural Development e-Skills CoLab based at Walter Sisulu University. Her presentation was titled 'Empowering teachers and learners for the future' and it was part of the Eastern Cape e-Learning Summit which took place on 18 May 2017 in East London.

The gig economy shows how the world of work has already changed. This is a labour market defined by a majority of short-term contracts or freelance work versus permanent jobs. "A study by Intuit predicted that by 2020, 40 percent of American workers would be independent contractors." (<http://whatistechtarget.com/definition/gig-economy>)

#### Future jobs will need digital fluency and STEM skills

With the Digital Economy, work can increasingly be done anywhere. Whether engaging for work, social or other reasons, advancing in this new world means being able to connect and to have the e-skills to function.

Ms van der Merwe noted that future jobs will require digital fluency, STEM skills (science, technology, engineering and maths), and traditional subject expertise. In the WEF recommendations to prepare African youth, investing in digital fluency and ICT literacy skills is highlighted.

#### National policies emphasise need for e-skills and collaboration

Government policies, strategies and plans have emphasised the need for e-skills (digital skills). These include the National Development Plan, SA Connect – the broadband policy, the National Integrated ICT Policy White Paper, and Operation Phakisa. Another emphasis is the need for collaboration between government, business, education, organised labour, civil society, and global development partners.

Aligned with this is NEMISA's mandate – to assist with e-skilling the nation through a national integrated e-skills development framework for sustainable socio-economic development in South Africa. NEMISA's aims include positioning South Africa for global competitiveness, assisting with increased equitable prosperity, growing the human resource e-skills base, and embedding technology in people's lives.

**?** **What is an e-skill (digital skills)?** An e-skill is more than knowing the basics of how to use a computer (computer literacy). While it's essential to be computer literate, the important question is: what can you do with that? **An e-skill means being able to use technology effectively to add benefit to your life – to actively take part in the world and move ahead.**

**What is the Digital Economy?** This refers to an economy based on digital technologies. It is also increasingly seen as conducting business through markets based on the internet. The digital economy is not limited to traditional business models, time or location.

#### Nature of work and jobs changing

With new developments in technology, the nature of work and jobs will change even further. There will be new types of jobs, jobs that won't survive due to digitisation and automation, and reduced jobs in certain areas. Read the full WEF report at <https://www.weforum.org/reports/the-future-of-jobs-and-skills-in-africa-preparing-the-region-for-the-fourth-industrial-revolution>.

Delegates at the Eastern Cape e-Learning Summit.



Article continued: **Preparing educators and learners for the Fourth Industrial Revolution**

## Gearing for change – the Eastern Cape e-Learning Summit

The Eastern Cape e-Learning Summit focused on coordinating e-learning stakeholders under the leadership of the Provincial Education Department. The drive was to digitalise school classrooms, as well as promote internet access, e-learning tools for teachers and learners, and technologies for school management.

**About the province:** The Eastern Cape consists mostly of rural areas. Challenges include access to technology, as well as the development of e-skills, e-services and a host of other elements that create a broadband environment that allows for participation in the digital society and digital economy.

**Summit theme:** This year's theme was 'e-Learning an imperative for sustainable quality education'. The initiative is supported by the Department of Basic Education (DBE), the Department of Telecommunications and Postal Services (DTPS), and SABC Education.

**Delegate profile:** The delegates included government departments, private entities, academic institutions and non-profit organisations. Participants included Stella Ndabeni-Abrahams, DTPS Deputy Minister, and a NEMISA team (including CEO Mymoena Ismail, and Board Chairman Walter Claassen).

**Programme and speakers:** Topics covered areas such as e-learning content costs for public schools, digital classrooms, data costs for schools, and managing teaching content licenses and rights. They also included the role of government, business and other stakeholders. Speakers and presenters included:

- Stella Ndabeni-Abrahams, DTPS Deputy Minister
- Seliki Tlhabane, Chief Director: MST Curriculum and Enhancement of Programs, DBE
- Lumko Mtimde, Chief Executive Officer, Universal Service and Access Agency of South Africa (USAASA)
- Professor Werner Olivier, Director: Govan Mbeki Mathematic Development Centre, Nelson Mandela Metropolitan University

**NEMISA and CoLab participation:** The ICT for Rural Development e-Skills CoLab had an exhibition stand and gave a presentation as part of the panel discussion: 'Empowering teachers and pupils in ICT skills'. This included positioning the CoLab thematic area – how ICT can be used to positively impact on developing peri-urban, rural and remote areas to accelerate inclusion in the Information and Knowledge Economy and Digital Society. ☑



*Mr S Tlhabane, Chief Director: MST Curriculum and Enhancement of Programmes, National Department of Basic Education*



*Ms P Vinjevoid, Deputy Director General, Education Planning, Evaluation and Monitoring, Eastern Cape Provincial Department of Basic Education*



*The ICT for Rural Development e-Skills CoLab had an exhibition stand at the summit.*

## Preparing for local impact – visit to Cala school with DTPS Deputy Minister

The day after the summit on 19 May 2017, the DTPS Deputy Minister, Stella Ndabeni-Abrahams, launched a cyber lab at Sifonondile Senior Secondary School in Cala, Eastern Cape. The Sifonondile Lab is sponsored by Vodacom with a smart board, 26 tablets and downloaded programmes. The event included an exhibition in which NEMISA and the ICT for Rural Development e-Skills CoLab participated. This was part of the district's 'Back to School' programme. e-Skills (digital skills) training for teachers from this municipal district is already underway.



