Unisa students experience of ICTs in a nutshell:

Integrating five years accumulative data

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"Applied with intelligence, diligence, research and commitment, ICT's provide a powerful means of improving the quality of education along with significantly improved data for diagnosis and formative evaluation. This potential will be realised if educators in all sectors take up the challenge and hard work of adaptation and change required if we are to develop both ICTs in education and the profession in its use of them "(Dellit, 2011).

Introduction

The explosion of ICT's over the past 20 years has made it increasingly difficult to understand exactly what **"distance"** means. It has also contributed to the boundaries between distance and contact education becoming less clear over time, with some suggesting the existence of a **continuum** of education provision, with distance on the one end and contact on the other.

One of the important discourses in HE in general and more so in ODL is regarding the importance to continue to probe **student's access and use** of information and communication technology (ICT).

A longstanding focus of research has been on monitoring the extent of student access to ICT, because it is an obvious precursor to technology use and more recently the understanding of **student's technological experiences**.

Why are we talking?

This article provides a brief summary of the ICT results obtained from the Student Profile Survey that was conducted in the latter half of **2014**, with reference also to the **2013 and 2011** Student ICT survey data where relevant. This presentation therefore serves as a high level summary of ICT research conducted over the **past five years** and the associated links to student success.

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Aim and Analytic Focus

The aim of the Student ICT research over time was essentially to evaluate the status and trends of student access to, and use of, various ICT's. It includes a review of self-reporting skills and capabilities of students in using such technologies.

The **key research areas** are as follows:

- **Regular access to devices**

- **Ownership of devices**

- **Access location**

- **Source and location of access**

- **Student ability to use software packages, platforms and web services**

- **Linking success to student ICT behaviour**

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Sampling and Response

- In **2011** approximately **30 000 students** participated - we had a online and paper base component in the regions were myUnisa usage was the lowest at that point in time.

- Both those students that completed **online and via paper** indicated that they have regular access. As well as a portion of students online and via paper indicating not having access.

- This indicated that the survey method does not impact on data based on participation method.

- In **2013 2 500 students** participated and in **2014** in the Student Profile questionnaire over **13 000** students participated.

How representative is our data

The results of the student profile survey revealed that the sample distributions across gender, race, and age groupings compared well with the overall group characteristics of the target population of 2014 registered students.

If we compare the data from the Student ICT surveys conducted in 2011 and 2013 to the data obtained from the Student Profile Survey, it is evident that across the three research projects the majority of participating students were African females, for all three years (2011, 2013 and 2014) – this pointing towards consistent representation of our current student body, with the majority of our students falling into the above mentioned categories.

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Survey Results: Profiling

Good representation

Gender

Male

37% **39%**

Female

63% **61%**

Gender

Male

43%/45%

Female

57%/55%

Race

(Bar chart, % axis 0–100)
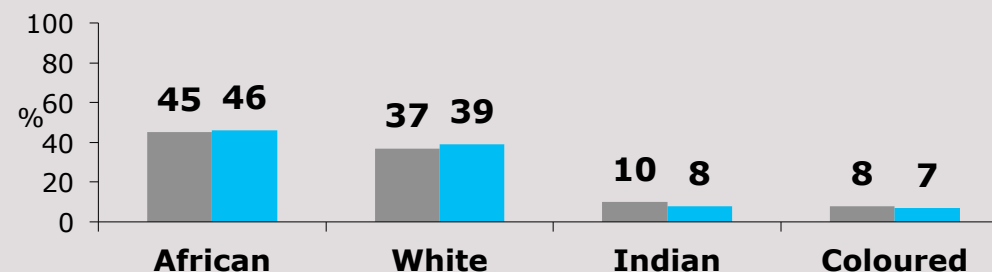
	African	White	Indian	Coloured
Grey	45	37	10	8
Blue	46	39	8	7

Unisa

2014

2013

2011

N-351 161

n-13 319

n 2194

n 22 216

Race

African - **60%** — 72%

Coloured - **7%** — 5%

Indian - **6%** — 7%

White - **26%** — 16%

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Survey Results: Profiling

Good representation

Chart — Age distribution (bars):

Age group	2014	2013
20-29	54	22
30-39	26	29
40-49	8	33
50-59	1	14
60-69	1	2
70+	0	1

