EMSD – Digital Economy – Back to Back Workshop
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Understanding the Digital Divide

Household Access to the Internet

- 65% From home
- 16% From cell phone
- 5% From work
- 6% From elsewhere
- 8% No access to internet

Reasons for not having internet

- Lack of interest/no need
- Lack of knowledge/skills/confidence
- Have access to internet elsewhere
- Cost of equipment too high
- Cost of subscription too high
- Concern about exposure to inappropriate or harmful contents

The Digital Divide is a manifestation of Global Inequality

- Under 50% internet access in SA, India & China
- Total disconnected pop in G20 countries amounts to 31% of World Pop
- 65% HHs in SA have no access to the internet
- Growth in accessing the internet via a Cell Phone
- 36% don’t access the internet due to a lack of knowledge
- 33% have no interest in the Internet
## G20 Position on Skills / Digitalisation

<table>
<thead>
<tr>
<th>Location</th>
<th>Key Points</th>
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<tbody>
<tr>
<td>Brisbane, AUSTRALIA</td>
<td>- Reduce Labour Participation gap between men and women by 25%</td>
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<tr>
<td>- 2014</td>
<td>- No digitalisation related recommendations</td>
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<tr>
<td>Antalya, TURKEY</td>
<td>- Commitment to bridge the digital divide (limited specifics)</td>
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<td>- 2015</td>
<td>- Produced the G20 Skills Strategy</td>
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<td>- Urged investment in skills development – for inclusive growth, combat poverty</td>
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<td>- Need to identify the skills for work and life</td>
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<td>- Encourage private sector to invest in skilling</td>
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<td></td>
<td>- Excludes notions of digital skills</td>
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<td></td>
<td>- Introduction of first W20 in 2015</td>
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<td>Hangzhou, CHINA</td>
<td>- Develop favourable conditions to bridge the digital divide</td>
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<tr>
<td>- 2016</td>
<td>- Promote equal participation of women in the digital economy</td>
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<tr>
<td>GERMANY - 2017</td>
<td>- Inclusion of Digital Economy as a priority policy area</td>
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<td>ARGENTINA - 2018</td>
<td>- ???</td>
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Digital Skills – A Catalyst to break the poverty cycle

- What skills do we offer learners when they exit the school system?
- Can they at a minimum, understand basic technical skills
- What further opportunities do we offer to improve one’s skills

Source: Spaull (2015)
Developed vs Developing Countries

**Developed**
- Technology embedded in schools
- Frequent access to tools
- Technology usage is multidimensional
- Usage is natural

**Developing**
- Limited usage in schools, mostly in Computer Class
- Limited access in household
- Technology usage is novel occurrence
# Core digital skill-sets needed

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Literate Routine/ Manual</th>
<th>Fluent Non routine/ Manual</th>
<th>Master Non routine/ analytical</th>
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<tr>
<td><strong>Information</strong></td>
<td>Finding, evaluating, organising, using content;</td>
<td>Understanding the need for information; identifying what type of information is needed</td>
<td>Synthesising, creating information</td>
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<td><strong>Computer</strong></td>
<td>Competence in using hardware and software tools; understanding access controls; Ability to publish and communicate using available tools; Using spreadsheets and word-processors</td>
<td>Using IT tools for research and scholarship,</td>
<td>Ability to evaluate the benefits of new technologies</td>
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<td><strong>Media</strong></td>
<td>Access, navigating and edit text, sound, image and video media; Communicate via media platforms</td>
<td>Understanding graphic design principles, the combination of visuals and text, the use of sound; The nature of web authorship;</td>
<td>Critical analysis and evaluation of mass media; Production of multi-media content; Integrating and comprehending sensory experiences</td>
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<td><strong>Communication</strong></td>
<td>Using and constructing hyperlinks between documents and/or images, sounds, movies, semiotic languages used in email, online chat space or in instant messaging</td>
<td>Producing ‘non-linear’ texts, navigating three-dimensional worlds online and so on</td>
<td>Ability to critically analyse and evaluate ‘non-linear’ texts and three-dimensional worlds online</td>
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<tr>
<td><strong>Technology</strong></td>
<td>Ability to use technology within life situations</td>
<td>Communicating and negotiating meaningful content through the medium of encoded texts within contexts of participation</td>
<td>Ability to adopt, adapt, invent, and evaluate technology to positively affect his or her life, community, and environment</td>
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Building Digital Skills

• Require life long learning opportunities to progress from Digital Literacy to Digital Fluency to Digital Mastery
• Digital Literacy provides one opportunities to entry-level employment (use generic skills to conduct routine and manual tasks)
• Skills Complementarity: The ability to use digital skills in multiple settings are most valuable – must be able to apply the skill to add value to the employer
• Skills training programmes must also be recognised and valued by employers
Skills Training Challenges

- Lack of accreditation
- High Cost for individual skills
- Need holistic training programmes

Digital Literacy Course

**Accreditation Info**

**Status:** Non accredited course  
**Type & reward:** College SA Provider Programme - Proficiency Certificate  
**Provided by:** College SA

College SA has put together a range of courses that address the need for affordable skills development. These courses, made up from a range of providers as well as some of our own proprietary material, have been developed specifically for distance learners to help them gain skills. Although these courses are non-accredited, they are extremely valuable for many students since the information is relevant, up to date and will help you improve your job performance in your chosen field. These courses are typically more affordable than accredited courses, do not require formal exams to pass and are often structured in such a way that you can level up your skills as you go along. They are perfect for self-development and demonstrate to employers/potential employers your willingness to learn and improve yourself thereby increasing your ability to find a job or get a better job.