Article continued: **Preparing educators and learners for the Fourth Industrial Revolution**

## Connected Health e-Skills CoLab launches Teaching with Technology Community of Practice

The Connected Health e-Skills CoLab, based at the University of Limpopo, is focusing on accelerating the effective use of ICTs among schools in the province. Dr Farivar Rahimi, Director of the e-Skills CoLab, says that many rural schools in the province work in isolation and this results in a very slow adoption pace despite interest among individual practitioners.

On 22 April 2017, the Connected Health e-Skills CoLab organised the launch of a Teaching with Technology Community of Practice in Polokwane, Limpopo. The aim is to foster interaction between educators who currently use technology in their classrooms with educators who are starting to figure out how to enhance teaching and learning with technology. Dr Rahimi says that such collaborative forums in other provinces have proved effective and successful.

**Audience:** Educators from local schools in Limpopo – there were 75 participants.

**Programme content:** The day's events included:

- Karen Walstra, formerly of Google South Africa,

*Delegates at the Teaching with Technology Community of Practice in Polokwane, Limpopo*



presented on Google's tools for educators to use in their teaching and learning

- Hlengiwe Mfeka from SchoolNet SA explained SchoolNet's involvement in helping educators with technology in education. (SchoolNet SA has a wide range of SACE-accredited courses for educators to hone their skills in an education technology environment.)
- Lohann Schoeman from TeachTech, Polokwane, introduced the audience to YouTube as an educational tool
- Annabel Roberts, the Principal of PEPPS High School in Polokwane and long-time user of classroom technology, presented on experiences and challenges in an education technology environment.
- There were also 2 workshops: one on Google education tools and the other on the use of YouTube as an educational tool.

**Outcome:** An online Facebook forum has been established, acting as a safe space where educators can explore technology-mediated learning environments.

**Delegate responses:** Informal responses showed that the event was considered informative and productive. It was considered the first step towards establishing a growing Community of Practice focusing on education technology in schools in the province.

**Future:** The aim is to have similar events on a quarterly basis. These may be hands-on workshops. Furthermore, the Limpopo CoLab intends to develop a relationship with SchoolNet SA to facilitate offering their courses to participants in this Community of Practice other and educators across Limpopo. ☑

## The provincial e-skills CoLabs

The provincial e-skills CoLabs are based at universities. Each leads in a specific area in e-skills:

- **e-Inclusion and Social Innovation CoLab**, based at the University of the Western Cape
- **e-Enablement for Effective Service Delivery CoLab**, based at Durban University of Technology
- **ICT for Rural Development CoLab**, based at Walter Sisulu University
- **Creative New Media Industries CoLab**, based at the National Electronic Media Institute of South Africa (NEMISA) central office, Gauteng
- **Connected Health CoLab**, based at the University of Limpopo
- **Knowledge-based Economy and e-Social Astuteness (e-Literacy) CoLab**, based at the Vaal University of Technology
- **e-Agro-Tourism CoLab**, based at the North-West University

Article continued: Preparing educators and learners for the Fourth Industrial Revolution

## e-Skills research presented at colloquium in electoral democracy in Africa

From 24-25 April 2017, the 'WIPHOLD-Brigalia Bam Chair in Electoral Democracy in Africa and the National Institute for the Humanities and Social Sciences (NIHSS) 4th annual Colloquium in Electoral Democracy in Africa' was held. The theme was 'Local Government Democracy Dynamics in Africa: What Works, What Doesn't, and Why?'. It was held at UNISA, Gauteng.

Dr Surendra Thakur, Director: e-Enablement for Effective Service Delivery e-Skills CoLab based at Durban University of Technology, presented a research paper at this colloquium. The paper is titled 'Democracy 2.0: Reviving Township Democracy through Technology'. The research looks at pragmatic ways that e-democracy can be implemented in South Africa. (e-Voting and e-participation are components of e-democracy.) The paper is currently being reviewed for publication. Details to follow in a future edition.

The WIPHOLD-Brigalia Bam Chair was established by UNISA to address election-related gaps and challenges in collaboration with election managing bodies.



