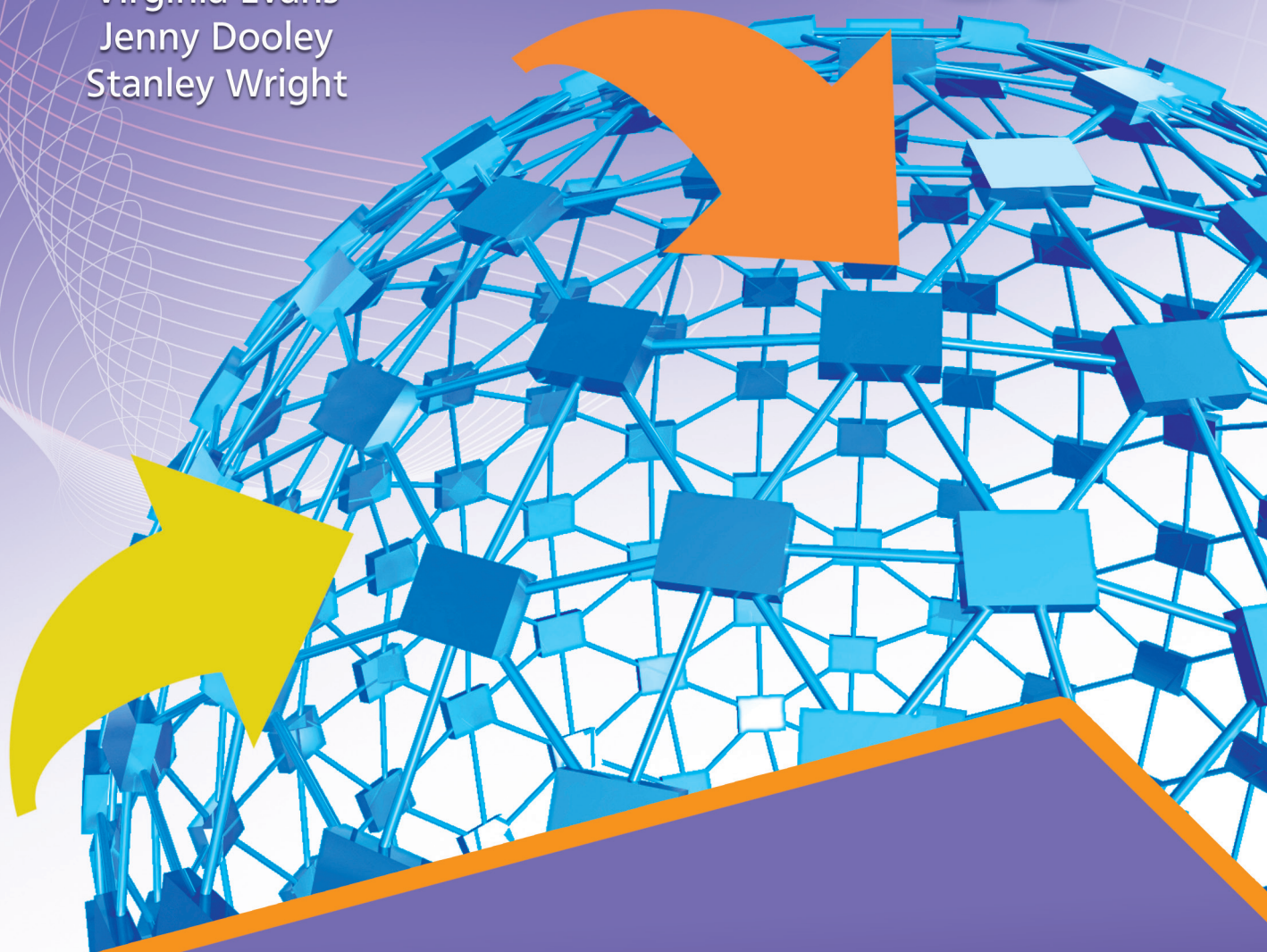


**CAREER
PATHS**

SECOND
EDITION

Information Technology

Virginia Evans
Jenny Dooley
Stanley Wright



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1

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Information Technology	Statement	code, data, data processing, encode, hardware, information security, online, quality assurance, software, technical support	Getting someone's attention
2	Introduction to Computing Systems	Email	desktop computer, laptop, mainframe, server, smartphone, supercomputer, tablet, workstation	Giving instructions
3	Inside the Computer	Product guide	case, disk drive, expansion card, fan, hard drive, heat sink, motherboard, power supply, processor, RAM	Indicating a course of action
4	Computing Devices	Catalog	input device, keyboard, LCD, microphone, monitor, mouse, peripheral, printer, scanner, scroll wheel, touchscreen, USB	Making a suggestion
5	Networking	Magazine article	CAT-5 cable, configuration, DHCP, Internet, IP address, LAN, network, power cycle, router, WLAN	Describing options
6	The User Interface	Manual	desktop, drag, folder, Graphical User interface (GUI), icon, maximize, menu, minimize, OS, pointer, shortcut, window	Asking for assistance
7	Word Processing	Advertisement	compatibility, document, font, format, formatting, layout, macro, spell check, template, word processing program	Identifying a problem
8	Email	Handbook	attachment, domain name, email address, email client, ISP, password, POP3, SMTP, username, webmail	Checking for errors
9	Web Browsing	Email	HTML, http, hyperlink, meta tag, search engine, URL, web browser, web host, website, www	Expressing confusion
10	Images and Graphic Design	Magazine article	contrast, crop, exposure, graphic editing program, graphics, JPEG, pixel, resize, resolution, tint	Answering the phone
11	Databases vs. Spreadsheets	Email	cell, database, database field, formula, function, operator, query, sort, spreadsheet, table, worksheet	Asking for help
12	Web Design vs. Web Development	Brochure	appearance, coding, content, CSS, functionality, navigation, usability, visibility, web design, web development	Asking about purpose
13	Desktop Publishing	Job listing	clip art, comprehensive layout, desktop publishing software, desktop publishing, electronic page, electronic paper, electrostatic printing, graphic communications, offset lithography, page layout	Talking about experience
14	Videoconferencing	Email	bandwidth, codec, dedicated system, document sharing, echo-cancellation, multipoint videoconference, video bridge, videoconferencing, webcam	Explaining differences
15	E-commerce	Email	affiliate, banner, brick and mortar, certificate authority, digital certificate, e-commerce, FAQs, page view, shopping cart, traffic	Asking for clarifications

