Area	Detail	Example starting questions
Technical leadership	Strategy and decision making	Is there a clear vision for learning? How effectively do decisions made about digital technologies help achieve the vision for learning? How is planning for digital technologies carried out? How do decisions about technical procurement, configurations, maintenance, and so on, get made? Is this effective for all students, teachers, support staff, and whānau?
	Shared responsibilities	Is there a culture of shared responsibility for decision-making, configuration, maintenance, and use of digital technologies? How do staff, students, and whānau have agency and voice when it comes to selecting or maintaining technologies?
Technical support and management	Support personnel	What level of satisfaction does your technical support provide? How do you regularly review the satisfaction levels of your technical support? Who provides technical support? School employees, contractors, students? How many hours per week for each type of support? Is good value for money achieved with technical support for: - Scheduled support - Ad-hoc support - Project-based support Is the right level of work being done by people with the right level of expertise at the right price? How effective is the communication between technical support personnel and the people they support?

	Support providers	What external support provider companies does the school use?
		Are these providers suitably:
		- Qualified? - Available and responsive? - Effective?
		Does the advice provided tend to be in the school's best interest?
		How often are other opinions or quotations sought?
		Is there clarity around the fixed and variable costs that your technical support provider might charge?
	Support systems	How do people access support when they have technical issues?
		Is there a helpdesk system to log and track issues?
		Are there tiers of support provided for issues of varying technical difficulty?
		How do issues get prioritised?
		How is the self-sufficiency of people being developed?
		Is it clear for students and staff what they could and should do to troubleshoot technical issues before they escalate them?
		What induction processes and documentation for staff and students to be able to understand and use the school's technical systems are in place?
		Is there some kind of knowledge base of how-to's or FAQs?
	Maintenance procedures	Are there systems for proactive maintenance such as checking error logs, testing emergency procedures, checking administrator accounts, applying security patches, updating firmware?
		How up-to-date are the operating systems and software on devices?
		Is there up-to-date, thorough technical documentation and inventories (asset registers,

		list of administration credentials/passwords, copies of configurations) Is there suitable turnaround time for repairs and maintenance of hardware and software?
	Policies and procedures	Are there policies, procedures, or supporting resources that a new student or staff member could use to become easily familiar with things such as: • How to access and use key systems, services, and applications • BYOD usage expectations • Acceptable use • Copyright Who has access to, and ownership of, system passwords, administrative level access and intellectual property? What is the process for dealing with user accounts, email, files, digital artifacts, and so on, when staff and students leave the school?
Procurement	Procurement strategy	How is budget allocated to digital technologies? Is there a sustainable strategy around procurement?
	Supplier relationships	Does the school obtain quotes from a variety of suppliers when procuring digital technologies?
	Procurement processes	How are decisions about procurement choices made? How are new assets registered and existing assets tracked?
	On-going maintenance	Is there a procurement plan that accounts for old equipment to be retired and replaced? Is key equipment kept under a manufacturer's warranty? How does the school know if equipment is no longer cost-effective to support and maintain?
Infrastructure	Internet connectivity	What internet connection is used?

		Is this suitable (contact N4L to ascertain the peak data throughputs)?
	Firewalling and security	What firewalling is in place?
		Are there any other security measures in place? (Intrusion prevention, application-level content inspection, gateway antivirus)
		What open ports are exposed to the internet?
		Is more firewalling needed that what N4L provides?
		What password policies are there for: • Staff and students to log-in to their network or cloud system accounts? • Administration-level accounts?
		Is there an understanding of basic security good practices amongst staff and students?
		Does staff access to data in the cloud require 2-factor authentication?
		Does remote access by staff to data at the school require 2-factor authentication?
	Internet content filtering	How is internet content filtering done?
		What could be improved?
		How easy is it for staff or students to be able to whitelist or blacklist an online resource?
	Network cabling	What is the state of the network cabling?
		Does it meet SNUP standards?
		Are all parts of the school able to access the network?
	Network switches	How old are the network switches?
		Is there sufficient ports available?
		Is the network performance adequate?
		Are there any loops?
		Is the configuration acceptable (Spanning Tree Protocol)
		Are there any VLANs configured?