WIPHOLD



NATIONAL INSTITUTE  
FOR THE HUMANITIES  
AND SOCIAL SCIENCES

## e-Skills a key priority in the DTPS budget

On 24 May 2017, Minister Siyabonga Cwele gave the Department of Telecommunications and Postal Services Budget Speech. He noted that the key priorities are: expanding ICT access through the broadband roll out, **increasing skills for internet use**, reducing costs for data and devices, the corporatisation of Postbank, and implementing the National Integrated ICT White Paper. To read the full speech, go to: <http://www.gov.za/speeches/minister-siyabonga-cwele-telecommunications-and-postal-services-budget-201718-24-may-2017>.

NEMISA is aligned with these priorities, especially in light of the Fourth Industrial Revolution (4IR). The World Economic Forum's report on 'Preparing the region for the Fourth Industrial Revolution' notes the following:

"While it is predicted that 41% of all work activities in South Africa are susceptible to automation, as are 44% in Ethiopia, 46% in Nigeria and 52% in Kenya; this is likely moderated by comparatively low labour costs and offset by new job creation. Despite this longer window of opportunity, the region's capacity to adapt to further job disruption is a concern, although there are important nuances at the country level."

(<https://www.weforum.org/reports/the-future-of-jobs-and-skills-in-africa-preparing-the-region-for-the-fourth-industrial-revolution>)



telecommunications  
& postal services

Department:  
Telecommunications and Postal Services  
REPUBLIC OF SOUTH AFRICA

## e-skills development for e-astuteness

## Promoting data science and analytics as a core e-skill capability

### KZN e-Enablement for Effective Service Delivery e-Skills CoLab part of e-skills intervention to introduce data science as a capability

With the explosion of data generated by technology, connectivity and the internet, data scientists are much in demand. Glassdoor, a US recruitment site, rates data scientist as the number one job in America.



#### Data science becoming a core capability

Vidhya Karthikeyan, Principal Research Scientist at BT, notes that "Data science is increasingly becoming a core capability. After all, who or what is going to turn the increasing mass of data into something usable... But there's a real concern because of the shortage of data scientists and the low skill adoption rate compared to the growth in technology." (<http://www.globalservices.bt.com/uk/en/blog/the-importance-of-data-scientists>) BT is a UK-based global communications services company.

Globally, including Africa, these skills are needed. When it comes to Big Data, it is data scientists that make sense of the data and what can be done with it. It's about making better decisions, as well as seeing trends and patterns in data to inform decisions and further research.

With this in mind, the e-Enablement for Effective Service Delivery e-Skills CoLab was part of a multi-stakeholder collaboration to introduce data science and data analysis as an e-skill.

#### Data Stream 2017 – an introduction to data science

The short course 'Data Stream 2017 – an introduction to data science' ran from 15-19 May 2017. It was held at the University of KwaZulu-Natal (UKZN) and hosted by the UKZN Teaching & Learning Office (UTLO). Dr Surendra Thakur was a facilitator and content developer. He represented the

e-Enablement for Effective Service Delivery e-Skills CoLab and Durban University of Technology (DUT). The CoLab is based at DUT.

**Partners:** This was a partnership between UKZN, Indiana University (Indiana, US), DUT and the e-Enablement for Effective Service Delivery e-Skills CoLab.

**Audience:** This is a short course on data science intended for a broad academic and academic support audience, as well as others interested in using data for decision making and development. There were approximately 30 participants. The criteria included the minimum of a bachelor's degree and knowledge of elementary statistics.

**Course content:** This was an introduction to modern methods in Data Analytics, Data Science and Artificial Intelligence. It used a series of case studies to show the possibilities in studying real-world problems and optimising institutional processes. Participants each analysed a data problem from their field of operation and applied the methods learned to develop an outcome. Course content included an introduction to analytical tools, methods and solutions (such as artificial intelligence, computational algorithms, data mining, and trends and causality).

**Outcome:** Participants received an attendance certificate. Informal feedback showed that delegates were keen to learn more about data science. ☑



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## e-skills development for e-astuteness

## e-Skills for active citizenry

### Connected Health e-Skills CoLab collaborates with Intel She Will Connect Journalism Training Workshop

Active citizenship is characterised by people becoming involved in their communities and democracy at all levels, from local to provincial to national. It is seen as one of the indicators of a strong democracy. A number of national policies, including the National Development Plan, focus on developing active citizenry.

Technology, especially the internet, has become an essential factor for creating active citizens. The broadband rollout and SA Connect – the broadband policy also view active citizenry as part of user demand and content creation in the broadband ecosystem.

