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| **Technical Skills** | **IT In Education Professional Standards (V1.2)** | | | | |
| **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Devices & Applications | Connect and check hardware devices e.g. connect external hdd to a PC, connect a Bluetooth, keyboard to a tablet etc. | Install and test new hardware e.g. install new graphics card in a PC. | Perform a wide range of hardware upgrades and repairs. | Undertake advanced diagnosis procedures on hardware and software. |
|  | Set up a device for a standalone user including basic account settings. | Follow instructions to support the use of hardware e.g. installing drivers according to a manufacturers setup guide. | Detect, diagnose and resolve most hardware device faults. | Understand and advise on the compatibility of hardware with an OS. |
|  | Install simple software e.g. install a browser on a PC or an app on a Tablet. | Perform basic device repairs and upgrades e.g. replace a broken laptop keyboard. | Follow instructions to install and upgrade client/server applications e.g. perform upgrade of the school MIS system. | Understand and advise on the compatibility of applications with existing systems, based on user requirements and at an advanced level |
|  | Connect devices to network based resources e.g. connect a PC to a networked printer. | Identify and rectify basic hardware or software faults e.g. damaged laptop power supply replacement. | Identify the need for software patches/upgrades and install them e.g. Roll out an OS service pack following monitoring manufacturers websites and completing research. |  |
|  |  | Install complete applications and configure basic options e.g. install office software and set spell checker language. Complete required software maintenance e.g. install a service pack, update an app etc. | Identify where an application may not be compatible with existing software. |  |
| Network Infrastructure and Network Based Systems | Perform basic install and check of devices connected to a domain or workgroup e.g. connect a PC to the network and ensure it has all required access | Perform network cable installation and maintenance e.g. patch new socket in comms cab, make a new cat5 patch cable. | Install and set a basic configuration for network hardware e.g. install and name a new managed switch including supplied VPN settings | Design and implement a network infrastructure to meet the organisations requirements |
|  | Perform basic maintenance tasks for user accounts e.g. reset Active Directory password. | Perform basic recovery checks on network systems e.g. perform a backup and restore test on a networked drive. | Test and configure software for rolling out to clients e.g. create and configure a new MSI package and install in AD for deployment. | Manage active network components including switches, routers and bridges. |
|  | Connect devices to secured wireless network using a pre shared key or other authentication based on information provided. | Select the appropriate wireless network SSID for a device based on a user need and best security practices e.g. decide whether a device needs to connect to a guest WLAN or increased access. | Configure and monitor a managed wireless network system including configuring different authentication types as appropriate. | Identify appropriate managed wireless network system and design configuration. |
| Network User Management | Use simple tools to update locally shared information e.g. use a CMS system to update staff only pages on a follow instructions to undertake basic network monitoring/checks and report results to the relevant person e.g. check available hdd space on a network drive and report the details to your line manager. | Follow instructions to configure network based devices e.g. install ODBC connection to a central server. Use tools to provide new resources on an online learning environment e.g. upload new subject pages using CMS. | Maintain server based hardware and software.  Design and manage the structure of an online learning environment. | Deploy additional servers as required and undertake server operating system upgrades.  Manage remote access to the organisations network. |
|  |  |  | Configure relevant software to implement, add or alter resource allocation for users e.g. set a print quota for a user, allocate disk space etc. | Determine print and disk space that should be applied. | Manage access to the organisation online systems |
|  |  | Use existing instruction maintain settings and permissions of user accounts. | Create shared folders, determining and setting appropriate access rights. |  |
|  |  |  | Monitor network connected system logs and identify when action is needed. |  |
| Service Support Procedures | Check compliance of new IT equipment and record/report appropriately. | Plan for, implement and prepare users for an agreed change e.g. liaise with a user to replace their laptop with a newer device. | Design, plan and oversee a simple change across the organisation. | Tailor specific services across the organisation, reporting on the expected impact and outcomes. |
|  | Complete changes to Systems | Update records of hardware and software locations after change e.g. update asset register when equipment is moved. | Collate and report on testing of new hardware/software and suitability or potential issues. | Assist in planning and implementing all aspects new software/hardware including testing, training and communication with users. | Planning and implement all aspects new software/hardware including testing, training and communication with users. |
