

ANNEXURE A:

SPECIFICATIONS GUIDELINE OF TECHNOLOGY

WESTERN CAPE EDUCATION DEPARTMENT STANDARDS LIST

AS AT 1 SEPTEMBER 2016

A:	LAB TECHNOLOGY	Specifications
A1	Server	Intel S1200V3RPS Server Board, 8 GB DDR3 1333 ECC REG DIMM, 3'5 RAID Edition 2 TB Hard drive, Intel Xeon CPU E3-1230 8 M CACHE 3, 24 x SATA SUPERMULTI DVDRW, Ethernet Server Adapter I1210-T1, Intel Drive carrier – Single (Spare), 18.5/19.5" 16x9 Wide LCD Monitor (Build-in speaker) MS Basic optical wheel mouse – USB, USB keyboard, Windows SL, Intel server Chassis 450W
A2	Switch	Depending on number of computers: 48-Port 10/100/1000Mbps with 4 Combo SFP Ports (DGS-1210-52/E) 24-Port 10/100/1000Mbps with 4 Combo SFP Ports (DGS-1210-28/E) 16-Port 10/100/1000Mbps with 4 Combo SFP Ports (DGS-1210-20)
A3	Uninterrupted Power Supply (UPS)	APC 1000VA, on-line, USB
A4	Teacher Presentation Workstation	Desktop, Intel Core i5-6500 (Processor (3.60 GHz), 8GB DDR4 2133MHz UDIMM, SATA III 6GB/S 500GB 7200 HDD, Integrated Gigabit Ethernet, 18.5" wide flat screen monitor, USB Pro Full Size Keyboard, Enhanced Optical USB Mouse, DVD Recordable, Windows 10 Professional 64 National Academic SKU
A5	Learner Workstations	Desktop, Intel Core i3 (Processor (3.70 GHz), 8GB DDR4 2133MHz UDIMM, SATA III 6GB/S 500GB 7200 HDD, Integrated Gigabit Ethernet, 18.5" wide flat screen monitor, USB Pro Full Size Keyboard, Enhanced Optical USB Mouse, Windows 10 Professional 64 National Academic SKU

A6	Data Projector	Aspect ratio: 16:10 native / 16:9 supported, ANSI 300, Contrast ratio 2000:1, LCD/DLP display type, 1280x800 resolution, scalable up to 1920x1080, Lamp life hours 4000/ 5000 eco, Vertical keystone correction, Optical zoom mandatory, Video Ports D-Sub, HDMI, Wireless enabled, including wireless dongle, RJ45 LAN connector, 1 x USB 2.0 or higher
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B:	DIGITAL CLASSROOMS	Specifications
B1	Magnetic Whiteboard	1.8 x 1.2m
B2	Laptop	i5-4000M series or higher, Q97 / 100 series Chipset, 8GB RAM, 500 GB HDD, Video adaptor DirectX 9 with Windows Display Driver Model (WDDM) 1.0 or higher, DVD Writable, RJ 45 connector, 2 – more USB ports, Audio/sound ports, HDMI and VGA ports or adapters
B3	Data Projector	Aspect ratio: 16:10 native / 16:9 supported, ANSI 300, Contrast ratio 2000:1, LCD/DLP display type, 1280x800 resolution, scalable up to 1920x1080, Lamp life hours 4000/ 5000 eco, Vertical keystone correction, Optical zoom mandatory, Video Ports D-Sub, HDMI, Wireless enabled, including wireless dongle, RJ45 LAN connector, 1 x USB 2.0 or higher
B4	Interactive Mobile device	<p>Whiteboard active area: 1.8m Height and 1.2m Width</p> <p>Positioned: Magnetically affixes to the normal magnetic whiteboard.</p> <p>Supports Windows 7, 8, and 10 (32 and 64 bit)</p> <p>Connectivity: USB 2.0 and/or Bluetooth [Bluetooth range up to 10m] Wireless-enabled</p> <p>Stylus or Finger touch: For interactive use.</p>
B5	Visualizers	<p>Capture area/scan size:</p> <p>A4 up to A3 landscape, Still photo capture option, Scan document capture option, Video capture option, Dual view capability by using webcam or on-board PC webcam to present and record simultaneously (video & audio).</p> <p>Operating System (OS): Support Windows 7, 8, and 10 (32 and 64 bit)</p> <p>Interactive Whiteboard Compatibility: Flash plug-in for interactive whiteboard software</p> <p>Image sensor: Camera with a minimum of 5 mega-pixel, Rotatable camera head/arm at least 90°, Flexible Gooseneck Camera Arm, Electronic Image rotation via software [0° - 270°], Capable of viewing 3D objects, CMOS colour image</p>