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Computer Memory	Guide	bit, bit size, bus speed, DIMM, MB, MHz, paging file, RAM, SIMM, virtual memory	Describing minimum requirements
2	Programming Languages	Letter	C, C#, C++, compiler, computer language, CPU, Java, JavaScript, linker, machine code, multi-thread, Python, Swift	Expressing a concern
3	ISPs and Internet Access	Notification	antivirus software, broadband, DSL, hotspot, ISP, T-1, T-3, upgrade, Wi-Fi®, WPS	Describing benefits
4	Storage Devices	Suggestion form	array, cloud computing, failure, HDD, hybrid array, RAID, SATA, SSD, USB flash drive	Asking about deadlines
5	Peripherals	Advertisement	automatic document feeder, calibration, CCD, digital camera, digital zoom, DPI, flash memory, inkjet printer, laser printer, megapixel, optical zoom, transparency adapter	Making a recommendation
6	MP3 Players	Notification	AAC, bitrate, capacity, decode, dock, driver, freeze, GB, MP3, playlist, upload	Troubleshooting a problem
7	Cell Phones	Advertisement	5G network, app, Bluetooth®, call waiting, caller ID, cell phone, lithium-ion battery, ringtone, text message, touchscreen, voice activation, voicemail	Asking for additional information
8	Communications	Instant messages	barcode, data plan, email, EPC, instant message, scan, spam, text, UPC	Assigning a task
9	Entertainment and Social Networking	Memo	avatar, blog, forum, gaming, handle, link, MMORPG, news feed, post, profile, social networking, virtual world	Making a generalization
10	Geographic Information System	Chapter introduction	cartographic, correlated, data capture, GIS, latitude, layer, location, longitude, metadata, raster, remote sensing, spatial pattern, vector	Describing differences
11	Banking	Website	account activity, account alert, bank fraud, bill pay, electronic funds transfer, electronic statement, identity theft, lockout, online banking, PIN, site key, SSL connection	Reporting a problem
12	Education and Research	Advertisement	Boolean operator, catalog, ebook, ejournal, EZproxy, index, license restriction, media, remote access, site license, subscription, VPN	Describing a problem
13	Robotics	Email	actuator, autonomous, drive power, dynamic model, enabling device, end-effector, equality constraint, joint, manipulator, pendant, robotics, serial robot	Giving advice
14	Electronic Publishing	Announcement	active matrix display, bitmapped graphic, black and white, download, ergonomic, offline, PDF reader, publication, reflow, sub-pixel rendering, system requirements	Expressing lack of knowledge
15	Artificial Intelligence	Magazine article	agent, algorithm, artificial intelligence, case-based reasoning, cognitive scientist, computer vision, consciousness, heuristics, machine learning, model-based reasoning, pattern recognition, robot	Expressing lack of understanding

