

**Cambridge Technical Diploma in IT****Y12 to Y13**

Summer Independent learning

**Due date: Ready to submit in the first lesson back in September****ACTIVITY 1****Unit 20 IT Technical Support**

LO 1: Understand the role of technical support

	<b>Pass</b>	<b>Merit</b>	<b>Distinction</b>
1. Understand the role of technical support	P1 Describe the activities within a technical support role	M1 Analyse the communication considerations used for differing client types	

**Create a presentation – P1**Research the different IT Support Roles (i.e. 1<sup>st</sup> Line, 2<sup>nd</sup> Line, 3<sup>rd</sup> line etc.)

Following your research of the different roles produce a presentation that:

- Describes each of the IT support Roles
- Describes the typical activities of each of these IT support Roles

Your Presentation should include detailed speaker notes indicating what you will be saying about the activities in each role.

**Create a report – M1**

'Improve-IT' are looking to take on another member of staff in the near future. They have tasked you with preparing some guidance for new members of staff regarding communication with different types of client:

**1.3 Client Types, i.e.:**

- environment (e.g. corporate, home)
- skill level (e.g. novice, non-technical, technical)
- software use (e.g. games, word processing, database)
- features (e.g. basic, advanced)

For each of these client sub types, provide an analysis of the most effective communication methods and interpersonal skills needed the most to communicate with them. Use this list as an indication of things to think about:

#### 1.4 Communicating advice, i.e.:

- client type (e.g. technical, non-technical)
- methods of communication (e.g. face-to-face, email, telephone)
- interpersonal skills (e.g. listen, negotiate, value opinion, take criticism)

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
1. Understand the role of technical support	<p>1.1 IT Support Roles (i.e. 1st line, 2nd line, 3rd line)</p> <p>1.2 Support process, i.e.:</p> <ul style="list-style-type: none"> <li>• helpdesk activities (e.g. role, point of contact, personnel, fault logging)</li> <li>• IT support requests</li> <li>• analysis of previous trends (e.g. types of fault reports, support request documentation, analysis, reporting)</li> <li>• resources (e.g. staffing, availability, training, emerging technologies)</li> <li>• policies, e.g.: <ul style="list-style-type: none"> <li>○ service level agreements (SLAs)</li> <li>○ computer use policy</li> <li>○ standard, non-standard equipment policy</li> </ul> </li> </ul> <p>1.3 Client Types, i.e.:</p> <ul style="list-style-type: none"> <li>• environment (e.g. corporate, home)</li> <li>• skill level (e.g. novice, non-technical, technical)</li> <li>• software use (e.g. games, word processing, database)</li> <li>• features (e.g. basic, advanced)</li> </ul> <p>1.4 Communicating advice, i.e.:</p> <ul style="list-style-type: none"> <li>• client type (e.g. technical, non-technical)</li> <li>• methods of communication (e.g. face-to-face, email, telephone)</li> <li>• interpersonal skills (e.g. listen, negotiate, value opinion, take criticism)</li> </ul>

## **ACTIVITY 2**

### **Unit 16 Developing a Smarter Planet**

LO 1: Understand what is meant by a Smarter Planet

	<b>Pass</b>	<b>Merit</b>	<b>Distinction</b>
1. Understand what is meant by a Smarter Planet	P1*: Describe the evolution of the Smarter Planet in different global situations		D1: Evaluate why the Smarter Planet concept is important for a global society
	P2: Describe the impacts of the Smarter Planet on society	M1: Explain the impact of the Smarter Planet within a specified sector	

#### **Task 1:** A Report – P1 and P2

You need to produce a report which describes what a smarter planet is and gives examples of developments which have been made. This report should cover the purpose and the impacts of the developments on society as well as human factors which have been supported within the development. These can be positives and negatives impacts on below areas:

- - **Environmental**
- - **Ethical**
- - **Social**
- - **Individual**
- - **Life styles**

#### **Task 2:** A Newspaper Report – M1

You need to create a report which explains the impact of smarter planet on society within each of the below sectors:

- - **Healthcare**
- - **Environmental**
- - **Engineering**
- - **Manufacturing**
- - **IT, retail**
- - **Electronics**
- - **Transport**

#### **Task 3:** A Report – D1

You need to evaluate the concept of a smarter planet and its importance to global society. Within this report you must give examples of concepts which have been used.