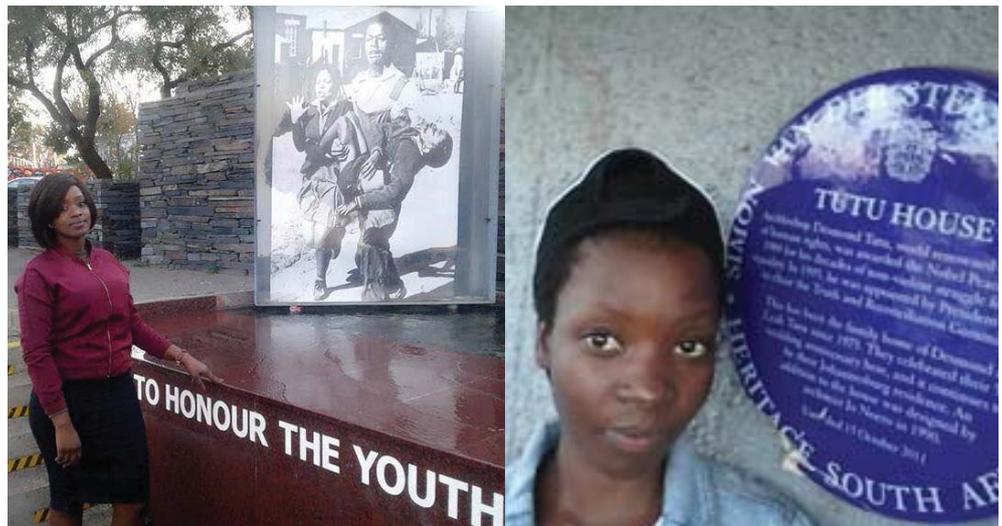
Citizen journalism (or participatory journalism) plays a role in empowering and engaging communities so that their voices are heard. Research results show that “both professional and citizen journalism have an effect on the political discourse”. (*Citizen Journalism and Democracy: how user-generated news use relates to political knowledge and participation*, K Kaufhold, S Valenzuela and H Gil de Zuniga, <https://tinyurl.com/ydhsvdfta>)

As part of developing active citizen e-skills, the Connected Health e-Skills CoLab engaged with Intel’s Journalism Training Workshop.

### Developing local content – Intel She Will Connect Journalism Training Workshop

The Connected Health e-Skills CoLab has been collaborating with Intel on the Intel ‘She Will Connect’ programme. (This digital literacy course focuses on women and entrepreneurship.) As a follow up to the programme, a one-week citizen journalism workshop was created from a partnership between Intel and the Thomson Reuters Foundation. It catered for 18 Intel ‘She Will Connect’ graduates from Nigeria, Kenya and South Africa.

The Limpopo e-Skills CoLab was invited to choose 3 graduates. “It’s an honour because those places are equivalent to a sixth of all participants,” says Dr Farivar Rahimi, Director of the e-Skills CoLab, based at the University of Limpopo.



Mathabo Mgiba (L) and Yingisani Ntiyiso Maluleke (R), two of the delegates at the Intel She Will Connect Journalism Training Workshop.

The CoLab graduates were asked to complete an online questionnaire. (The target group for the intervention was unemployed youth in rural Limpopo.) Short-listed candidates were interviewed. The chosen participants were Annah Mpinnah Machethe, Yingisani Ntiyiso Maluleke, and Mathabo Hope Mgiba.

**About the citizen journalism workshop:** The course ran from 22-26 May 2017. Accommodation and transport was included. Part of the criteria includes writing at least 5 articles in the next year on the ‘She Will Connect’ programme impact.

**Delegate response:** Mathabo Mgiba, one of the Connected Health e-Skills CoLab participants, notes that she “learned a lot in few days and gained much experience, having to interact with ladies from different places across Africa”. During the programme, the participants created a Facebook group (She Will Connect Africa), Women of Africa Facebook page and a web page. “We were able to write stories and post and follow current trends. We also had our own #ShewillConnect and #Shespeaks. Please check it out

on Twitter and Facebook.” She notes that it was “a great experience and has opened up opportunities for me and the other ladies as we will start freelancing for Reuters Foundation”. ☑



## e-skills development for e-astuteness

## Digital marketing e-skills provide future growth opportunities

### Digital marketing seminars for WSU marketing students in the Eastern Cape

"In 2017, social media will be an indispensable tool for South African marketers and politicians, artists and activists, reporters and media personalities alike." This is according to the 2017 edition of the SA Social Media Landscape, by World Wide Worx and Ornico (<http://www.worldwideworx.com/wp-content/uploads/2016/09/Social-Media-2017-Executive-Summary.pdf>). The study included 116 major South African brands. In 2016:

- 91% of these brands were using Facebook
- 88% were active on Twitter
- 66% were on YouTube
- 62% of brands made use of Instagram
- 63% were using LinkedIn

Digital marketing is part of the e-skills that are needed for the internet, whether you are a company or an individual. "Companies are continuing to increase marketing budget

spend on social media and marketers are urged to become experts at creating visually engaging content that compels customers to buy," says Ms Lorna van der Merwe, Acting Coordinator: ICT for Rural Development e-Skills CoLab. "There were around 26 million internet users in South Africa in 2016 and nearly 14 million South Africans using Facebook. The potential market for tech smart entrepreneurs and marketing strategists is unlimited."