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	Mac®s and PCs	Magazine article	Apple®, color matching, customize, Mac®, Microsoft®, OS X®, PC, prepress, processing speed, typography, video subsystem, Windows®	Stating a preference
2	Linux®	Email	command line, free software license, Linux®, Linux® distribution, Microsoft Office®, open source, OpenOffice®, Samba®, TCP/IP protocol, terminal, Ubuntu®, vendor	Expressing doubt
3	Connecting to Clients and Employees	Email	anchor, applet, CAD, CBT, electronic bulletin board, FAQs, Flash®, media player, MPEG, multimedia, reliability	Giving an opinion
4	Advertising and Marketing	Contract	above the fold, ad product, animated GIF, campaign, click-through rate, click tracking, commission, CPC, CPM, frequency capping, geo targeting, hang	Confirming information
5	Automation	Investor report	automation, CAM, embedded system, encoder, Ethernet network, fault tolerant, integrated circuit, latency, open system, oscilloscope, priority inversion, redundancy	Asking for suggestions
6	Telecommuting	Letter	Basecamp®, centralize, color-coding, dashboard, gallery, in real time, message board, Microsoft Teams®, Skype™, telecommuting, toggle, tour, web-based, Zoom®	Describing features
7	Hackers and Viruses	Newspaper article	anti-antivirus virus, hacker, host computer, imbed, infect, log in, overwriting virus, piggybacking, replicate, resident extension, resident virus, virus	Discussing possible consequences
8	Identity Theft	Letter	card scanning, cyber, malware, pharming, phishing, pretexting, scanner, spyware, Trojan horse, worm	Discussing suspicions
9	Preventative Measures	Email	attack, audit log, authenticated, backdoor, bug, firewall, intruder, keylogger, patch, pop-up, protocol, security breach	Expressing necessity
10	Antivirus Software	Advertisement	backup, block, cyber criminal, detect, false negative, false positive, quarantine, rootkit, security software, sweep, virus removal software, webpage analysis	Correcting a false impression
11	Cloud Computing	Newspaper column	CDN, deployment, elasticity, IaaS, PaaS, pay-as-you-go, private cloud, public cloud, SaaS, scalability, utility computing	Giving positive feedback
12	Improving Health	Magazine article	ADM, bar coding, CDSS, CPOE, EHR, EMM, implanted microchip, interoperability, lab-on-a-chip, microrobotic tweezers, optic scanner, PACS	Giving instructions
13	Creative Design	Website	egress filter, ingress filter, keyword, mask, natural language, PCI compliance, redesign, root directory, trust logo, web portal	Discussing options
14	System Administration	Job posting	configure, cover letter, duty, file archiving, install, performance tuning, purge, résumé, system administrator, technical, troubleshooting, Unix®	Talking about qualifications
15	Programming	Job postings	back end, component, editor, interactive, PHP, programmer, script, user-friendly, Visual Basic, web developer, XML	Discussing degree of difficulty

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Get ready!

- 1 Before you read the passage, talk about these questions.

- 1 What do you buy online?
- 2 How does online shopping help businesses?

Reading

- 2 Read the email from the marketing director of BargainEquipment.com. Then, mark the following statements as true (T) or (F) false.

- 1 ___ BargainEquipment.com has a brick and mortar shop.
- 2 ___ TFC Gaming is an affiliate of BargainEquipment.com.
- 3 ___ Affiliates earn a percentage of sales for increases in page views.



From: Mark Johnson

To: Amanda Jackson

Subject: Lowest Price Affiliate Program

Dear Ms. Jackson,

Our advertising at **brick and mortar** gaming shops is not producing video game equipment sales. Those consumers are much more active in **e-commerce**. So, we at BargainEquipment.com want TFC Gaming to become an **affiliate**. Our program works in the following manner. You display our **banner** when customers view their **shopping cart**. This directs **traffic** our way. TFC Gaming earns a percentage of sales from that traffic. We pay a smaller percentage for increases in **page views** without sales.

Our **FAQs** explain that affiliates are not responsible for our products. We do ask that affiliates obtain a **digital certificate** with our preferred **certificate authority**.

Contact me with any questions.

Regards,

Mark Johnson

Marketing Director, BargainEquipment.com



Vocabulary

- 3 Read the sentence pairs. Choose which word or phrase best fits each blank.

1 digital certificate / certificate authority

- A I don't trust this site, it has no _____.
- B The _____ will tell customers our site is safe.

2 page views / traffic

- A My site has two hundred more _____ today.
- B Advertising a website should increase _____.

3 FAQs / banner

- A Let's display a new _____ to attract attention.
- B Check the _____ to find out about the company.

