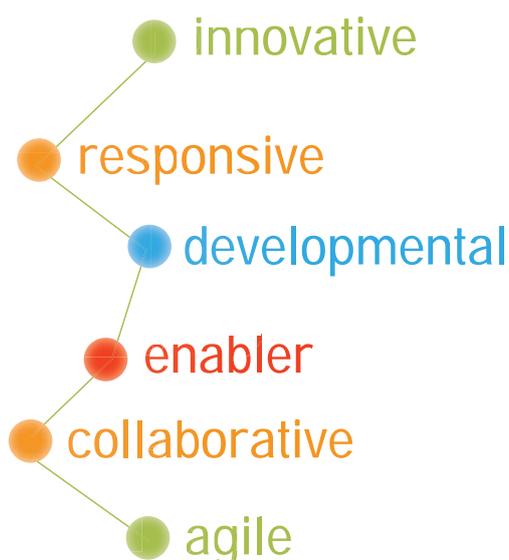


## Newsletter Edition 29, August 2014



### Call for papers

e-Skills Academic Conference  
'Bringing the future to life' on 17-21  
November 2014 in Cape Town, South Africa.  
See [e-SkillsConference.org](http://e-SkillsConference.org) for more  
information.



### Contents

- p1 e-Literacy fundamental to building an e-astute nation**
- p2** iNeSI impacting in deep rural areas - Siyakhula Living Lab in the Eastern Cape
- p3 'E'nablement Week e-Skills Academic Conference**  
'Bringing the future to life' - Call for papers
- p4 Developing an e-astute SA by 2030**
- p4** Mobile apps development workshops in Port Elizabeth
- p5** e-Literacy course for Matladi Project High School
- p6** Web 2.0 training and talks
- p6** Creative new media skills training
- p7 Multi-stakeholder collaboration for increased impact**  
DOT pilot projects in the Eastern and Western Cape
- p7 NDP Priority Areas supported by NeSPA 2013**
- p7 iNeSI provincial CoLab thematic areas**
- p7 Contact information for iNeSI**
- p8 iNeSI highlights challenges to SA's digital economy and the greater need for collaboration for impact**
- p9 ReSNeS focus for 2014/2015**
- p10 Knowledge translation for local, provincial and national impact**
- p10** Mobile apps development results in internships and jobs
- p10** NDR project develops cultural heritage through creative new media skills
- p11 Advocacy and awareness collaboration to create knowledge and mindset change: getting SA e-ready**
- p11** FET Week at Ekurhuleni East College
- p12** iNeSI presents on innovation at National Science Week
- p12 Policy news: MSTF 2014-2019 (MSTF) and iNeSI's Annual Performance Plan 2014-2015**
- p13 Taxonomy for e-skills**
- p14 Partners in the Ikamva National e-Skills Institute multi-stakeholder collaboration**

The Ikamva National e-Skills Institute (iNeSI) 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. iNeSI focuses primarily on five components: knowledge for innovation (research), e-astuteness (teaching and learning), multi-stakeholder collaboration, innovation and aggregation (monitoring and evaluation framework). iNeSI is a state-owned company and the result of a merger between three institutions: the e-Skills Institute, the National Electronic Media Institute of South Africa and the Institute for Satellite and Software Applications.

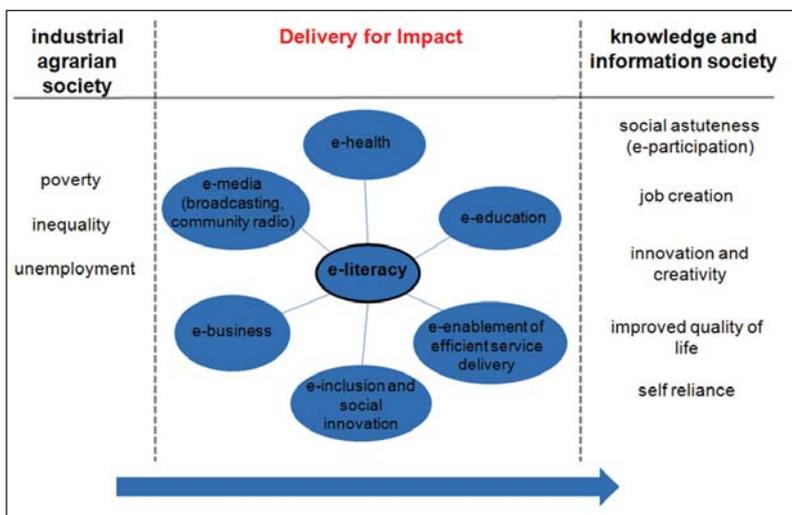
## e-Literacy fundamental to building an e-astute nation

 Newsletter Edition 29, 2014  
 page 1

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

e-Literacy is a core skill. It is **the starting point for getting South Africa e-ready and building an e-astute society**. It is the base for developing e-astuteness for employment readiness, effective e-governance and service delivery, business development, local innovation and socio-economic development.

**able to use technology in all areas of life and work with a specific purpose.** From an e-literacy base, it is then possible to develop e-skills and e-astuteness, where individuals use technology to actively take part in the world and move ahead – in a smart way that benefits the individual and the community.



### National e-literacy roll-out

iNeSI is in the process of rolling out a national e-literacy intervention. iNeSI's Southern Gauteng/Northern Cape CoLab: e-Literacy and e-Business (knowledge economy and e-social astuteness) is spearheading the rollout, along with the other CoLabs.