| The audit of all IT Assets | Maintain a software library and asset register including original copies of software and licences. | Manage and report on the software Library and Asset Register to the relevant person, including highlighting potential issue or shortfalls. | Mange and oversee all aspects of the IT sustainability and IT disposal policies. | Design and implement IT sustainability and IT disposal policies. |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
| Aware of the limitations and the appropriate use of hardware and OS (operating systems). | Confident user of common devices and operating systems. | Confident user of a majority of devices and operating systems. | Expert user of the majority of devices and operating systems. | Expert user of all major devices and detailed knowledge of operating systems. |
|  | Confident user of common applications. | Confident user of majority of applications. | Expert user of applications. | Expert user of desktop and client/server based applications, including a strong awareness of |
|  |  | Awareness of client/server based applications e.g. MIS and finance software. | Confident user of client/server based applications. |  |
|  | Able to connect a computer to a network using simple instructions. | Understand the basic and principles of structured cabling and the practicalities of connecting network. | Understand role and function of common network protocols and services such as DNS, DHCP and IP | Specialist networking skills relating to managing active equipment, including wireless technology. |
|  |  | Understand basic user account management. | Recognise the function of basic network devices such as routers, switches and wireless access points | Aware of the ways in which different applications and operating systems can conflict | Understand firewalls, disk, caches, filtering systems, access policies and usage reporting utilities present in the server operating systems. |
|  |  | Aware of the function of network file systems and of file and user administration utilities. | Understand the allocations of resources such as print and disk space quotas. |  |
|  |  |  | Understand the different ways that access rights can be applied. |  |
| Understand the importance of documentation | Able to identify when change needs to be recorded and what information should be recorded. | Understands the importance of structured documentation to record configurations. | Understands the importance of documentation for troubleshooting, planning, recovery and insurance. |  |
|  | Able to understand the different levels of change and their significance. | Aware of the different issues around asset disposal. |  |  |
|  | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Health & Safety | Carry out basic safety checks and escalate problems as required. | Ensure basic safety checks are carried out and escalate problems as required. | Implement and make modifications to relevant H&S procedures. | Actively monitor organisations and legal responsibilities. |
|  | Follow relevant H&S procedures and raise awareness among staff, pupils and other users. | Follow relevant H&S procedures and raise awareness among staff, pupils and other users. | Undertake a risk assessment for every activity. | Develop relevant H&S procedures and ensure that all ICT users follow appropriate practice. |
|  |  |  | Advise other staff of H&S aspects of proposed developments. |  |
| Budget & People Management | Understand the organisation process for purchasing and recording expenditure. | Track spending against a budget for items such as consumables and spares. | Support the full range of financial planning for ICT, including purchase of larger items, and help to estimate future budget requirements. | Develop ICT financial management processes with reference to the organisation procedures. |
|  | Purchase consumables following organisation procedures. | Purchase lower value items following organisation procedures. | Have some supervisory responsibilities for junior staff. | Closely involved in writing organisation ICT procurement policy. |
|  | Work as part of a team. | Adopt flexible working practices. |  | Management responsibilities for other ICT support staff. |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Know both general and specific ICT H&S issues relating to work, both for self and all potential users. | Know both general and specific ICT H&S issues relating to work, both for self and all potential users. | Detailed knowledge of both general and specific ICT H&S issues relating to work, both for self and all potential. | Detailed knowledge of both general and specific ICT H&S issues relating to work, both for self and all potential. |
| **Continuity, Maintenance & Security** | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Minimise the impact of a disaster | Complete tasks related to the organisation backup and recovery/disaster recovery documents. | Record any identified risks to system integrity and report them along with potential remedies. | Identify and consider risks to systems and develop appropriate procedures to either eradicate or recover from them. | Maintain and regularly review whole organisation resilience and disaster recovery plans. |
|  | Follow instructions to implement organisation backup and virus protection procedures. | Follow a schedule of extended maintenance procedures, highlighting issues to appropriate person. | Develop a schedule of maintenance. | Implement appropriate security systems to protect hardware, data and confidential information. |
|  |  | Implement and suggest improvements to organisation backup, virus protection and security. | Identify for implementing backup and virus protection policies. |  |
