Skills Development **Scotland**

Occupation Profile

Modern Apprenticeship in Digital Technology - IT Support Pathway at SCQF Level 6

Approved by: Digital Technology Technical Expert Group Approved date: October 2022



Purpose:

This occupation profile consists of 7 work situations routinely carried out in IT support roles. Collectively these describe all the performance requirements and knowledge and understanding requirements apprentices need to demonstrate competence in the occupation. Each work situation has a unique reference number and is set out as follows:

 Work situation title, goal, brief outline, performance requirements and knowledge and understanding requirements

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Mandatory work situations

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Applying problem solving approaches

URN: SDS0221

Goal of work situation:

To select and apply tools and techniques to solve workplace problems in line with organisational procedures.

Brief outline:

This involves individuals identifying and exploring problems, selecting appropriate approaches, planning problem-solving steps, carrying out and assessing problem resolutions. This also includes documenting problems, resolutions and outcomes.

Performance requirements

- 1. Diagnosing problems to identify the key characteristics, who it affects, the impact and urgency to resolve it
- 2. Selecting and justifying the most appropriate problem-solving techniques in line with organisational procedures
- 3. Developing step-by-step plans to solve problems
- 4. Performing root cause analysis to identify underlying causes of problems and identify solutions
- 5. Evaluating potential solutions and selecting the most feasible
- 6. Implementing solutions to resolve problems
- 7. Assessing effectiveness of problem resolutions to contribute to continuous improvement activities
- 8. Documenting problems, approaches, steps taken, techniques applied and outcomes of the problem-solving activities to update knowledge bases

- 1. What is meant by problem-solving
- 2. The importance of problem solving within an organisational context
- 3. How to diagnose problems to understand the main characteristics, impact, stakeholders and importance
- 4. Industry standard tools and techniques that can be applied to solving problems and how to apply them
- 5. How to plan problem solving steps
- 6. Steps involved in root cause analysis and how to apply them
- 7. How to evaluate solutions to problems and select the most appropriate
- 8. How to assess the effectiveness of problem-solving techniques and problem solutions
- 9. Impact on organisations of poor problem solving
- 10. How to document problems, problem solving approaches and resolutions
- 11. The importance of maintaining a knowledge base of problems and their resolutions

URN: SDS0224

Producing documentation to support organisational process delivery

Goal of work situations:

To produce and update documentation for colleagues, customers and users to support the delivery of organisational processes.

Brief outline:

This is about individuals assessing documentation requirements, including audience, type of documentation and structure and format required. This also includes creating documents and associated graphics, identifying sources of information to include, maintaining version and revision control and checking documents meet requirements.

Performance requirements

- 1. Assessing documentation requirements to plan documentation production
- 2. Selecting structure and format of documentation in line with organisational style guides
- 3. Identifying sources of information for documentation to meet organisational requirements
- 4. Producing and updating documentation in line with organisational procedures
- 5. Applying version and revision control to document production in line with organisational procedures
- 6. Creating relevant graphics and visualisations within documentation to aid interpretation and illustrate key concepts
- 7. Reviewing documentation with stakeholders to ensure requirements are met
- 8. Following procedures for documentation sign off and storage in line with organisational procedures

- 1. Who the stakeholders are for documentation
- 2. Purpose of the documentation being created
- 3. How to review documentation requirements
- 4. Steps involved in planning document production
- 5. Organisational structure and format style guides for standard documents including detailed and summary reports, plans, guidelines, standard operating procedures and project documentation
- 6. Industry standard conventions of format, structure and layout in documents and how to select and apply them
- 7. How to identify, locate and utilise information to include in documentation
- 8. Organisational policies and regulations for data protection and copyright that apply to documentation production
- 9. Industry standard tools and techniques used for document production and how to apply them
- 10. How to produce documentation
- 11. How to apply version and revision control to document production
- 12. How to create graphics and visualisations in documentation
- 13. Organisational procedures for testing and quality checking documentation
- 14. Organisational procedures for document sign off, version control, storage and distribution

Developing meta-skills and personal practice

Goal of work situation:

To develop meta-skills and personal practice through self-evaluation, agreeing objectives, reflecting on practice, and actively learning to improve own performance in line with organisational requirements.

Brief outline:

This is about developing meta-skills and personal practice. This involves reflecting on and learning from practice; acting on feedback; agreeing and working towards own objectives for continuous personal and professional development. Individuals will be supported in their development, usually by their line manager.