The Southern Gauteng/Northern Cape e-Skills CoLab has developed a self-taught online programme in collaboration with Kagiso Activ. It is an 80-hour interactive training programme that has been contextualised to the South African market. The aim is to develop e-literacy in people with no ICT skills, as well as improve the skills of people with an existing technology skills base.

The e-literacy programme has been developed with an integrated curriculum. It is outcomes based and includes assessment and flexible learning. Topics covered in the course include:

- internet and emails
- mobile applications
- introduction to computers
- using computer functions
- word processing, spreadsheets and presentations

e-Literacy is also the foundation for developing e-skills around national thematic areas such as e-health, e-education, e-business, e-inclusion and social innovation, and the e-enablement of effective service delivery. All of these are necessary if South Africa is to move from an industrial/agrarian society to a knowledge and information society.

Ensuring that South Africans are e-literate is the core to building e-skills and e-astuteness. Through developing an e-skills pathway, the Ikamva National e-Skills Institute (iNeSI) and its multi-stakeholder network is able to support the National Development Plan which aims to have an e-literate South Africa by 2030. The process also supports SA Connect, the broadband policy, particularly within the Digital Opportunity pillar. The pillar focuses on developing an e-skilled population empowered to create a demand for broadband services.

### e-Literacy and e-astuteness

e-Literacy is not computer literacy – the latter referring to the ability to use a computer. **e-Literacy means being**

#### About Kagiso Activ

Kagiso Activ is a majority black-owned company with 50% owned by Kagiso Trust Consultancy. (Kagiso Trust Consultancy is fully owned by the Kagiso Trust.) The organisation focuses on e-literacy. ([www.kagisoactiv.co.za](http://www.kagisoactiv.co.za))



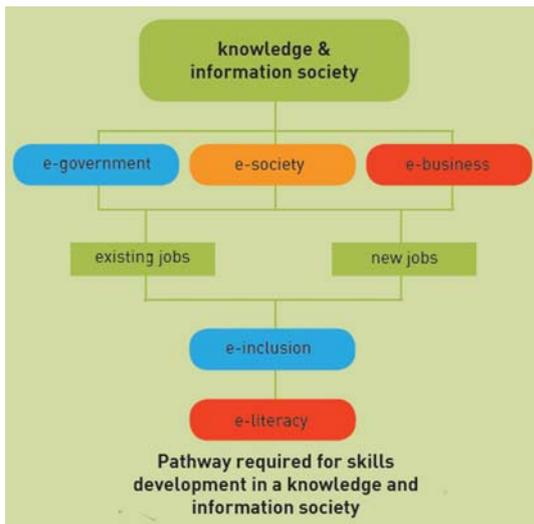
Support from the Vice Chancellor of Vaal University of Technology Professor Irene Moutlana, the Vice-Chancellor and Principal of Vaal University of Technology (VUT) has expressed VUT's support and commitment to e-literacy and the e-literacy rollout.

## e-Literacy is fundamental to building an e-astute nation [continued]

 Newsletter Edition 29, 2014  
 page 2

initiatives, provide a central point for business-based digital interactions, and enable community-to-government interactions, among other actions.

Eighteen smart centres – across the country – will be part of the initial rollout. There will also be a helpdesk available to assist these smart centres with rollout and implementation of the e-literacy course. Smart centre managers will be undergoing training.



### Accreditation

The e-literacy course is accredited and has been developed according to the framework set out in the National Curriculum Competency Framework (NCCF).

The course has also been approved by the Vaal University of Technology. Furthermore, when teachers are trained on the e-literacy course they will be given 10 Continuing Professional Development (CPD) points by the South African Council for Educators (SACE).

All stakeholders – government, business, education, civil society – with an interest in collaborating with regards to the online e-literacy course, please contact iNeSI central office or email [mymoena@doc.gov.za](mailto:mymoena@doc.gov.za).

### Knowledge for innovation (research)

As part of the holistic iNeSI model, knowledge for innovation (research) is a critical component. It operates as a feedback loop to ensure that e-skills interventions are on track, have an impact and that South Africa's knowledge of e-skills and e-astuteness continues to grow.

As part of the rollout, information will be gathered for research purposes by the Southern Gauteng/Northern Cape e-Skills CoLab. Current case studies based on the e-literacy pilot projects will be presented at the upcoming 3rd e-Skills Summit (17-21 November 2014). 

### iNeSI impacting in deep rural areas – Siyakhula Living Lab in the Eastern Cape

A strategic priority for the Ikamva National e-Skills Institute (iNeSI) is to leverage existing social platforms – for building e-readiness and e-astuteness in South Africa. The Siyakhula Living Lab (<http://siyakhulall.org/>) is one such example.

Siyakhula Living Lab (SLL) is based in the Dwesa area, catering to a rural community. It is part of a research project that involves the Makana Apps Factory, Rhodes University and the University of Fort Hare. The Makana Apps Factory is the associated mobile apps factory of iNeSI's Eastern Cape e-Skills CoLab: ICT for Rural Development.

SLL engages in activities that provide a space for communities to be part of an inclusive society, as part of the progress South Africa is making to become a knowledge and information society. The work being done at SLL is also aligned to the Eastern Cape e-Skills CoLab's thematic focus area of ICT for rural development.

SLL has been positioned as a smart community knowledge centre (smart centre). iNeSI is currently developing a national smart centre network. Smart centres move beyond access centres to spaces that allow for the social appropriation of ICT.