|  |  |  | Ensure whole- organisation resilience, disaster recovery plans and data protection plans are implemented. |  |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Understand the need for, and scope of the organisations disaster recovery plans. | Understand more complex aspects of risk across the wider organisation. | Understand how service continuity means more than immediate 100% availability, and how alternatives to key systems can allow the organisation to continue to function at a basic level. | Understand the importance of contingency planning at different levels for elements of the organisations business. |
|  | Understand the different ways that a wireless network can be secured. | Understand which type of wireless network security to use in any situation. | Understand how to deploy different types of wireless security. |  |
|  | Understand the need for, and scope of the organisations data protection plans. | Understand different methods and techniques for backup and data security. |  |  |

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| **Support Request Management** | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Support Requests | Record incidents in a log and understand how to retrieve information on previous incidents from the log to aid resolution. | Understand the difference between incidents and problems. | Identify trends and analyse incident data to improve service provisions and be proactive to prevent issues happening | Produce detailed management reports and use these as evidence to support strategies and planning. |
|  | Triage support requests and either resolve or escalate appropriately. | Use a knowledgebase and the internet to find resolutions to problems. | Prioritise incidents and problems and determine whether external or additional support is required. | Analyse the support logs to produce detailed management reports and help plan future support. |
|  | Understand how long a task should take and evaluate whether time savings could/should have been made for the future. | Record detailed diagnostic information. | Monitor and manage server logs and use them to inform required developments and/or support. | Provide higher tier of in house support for more complex issues. |
|  |  | Understand when a fix is time sensitive and escalate accordingly. | Produce basic reports outlining the type and frequency of issues and allocate tasks across available team members. | Set support priorities based on resources available. |
|  |  | Understand when to apply a quick fix and when a more substantive solution is required. | Allocate tasks across available team members | Advise leadership team on areas of CPD required, based on information extracted from support logs. |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Understand what information it is important to record | Understand the difference between an incident and a problem. | An awareness of the importance of structured record keeping and reporting. | Understand the importance of balancing trouble-shooting against monitoring and scheduled maintenance. |
|  | Understand the importance of recording time spent on tasks. | Understand the role of a knowledgebase in recording and retrieving known solutions to problems. | Understand which resources are available to support the ICT function, and how they might be allocated. | Aware of the role of support request analysis is providing management information and informing service development. |
| **Procurement** | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Understands the restrictions and morals of spending public money. | Understands the restrictions and morals of spending public money. | Can undertake /oversee a purchasing/tender process that meets the organisations purchasing policies and procedures. |  |
|  |  | Can support a tender/purchasing exercise by obtaining relevant pricing. | Can advise the senior management team when purchasing of goods or services will be necessary over an appropriate time. |  |
|  |  | Can identify outline the key requirements of a required purchase. | Can negotiate with suppliers to obtain appropriate goods and services at the best prices | Can produce a detailed financial plan for the sustainability and development of IT resources. |
|  |  | Can identify appropriate suppliers for a given product or service. | Can specify and procure a service/support contract to meet the organisations requirements. | Can specify and procure a service/support framework to meet the organisations requirements. |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Understand the warranties and contracts available for use. | Understand the function and values of a Service Level Agreement. | Understand the full range of ICT services that may need support. | Aware of the full range of support models. |
|  | Know when external support is available and from where it can be obtained. | Understand the wider implications and limitations of any contracts (including warranties) that are in place. | Have detailed understanding of all the external ICT support services and contracts in place. |  |
| **Strategy and planning** | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Ensure ICT development supports the organisations priorities. | Identify where ICT could be improved or a better solution is available. | Identify where ICT improvements could be made and identify how this could be achieved. | Identify software, hardware and working practices that would be appropriate to fulfil required functions as defined by the relevant organisation leaders. | Have an overall view of the capabilities of the organisations ICT services and contribute to continuous improvement to meet future needs. |