Performance requirements

- 1. Identifying meta-skills and role specific skills regularly used in own work to assess strengths and improvement needs for personal and professional development
- 2. Discussing and agreeing SMART objectives for personal and professional development and to achieve business objectives
- 3. Discussing and agreeing appropriate development activities to improve own performance and to achieve business objectives
- 4. Completing development activities within agreed timescales to support and progress own performance
- 5. Acting on feedback to improve own performance and development
- 6. Reflecting on performance, meta-skills and specific skills developed in your role to identify and agree future development needs
- 7. Completing mandatory training in line with organisational requirements
- 8. Completing documentation required for personal and professional development in line with organisation policy and procedures

Knowledge and understanding requirements

- 1. The purpose and importance of meta-skills including their definitions and how they relate to own work
- 2. The importance of personal and professional development within own organisation and role
- 3. How to use reflective practice to identify gaps in role specific knowledge, skills and meta-skills
- 4. How to participate effectively in performance reviews
- 5. How to discuss and agree SMART objectives Specific, Measurable, Achievable, Realistic, Time-bound
- 6. The importance of business and personal objectives in own development
- 7. Sources of up-to-date and appropriate information to support own development
- 8. The importance of maintaining well-being in own role and where to get support
- 9. How to use feedback to develop own skills and knowledge
- 10. Different learning models and styles and how to use these for own development

URN: SDS0223

URN: SDS0222

Defining requirements to support project delivery

Goal of work situation:

To identify, understand and define stakeholder requirements for own projects to support project delivery.

Brief outline:

This is about individuals assessing requirements for projects they are tasked with delivering, through engaging with stakeholders to understand project goals and outcomes required. This includes defining and documenting requirements, identifying risks, producing estimates, developing plans and providing progress updates.

Performance requirements

- 1. Scheduling and attending project requirements meetings with stakeholders to gather project requirements
- 2. Reviewing project requirement specifications, plans and stakeholder feedback to specify own project tasks, deliverables and timescales
- 3. Undertaking estimation of own tasks and deliverables in line with organisational procedures
- 4. Producing task breakdown and project schedules to plan own project activities
- 5. Identifying key risks to own project to develop a risk assessment
- 6. Producing progress updates of own tasks to inform project monitoring

- 1. Who the internal or external stakeholders are for a project
- 2. How to schedule and conduct stakeholder requirements meetings
- 3. How to engage with stakeholders and tailor communication styles
- 4. How to identify project requirements with stakeholders
- 5. How to interpret project requirement specifications and plans
- 6. SMART objectives (Specific, Measurable, Achievable, Realistic and Timebound) and how to apply them
- 7. Understanding the organisation's approach to managing projects and how this aligns to industry standard approaches
- 8. Steps involved in producing estimates for own project tasks
- 9. How to produce task breakdowns and schedules of own tasks and deliverables
- 10. Steps involved in identifying and assessing risks to own project activities
- 11. How to track and report own effort and progress on project tasks and outputs delivered
- 12. How to provide updates on projects and deliverables
- 13. The importance of developing excellent relationships with colleagues and stakeholders to support own project delivery

Supporting digital technology service requests

Goal of work situation:

To support responses to digital technology service requests to provide end-user support and issue resolution. The learner receives on-the-job training while working under close supervision as they gain experience, typically working on smaller tasks within larger projects.

Note: Individuals receive on-the-job training while working under close supervision as they gain experience, typically working on smaller tasks within larger projects.

Brief outline:

This is about individuals supporting service requests in line with service level agreements. This involves serving as the first point of contact with users to identify, validate and triage service requests. This also includes determining whether to escalate or resolve user's issues, documenting the issue and resolution.

Performance requirements

- 1. Responding to internal or external digital technology service requests to identify and classify user issues in line with organisational procedures
- 2. Supporting end users to validate service requests and record Minimum Data Sets (MDS) of the issue in line with organisational procedures
- Supporting initial assessment and triage of service requests to determine whether to resolve or escalate issues to second line or third-party support
- 4. Keeping users informed of the status of live service requests in line with organisational procedures
- 5. Supporting diagnosis of user issues in line with organisational procedures
- 6. Documenting issue resolutions and closing service requests in line with organisational procedures

- 1. The basic digital infrastructure used by end-users, including onpremises and cloud hardware, operating system and software applications
- 2. What is meant by a service catalogue and how to use it
- 3. The organisational incident handling processes, including response, resolution, escalation and reporting procedures and how to apply them
- 4. How to respond to new digital technology service requests from users for on premises and remote support
- 5. The need to respond to incident and service requests in a timely manner and in line with service level agreements (SLA)
- 6. How to validate service requests and collect the Minimum Data Set (MDS) required to define user issues
- 7. The approved tools and techniques used for diagnosing user issues and delivering user support, and how to use them
- 8. How to triage service requests
- 9. How to deliver customer service
- 10. The importance of keeping users informed of service request status and resolution
- 11. The knowledge management systems used to help identify and resolve user issues and how to apply them

- 12. The need to provide out of hours service support
- 13. The different escalation processes used to resolve user issues
- 14. The impact of organisational change on service request processes and resolutions
- 15. How to document user issues and their resolution

URN: SDS0230

Assisting development of digital technology service support materials

Goal of work situation:

To assist in developing end user support guides and maintaining the knowledge base and support documentation for digital technology support staff.