SLL is also used as part of a body of research (knowledge for innovation). For further information, please go to [www.siyakhulall.org/?q=publications](http://www.siyakhulall.org/?q=publications). Note that conference papers based on work done at SLL will be presented at the upcoming e-Skills Summit (17-21 November 2014).

#### The Living Lab philosophy

Living Labs refers to studying the use of technology, such

as mobile or digital, in a real-life environment with the co-creation of solutions with empowered users. The focus is on studying the behaviour of people around technology, from appropriation and domestication to alternative uses and identifying gaps. Innovation is also a strategic goal of Living Labs. Often the manner in which technology is used is different from its intended purpose and this is particularly so in Africa. The Living Labs concept allows gaps (such as skills) and opportunities to be identified, among other research areas. It addresses the needs of communities while simultaneously focusing on improving e-skills. 

Collaborating to impact in deep rural areas – the Siyakhula Living Lab in Dwesa.



# 'E'nablement Week

17-21 November 2014

Cape Town, South Africa

**'Building African e-astuteness for more equitable prosperity'**

## e-Skills Academic Conference - Bringing the future to life

The conference focuses on the strategic and efficient use of new ICTs, as well as the knowledge, skills, competencies and inventiveness of the workforce and citizens.

### Call for papers

Submit papers on research topics using evidence-based advice, services and programmes related to improving the abilities of teaching and learning, service delivery, business effectiveness, employment creation, job seekers, communities and families to live and work effectively with modern ICT capacity.

Seeking papers from academics, policy developers, government service deliverers, business and civil society.

See [e-SkillsConference.org](http://e-SkillsConference.org) for more information on the conference.



#### e-Skills Academic Conference

A platform to examine evidence-based approaches for praxis, policy development, service delivery and evaluation. Hosted in partnership with the Informing Science Institute.



#### 3rd National South African e-Skills Summit 2014

A collaborative approach for assessing achievements and developing new approaches for the National e-Skills Plan of Action 2015 (NeSPA).

#### Thought Leaders Congress

Building an aggregation framework across business, government, education, civil society and international development partners to improve national e-readiness.



#### FET Principal's Forum

Developing a framework for FET approaches to e-skilling South Africa aligned to the needs of business, government, education and civil society.

#### Uni Connect - South Africa

Developing collaborative national and international university networks to build capabilities and knowledge for innovation.

**The 'e'nablement week focuses on building South Africa's e-skills and e-astuteness through a national, integrated and collaborative approach.**

The week's activities involve strategy, research and evaluation, policy development and delivery. The collaborative model builds and focuses effort across government, business, education and civil society. This ensures that there is multi-level input into raising South Africa's e-readiness rankings, moving the country towards wealth equity and an improved global competitiveness.



Join the e-skills revolution!

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



## Developing an e-astute SA by 2030

Newsletter Edition 29, 2014  
page 4

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

The National Development Plan (NDP) outlines an e-literate South Africa by 2030. To achieve this means embedding e-astuteness into South African consciousness.

### Moving beyond computer literacy to e-astuteness

**e-Astuteness encompasses far more than computer skills.** While an individual may understand how to use ICT hardware and software (computer skills), this is not enough to become e-literate. e-Astuteness can be viewed as e-competency ie not just knowing the basics of using technology but having the appropriate knowledge and e-skills to use technology in a smart way that betters the individual's life and the lives of the community.

It's important to note that e-astuteness doesn't depend on formal education or high levels of literacy.

### iNeSI's holistic model for embedding e-astuteness

To embed e-astuteness into the national consciousness, the Ikamva National e-Skills Institute (iNeSI) has developed a framework that focuses on five primary areas. These are:

- multi-stakeholder collaboration
- knowledge for innovation (research)
- aggregation (monitoring and evaluation framework)
- e-astuteness (teaching and learning)
- innovation

Multi-stakeholder collaboration ensures stakeholders are aligned to national goals (such as the NDP and SA Connect, the broadband policy). It also reduces duplication and increases impact. e-Astuteness (teaching and learning) concentrates on developing courses and curricula, and creating ecosystems for e-skilling South Africa. Interventions, courses and curricula are then aggregated through a monitoring and evaluation framework to assess impact.

The knowledge for innovation (research) component operates in a continual feedback loop to address gaps, ensure decisions are evidence based and to increase knowledge around e-skills and e-astuteness. The iNeSI

### South Africa's National Development Plan

To read South Africa's National Development Plan, go to [www.inesi.org.za/research-and-policy/upload/npc\\_vision2030.pdf](http://www.inesi.org.za/research-and-policy/upload/npc_vision2030.pdf)

model is underpinned by innovation which includes finding new ways of 'doing'.

In a developmental country such as South Africa, iNeSI is intent on ensuring that all stakeholders uphold the philosophy and action of 'doing with' rather than 'doing for'. Embedding e-astuteness is about empowerment where the individual and the community is at the centre. It is not about handing out opportunities but providing citizens with the knowledge and e-skills to develop their own opportunities.

### e-Astuteness developed across national, provincial and community levels

iNeSI's organisational model ensures that the embedding of e-skills and e-astuteness cuts across international, intercontinental, national, provincial and community lines. While central office operates on an international and national level, the e-skills knowledge production and coordination CoLabs (e-Skills CoLabs) are iNeSI's provincial presence. (There will eventually be nine CoLabs to correlate with the nine provinces.)