		Is the patching in the switching cabinets neat and tidy?
		Is the network topology suitable?
	Wireless networking	What system is in use?
		How old is it? When will it need to be replaced?
		How many SSIDs?
		Are suitable security protocols in place?
		Is it easy for staff, students, and guests to access?
		Are there any dead spots?
		Are there any drop-offs experienced?
		Are there any concerns about the reliability, security, coverage, performance?
	Servers	What physical and virtual servers are in use?
		Are they in warranty?
		Are any no longer needed?
		Are they suitably specified and configured?
		Would any of the services be better served from the cloud either now or when the server next needs to be replaced?
	File storage	What local file storage is available?
		What cloud-based file storage is available?
		Is there clarity around what file storage system is used for what purpose?
	Back-up and disaster recovery	How are essential systems data and configurations backed up?
		How effectively is students and staff data backed up?
		Do staff and students understand how to avoid having data that is not backed up?
		When was the last time the back-ups were checked?
		What is the procedure to restore critical data and systems in the event of a failure, how long would this take, and what is the worse case

		scenario of how much data could be lost in a disaster?
		If the internet was unavailable, how would the school know students' contact details?
	Power management and UPS protection	Is there clarity about what services are essential to keep running in a power outage?
		Are the essential devices protected by surge protectors and UPSs?
		Are non-essential devices being maintained by UPS unnecessarily?
		Do you know how long a UPS will hold up essential equipment for, and is the shutdown procedure manual or automated?
		Is power easily available for staff and students to charge devices?
Services	Email	Is email appropriately hosted and configured?
		Is it easy to access email?
	Print	Are printers owned or leased?
		Is the mix of black and white/colour printers suitable?
		Are cloud print services supported?
		How cost-effective is printing?
	DNS	Is the configuration suitable?
	DHCP	Is the configuration suitable?
	VoIP	If in use, is the configuration suitable?
	Directory	Is the configuration suitable?
	Identity, IAM, and SSO	How are users and devices identified and authenticated onto the network to gain access to services?
		Are the possibilities of making it easier for people to log on to services being explored and deployed?

Systems and applications	Student Management System (SMS) and Parent Portal	Can students and parents access their SMS records easily?
		Is the configuration and policies for access secure enough?
		Can teachers easily access and use the SMS?
		Is the SMS the "authoritative source" of information that feeds into other digital systems?
		Is there an understanding of what constitutes data quality and is this exemplified in practices?
		Is the SMS cloud-based?
	Office productivity/online learning environment (OLE)	What online learning environment is in use?
		Is the OLE well used by students, teachers, parents, and administrators?
		What areas for development are there when it comes to the OLE?
		What alternatives now exist?
	Library Management System	What is in use?
		Is it accessible and delivering what is needed?
		Is it properly updated and backed-up?
		Is it cloud-based?
		Is it cost-effective?
		What alternatives now exist?
	Significant cloud end-user applications	What are in use?
		Are they cost-effective?
		What alternatives now exist?
	Significant local server-based, end-user applications	What are in use?
		Are they accessible remotely and delivering what is needed?
		Are they properly updated and backed-up?
		Can they be migrated to become cloud-based?
		Are they cost-effective?
		What alternatives now exist?

	Significant locally installed end-user applications	What apps are in use? Are they delivering what is needed? Are they properly updated and is the data they store backed-up? Can similar functionality be delivered in a more cloud-based way? Are they cost-effective?
	Technical management applications (for example, Mobile Device Management (MDM) solutions Device deployment solutions Endpoint Protection (antivirus, malware, and so on) solutions)	What is in use? Is it delivering what is needed? Is it properly updated and backed-up? Is it cloud-based? Is it cost-effective? What alternatives now exist?
User-facing devices	Telephones	How is telephony delivered and managed? How old, reliable, and functional is the system? Is the telephony system cost-effective? What alternatives now exist, for example, VoIP?
	Staff devices	What devices are made available to staff? How old are they? What specifications are they?
	Student devices	How well do digital devices meet the needs of students? What devices are made available to students? How old are they? What specifications are they?
	BYOD	What is the BYOD experience? How is BYOD security managed? How is access to devices and applications made equitable for students?

	Audio visual	How well do audio visual items meet the needs of students and teachers?
		Do all available features get used or has expenditure gone into unnecessary features?
		What alternatives now exist?
	Printing	Can people easily print their documents?
		Are systems in place to manage printing?
	Other digital devices	What other user-facing devices or peripherals are in use?
		How well do these items meet the needs of students and teachers?
		Do all available features get used or has expenditure gone into unnecessary features?
		What alternatives now exist?
The user experience	Remote access to services and applications	Is there ability for students, teachers, and support staff to work on any device at any time and at any location with internet connectivity?
	Devices	How well do devices meet the needs of students and staff in terms of - Sufficiency: are there enough? - Suitability: are they the right devices with the right software/applications and appropriate levels of administration? - Reliability: do they always work well enough? - Ease of access: can you get access to them?
	Internet	Is the internet secure, fast, reliable, accessible?
		Is the internet filtering in place too restrictive or too open?
		Can internet sites and services that are blocked be easily allowed to be accessed?
		Can internet sites and services that are allowed be easily blocked if necessary?