- 4 Fill in the blanks with the correct words or phrases from the word bank.

Word BANK

affiliate e-commerce
shopping cart brick and mortar

- _____ allows people to shop with businesses globally.
 - My business is a(n) _____ of that website. We share profits.
 - There are many _____ shops on Main Street.
 - Put an item in a(n) _____ and pay for it later.
- 5 Listen to and read the email from the marketing director of BargainEquipment.com again. What happens when a consumer clicks on a page view, but doesn't purchase?

Listening

- 6 Listen to a conversation between two employees of BargainEquipment.com and TFC Gaming. Choose the correct answers.

- What are the employees mostly talking about?
A raising sales C calculating profits
B meeting affiliates D payment percentages
- TFC Gaming earns a half percent for _____.
A each sale C 100 page views
B slowing traffic D becoming an affiliate

- 7 Listen again and complete the conversation.

Employee 1: Hi, Mark. This is Amanda from TFC Gaming.

Employee 2: Hi, Amanda. Glad to hear from you.

Employee 1: Well, we're definitely interested in being an 1 _____. But we have some questions.

Employee 2: Of course. What do you want to know?

Employee 1: About the 2 _____. What do we earn for just an increase in 3 _____?

Employee 2: That's 0.5% per hundred.

Employee 1: I see, and for sales from our 4 _____?

Employee 2: All BargainEquipment.com affiliates get 2% of the 5 _____.

Speaking

- 8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

What do you want to know?

What do we earn for ...?

Affiliates get ...

Student A: Your company is considering becoming an affiliate. Ask Student B about:

- earnings from page views
- earnings from traffic sales

Student B: You work at BargainEquipment.com. Answer Student A's questions.

Writing

- 9 Use the email and the conversation from Task 8 to complete the recommendation.

From: _____,
TFC Gaming Marketing

Department: _____

To: James Harper,
President, TFC Gaming

Mr. Harper,

BargainEquipment.com wants us _____

_____. We would earn _____ for an increase in page views. We would also earn _____.

My recommendation is _____.

Glossary

- affiliate** [N-COUNT-U15] An **affiliate** is a person or business that directs Internet traffic to a business's website in exchange for a percentage of sales.
- appearance** [N-UNCOUNT-U12] **Appearance** is the way that a webpage looks.
- attachment** [N-COUNT-U8] An **attachment** is a file that is sent with an email.
- bandwidth** [N-UNCOUNT-U14] **Bandwidth** is a measurement of the amount of information that a computer network can send or receive. High bandwidth allows images and websites to load quickly on the Internet.
- banner** [N-COUNT-U15] A **banner** is a rectangular graphic on a website that advertises a business.
- brick and mortar** [N-COUNT-U15] A **brick and mortar** is a business that operates in a physical location instead of online.
- case** [N-COUNT-U3] A **case** is an enclosure that holds the computer's components.
- CAT-5 cable** [N-COUNT-U5] **CAT-5** (Category 5) **cables** are the standard cables that connect computers to networks.
- cell** [N-COUNT-U11] A **cell** is a unit of a spreadsheet that holds a piece of information.
- certificate authority** [N-COUNT-U15] A **certificate authority** is an organization that creates, offers and verifies reliable digital certificates.
- clip art** [N-UNCOUNT-U13] **Clip art** is electronic artwork that can be used in publications.
- code** [N-UNCOUNT-U1] **Code** is a set of words and signs that give instructions to a computer.
- codec** [N-COUNT-U14] A **codec** is a piece of videoconferencing equipment. It encodes outgoing analog signals into digital form and decodes them when they come in.
- coding** [N-UNCOUNT-U12] **Coding** is the programming language that makes up a website.
- compatibility** [N-UNCOUNT-U7] **Compatibility** is the ability of a type of system or software to work with a different one.
- comprehensive layout** [N-COUNT-U13] A **comprehensive layout** is the stage of a nearly complete version of a page layout of a publication.
- configuration** [N-UNCOUNT-U5] The router **configuration** is part of the network setup process. It specifies the route settings, the correct IP addresses, passwords, Wi-Fi® channel and band, etc.
- content** [N-UNCOUNT-U12] **Content** is the material on a webpage, including text and graphics.
- contrast** [N-UNCOUNT-U10] **Contrast** is the amount of difference between the dark areas and light areas of an image.
- crop** [V-T-U10] To **crop** an image is to cut off unwanted parts of an image.
- CSS** [ABBREV-U12] **CSS** (Cascading Style Sheets) is a language that sets the style (e.g. fonts, color, spacing) of HTML elements on a webpage.
- data** [N-UNCOUNT-U1] **Data** are information that can be entered and used in a computer.
- data processing** [N-UNCOUNT-U1] **Data processing** is the act of entering, using or manipulating data with computers.
- database** [N-COUNT-U11] A **database** is a large group of data organized in a computer system. It allows you to search and find information easily.
- database field** [N-COUNT-U11] In a database, a **database field** is a category that holds a particular type of information. When this field is grouped together with other related fields, they form a record for a specific subject (e.g. employees' social security status).
- dedicated system** [N-COUNT-U14] A **dedicated system** includes all the necessary components of videoconferencing together as a set.
- desktop** [N-COUNT-U6] A computer **desktop** is everything that a user sees on a computer screen.