**Extra Guidance:**

P1: The learner will describe the evolution of the Smarter Planet for different global situations as identified in the teaching content for the unit. Each situation must be from a different category in the teaching content. Evidence can be in the form of a written report, a presentation with detailed speaker notes, a video of the learner presenting the information to an audience, or an information guide on the evolution of the Smarter Planet in different situations.

D1: The concept of the Smarter Planet will be evaluated in relation to its importance for a global society. A variety of concepts should be evaluated. Evidence can be in the form of a written report, a presentation with detailed speaker notes, a video of the learner presenting the information to an audience, or an information guide. P2: The Smarter Planet has impacted on a number of areas of the global society. The learner should describe different impacts. Evidence for this criterion may link with criterion P3. Evidence can be in the form of a written report, a presentation with detailed speaker notes, a video of the learner presenting the information to an audience, or an information guide on areas of impact within a global society.

M1: The evidence for this assessment criterion will link with criterion P2 and will focus on the impact of the Smarter Planet within a specified sector. The selected sector does not need to be IT based, and learners should consider examples identified in the teaching content. The evidence can be presented as a newspaper article, report or presentation with detailed speaker notes.

This is the indicated content from the exam board and gives you an idea of what we are looking for across these tasks:

### 1.1 Evolution of a Smarter Planet, i.e.:

- improvements to original developments e.g.:
  - o radio to DAB
  - o telephones to mobile
  - o manual to automated machinery
  - o greener IT
- purpose to, e.g.:
  - o speed processes
  - o improve efficiency
  - o reduce waste and inefficiency
  - o harness natural resources
- human factors, e.g.:
  - o reduce manpower requirements
  - o improve quality of life

### 1.2 Importance for a global society, i.e.:

- principles, e.g.:
  - o information
  - o instrumented
  - o interconnected
- focus/objectives (e.g. why do we need it?)
- relevance

### 1.3 Impacts, i.e.:

- environmental, e.g.:
  - o pollution
  - food miles
  - o increased energy consumption
- • ethical, e.g.:
  - o health and transplants
  - o the internet
  - o data privacy
- • social, e.g.:
  - o acceptance
  - o communication
  - o exposure to threat
  - o reduced face-to-face communication
- individuals, e.g.:
  - o health
  - o labour saving
  - o time saving
  - o flexibility
  - o accessibility

- life styles, e.g.:
  - o health
  - o comfort
  - o travel
  - o communication
  - o social

#### 1.4 Business sectors, e.g.:

- healthcare
- environmental
- engineering
- manufacturing
- IT, retail
- electronics
- transport

#### 1.5 Sectors with applications of a Smarter Planet, e.g.:

- banking
- construction
- towns and cities
- computing and data storage
- education
- energy
- healthcare
- infrastructures
- oil
- products
- regulatory bodies
- retail
- telecoms
- transport/traffic
- water
- e-commerce
- environmental

## Optional Activities

**Although the below are optional, we would suggest you look through all the below and make notes where appropriate. This will give you a head start and will work to your benefit from September 2021**

Take a look and read through the contents of some of the coursework units for next year!

[Unit 19 Computer systems - software](#)

[Unit 4 Computer networks](#)

[Unit 8 Project Management](#)

[Unit 9 Product Development](#)

[Unit 12 Mobile Technology](#)

[Unit 16 Developing a Smarter Planet](#)

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Ed Stout – IT Support Services Manager at Leeds Beckett University. Talks about his journey from college to current managerial position. Tips on how to gain experience, routes into the industry and what he looks for when recruiting.

[IT Work Experience Talk](#)

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Here are a collection of interesting talks and interviews that will expand your understanding of the world of IT and Computing:

[Joe Rogan Experience #1368 - Edward Snowden](#)

[YouTube CEO Susan Wojcicki | Full interview | Code 2019](#)

[How I used to rob banks! by FC \(aka Freaky Clown\)](#)

[GOTO 2018 • The Future of the Web • Sir Tim Berners-Lee](#)

[The mind behind Linux | Linus Torvalds](#)

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There are a series of good YouTube channels that regularly post interesting videos about the world of IT and Computing:

[Linus Tech Tips](#)

[Computerphile](#)

[Techquickie](#)

[Crash course computing](#)

[Explaining computers](#)

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Another great exercise is to regularly read news articles and stories. These will keep you up to date with all of the latest happenings in technology:

[BBC](#)

[Sky](#)

[The Guardian](#)

[Computer World](#)

[CNET](#)

Other clips you can watch related to the units:

Unit 16

<https://www.ibm.com/smarterplanet/us/en/>

<https://youtu.be/Pf2VnEz4jGQ>