With the national broadband rollout and the plans outlined in the National Integrated ICT Policy White Paper (both supporting the vision of the National Development Plan), online engagement will continue to grow. This engagement is dependent on the broadband ecosystem. Infrastructure is part of the supply side, whereas e-skills and the capability to make use of the technology for individual and community benefit is part of the demand side.

*The ICT for Rural Development e-Skills CoLab ran digital marketing seminars for marketing students at Walter Sisulu University.*



### Digital marketing seminars for WSU marketing students

On 11 May 2017, the ICT for Rural Development e-Skills CoLab ran digital marketing seminars for marketing students at Walter Sisulu University (WSU) Buffalo City Campus (BCC). The CoLab is based at WSU.

**Partners:** The Digital Marketing Seminar was facilitated by the e-Skills CoLab in collaboration with the WSU (Academic) BCC Marketing Department.

**Audience:** A total of 170 WSU marketing students went through the e-skills engagement. They were all registered for Marketing 3 in the following National Diplomas: Marketing, Small Business Management, and Sport Management.

**Seminar content:** The first module covered an introduction to digital marketing. This included:

- How digital marketing is different to traditional marketing
- Types of assets (websites, social media etc)
- Available digital marketing jobs

The second module focused on social media, including strategies and measurements. Students were shown how



## Article continued: Digital marketing e-skills provide future growth opportunities

the digital marketing boom is creating opportunities for the smart use of data analytics (eg monitoring campaign effects, targeting specific groups and keeping track of competitors. Module 3 covered free digital marketing tools and cyber security).

**Delegate response:** The responses were overwhelmingly positive, with requests for more of these seminars. ☑

### e-Skills for the internet – digital footprint, social media and cyber safety

The e-Enablement for Effective Service Delivery e-Skills CoLab continues to present its social media and digital footprint seminars. (The CoLab is based at Durban University of Technology.) The focus has been on youth:

- On 26 April 2017, the CoLab presented 'Managing your digital foot print' to 180 learners at Chatsworth Youth Centre.
- On 4 May 2017, the CoLab conducted a seminar on 'email netiquette, social media and safe internet' with 30 Btech students at the Durban University of Technology.



e-Skills for the internet for learners at Chatsworth Youth Centre and Btech students at DUT.

### Upcoming events

**The Vision 2030 Summit is being held from 21-22 June 2017 in Johannesburg** (<http://vision2030.co.za/summit/>). It aims to:

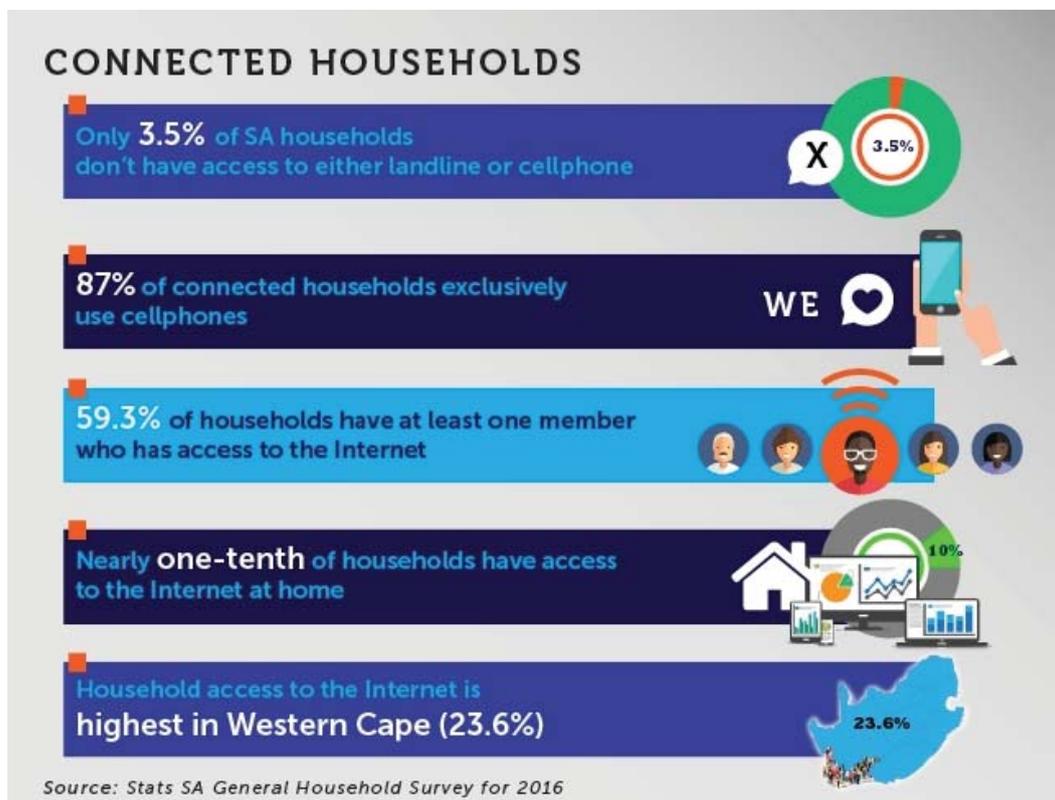
- Raise awareness and position the National Development Plan (NDP) as a South African plan and not merely a government plan
- Unpack the NDP into an easy-to-understand, practical document, outlining how government departments, provinces, municipalities, state-owned enterprises and agencies are aligning themselves to
- Promote and encourage public-private partnership investment opportunities in provincial and local government
- Discover innovations, solutions, plans and initiatives that can help fast-track the realisation of goals set by the business and investor communities
- Reinforce private and public sector support for and commitment to the NDP
- Take stock of where we are, where we should be, and the way forward for the nation to achieve its NDP objectives

