

Shifts in students' access to and skills in using ICT in an open and distance learning context



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Introduction



Introduction

- Access to and the **effective utilisation of ICT** and related resources are becoming increasingly important contributors towards student success in higher education
- Contemplate the moderator vs mediator vs direct causal effect
- Realises that access to ICT constitutes only one dimension of a more complex and elaborative (and evolving) construct -> **ICT sophistication** (engagement, literacy)

Introduction

- Research efforts at Unisa has strong focus on measuring access to ICT
 - Student Profile Survey 2012 (amongst ACN203S students – a pilot study)
 - ICT Survey 2011 (baseline study)
 - ICT Survey 2013 (comparative study)

Some research questions

- What are the **current status of student access** to, and use of, various ICTs?
- Any key shifts and emerging trends?
- Investigating the relationship between access/ability as sub-constructs of ICT sophistication and student success?

Research design

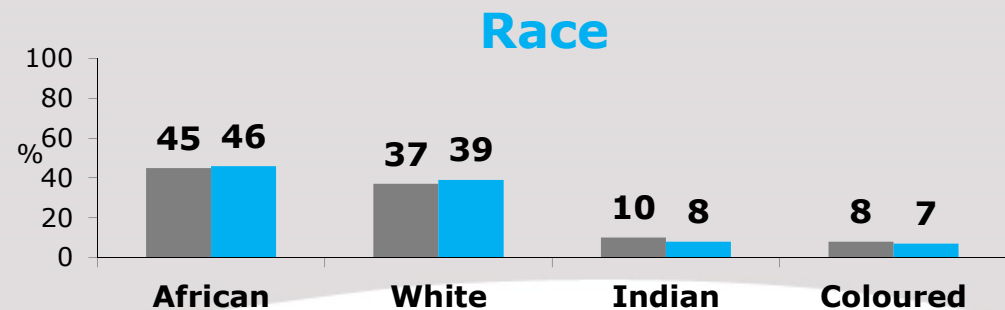
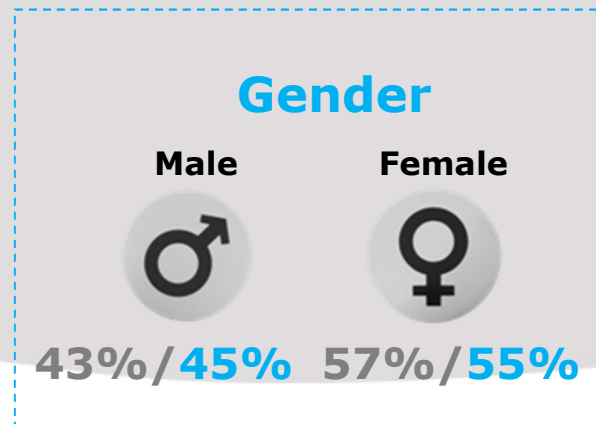
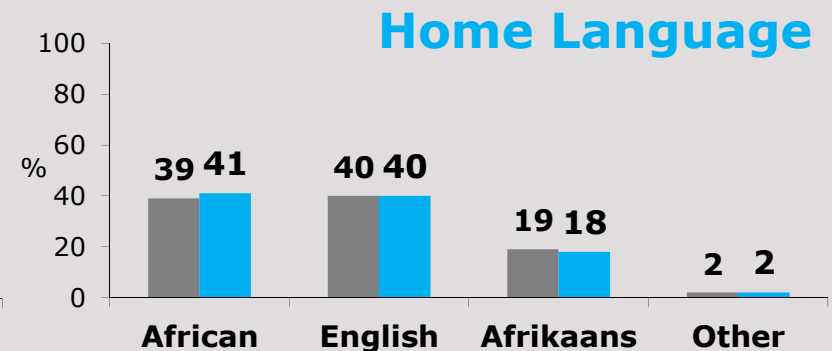
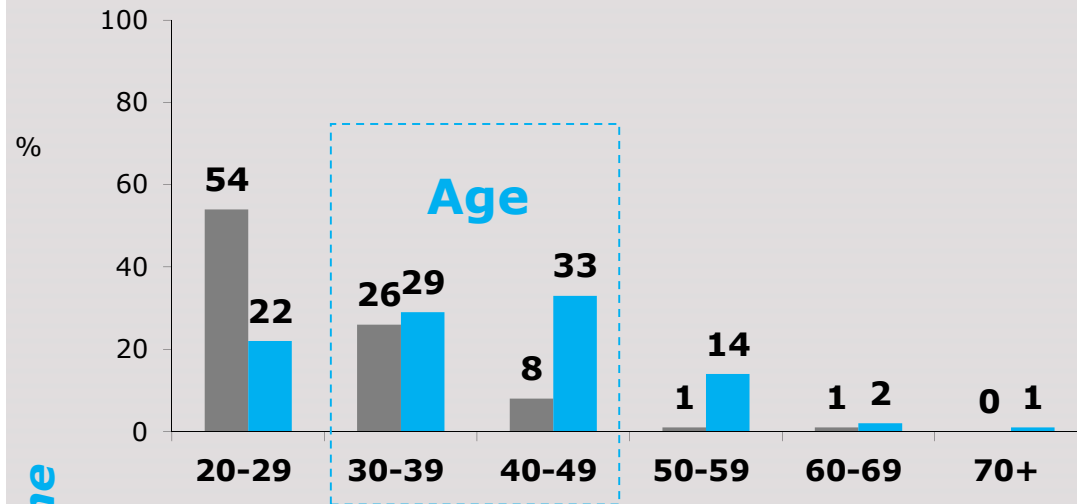
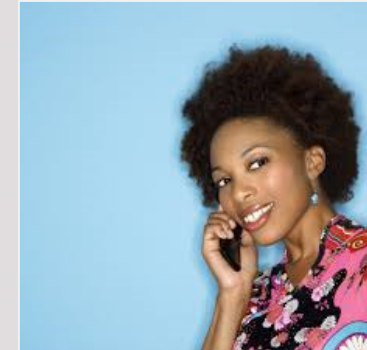
On-line survey