Age
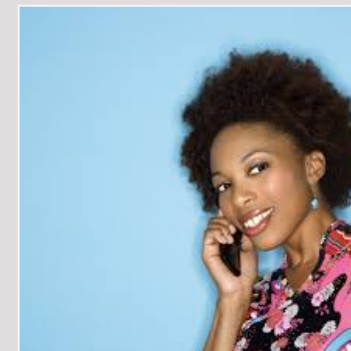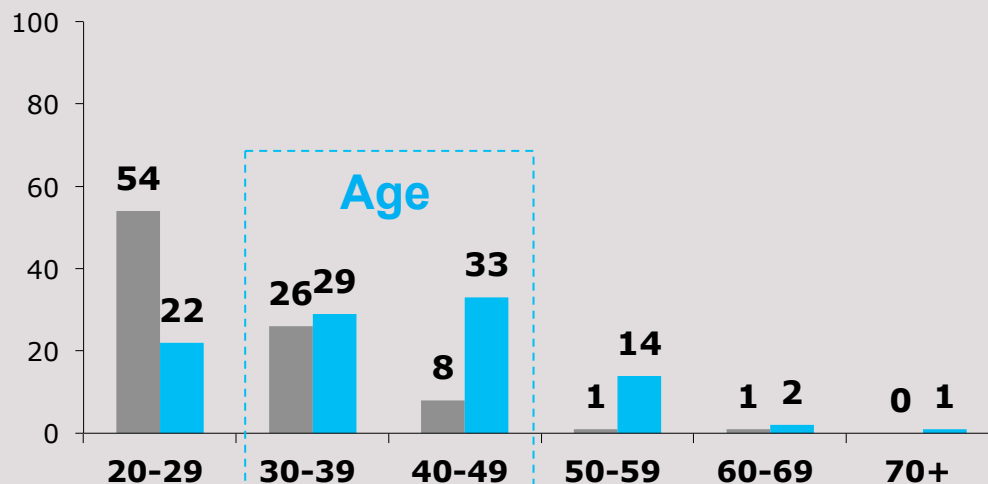
Unisa
N-351 161