desktop computer [N-COUNT-U2] A **desktop computer** or a desktop is a computer that is small enough to use at a desk, but too big to carry around.

desktop publishing software [N-UNCOUNT-U13] **Desktop publishing software** is a high-end computer program that is used to make page layouts.

desktop publishing [N-UNCOUNT-U13] **Desktop publishing** is the art of using page layout software to design finished, printable documents.

DHCP [ABBREV-U5] The **DHCP** (Dynamic Host Configuration Protocol) is a TCP/IP protocol system for computer networks to receive IP addresses and other configuration information.

digital certificate [N-COUNT-U15] A **digital certificate** is an electronic document that proves the ownership of an online business.

disk drive [N-COUNT-U3] A **disk drive** is any device that reads and/or writes data to a disk. Some examples include the hard disk drive or removable storage devices. These ones use a magnetic head whereas optical drives use a laser.

document [N-COUNT-U7] A **document** is a file created on a word processing program.

document sharing [N-UNCOUNT-U14] **Document sharing** is a feature of some videoconferencing systems. It allows everyone participating in the videoconference to look at and edit the same document.

domain name [N-COUNT-U8] A **domain name** is a set of words and letters that identify a company or address on the Internet.

drag [V-T-U6] To **drag** files, folders or icons is to move them around on a desktop.

e-commerce [N-UNCOUNT-U15] **E-commerce** is the purchase or sale of items on the Internet.

echo-cancellation [N-UNCOUNT-U14] **Echo-cancellation** is a process that reduces the amount of echo heard by participants of a videoconference.

electronic page [N-COUNT-U13] An **electronic page** is software that displays electronic paginated content.

electronic paper [N-UNCOUNT-U13] **Electronic paper** is a display device that resembles paper books.

electrostatic printing [N-UNCOUNT-U13] **Electrostatic printing** is a method that uses static electricity to print.

email address [N-COUNT-U8] An **email address** is an online location to which electronic messages can be delivered.

email client [N-COUNT-U8] An **email client** is an offline program that receives, sends and stores a user's email on a specific computer.

encode [V-T-U1] To **encode** data is to convert them to a desired form for data transmission, storage, etc. so that no one can read it.

expansion card [N-COUNT-U3] **Expansion cards** are extra circuit boards that are used to increase the functionality of a computer.

exposure [N-UNCOUNT-U10] In photography, the **exposure** is the amount of light that reaches the camera's sensor.

fan [N-COUNT-U3] A **fan** moves cool air onto computer components inside the case.

FAQs [ABBREV-U15] **FAQs** (Frequently Asked Questions) are a set of questions and answers that are provided on a website to provide users with information that users commonly want to know.

folder [N-COUNT-U6] A **folder** holds and organizes files and documents on a computer.

font [N-UNCOUNT-U7] **Font** is the style of the typed characters on a document.

format [N-COUNT-U7] A **format** is a file's type. Different files might not work in different programs or software.

formatting [N-UNCOUNT-U7] **Formatting** is the style of the words on a document.

formula [N-COUNT-U11] A **formula** is any mathematical calculation that you perform in a spreadsheet.



**CAREER
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Career Paths: Information Technology 2nd Edition is a new educational resource for information technology professionals who want to improve their English communication skills in a work environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. **Career Paths: Information Technology 2nd Edition** addresses topics including computer components, accessories, software, Internet security, web design, and the future of the industry.

The series is organized into three levels of difficulty and offers over 400 vocabulary terms and phrases. Every unit includes a test of reading comprehension, vocabulary, and listening skills, and leads students through written and oral production.

Included Features:

- A variety of realistic reading passages
- Career-specific dialogues
- 45 reading and listening comprehension checks
- Over 400 vocabulary terms and phrases
- Guided speaking and writing exercises
- Complete glossary of terms and phrases

The **Teacher's Guide** contains detailed lesson plans, a full answer key and audio scripts.

The **audio CDs** (downloadable) contain all recorded material.



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