There will be discussions, networking, collaboration opportunities, among other things. NEMISA is a partner in the Vision 2030 Summit. NEMISA's CEO, Mymoena Ismail, will be speaking on 'The 4th Industrial Revolution and its implications for South Africa'. NEMISA has also sponsored an ICT Award that will be presented at the Gala Dinner.



## Trends in e-skills and the e-skills environment

- **The Internet Society and Commission of the African Union have launched Internet Infrastructure Security Guidelines for Africa.** These are the first of their kind in Africa – developed by a multi-stakeholder group of African and global internet infrastructure security experts. A copy of the Africa Internet Infrastructure Security Guidelines can be found at: [www.InternetSociety.org/doc/aisg](http://www.InternetSociety.org/doc/aisg).
- **According to the fourth edition of the Open Data Barometer (by the World Wide Web Foundation), South Africa ranked 46th with a score of 34 out of 100.** The report covers 115 countries. “Everyone should be able to access and use open data on an open web to allow them to participate fully in civic life. Without good data, it is impossible to hold governments to account for the decisions that they make, the policies they pass, and the money they budget and spend.” (<http://opendatabarometer.org/4thedition/report/>)
- **According to the Stats SA General Household Survey for 2016, 3.5% of households did not have access to either landlines or cellular phones.** Households without access to either were most common in the Northern Cape (9.7%) and the Eastern Cape (6.9%). Only 0.1% of South African households used only landlines. In comparison, 87% of South African households exclusively use cellular phones. The exclusive use of cellphones was most common in Mpumalanga (95%), Limpopo (94.4%), North West (90.5%) and Free State (90.2%). Households that used both cellular phones and landlines were most common in the more affluent provinces, namely the Western Cape (22%) and Gauteng (12.5%). **With regards to internet, 59.3% of South African households had at least one member who had access to it – internet cafes included.** The Western Cape Province had the highest number of household with internet access (23.6%). ([http://www.itweb.co.za/index.php?option=com\\_content&view=article&id=162244&A=DIG&S=Mobile%20Business&O=E&E=3-4048](http://www.itweb.co.za/index.php?option=com_content&view=article&id=162244&A=DIG&S=Mobile%20Business&O=E&E=3-4048)). Find the survey at [http://www.statssa.gov.za/?page\\_id=1854&PPN=P0318&SCH=6819](http://www.statssa.gov.za/?page_id=1854&PPN=P0318&SCH=6819).



## About NEMISA

**Unite around a common pillar to fight poverty and inequality, active citizenry, an inclusive economy, building capabilities, a capable developmental state and leadership working together to solve problems**

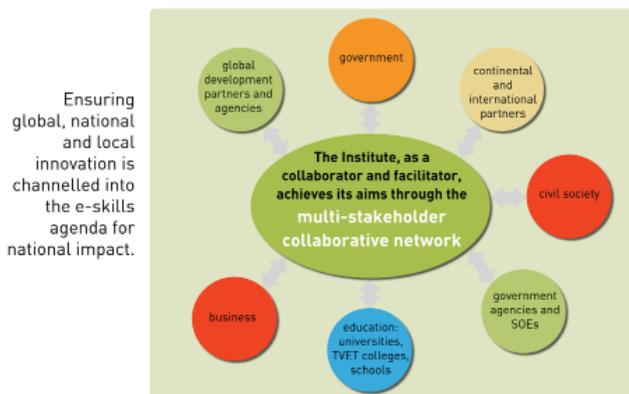
NEMISA is a globally-recognised collaborative model that allows stakeholders to sustainably meet South Africa's e-skilling objectives.