2014
n-13 319

2013
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2011
n 22 216

Age

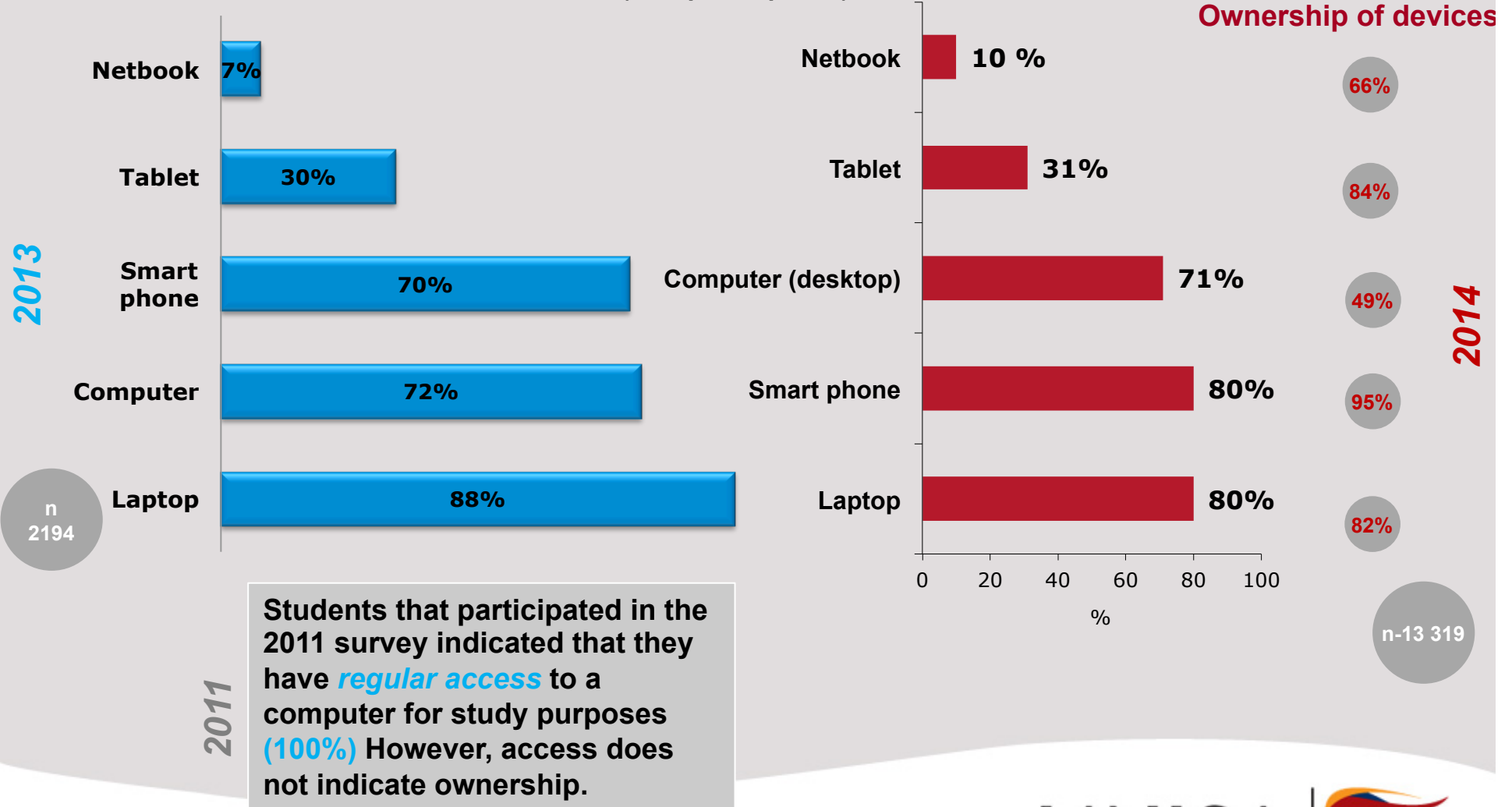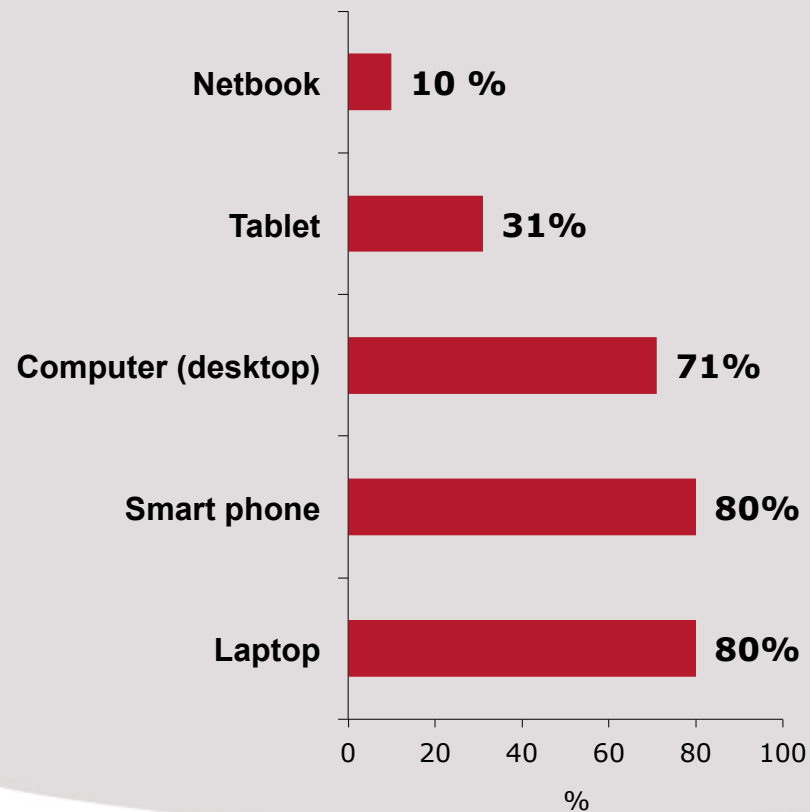|		
18-24 -	23%	24%
25-29 -	22%	26%
30-39 -	34%	34%
40-49 -	16%	14%
50-59 -	5%	3%
60+ -	0,7%	0.3%

age

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Access: ICT Devices

Survey Results

Do you have access to one or more of the following even if it is not your own?
(Multiple response)

Ownership of devices

2013

Device	Access
Netbook	7%
Tablet	30%
Smart phone	70%
Computer	72%
Laptop	88%

n 2194

2014

Device	Access	Ownership
Netbook	10 %	66%
Tablet	31%	84%
Computer (desktop)	71%	49%
Smart phone	80%	95%
Laptop	80%	82%

0 20 40 60 80 100

%

n-13 319

2011

Students that participated in the 2011 survey indicated that they have *regular access* to a computer for study purposes *(100%)* However, access does not indicate ownership.

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ICT Access: Success

Do you have access to one or more of the following even if it is not your own?