	<p>sensor, Image resolution range: 2592x1944, 1600x1200, 1280x1024, 800x600, 640x480 and 1920x1080,</p> <p>On-board LED flashlight</p> <p>Zoom Function: Frame rate minimum up to 30 fps, Digital zoom 8 – 10X</p> <p>USB: Mini USB 2.0 port - 1 out, USB 2.0 port – 2 in (for use with a USB hub), Power over USB (to power the device)</p> <p>Audio: Audio capture using built-in microphone of the device</p> <p>Advanced Features: Include Interactive learning software and Application with the visualizer, Capability to send images/documents/information under visualizer to computer tablets (Android, IOS or Windows) and laptops/notebooks to up to 40 devices.</p> <p>Application must be able to send information back from the computer tablets (Android, IOS or Windows) and laptops/notebooks [two-way communication]</p>
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C:	LEARNER DEVICES	Specifications
C1	<p>Windows Tablets 10" dock ready</p> <p>Note:</p> <p>Dock keyboard optional</p>	<p>Windows tablet:</p> <ul style="list-style-type: none"> • 10.1", 16 x 10 Format, Windows 10 • Intel Cherry Trail Quad Core CPU (or newer version) • (1.4 GHz - 1.83GHz, 2MB Cache) • 10.1", Gorilla Glass HD (1280 x 800) TN TFT Panel • Capacitive 5 - 10 Point Touch • 2GB DDR3 • 32GB Flash Memory (eMMC) • Additional on-board storage space (HDD or SSD) 128 GB or greater • Dock Keyboard • Embedded 802.11a/b/g/n Wireless LAN • BT 4.0 • Built-in 2 MP or higher Front Camera • Built-in 5 MP or higher Rear Camera • Built-in Sound, Speakers and Microphone • 1 x Micro USB, 1 x Micro HDMI, 1 x Micro Card Reader up to 64 GB SD card • Passive Stylus (Included) • Ruggedized Design • Dust and Water Resistance (IP52 rating) • Drop spec - 60cm minimum drop tested • Li-Polymer Battery (6000mAh minimum) or higher • 7 - 8 hours operating • Charger • Micro USB to USB Cable (Male) • 1 set of lightweight headphones • Two (2) year ON-SITE warranty advised

<p style="text-align: center;">C2</p>	<p>Android Tablets 10" dock ready</p> <p>Note:</p> <p>Dock keyboard optional</p>	<p>Android tablet:</p> <ul style="list-style-type: none"> • 10.1", 16 x 10 Format • Android 6.0 (Marshmallow or newer version) • Intel Cherry Trail Quad Core CPU • 1.33 GHz - 1.83GHz, 2MB Cache • 10.1",Gorilla Glass /Enhanced Glass (1280 x 800) TN TFT Panel • Capacitive 5 -10 Point Touch • 2GB DDR3 • 32GB Flash Memory (eMMC) • Embedded 802.11a/b/g/n Wireless LAN • BT 4.0 • Built-in 2 MP or higher Front Camera • Built-in 5 MP or higher Rear Camera • Built-in Sound, Speakers and Microphone • 1 x Micro USB, 1 x Micro HDMI, 1 x Micro SD Card Reader up to 64 GB SD card • Passive Stylus (Included) • Ruggedized Design • Dust and Water Resistance (IP52 rating) • 60cm minimum Drop tested • Li-Polymer Battery (6000mAh) or higher • 7 - 8 hours operating • Charger • Micro USB to USB Cable (Male) • 1 set of lightweight headphones <p>Two (2) year ON-SITE warranty advised</p>
<p style="text-align: center;">C3</p>	<p>Cloud based Netbooks</p>	<p>Cloud based netbooks (either Chrome or Windows OS):</p> <ul style="list-style-type: none"> • Up to 12" HD 1366 x 768 resolution • Intel Celeron Processor • Intel HD Graphics • 2GB DDR3L RAM • 32 GB Flash Memory (eMMC) • SD Card Reader • Embedded 802.11a/b/g/n Wireless LAN • Built-in HD Webcam • Built-in Sound, Speakers and Microphone • 1 x Micro USB 3.0, 1 x Micro HDMI, DC- in jack, Headset/speaker jack • Spill proof keyboard • 60cm minimum drop tested • Battery 7 - 8 hours operating • Keyboard and touchpad • Power adapter • set of 1 lightweight headphones <p>Two (2) year ON-SITE warranty advised</p>