Realised **sample** (n = 2 194)

A **comparison of demographics** shows **highly similar profiles with 2011 study**

Profile: Respondents

2013 comparison to 2011



2011 Online 2013 Online

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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?

Access Location

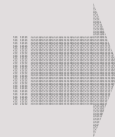
2013



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

Gender &
LSM
differences!

2011



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

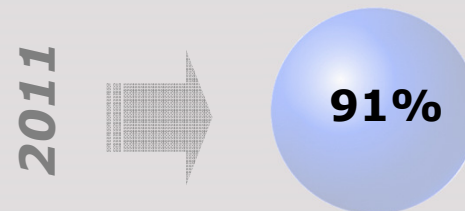
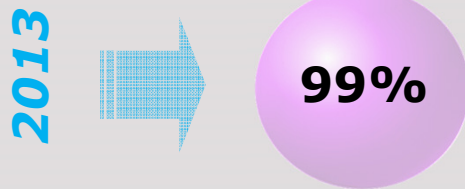
Relationship
with student
success!

Survey Results

Do you have regular access to the Internet (even if it is not your own?)

From which device do you access the Internet?

Internet Access



Computer	59%
Laptop	74%
Netbook	4%
Tablet	21%
Cellphone/Smart phone	60%

Moving from pen/paper to digital

Survey Results

What kind of Internet access do you have?

2013

3G/HSDPA
modem
54%

Cellphone device
51%

Company LAN
43%

ADSL
40%

Public Wifi
10%

2011

3G/HSDPA
modem
35%

Cellphone device
16%

Company LAN
32%

ADSL
39%

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Survey Results

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

Top Box score

Ability

2013

Microsoft Word

Good- 87%

Microsoft Excel

Good- 73%

PowerPoint

Good- 64%

Microsoft Access

Good- 31%

Microsoft Project

Good- 19%

Scientific Tools

Good- 10%

E-mail

Good- 92%

Internet browser

Good- 89%

Internet search engines

Good- 89%

myUnisa

Good- 87%

Unisa online library

Good- 47%

89%

76%

62%

35%

22%

14%

93%

92%

93%

91%

45%

2011

Survey Results

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

Top Box score

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%

Ability

2013

2011

New items added to
questionnaire no 2011
comparison

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Survey Results

What is the brand of mobile device that you use?