Device	Access %	Final mark 75%+	100% of Modules passed
Netbook	10 %	11%	64%
Tablet	31%	14%	70%
Computer (desktop)	71%	13%	66%
Smart phone	80%	13%	68%
Laptop	80%	14%	68%

2014

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Survey Results

Students that have access to a computer mostly access it from home.

From which location do you mostly access the computer/device/s you specified? (Multiple response)

Access Location

2013

Home	82%
Work	70%
Internet Cafe	9%
Someone else's home	3%
Unisa Computer Laboratory	6%
Unisa Multipurpose Community Centre	1%
Other	1%

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2011

Home	61%
Work	53%
Internet Cafe	9%
Unisa Computer Laboratory	7%
Someone else's home	2%
Unisa Multipurpose Community Centre	1%
Other	1%

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ICT Access: Results

From which location do you mostly access the device's you specified?

	Computer	Laptop	Netbook	Tablet	Smart phone
Home	35%	83%	57%	88%	91%
Work	64%	32%	23%	21%	34%
Internet Cafe	10%	2%	3%	1%	3%
Unisa Computer Laboratory	7%	1%	1%	1%	1%
Someone else's home	3%	4%	8%	6%	5%
Unisa Multipurpose Community Centre	1%	1%	1%	0,3%	1%

2014

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ICT Access: Success

From which location do you mostly access the device's you specified?

100% of Modules passed

	Computer		Laptop		Netbook		Tablet		Smart phone	
Home	35%	70%	83%	70%	57%	66%	88%	72%	91%	68%
Work	64%	65%	32%	66%	23%	67%	21%	72%	34%	69%
Internet Cafe	10%	62%	2%	58%	3%	67%	1%	67%	3%	66%
Unisa Computer Laboratory	7%	56%	1%	43%	1%	67%	1%	29%	1%	50%
Someone else's home	3%	72%	4%	69%	8%	49%	6%	68%	5%	76%
Unisa Multipurpose Community Centre	1%	65%	1%	51%	1%	50%	0,3%	50%	1%	63%

2014

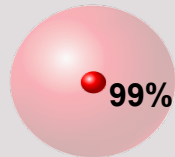UNISA | university of south africa

Access: Internet

Survey Results

Do you have access to the internet even if it is not your own?
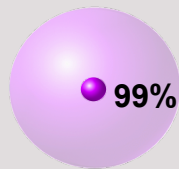*(Multiple response)*

Internet Access

2014

99%

99% of students that participated in 2014 have regular access to the internet
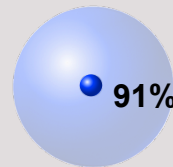
n
13 319

2013

99%

99% of students that participated in 2013 have regular access to the internet

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2011

91%

91% of students that participated in 2011 have regular access to the internet

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ICT Access: Results

From which sources and location do you mostly access the internet?

	Computer	Laptop	Netbook	Tablet	Smart phone
Home	30%	68%	50%	79%	84%
Work	61%	33%	23%	25%	32%
Internet Cafe	13%	4%	4%	3%	3%
Unisa Computer Laboratory	7%	2%	2%	1%	1%
Someone else's home	4%	6%	8%	7%	6%
Unisa Multipurpose Community Centre	2%	1%	1%	0,4%	1%

2014

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Survey Results

From which location do you mostly access the internet for study purposes?
(Multiple response)

Access Location

2013

Home	76%
Work	55%
Mobile device	26%
Internet Cafe	9%
Someone else's home	2%
Unisa Computer Laboratory	7%
Unisa Multipurpose Community Centre	2%
Other	1%

n
2194

2011

Home	57%
Work	51%
Mobile device	11%
Internet Cafe	10%
Unisa Computer Laboratory	6%
Someone else's home	3%
Unisa Multipurpose Community Centre	1%

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22 216

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ICT Access: Success

From which sources and location do you mostly access the internet?