The roll-out of smart community knowledge production centres (smart centres) addresses communities and individuals. These will target rural and peri-urban areas and will provide a space for the community to leverage the online environment and the e-skills cloud, build entrepreneurial skills and receive training, among other actions.

**This section looks at developing e-astuteness through teaching and learning.** It covers creative new media, mobile apps development and social media for the e-enablement of government.

## Mobile apps development workshops in Port Elizabeth

### Building SA's knowledge for innovation

A three-part mobile Android development series is currently being run in Port Elizabeth. The introductory session was on 15 August 2014 and was facilitated by Prof Mamello Thinyane of the computer science department at the University of Fort Hare. This is part of the 2014 Eastern Cape developer activities.

The mobile apps development workshops are hosted through a collaboration between iNeSI's Eastern Cape e-Skills CoLab: ICT for Rural Development and its associated apps factory, the Makana Apps Factory, along with SEDA Nelson Mandela ICT Incubator, Nelson Mandela

### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Knowledge translation
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

Metropolitan University (NMMU), Rhodes University and the University of Fort Hare.

The introductory session was highly interactive and



was attended by 25 delegates, mainly from the NMMU students and staff members, together with developers, representatives from IT start-ups and entrepreneurs from local SMMEs.

Makana Apps Factory was developed through a memorandum of understanding between the Eastern Cape e-Skills CoLab and Rhodes University. Part of its mandate is to conduct mobile development workshops to young developers in the region. To date, two developer groups have been established, first in East London and now in Port Elizabeth. These form part of the drive to stimulate mobile apps development as a pathway to embedding e-astuteness, e-skills development and entrepreneurship, among other things.

Delegates at the mobile apps development workshops in Port Elizabeth.



### e-Literacy course for Matladi Project High School

#### Multi-stakeholder collaboration ensures e-skills and infrastructure

iNeSI's Limpopo e-Skills CoLab: Connected Health, based at the University of Limpopo, is currently positioning Matladi Project High School to become a smart knowledge production centre (smart centre) and to deliver on the national e-literacy course. iNeSI is engaging existing e-centres, schools, community centres and TVET colleges

to create a smart centre network that will further enhance and embed e-astuteness for local impact. Leveraging existing resources is part of iNeSI's strategy to raise South Africa's e-readiness rankings.

Matladi Project High School is based in Moletlane, Limpopo, a relatively remote area. The intention is to teach the 103 Grade 12 learners e-literacy, as well as all the teachers, by the end of 2014.

The school is already supported by business corporate social initiatives (CSIs) and has three computer labs – two established by Business Connexion and one by the Telkom Foundation. It receives 10Gb of bandwidth per month. There is also a Wi-Fi enabled learning toolbox supplied by Business Connexion.



#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect



iNeSI's Limpopo e-Skills CoLab: Connected Health collaborates with existing community centres, including schools such as Matladi Project High School, for the social appropriation of ICT for local benefit.



We have come a long way – celebrating 20 years of freedom

On 27 April 2014, South Africa celebrated the 20 year anniversary of the country's first democratic elections which included South Africans of all races. Initiatives have included events, celebrations and reports from all sectors on how far South Africa has come as a country since 1994.

### Web 2.0 training and talks

#### Social media – an integral component for effective service delivery to impact locally, provincially and nationally

iNeSI's KZN e-Skills CoLab: e-Enablement for Effective Service Delivery, based at the Durban University of Technology, regularly holds training and talks on Web 2.0 tools. The focus is on how to use social media more effectively, particularly for the e-enablement of government.

On the 13 August 2014, the KZN e-Skills CoLab gave a talk on 'Email Netiquette and Use of Google' to educators at ML Sultan Saint Mary's School. The same talk was given at St Raphael's School for the disabled on 18 August 2014.

On 29 August 2014, the CoLab gave further Web 2.0

training to DUT research supervisors around Wordpress and how to post a blog.

The KZN e-Skills CoLab has been running a Leadership, Management and Development Programme called 'e-Enablement of Government Service Delivery'. This is a joint venture between DUT and the KZN e-Skills CoLab, with the CoLab providing the e-skills training and the university providing the management training. The KZN CoLab concluded this round of the course on 6 and 7 August 2014 with the Web 2.0 component.

#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ Advocacy and awareness
- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

iNeSI's KZN e-Skills CoLab at the ML Sultan Saint Mary's School.



### Creative new media skills training

#### Creative new media skills enhance community radio and develop continental relations

iNeSI, as a thought leader and catalytic organisation, continues to contribute to e-skills development in Africa. It has opened linkages with Ghana to provide much-needed creative new media skills. From 4-15 August 2014, the Parktown base of iNeSI's Gauteng e-Skills CoLab: Creative New Media Industries hosted delegates from Central University College (CUC), Ghana.

Delegates went through an 80-hour programme on Broadcast Skills Training which covered radio and television. This included operating broadcast cameras and field recorders, sound editing, picture editing, multi-track mixing of voice music and effects, production principles, scriptwriting and product packaging. The final product was a public service announcement video and radio advert for CUC. The training included a trip to the SABC and MNet Magic in Motion Expo.

A five-day course on community radio station newsroom skills was run by the Parktown base of the Gauteng e-Skills CoLab: Creative New Media Industries. An introductory course, the focus was on sharpening freelancers and practitioners in sourcing and writing newsworthy stories, editing sound bites and packaging features, among other areas. It was held from 25 – 29 August 2014 over three hours per day at Radio Khwezi. 