NEMISA is a national catalyst, facilitator and responsive change agent in the development of SA, within the globally evolving information and knowledge-based environment, by leading the creation of key e-skills development strategy, solutions, practices and implementation, to benefit the total population.

**Alignment to government policy:** The above objectives are aligned to the new broadband policy, South Africa Connect, and the National Development Plan 2030, among other national and international goals.

**Multi-stakeholder collaborative platform:** NEMISA provides a formal multi-stakeholder collaborative platform that aligns all stakeholders (business, government, civil society and education) with a common vision. This common vision ensures that e-skills initiatives are coordinated within a national framework, reducing duplication and increasing impact.

### multi-stakeholder collaborative network



**Five focus areas:** NEMISA primarily focuses on five components.

- Knowledge for innovation (research)
- e-Astuteness (teaching and learning)
- Multi-stakeholder collaboration
- Innovation
- Aggregation (monitoring and evaluation framework)

**Providing national, provincial and community level access:**

Through collaborative partnerships, NEMISA is organised on a national

#### Join NEMISA's network

As a national catalyst for the development of e-skills in South Africa, NEMISA calls on e-skills stakeholders to become involved in the integrated approach to e-skills development through our multi-stakeholder collaborative network.

#### Contacting NEMISA

For more information, contact [info@nemisa.co.za](mailto:info@nemisa.co.za).

level, a provincial level and a local community level. NEMISA's central office coordinates nationally and globally.

**The e-skills knowledge production and**

**coordination CoLabs (e-skills CoLabs):** These are situated at universities, with one in each province. There are currently 7 e-skills CoLabs:

- **e-Inclusion and Social Innovation CoLab**, based at the University of the Western Cape
- **e-Enablement for Effective Service Delivery CoLab**, based at Durban University of Technology
- **ICT for Rural Development CoLab**, based at Walter Sisulu University
- **Creative New Media Industries CoLab**, based at the National Electronic Media Institute of South Africa (NEMISA)
- **Connected Health CoLab**, based at the University of Limpopo
- **e-Literacy and e-Business (knowledge economy and e-social astuteness) CoLab**, based at the Vaal University of Technology
- **e-Agro-Tourism CoLab**, based at the North-West University

There will ultimately be nine e-skills CoLabs correlating to the nine South African provinces.

The e-skills CoLabs provide knowledge spaces for collaboration at a provincial level.



**Article continued: About NEMISA**

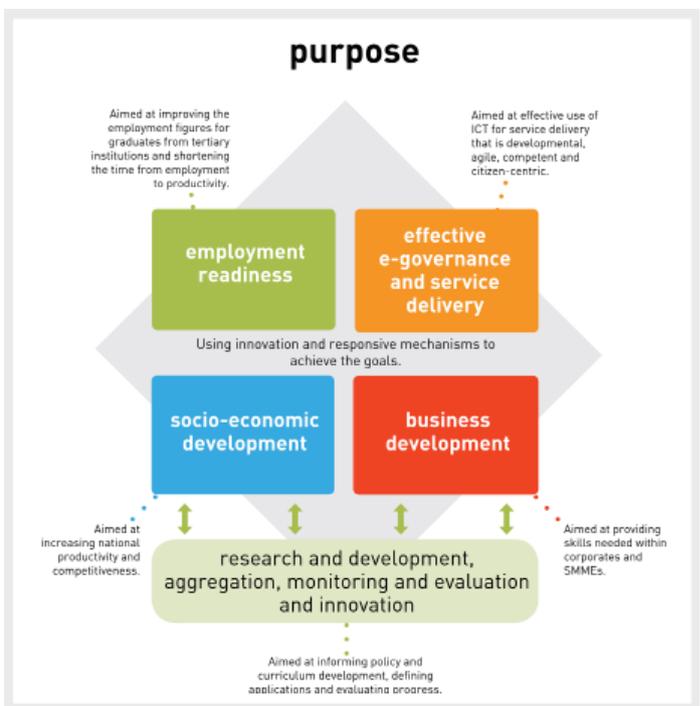
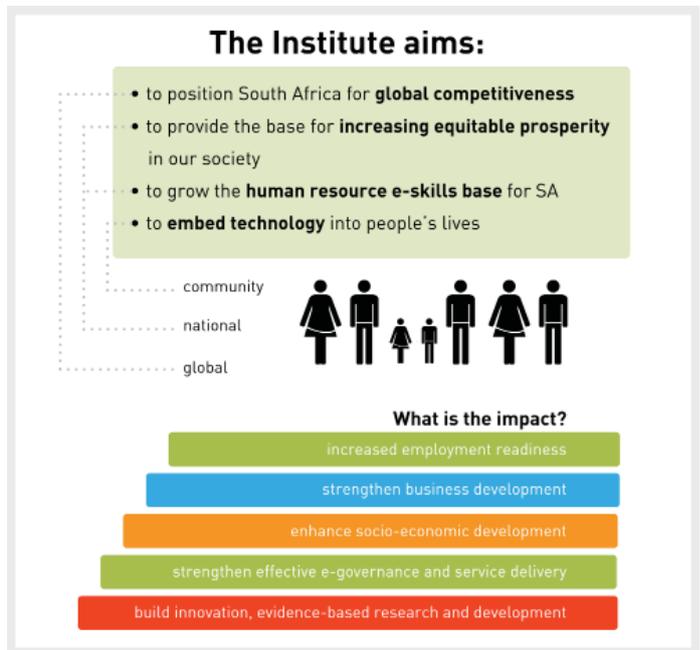
**Smart community knowledge production centre (smart centre):** These allow for interaction and coordination at a local community level. NEMISA's smart centre network is currently being developed across the country.