|  |  |  | Plan and implement required or identified changes to the service provision. | Plan for major developments of the ICT service and project manage their. |
| **Knowledge** | **0.5** | **1st** | **2nd`** | **3rd** |
|  | Aware of the possibilities of ICT in providing a solution. | Basic technical knowledge of the possibilities of ICT in providing a solution. | Technical knowledge of a wide range of solutions. | Specialist technical knowledge of a wide range of solutions. |
|  |  |  |  | Understand system integration risks and issues. |
| **Behaviours** | **Functions** | **0.5** | **1st** | **2nd** | **3rd** |
| Individual skills | Attend relevant courses/undertake online training to improve skills and knowledge. | Attend relevant courses/undertake online training to improve skills and knowledge. | Actively seek to broaden knowledge and skills, including technical, management and other areas relevant to the organisation. | Actively seek to maintain and extend expertise in appropriate areas. |
| Communication | Offer support staff and pupils based on your own knowledge and skills. | Advise and train individual staff and pupils. | Run training sessions for groups of staff. | Advise senior staff and governors on changes to policy or new potential. |
|  | Have appropriate communications with suppliers. | Have appropriate communications with suppliers. | Negotiate with suppliers and maintain effective relationships with them. | Negotiate with suppliers and maintain effective relationships with them. |
|  | Produce brief guidance and support sheets for staff and pupils. | Produce detailed guidance and support sheets for staff and pupils. | Document and design current policies and practice. | Design and document systems and procedures. |
|  | Network with colleagues doing similar roles in others similar organisations. | Network with colleagues doing similar roles in others similar organisations. | Network with colleagues doing similar roles in others similar organisations. | Network with colleagues doing similar roles in others similar organisations. |
| Educational Awareness | Regularly attend staff briefings and meetings to understand how ICT is used across the organisation | Read organisation policy documents, schemes of work and curriculum plans. | Liaise with senior staff about upcoming challenges and strategies for the organisation. | Liaise with senior staff about upcoming challenges and strategies for the organisation and offer advice and solutions to these. |
|  |  |  | Read published materials about the educational use of ICT. | Regularly access key ICT education web sites and publications to keep abreast of changes and |
| **Knowledge** | **0.5** | **1st** | **2nd** | **3rd** |
|  | Able to use a word processing package. | Able to use a range of office applications. | Can create a database that utilises web forms for accessing data and updating. | Develop expertise in specific user areas to provide advice and support. |
|  | Able to use email and browse the web. | Understand different types of email uses and systems. | Can create simple code or macros to automate tasks. | Create complex code to automate and improve accuracy of tasks. |
|  | Understand basic file management. | Can provide a simple web page. | Understand how to move data between different applications using appropriate file formats (e.g. | Understand how to move data between different applications using appropriate file formats (e.g. |
|  | Able to download and save files from the internet. | Can perform simple image manipulation. | Understand the relationship between all the different data systems in school and utilise interoperability between. | Understand the relationship between all the different data systems in school and utilise interoperability between. |
|  | Able to undertake basic software/application installations. | Able to download and save files from the internet. | Good level of written and spoken English appropriate to the context and audience. | Good level of written and spoken English appropriate to the context and audience. |
| **Behaviours** |  | Can use simple peripherals. | Good level of written and spoken English appropriate to the context and audience. | Detailed knowledge of organisation structure, including staffing roles and responsibilities. | Aware of the different agencies that govern or advise the organisation. |

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| **Behaviours** |  | Awareness of computer viruses and other security risks. | Appreciation of the curriculum, including a general understanding of the requirements for ICT in the school’s curriculum. | Understand how ICT can enhance the teaching and learning in, and management of schools. | Aware of different levels of capability in each level of NC ICT and implications for infrastructure. |
|  | Good level of written and spoken English appropriate to the context and audience. | Aware of relevant organisation policies. |  |  |
|  | Aware of basic organisation structure, year groups and staffing structure. | An understanding of the use, functionality and limitations of different platforms including desktop and mobile devices. |  | Understand how the overall technical requirements of the organisation should support the use of ICT in the curriculum and management of the organisation. |
|  | Aware of different levels of ability and confidence of staff and pupils in using ICT. | Aware of different levels of ability and confidence of staff and pupils in using ICT. |  |  |
|  | An understanding of the use, functionality and limitations of different platforms including desktops and mobile. | Aware of potential and actual uses of ICT in schools. |  |  |
|  | Aware of potential and actual uses of ICT in schools. |  |  |  |