#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Knowledge translation
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

Building an e-skills bridge in Africa so that the continent plays a key global role – iNeSI creates linkages with Ghana.



## Multi-stakeholder collaboration for increased impact

 Newsletter Edition 29, 2014  
 page 7

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

The Ikamva National e-Skills Institute (iNeSI) and the Digital Opportunity Trust (DOT) are currently developing pilot projects in the Eastern and Western Cape. This is part of iNeSI's multi-stakeholder collaboration model – creating an environment where e-skilling activities are aligned to national priorities, reducing duplication and increasing impact.

The programmes are customised to the local environment and align with the iNeSI goal of developing e-skills, embedding e-astuteness and creating entrepreneurial skills.

### e-Astuteness development in the Eastern Cape

The Eastern Cape e-Skills CoLab: ICT for Rural Development and DOT are developing an integrated proof of concept that includes DOT's ReachUp! (youth workforce readiness) and TeachUp! (ICT in education). This will be implemented at a Technical Vocational Education and Training College in Butterworth. (TVETs were previously known as Further Education colleges – FET colleges.)

ReachUp! will involve interns impacting on youth either at the college or in surrounding communities. TeachUp! will involve a teacher facilitator, teachers and students. The integrated pilot programme includes elements of DOTconnect, a cloud-based learning platform with learning resources, communities of practice and an online self-assessment learning path.

The aim is for the proof of concept to be used for all Eastern Cape TVETs in the long term.

### e-Astuteness development in the Western Cape

In the Western Cape, DOT will be working with iNeSI's

Western Cape e-Skills CoLab: e-Inclusion and Social Innovation. The pilot project is an integration of DOT's ReachUp! programme (youth workforce readiness) that will also emphasise smart digital inclusion, innovation and mobile learning goals.

The pilot will be run at the Franschoek Smart Community Knowledge Production Centre, with interns catering to the surrounding areas. The pilot includes elements of DOTconnect.

A smaller pilot, based at the University of the Western Cape is also being investigated. The focus is on introducing the customised programmes within a university setting.

The overall aim is to extend the pilot throughout the Western Cape. It will then be used as a model for replication on a national scale. 



#### About the Digital Opportunity Trust (DOT)

- DOT's mission is to create global networks of talented, energetic young leaders who make real change by educating local communities to apply technology effectively to real life.
- The organisation already has 4 000 young leaders in its network and has reached over 800 000 people.
- Results have shown that 90% of DOT interns get jobs or start businesses and that 70% of the interns report improved income.

#### iNeSI provincial CoLab thematic areas

Western Cape e-Skills CoLab: e-Inclusion and Social Innovation
KZN e-Skills CoLab: e-Enablement for Effective Service Delivery
Eastern Cape e-Skills CoLab: ICT for Rural Development
Gauteng e-Skills CoLab: Creative New Media Industries
Limpopo CoLab: Connected Health
Southern Gauteng/Northern Cape CoLab: e-Literacy and e-Business (knowledge economy and e-social astuteness)

#### 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

For more information about the Ikamva National e-Skills Institute, contact:

- Mymoena Sharif, [mymoena@doc.gov.za](mailto:mymoena@doc.gov.za)
- Follow us on Twitter @iNeSI\_
- Website: [www.inesi.org.za](http://www.inesi.org.za)



## iNeSI highlights challenges to SA's digital economy and the greater need for collaboration for impact

Newsletter Edition 29, 2014  
page 8

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

On 4 August 2014, the Ikamva National e-Skills Institute's (iNeSI) Western Cape e-Skills CoLab: e-Inclusion and Social Innovation held a one-day conference on 'Strategies, Practices and Skills for Competitiveness in the Digital Economy – a perspective on large companies in South Africa'. This was done in collaboration with the University of the Western Cape (UWC) and the University of Stellenbosch Business School. It was attended by 60 delegates from business, government and academia.

Dr Leona Craffert, Director of the iNeSI Western Cape e-Skills CoLab: e-Inclusion and Social Innovation was the lead researcher. Other researchers included:

- Prof Marius Ungerer (Associate Professor of Strategic Management, University of Stellenbosch Business School)
- Prof Kobus Visser (Dean: Faculty of Economic and Management Sciences, University of the Western Cape)
- Dr John Morrison (Senior Research Consultant, University of Stellenbosch Business School)
- Prof Walter Claassen

**Following is a synopsis of the report in which 82 large South African companies participated.**

### The increasing impact of digital developments

The report notes that digital developments (new digital devices, new software, and new areas of applications) have a growing impact, and in some cases can be transformational. The increasingly hyperconnected world also means that "employees become participants in a world beyond the boundaries of companies, thereby being in a position to gauge sentiments outside, to influence opinions and to make a contribution to the positioning of companies".

### A paradigm shift into a digitally-infused world

The introduction looks at how there is a paradigm shift that moves beyond using ICT as an operational tool to "one in which the digital dimension in fact changes the world within which business takes place... a rethinking is also required in which ICTs are used in a digitally-infused world, in the digital economy."

The report notes that all levels and functions of the business need to understand the nature of this change, not only ICT practitioners and CIOs. Furthermore, the change will demand a rethinking of key activities and the digital capability to understand the impact and to unlock business value.

E-leadership is also needed. The skills of e-leadership refer to "a combination of skills of both using ICT systems and leading organisations".