Top 8

Blackberry	42%
Nokia	21%
Samsung	19%
Apple	11%
Sony Ericsson	2%
HTC	2%
Other	1%



Top 8

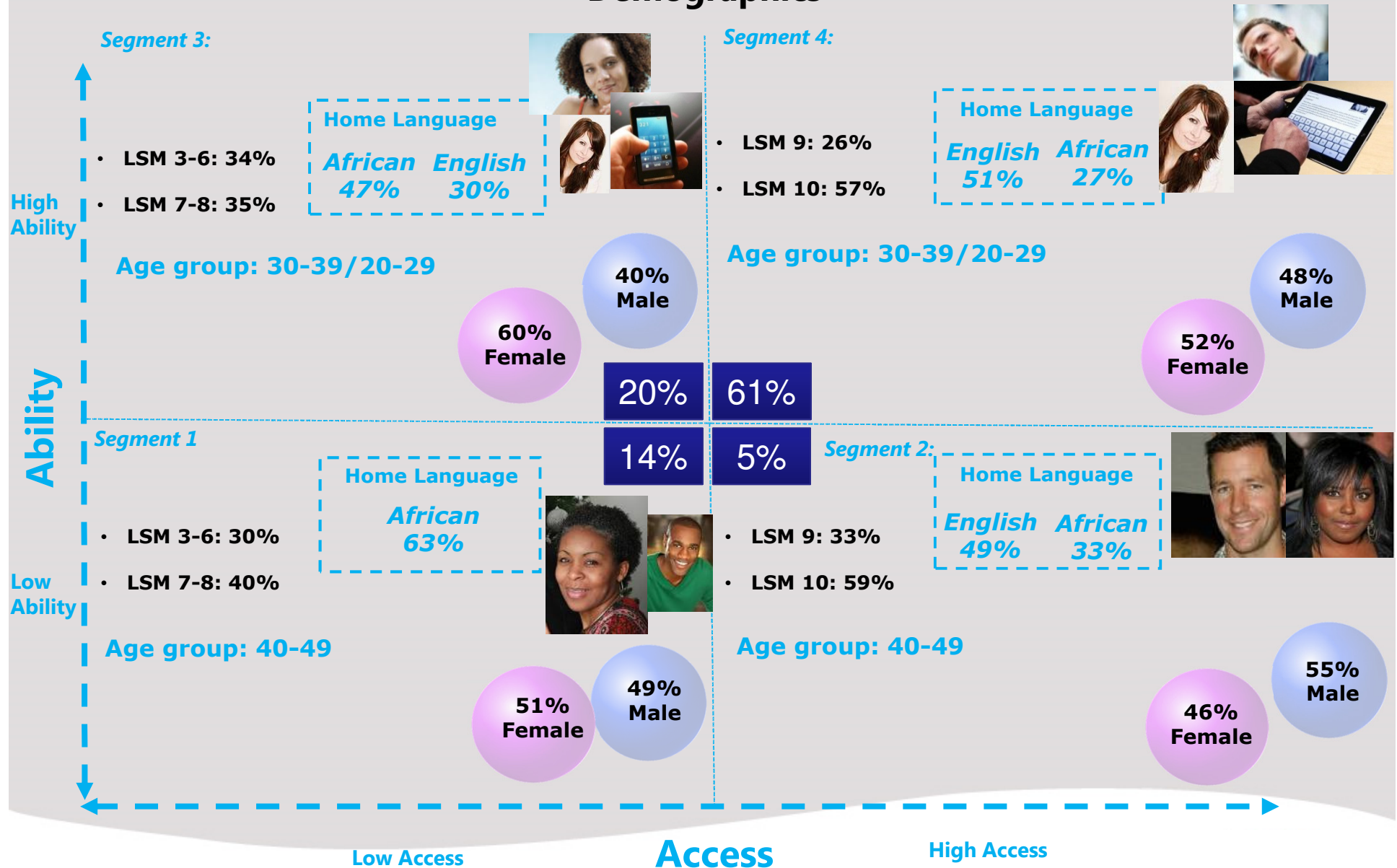
Nokia	40%
Blackberry	30%
Samsung	13%
Sony Ericsson	4%
Apple	3%
HTC	3%
Other	2%