Note: Individuals receive on-the-job training while working under close supervision as they gain experience, typically working on smaller tasks within larger projects.

Brief outline:

This is about individuals assisting with creating support documentation including FAQs, user guides, support guides, lessons learned and knowledge base documentation. This also involves reviewing and loading documentation into repositories and portals and assisting with quality checks on support materials.

Performance requirements

- Assisting with creation of Frequently Asked Question (FAQ) responses, how-to guides and end-user self-help systems in line with organisational procedures
- 2. Assisting with deployment and uploading of user guides and selfhelp materials to user portals to provide user centred support
- 3. Assisting with updating of first-line support, playbooks, lessons learned and guidance materials to improve user support provision
- 4. Assisting with maintaining knowledge management tracking systems in line with organisational standards
- 5. Assisting with reviewing the quality of user guidance documentation including collecting end-user feedback in line with organisational procedures

- 1. The importance of providing user guides and self-help support to assist users to resolve their issues
- 2. Organisational self-service capabilities that are used to support endusers
- 3. How to develop accessible end-user guides and self-help systems so users can resolve common issues quickly and easily
- 4. Industry standard tools used for support documentation and how to apply them
- 5. How to upload and deploy user guides and self-help materials to online portals
- 6. How to update first-line support materials
- 7. The role of knowledge management documentation in assisting firstline support staff to deliver efficient issue resolution
- 8. The importance of capturing lessons learned to save time on future resolution of similar issues
- 9. How to update knowledge management systems

- 10. Organisational operation processes for producing end user and service support documentation
- 11. Steps involved in reviewing the quality of user support materials and how to apply them

URN: SDS0231

Supporting digital technology asset management

Goal of work situation:

To support asset management to maintain records of organisational hardware and software assets and licensing in line with organisational procedures.

Note: Individuals receive on-the-job training while working under close supervision as they gain experience, typically working on smaller tasks within larger projects.

Brief outline:

This is about individuals supporting updating hardware and software asset registers, configuring devices and installing software images and monitoring software licensing.

Performance requirements

- 1. Supporting updating digital technology hardware and software assets in the asset register in line with organisational procedures
- 2. Supporting monitoring of software licensing estate positions across users to maintain compliance
- 3. Supporting installation of user licensing of operating system and application software to end-user devices in line with organisational standards

- 1. What is meant by digital technology assets
- 2. Organisational asset management procedures, policies, tools and techniques and how to apply them
- 3. The importance of accurately tracking all digital technology assets, including use of asset registers and configuration management databases
- 4. How to setup configuration items in configuration management databases
- 5. How to interact with end-users relating to asset management
- 6. Steps involved in software licensing management
- 7. How to monitor licensing estate positions in the organisation to track software licensing to maintain compliance
- 8. Asset lifecycles (including security and environmental aspects)
- 9. How to install software licenses to end-user devices directly or remotely

The relationship between meta-skills and work situations

	Meta skills alignment											
Work situation	Adapting	Collaborating	Communicating	Creativity	Critical thinking	Curiosity	Feeling	Focussing	Initiative	Integrity	Leading	Sense making
Applying problem solving approaches	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark
Producing documentation to support organisational process delivery		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
Developing meta-skills and personal practice	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Defining requirements to support project delivery	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark
Supporting digital technology service requests	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
Assisting the development of digital technology service support materials	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark
Supporting digital technology asset management	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark

The table above indicates where there are opportunities to develop and evidence meta-skills in each work situation within the occupation profile. Please note, this information is for guidance, and indicates where meta-skills are explicit rather than an exhaustive list. There may be opportunities for individuals to develop and evidence other meta-skills when carrying out their role.

The relationship between National Occupational Standards and work situations

The table below indicates where there are links between National Occupational Standards and each work situation within the occupation profile

Work situation	National Occupational Standards Alignment
Applying problem solving approaches	ESKITP7034 Problem Management TECHDUPS1 Recognise and resolve routine digital technology problems
Producing documentation to support organisational process delivery	ECHDUWP1 Create and edit digital documents
Developing meta-skills and personal practice	CFABAA626 Plan how to manage and improve own performance in a business environment
Defining requirements to support project delivery	TECDT20341 Undertake system requirements elicitation and definition TECDT20351 Manage system requirements engineering
Supporting digital technology service requests	ESKITP7053 IT/Technology Management and Support Level 3 Role
Assisting the development of digital technology service support materials	ESKITP7023 IT/Technology Service Help Desk and Incident Management Level 3 Role
Supporting digital technology asset management	ESKITP7013 IT/technology Service Operations and Event Management Level 3 Role