### SA's standing in the WEF Global IT Report

South Africa is positioned 70th among 148 countries in the 2014 Global IT Report of the World Economic Forum (WEF). This relatively low position is attributed to challenges

Full report: on 'Strategies, Practices and Skills for Competitiveness in the Digital Economy – a perspective on large companies in South Africa'

For the complete report, please go to [www.inesi.org.za/research-and-policy/upload/digital\\_economy.pdf](http://www.inesi.org.za/research-and-policy/upload/digital_economy.pdf)

around broadband access and affordability, as well as the shortage e-skills.

According to the WEF report, business "is a critical role player in unlocking the opportunities posed by the digital economy". However, the digital economy report notes that there is little information available about the response of South African companies within this context.

### Focus on people and organisational capabilities

The intention of the research (knowledge for innovation) is to investigate the role of business as a critical player in the digital economy further. The report looks at three elements of the digital business ecosystem:

- the level of digital infrastructure
- the level of people and organisational capabilities
- the level of digital opportunity realisation

In particular, the research focuses on people and organisational capabilities.

The ultimate aim of the report is to stimulate discussion about digital readiness and its implications for the competitiveness of the South African economy. This includes not only business but government and education.

### Types of companies interviewed

Companies from various sectors were involved. These ranged from manufacturing and agriculture to retail and telecommunications. A range of people within the companies were interviewed, from CIOs to executive assistants. Other areas investigated included ICT management approach and the type of access available to digital resources.

### Digital strategy and growth

The majority of companies acknowledged the impact of ICT and the digital economy, and the consequent impact on strategy. However, the majority of respondents rated their digital maturity as medium to low. Of interest is that compared to international benchmarks, the involvement of CEOs and board members regarding the "pro-active exploitation... of digital opportunities" was below par. Digital strategies and practices tend to focus on improving operational efficiency.

**Take-forward 1:** For their competitiveness in the context of changing paradigms related to the digital economy, it will be required of companies to re-evaluate





current strategies and practices.

**Take-forward 2:** Measure digital maturity growth in a multi-factored manner and as part of the strategic performance management scorecard.

### People and digital capabilities

A key finding of the report is that people and organisational capabilities are untapped resources. These can significantly improve the ability to pursue new business opportunities in the digital economy.

**Take-forward 3:** Systemic perspective - Challenging the status quo. [This take forward relates specifically to developing people and organisational capability in terms of digital technologies.]

### Skills and practices supporting digital strategies

While companies viewed ICT practitioner (e-practitioner) skills as advanced, employees (e-users) and managers (e-leaders) are significantly lower. Companies prefer internal digital development initiatives and headhunting when sourcing e-skilled talent. The report shows that bursaries, learnerships and internships are under-utilised as pipelines for developing digital talent.

There are challenges when participating in the digital economy. These include: the agility and adaptability of the organisational culture, availability of ICT skills, and appropriate e-user skills and e-leadership skills. Of note is that companies seem to be under-utilising the benefits of online learning material.

**Take-forward 4:** Prioritise the development of e-competency ability in all functional roles, especially in leadership.

**Take-forward 5:** Include an e-skills capability as a core competency in all courses, thereby ensuring digitally literate citizens.

**Take-forward 6:** Growing our local digital talent pipeline as a pro-active step by strengthening collaboration amongst industry partners and educational institutions.



Dr Leona Craffert, Director of the iNeSI Western Cape e-Skills CoLab: e-Inclusion and Social Innovation and lead researcher of the report.

### Harnessing e-innovation

The report notes that people as drivers of innovation are under explored. Furthermore, employees' access to knowledge sharing and knowledge creating platforms is also not used effectively.

**Take-forward 7:** Enhancing competitiveness by leveraging the benefits of "flows of knowledge" by means of cross-functional collaboration and cross boundary capabilities.

### Digital readiness in stakeholder networks

Digital readiness in stakeholder networks is fairly widely applied with business partners, but to a lesser extent with SMMEs. It is seldom used with local communities and employees' families.

**Take-forward 8:** e-Inclusion of broader stakeholder network for business benefits and positive corporate citizenship behaviour.

### Leadership and e-leadership

The report notes that agility is needed for openness, collaboration and sharing: "In the digital era, successful companies are characterised as networked organisations where contributors emerge from both inside and outside the company boundaries, and where customers and broader stakeholder groups participate in the development of products, ideas and novel delivery mechanisms."

**Take-forward 9:** Leadership requirements and organisational culture - thinking differently about organisations. 

### ReSNeS focus for 2014/2015

Part of the Ikamva National e-Skills Institute (iNeSI) focus is knowledge for innovation (research). This is facilitated by the national research Network for e-Skills (ReSNeS). It is a multi-stakeholder model that provides a platform for collaboration in research, with a network of researchers that extends across the higher education sector, the private sector, government, business and civil society.

The main objectives of ReSNeS are:

- Thought leadership
- Research classification
- Research working groups
- Developing integrated approaches for policy

development

- Research and evaluation of e-skills impacts

Outlined below is ReSNeS' focus for 2014/15:

- Strengthen a sound international research network
- Develop a framework for the appointment of research chairs at the CoLabs
- Develop a high-level accredited publication outlets for e-skills and e-readiness articles
- Broaden the ReSNeS value proposition in collaboration with iNeSI to DPME, Stats SA and business
- Deliver on the e-skills academic conference 



## Knowledge translation for local, provincial and national impact

Newsletter Edition 29, 2014  
page 10

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

The Ikamva National e-Skills Institute (iNeSI) is mandated to develop e-skills in the country, thus harnessing human capacity development for wealth equity and global competitiveness. Its holistic framework, which incorporates multi-stakeholder collaboration, ensures that e-skills initiatives are aligned to national goals. The work of iNeSI supports the National Development Plan and South Africa Connect, among other national policies and strategies. It is also aligned to international aims and goals such as the Millennium Development Goals.