2013

2011

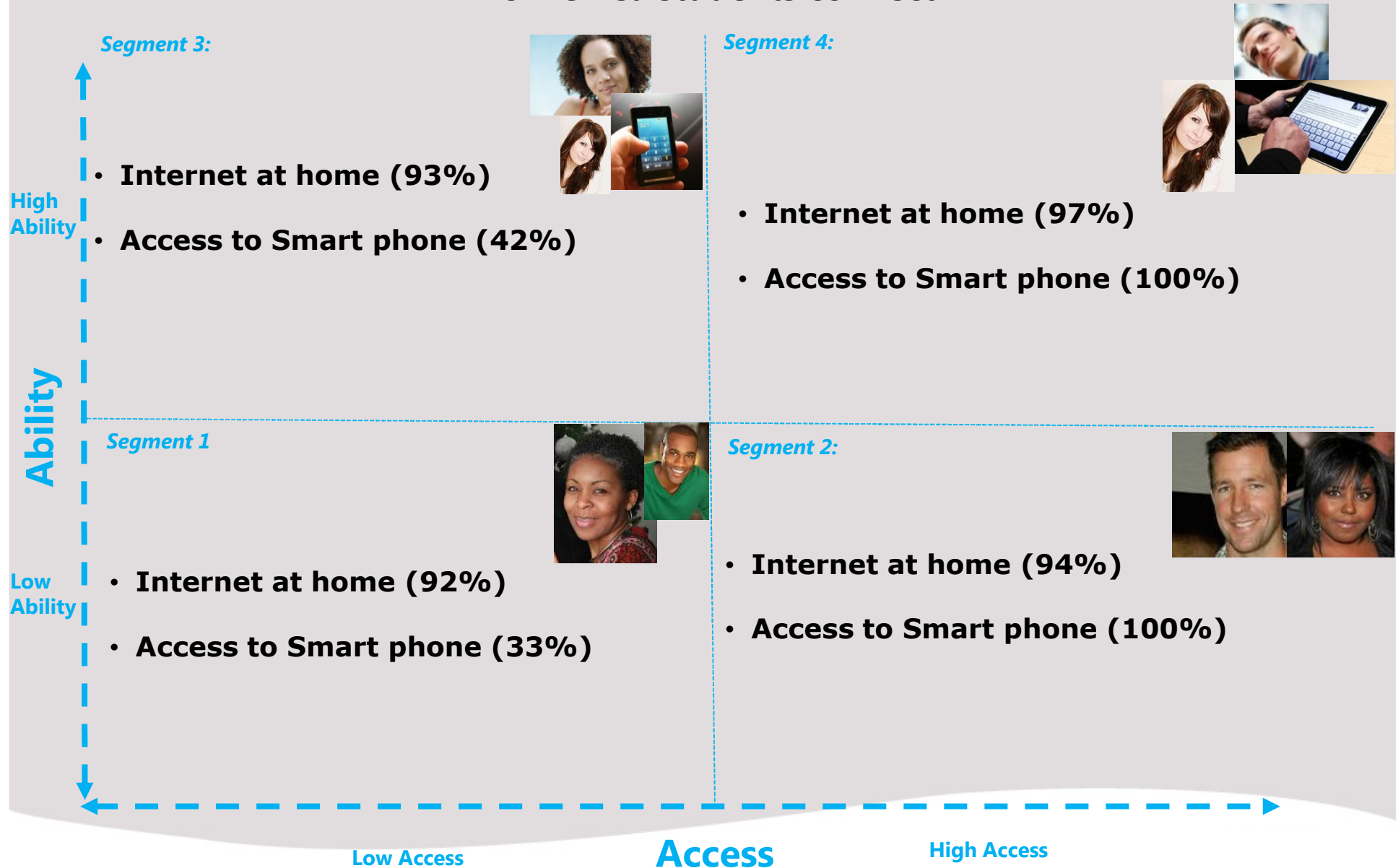
Segmentation: ICT Sophistication

Demographics



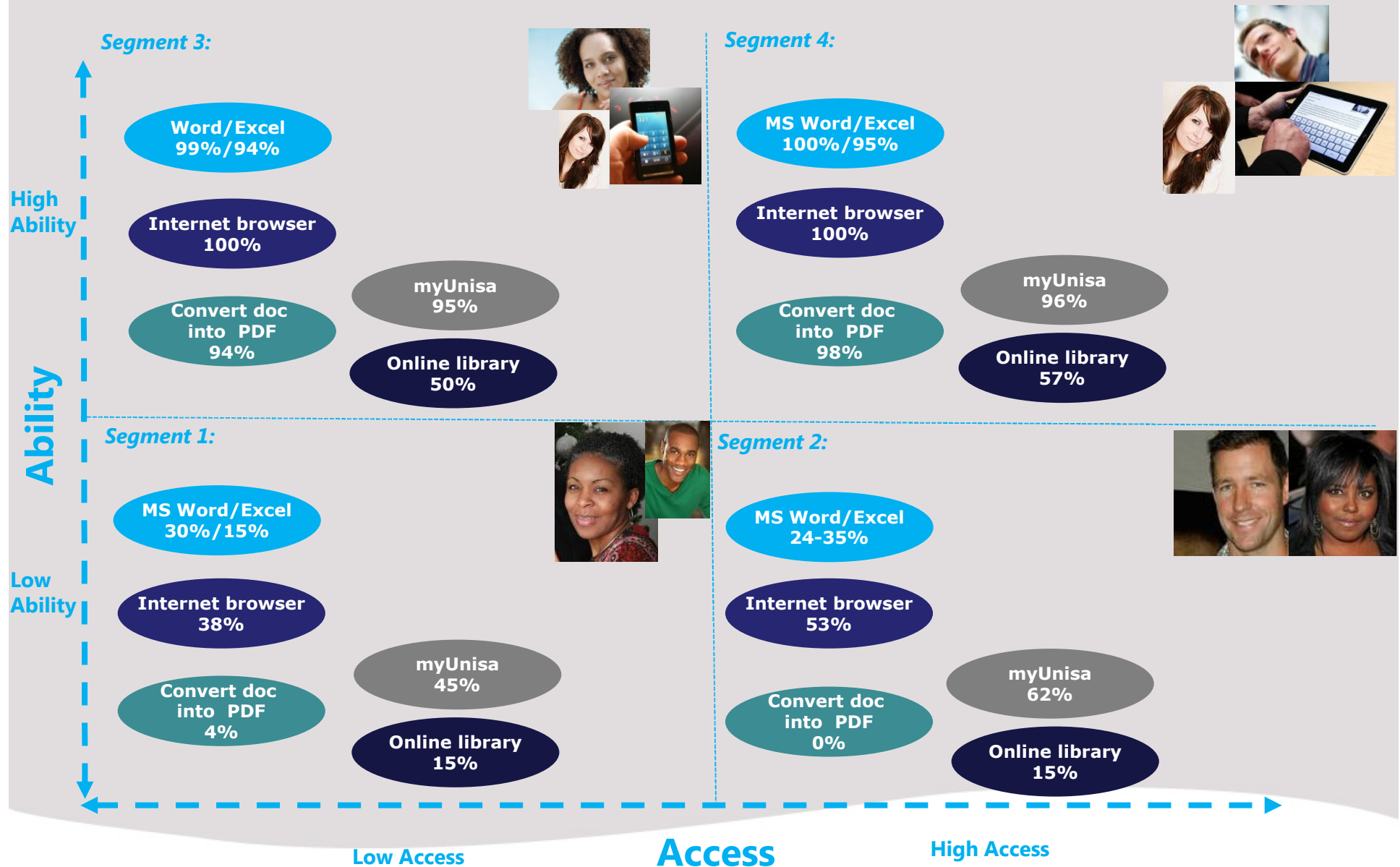
Segmentation: ICT Sophistication

How Unisa students connect