100% of Modules passed

	Computer		Laptop		Netbook		Tablet		Smart phone	
Home	30%	**71%**	68%	**70%**	50%	**66%**	79%	**71%**	84%	**68%**
Work	61%	**65%**	33%	**67%**	23%	**69%**	25%	**72%**	32%	**69%**
Internet Cafe	13%	**62%**	4%	**61%**	4%	**46%**	3%	**61%**	3%	**64%**
Unisa Computer Laboratory	7%	**56%**	2%	**57%**	2%	**69%**	1%	**67%**	1%	**59%**
Someone else's home	4%	**71%**	6%	**71%**	8%	**61%**	7%	**71%**	6%	**73%**
Unisa Multipurpose Community Centre	2%	**66%**	1%	**58%**	1%	**33%**	0,4%	**50%**	1%	**51%**

2014

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Ability

ICT Ability: Results

Top Box score

2014

Microsoft Word — Good- 85%

Microsoft Excel — Good- 70%

PowerPoint — Good- 63%

Microsoft Access — Good- 35%

Microsoft Project — Good- 22%

Scientific Tools — Good- 8%

E-mail — Good- 91%

Internet browser — Good- 91%

Internet search engines — Good- 90%

myUnisa — Good- 87%

Unisa online library — Good- 49%

Please rate your ability to use the following computer software packages, platforms and web services.

Unisa online registration — Good- 73%

Convert documents into PDF — Good- 71%

Download a PDF document — Good- 81%

Install and use anti-virus — Good- 24%

Blogs — Good- 34%

Discussion forums — Good- 52%

Photo editor — Good- 33%

GPS (e.g. Google Earth) — Good- 56%

Survey Results

Top Box score

Ability

2013

2011

	2013	2011
Microsoft Word	Good- 87%	89%
Microsoft Excel	Good- 73%	76%
PowerPoint	Good- 64%	62%
Microsoft Access	Good- 31%	35%
Microsoft Project	Good- 19%	22%
Scientific Tools	Good- 10%	14%
E-mail	Good- 92%	93%
Internet browser	Good- 89%	92%
Internet search engines	Good- 89%	93%
myUnisa	Good- 87%	91%
Unisa online library	Good- 47%	45%

Please rate your ability to use the following computer software packages, platforms and web services.

Survey Results

Top Box score

Ability

2013

Unisa online registration	**Good- 74%**
Convert documents into PDF	**Good- 70%**
Download a PDF document	**Good- 83%**
Install and use anti-virus	**Good- 62%**
Blogs	**Good- 33%**
Discussion forums	**Good- 49%**
Photo editor	**Good- 27%**
GPS (e.g. Google Earth)	**Good- 54%**

2011

New items added to questionnaire no 2011 comparison

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ICT Ability: Success

	Final mark 75%+	100% of Modules passed
Microsoft Word — Good- 85%	13%	67%
Microsoft Excel — Good- 70%	13%	67%
PowerPoint — Good- 63%	13%	67%
Microsoft Access — Good- 35%	10%	64%
Microsoft Project — Good- 22%	11%	65%
Scientific Tools — Good- 8%	11%	58%
E-mail — Good- 91%	13%	67%
Internet browser — Good- 91%	13%	67%
Internet search engines — Good- 90%	13%	67%
myUnisa — Good- 87%	13%	67%
Unisa online library — Good- 49%	12%	65%