Beyond multi-stakeholder collaboration, the other focus areas include: knowledge for innovation (research),

**“iNeSI’s aim is to increase the impact of e-skills in South Africa and, through its model, to raise the level of e-skills and e-astuteness.”**

aggregation (monitoring and evaluation framework), e-astuteness (teaching and learning) and innovation. iNeSI’s aim is to increase the impact of e-skills in South Africa and, through its model, to raise the level of e-skills and e-astuteness. This means that not only must people be e-skilled but know how to use the skills to better their lives and their communities.

Part of this is the translation of the knowledge that has been acquired. Once e-skills are gained, these need to be used to create real impact and visible outcomes. **This section looks at training initiatives within creative new media industries and mobile apps development which clearly show visible outcomes.**

### Mobile apps development results in internships and jobs

#### The impact of CodeJam on e-astuteness and employment opportunities

CodeJam is now being held for a second year. It is run by iNeSI’s Western Cape e-Skills CoLab: e-Inclusion and Social Innovation, based at the University of Cape Town.

The competition creates a mobile apps ecosystem that takes participants from ideation and development to incubation, entrepreneurship training and to market. There are currently 280 registrations.

Winners from CodeJam 2013 now have internships at ICT incubator, the Bandwidth Barn in Cape Town. The 13 students are focusing on entrepreneurship for mobile apps development and there has been positive feedback, particularly in terms of the amount learnt. Four students have also successfully completed their internships with CodeJam 2013 business partners.

The Western Cape e-Skills CoLab appointed 10 students

to run CodeJam 2014 and to work in the CoLab. Since CodeJam is run as a business, the result of this initiative is that ICT companies are now requesting to hire these students.

#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Knowledge translation
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

### NDR project develops cultural heritage through creative new media skills

#### The need to create an ecosystem that promotes local talent and digital opportunities for local consumption

#### The iNeSI model

This project involves:

- ✓ E-astuteness development
- ✓ E-competence development
- ✓ Knowledge translation
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

The Parktown base of the Creative New Media Industries CoLab: Gauteng manages the National Digital Repository (NDR). It is a youth-based heritage project that aims to collect, digitise and promote South African heritage as seen by its youth, primarily through the online archive portal [www.ndr.org.za](http://www.ndr.org.za).

The project started in 2009 with 355 young South Africans (from all 9 provinces) trained in basic video skills

and a group of 12 trained in multimedia skills. In 2011, NDR extended its scope to television by creating a documentary series called ‘SA undocumented’.

Two of the documentaries created have recently been flighted on TV. ‘Fedefokol’, about SA hip hop, was played on channel 263 on DSTV, 23 August 2014. ‘SA Undocumented - Life and times of King Makhado’ was flighted on Soweto TV, 3 September 2014. The remaining 11 documentaries will be flighted every Wednesday at 18:30 on DSTV Channel 263.

While the airing of the documentaries continues to build cultural heritage, it highlights the need for a more effective ecosystem that further promotes job opportunities for emerging youth as well as more opportunities for airing local products. There is a need to reposition the ecosystem so that this type of documentary flighting can be massified as South Africa moves into a digital economy. 



## Advocacy and awareness collaboration to create knowledge and mindset change: getting SA e-ready

Newsletter Edition 29, 2014  
page 11

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

It is essential that the Ikamva National e-Skills Institute (iNeSI) focuses on advocacy and awareness around e-skills and the impact that these will have on South Africa as a developmental country. **Advocacy and awareness isn't an individual effort but results from collaborating with e-skills stakeholders to allow for massification with the aim of getting SA e-ready.**

For there to be changes in policy and in mindset, it is important that there is an understanding that e-skills incorporate the capacity and knowledge that is beyond computer literacy. The latter merely being the capacity to know how to use a computer.

'e-Skills' means being able to use technology so you can actively take part in the world and move ahead. e-Astuteness means using technology and e-skills in a smart way as part of life, for your benefit and for the benefit of your community. e-Astuteness is not just having computer skills.

It means knowing how to use technology:

- To understand people and situations

- To build social and business connections
- To understand strategic direction
- For strategic behaviour

Other key messages include the alignment with national goals, such as the National Development Plan and SA Connect, the broadband policy. One of the four pillars of the broadband policy – Digital Opportunity – outlines the importance of broadband demand. In other words, infrastructure provision is not enough, there needs to be a demand for its use and capable users who have the necessary e-skills.

Advocacy and awareness is also important for building iNeSI's multi-stakeholder network. It is through collaboration and alignment with national goals that e-skills initiatives will have greater impact within South Africa.

**This section looks at some of the events and talks that have increased awareness around iNeSI, as well as awareness of the importance of e-skills and e-astuteness.**



### FET Week at Ekurhuleni East College

Strengthening partnerships with multi-stakeholder collaborators



iNeSI at Ekurhuleni East College's FET week.