**Entry Requirements**

- Grade 10.
- Read and write English.
- At least 16 years old.
South Africa – Skills Required by Employers – May 2017

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Holistic Skills Upliftment Strategy
The Need for a Holistic Digital Skills Upliftment Strategy

• Current education system’s main focus is on quantity not quality of graduates whereas employers want better quality
• The challenge faced by education policy makers is to determine how to ensure policy is agile to respond to the rapid pace of the changing needs of employers
• Because of emerging technologies, the skill levels required in the digital economy keep moving forward
• As such, any minimum standards that are introduced for the purposes of digital education standards must informed by a dynamic and responsive standard-setting body
• Hence we are proposing that there need for:
   A new education paradigm
   Specific digital skills standard-setting body
   Effective management of digital skills training programmes
New Education Paradigm(s) to meet High Demand of Digital Skills

- Focus on the student’s success in the new global economy and effective thought on the type of skills that students need to master to be well prepared for success in the digital economy

- Basic Computer Science (CS) and Information Systems (IS) curriculum can be shifted to start in secondary schools as compulsory subject(s) to give students a suitable foundation of digital skills perceptions

- A move from textbook-based data to web-based sources in primary and secondary schools to familiarise students with digital workplaces

- Move from teacher-directed to student-centred learning, from direct teacher instruction to interactive exchange with and among students to boost teamwork

- A shift from a traditional and formal education, to work-integrated learning
Specific Digital Skills Standard-Setting Body

• Introduce skills certification recognised by employers and higher education

• Such certificate to be supported by Internationally recognised standard-setting body

• Standard-setting body to be responsible to balance need of Demand and supply of digital skills
Effective management of digital skills training programmes

• Introduce basic computer training in primary levels of schooling: just simple activities of problem solving using basic technology platforms

• Companies-life long learning

• Apprenticeships to help get experience – how to solve the problem of experience

• Universities/ Schools/ Colleges to develop partnerships with business / employers

• Robust and flexible digital student workshop approach (similar to SAICA camps for accounting students)
Addressing Socio-Cultural Norms
Gender Biased Value Systems

- Biased Community Values systems tend to deprive the girl child opportunities, such as:
  - Son preference within family units
  - Community expectations
  - Cultural norms of the female contribution to the household
- 23% of Girls dropout of School before puberty
  - Lack of exposure to ICT
  - Limited English language teaching
  - Limited technological and scientific knowledge, particularly in rural areas
- Negative attitudes to women using ICT:
  - Eg: ‘What would a woman farmer want with a computer?’

Source: Boag (2015)
Gender Parity when accessing digital training

- ICT Training facilities are in public spaces
- Are negative connotations for a woman to visit a ‘cyber café’ if it is predominantly visited by men
- Women are affected by ‘time poverty’ – carry out multiple roles, with limited time for training programmes – clashes with operating hours of training programmes.
- Need to tailor the training programme to address such challenges:
  - Eg. Internet Saathi Programme:
    - Managed by women
    - Training conducted by local women
    - Scalable and sustainable programme
Need-specific training programmes

- Training programmes need to be context-specific to be accessible to women.
- ICT training programmes in school to teach science and technology may work in urban areas.
  - Need alternative approach in rural areas to respond to high drop-out rates.
  - Consider out-of-school training programmes for rural adolescent girls.
- Need innovative approaches to reach the illiterate.
  - EG. Barefoot College in Rajasthan, India.
  - Innovative methods to train illiterate rural women to use cell-phones.
E-Commerce Opportunities for Women

- Women entrepreneurs can benefit from e-commerce, it offers
  - Ability to work from home
  - Flexibility of time
- Can sell and purchase products / services
- Digital technology promotes productivity and competitiveness amongst women entrepreneurs
  - Linkers producers and traders to international markets
- Research into appropriate training programmes that target women will help develop these opportunities
Recommendations

• Recognise that the Digital Divide is a manifestation of Global Inequality
• Need to provide balanced skills training programmes informed by the 5 dimensions of digital skills
• A standard setting body can determine the skills needs of employers
• Need to tailor training programmes to recognise gender disparities and socio-cultural norms
Thank you

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www.orfonline.org
http://www.g20-insights.org/policy_area/the-digital-economy/