**NEMISA's national research network** is a multi-stakeholder collaborative network that focuses on knowledge for innovation (research).

NDP Priority Areas supported by NeSPA 2013
<b>Pillar 1:</b> Unite around a common pillar to fight poverty and inequality
<b>Pillar 2:</b> Active citizenry
<b>Pillar 3:</b> Inclusive economy
<b>Pillar 4:</b> Build capabilities
<b>Pillar 5:</b> A capable developmental state
<b>Pillar 6:</b> Leadership throughout society to work together to solve problems

**Wide-ranging opportunities for business:** NEMISA's positioning and organisational model provides numerous opportunities for businesses to engage effectively within the e-skills space:

- There is high-level government engagement. This is integral to developing the e-skills agenda and ensuring that national and provincial policies, as well as all stakeholder decisions, reflect a common goal.
- Business corporate social investment (CSI) has an elevated impact that is aligned with national priorities. The elevated impact and the high-level government engagement allow businesses to position their individual CSI initiatives prominently to their stakeholder base, including the media.
- Businesses are given the opportunity to showcase their talents nationally, provincially and locally.
- Because of the inclusive national priority alignment within the NEMISA's multi-stakeholder collaborative network, businesses are able to position their work within a local context and a developing country framework.
- The link that NEMISA has with universities through its CoLabs and research network means that business can also align new approaches using the benefits of an academic environment and a research function.



- Most importantly, NEMISA provides an environment where CSI is part of a model where stakeholders work together – 'doing with' and not 'doing for'. ☑

## Taxonomy for e-skills

An e-skills taxonomy is more than just definitions. The e-skills agenda requires a shift in thinking with outcomes such as changes in policy. The terms used are part of creating the environment for this shift. Following are definitions for some of the words that form part of the e-skills taxonomy.

e-Astuteness	<p>The capacity to continuously appropriate the technology into personal work, education, business, social and family contexts for both personal and collective benefit.</p> <p>e-Astuteness is defined as a knowledgeable capacity, based on personal and interpersonal skills, that involves:</p> <ul style="list-style-type: none"> <li>• Understanding people and situations</li> <li>• Building alignment and alliances</li> <li>• An acute understanding of strategic direction</li> <li>• Applying strategic behaviour</li> </ul> <p>e-Astuteness allows individuals to take personal advantage of ICT in social or economic situations, through the appropriate e-skills. (Building social connections is an example of a social situation and obtaining a job or starting a business is an example of an economic situation.)</p> <p>e-Astuteness does not necessarily depend on formal education or high levels of literacy.</p>
e-Literacy (digital literacy)	e-Literacy (digital literacy) is the ability of individuals to use digital tools and facilities to perform tasks, to solve problems, to communicate, to manage information, to collaborate, to create and share content and to build knowledge, in all areas of everyday life and for work.
e-Skills	The ability to use and develop ICTs within the context of an emerging South African information society and global knowledge economy, and associated competencies that enable individuals to actively participate in a world in which ICT is a requirement for advancement in government, business, education and society in general.
e-Social astuteness	<p>e-Social Astuteness is defined as the use of ICT and e-skills for more astute ways of people interacting with others, which include:</p> <ul style="list-style-type: none"> <li>• Social interactions</li> <li>• A level of awareness and understanding of diverse social situations</li> <li>• The various alternatives open to them for response</li> </ul> <p>e-Astuteness focuses on individual benefit whereas e-social astuteness focuses on interacting with others for group benefit.</p>

### What is an e-skill?



### Official South African definition (from the National e-Skills Plan of Action)

The ability to use and develop ICTs within the context of an emerging South African information society and global knowledge economy, and associated competencies that enable individuals to actively participate in the world in which ICT is a requirement for advancement in government, business, education and society in general.

## Partners in NEMISA's multi-stakeholder collaboration

### Education



### Government/South Africa



### Civil society



### Business



### Global developmental partners