Ekurhuleni East College held an FET week from 25 – 29 August 2014. (FET refers to further education and training colleges. The new term is TVET - Technical Vocational Education and Training Colleges.) These open days were aimed at showing matriculants various study and career options. iNeSI, as well as other training institutions and SETAs were invited to participate.

iNeSI and its provincial CoLab – the Southern Gauteng/Northern Cape CoLab: e-Literacy and e-Business (knowledge economy and e-social astuteness) – hosted a table on 26 August 2014 at the Springs Campus and on the 27 August 2014 at the Daveyton Campus. The Director of the Southern Gauteng/Northern Cape CoLab also gave a talk on e-skills.



#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ Advocacy and awareness
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect



## Advocacy and awareness collaboration to create knowledge and mindset change: getting SA e-ready

Newsletter Edition 29, 2014  
page 12

### iNeSI presents on innovation at National Science Week Raising awareness around e-skills and innovation

iNeSI's KZN e-Skills CoLab: e-Enablement for Effective Service Delivery presented a seminar on 'Grassroots innovation for social impact' at the request of the Technology Innovation Agency.

This occurred on the 12 August 2014 and was part of the National Science Week celebrations. The audience included post-graduate students and youth entrepreneurs. The focus was on creating social entrepreneurs that respond to the local context and local or national challenges. 

#### The iNeSI model

This project involves:

- ✓ Multi-stakeholder collaboration
- ✓ Partnership development
- ✓ Advocacy and awareness
- ✓ Alignment with national goals – in particular the NDP and Broadband Connect

#### Policy news

- The Medium Term Strategic Framework 2014-2019 (MSTF) was recently published. See <http://inesi.org.za/research-and-policy/upload/mtsf2014-2019.pdf> for further information.
- The Ikamva National e-Skills Institute's Annual Performance Plan 2014-2015 is now online. Please see <http://inesi.org.za/research-and-policy/upload/iNeSlapp2014-2015.pdf>

#### Newsflash

The Ikamva National e-Skills Institute's KZN e-Skills CoLab: e-Enablement for Effective Service Delivery, based at the Durban University of Technology, has had the following courses accredited by MICT SETA:

- National Certificate: Information Technology: End User Computing (NQF level 3)
- Further Education and Training Certificate: Information Technology: Technical Support (NQF level 4)
- Further Education and Training Certificate: Information Technology: Systems Development (NQF level 4)
- National Certificate: Information Technology: Systems Development (NQF level 5)
- National Certificate: Information Technology: Systems Support (NQF level 5)

#### Join the iNeSI network

As a national catalyst for the development of e-skills in South Africa, the Ikamva National e-Skills Institute (iNeSI) calls on e-skills stakeholders to become involved in the integrated approach to e-skills development through our multi-stakeholder collaborative network.

#### Our value proposition

Have a look at the iNeSI value proposition on: [www.inesi.org.za/media-and-publications](http://www.inesi.org.za/media-and-publications).

#### Understanding the collaborative multi-stakeholder network

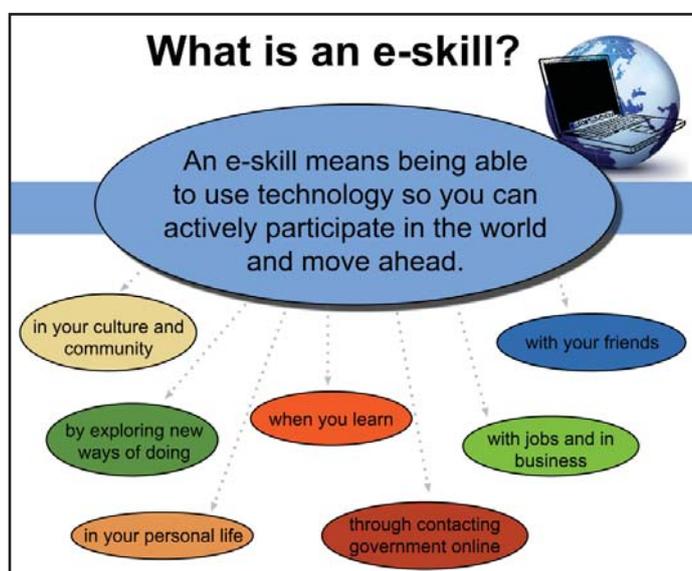
See the explanation for the collaborative multi-stakeholder network: [www.inesi.org.za/pages/collaborative-network.php](http://www.inesi.org.za/pages/collaborative-network.php). This includes ways to engage with iNeSI.

#### Contacting iNeSI

Use the following link to get contact details for iNeSI: [www.inesi.org.za/contact-us/](http://www.inesi.org.za/contact-us/).

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.

<p>e-Astuteness</p>	<p>The capacity to continuously appropriate the technology into personal work, education, business, social and family contexts for both personal and collective benefit. 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>
<p>e-Literacy</p>	<p>e-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.</p>
<p>e-Skills</p>	<p>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.</p>
<p>e-Social astuteness</p>	<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>



**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.

**Newsletter** Edition 29, August 2014

Partners in the Ikamva National e-Skills Institute  
multi-stakeholder collaboration

Education



Government/South Africa



Civil society



Business



Global developmental partners



Please note that this list will be extended as there are Memorandums of Understanding in progress across all sectors.

The Ikamva National e-Skills Institute (iNeSI) 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. iNeSI focuses primarily on five components: knowledge for innovation (research), e-astuteness (teaching and learning), multi-stakeholder collaboration, innovation and aggregation (monitoring and evaluation framework). iNeSI is a state-owned company and the result of a merger between three institutions: the e-Skills Institute, the National Electronic Media Institute of South Africa and the Institute for Satellite and Software Applications.