2014
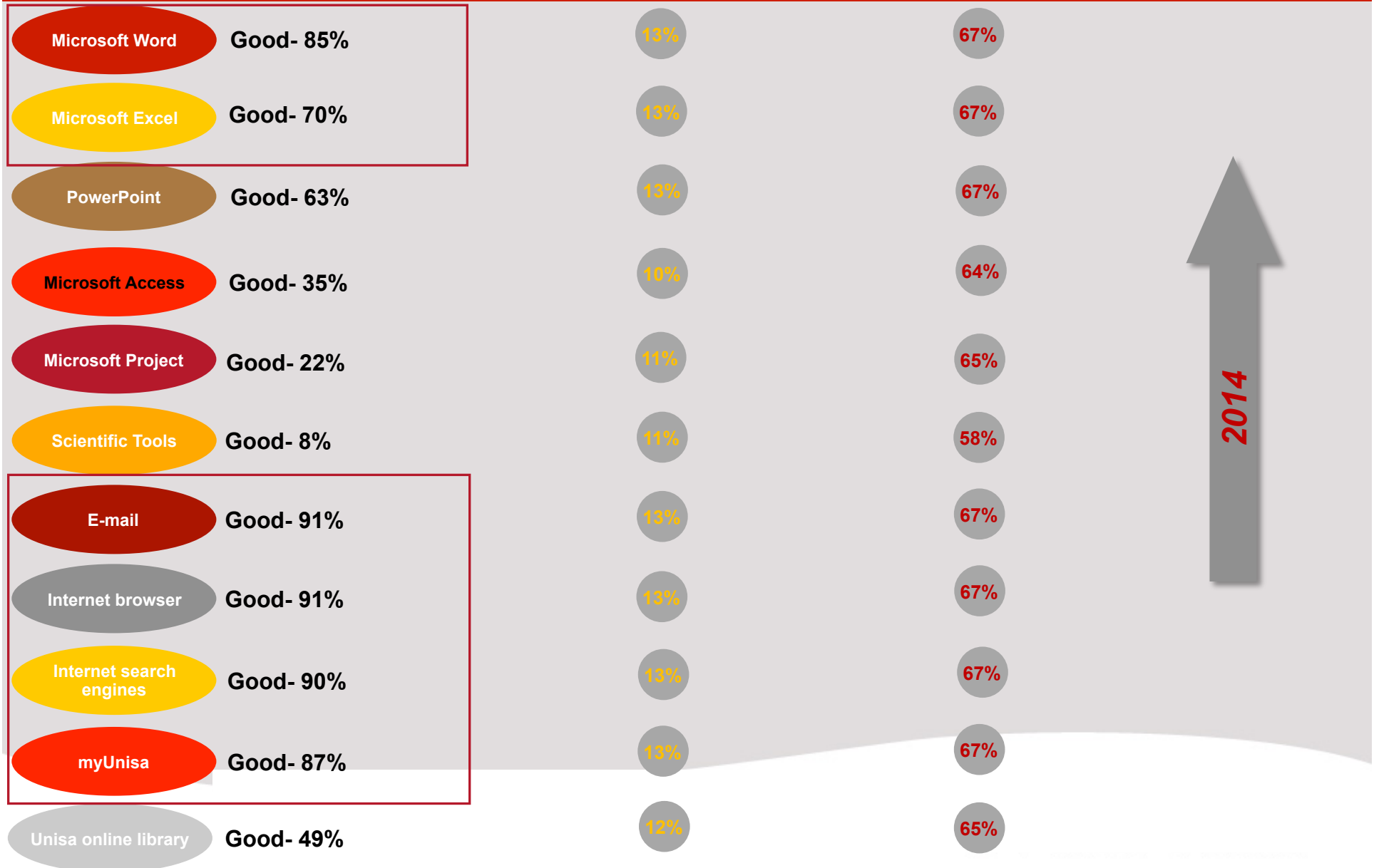
ICT Ability: Success

		Final mark 75%+	100% of Modules passed
Unisa online registration	Good- 73%	12%	66%
Convert documents into PDF	Good- 71%	14%	68%
Download a PDF document	Good- 81%	14%	68%
Install and use anti-virus	Good- 24%	13%	66%
Blogs	Good- 34%	14%	69%
Discussion forums	Good- 52%	15%	69%
Photo editor	Good- 33%	14%	68%
GPS (e.g. Google Earth)	Good- 56%	13%	68%

2014

Concluding Remarks

Unisa students are cost sensitive towards acquiring ICT's and often have to make arrangements to have regular access for study purposes. Therefore laptop ownership and broadband access are only some of the changing access trends that need to be monitored on a regular basis. The fact that Unisa students can be resourceful and can make alternative arrangements to access various forms of ICT's does not necessarily translate into "the access issue" being fully resolved.

Concluding Remarks

Laptops and desktops remain key ICT devices; however, students are increasingly making use of smartphones for study purposes. Due to this increased use of smartphones, students are becoming less reliant on access to laptops. Smartphones, however, do not provide the same functionality and could be limiting to students for study purposes.

Concluding Remarks

The proportion of students having access to desktop computers remains stable, but they are not upgraded as regularly as laptops, therefore could become outdated in terms of software and performance (hardware).

Desktops remain an ICT that is more often shared than any of the other devices. Laptops are second, followed by tablets. A smartphone is least shared and therefore more often owned by the user.

With the advances in technology, smartphones are considered a primary option when compared to tablets, with the latter being used only as a secondary device.

Concluding Remarks

In conclusion, the value of undertaking regular research to explore and monitor growth and changes in ICT usage, behaviour and attitude is pertinent not only from a student perspective but also from a teaching and learning perspective.

The research conducted in the past five years offers valuable insights for educational practitioners and addresses elements of an ever changing educational environment.

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Concluding Remarks

It provides the opportunity to develop intervention strategies based on the findings in order to address ICT skill levels in an open distance learning environment. From a teacher perspective, research and training needs to continue to support innovative pedagogy. According to Underwood (2006), the use of ICT's for teaching and learning is being integrated in a continuous process.

In conclusion the data collected offers a rich secondary source for ongoing research.

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