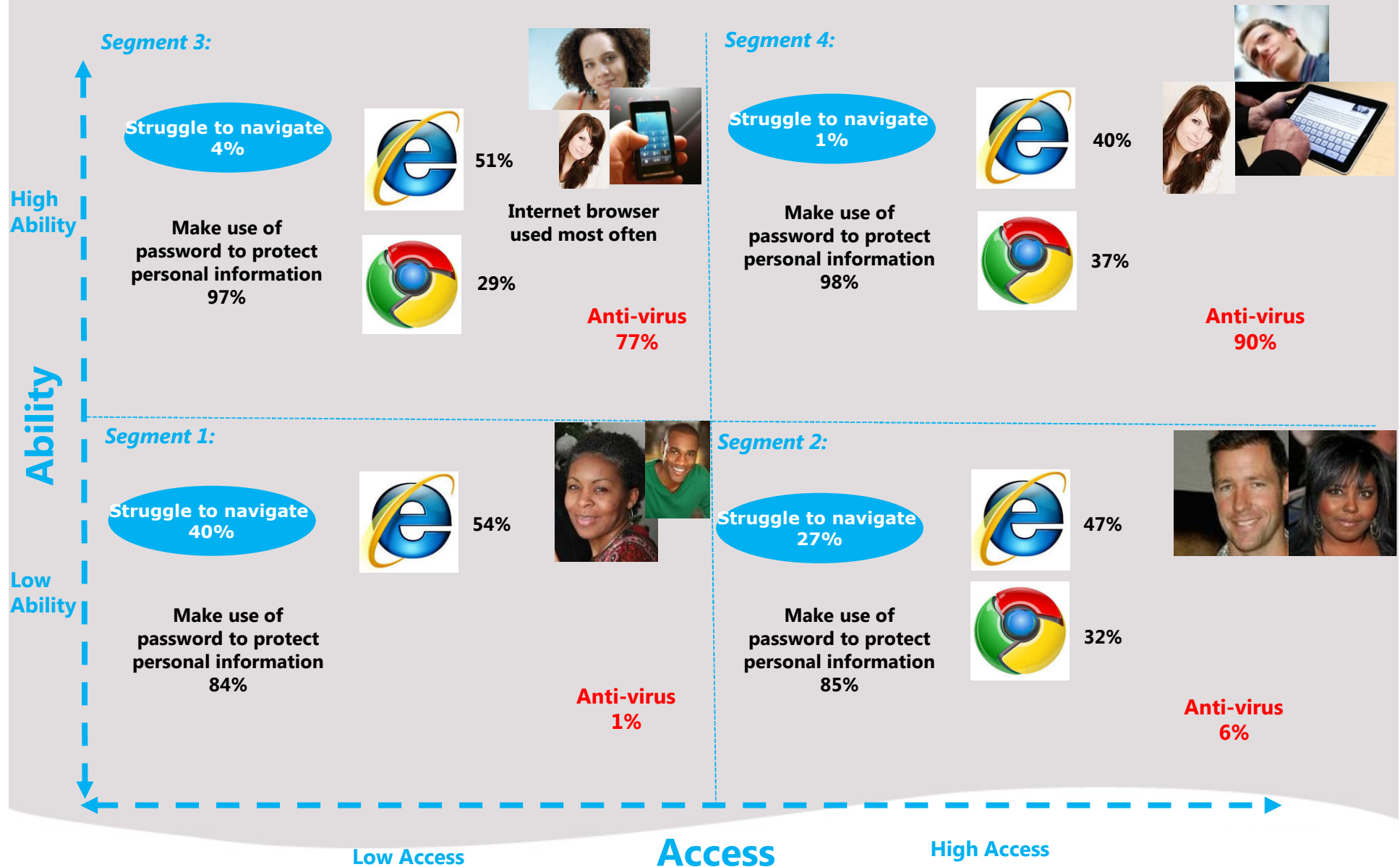
Segmentation: ICT Sophistication

Student Ability



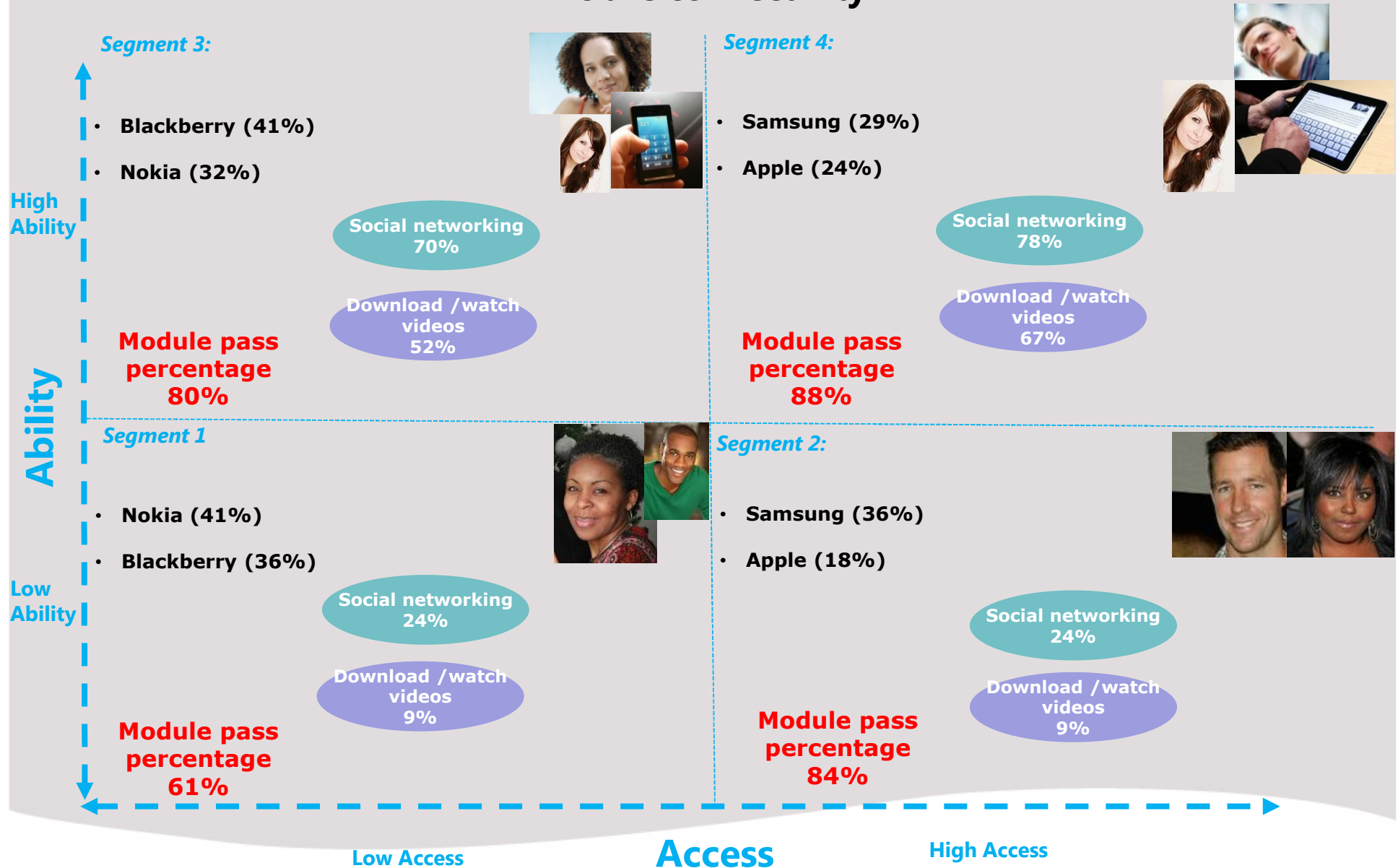
Segmentation: ICT Sophistication

Student Ability



Segmentation: ICT Sophistication

Mobile connectivity



In conclusion

- Important to track ICT access and ability for development of intervention strategies
 - Challenge of dynamic ICT product market
 - Converging ICT technologies
- Access and ability not enough
 - What we use and how we use
 - What we do with content (signals vs noise)
- Engagement is key
- Towards a definition of ICT sophistication, engagement and literacy

Thank you

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