

Briefing

This final unit of the book is less technical than most of the previous units. Topics have been chosen for their potential for review and recycling of language from earlier in the book. The language focus is on problems and solutions: present perfect vs. past simple; modals of speculation and deduction; proposing solutions. The final section focuses on applying for jobs, something that many users of this book will be doing at the end of their course.

Investigations

This section introduces students to the vocabulary of faults that occur with software and hardware. A distinction is made between a **hang** (in which a computer or program appears to come to a halt, stops accepting input but does not close or switch off) and a **crash** (in which the program or computer shuts down). Another word that is often used for hang is **freeze**. Often when a program hangs, its windows become grey and the title bar may say 'not responding' or something similar.

Diagnosis

While the diagnosis of problems occurs in many situations in IT-related workplaces, this section focuses on a call centre/help desk situation. Call centres and help desks may take calls from the general public (if the company sells products to the general public) or workers inside a company. In such an environment, calls are often answered by workers with relatively little knowledge of IT. This is called **tier 1, level 1** or **first line support**. The purpose is to deal with the problems that occur most frequently, and the majority of problems will be successfully solved at this level. The operator usually follows a script. If by following the suggestions in the script the problem is not solved, it can be **escalated** to tier 2 support. Operators at this level have a higher level of technical knowledge. If they are unsuccessful, the problem can be escalated further to tier 3 and sometimes even tier 4, where that exists.

A particular kind of software, known as an **issue tracking system** (also known as a **support ticket system**) is important for the efficient operation of a help desk or call centre. When a call is first received, information about the caller and the problem is

entered into a form. Not only does this allow data to be collected about the types of problems that occur most frequently but it also allows information to be supplied by the higher tiers of support personnel as required, to save them asking the client questions that have already been answered. It also automatically monitors issues to avoid them being left unattended for too long, can help balance workloads by passing the issues to the people who are least busy and can efficiently allocate work to people with the appropriate skills. Issue tracking systems can also be used to track bugs in software during the development process.

Solutions

This section looks at the language for proposing solutions to IT problems. The first page looks mostly at situations that recycle vocabulary from earlier in the book. One issue new to this section is **bloatware**. This is software that is often put on computers and mobile phones when they are new and whose sole purpose is advertising: they are generally cut-down versions of full programs which are intended to tempt the user to use them, become interested and then buy the full version. Sometimes the company producing the bloatware pays the manufacturer to include the software, thus reducing the price of the hardware to the consumer. However, these programs may slow down the device and take up space, so are often seen as undesirable.

Some health and safety issues also appear in this section:

- **Correct posture:** sitting at a computer for long periods of time with a bent back can lead to backache, which can become severe and debilitating.
- **RSI (Repetitive Strain Injury):** people for whom typing is a core part of their job need to be careful to keep their wrists straight while typing to avoid strain caused by excessively repeating motions for which the body has not evolved. RSI can be severe. Sometimes even surgery is not enough to deal with it properly and it can lead to people having to change career. There are many different varieties of RSI. Various alternatives to conventional keyboards and mice have been designed to reduce the possibility of RSI.

- Spilling drinks on computers can cause electrical signals to go the wrong way, causing damage to the computer. Such problems are called **short circuits**.
- Toner cartridges, the 'ink' in laser printers and photocopiers, can get very hot during use. Thus, if they need replacing, it is safest to give the cartridge time to cool down before opening the printer or photocopier, to avoid burns.

Your future in IT

This section looks at CVs and provides a good opportunity for review of language from throughout the book. The Business Matters section goes on to look at job interviews.

Students often ask what the difference is between a CV and a resume. The answer often given is that **CV** is preferred in the UK, while **resume** is the preferred word in the USA for the same kind of document and that both are used interchangeably in some countries such as Australia.

Note that different jobs and industries often require different types of CV. For example, highly technical jobs within IT may be associated with CVs that have long lists of technical skills, such as the programming languages in which the applicant is fluent, the operating systems with which they are familiar and so on. If you are teaching in a college environment, your Careers Department might be able to supply advice about this.

The example CV is of the Europass style, which is a standard used across Europe. If your students are not European and have little reason to want to apply for jobs in Europe, you may want to use a more locally appropriate format.

Business matters

This involves a scenario in which students discuss jobs and job interviews and go on to roleplay an interview. It is designed to bring out some of the vocabulary and grammar from this and earlier units.

Further reading

Use the following keywords to search the internet for websites which give more in-depth information about the topics covered in this unit: hang, crash, technical support, issue tracking system, repetitive strain injury (RSI).

Teacher's Notes

Warm-up

Put students in pairs or small groups and ask them to tell each other the stories about faulty IT equipment that they thought about in preparation for this unit. While taking their turn to listen, students should note down any vocabulary they hear that is new to them and that they feel might be useful. They should ask the speaker about the meaning. At the end, you could ask your students to share their stories with the class. They could identify common problems, discuss unusual ones and share vocabulary.

Investigations

Speaking

- 1 Here students talk about their experiences of problems with electronic devices and brainstorm ideas for other issues that could occur. Question 1 can be skipped if the Warm-up activity has been completed.

Listening

- 2 ▶ 42 Students listen to six people describing IT-related problems. While listening, they use words and expressions from the box to complete sentences which describe some common computer problems, thereby being introduced to vocabulary which is central to this unit.

1 hanging 2 crashes 3 connection error
4 running slowly 5 failure 6 fault

Extra activity

Audio script 42 page 79 provides a good opportunity for a review of tenses. Put students in pairs and ask them to identify the tenses used by the speakers and the reasons for their choice of tense. Then ask them to speak to a person from a different pair and compare their answers. Given that the grammar point in this section is the present perfect, this is a useful place at which to review tenses.

- 3 To clarify the difference between *crash* (when a computer switches off by itself or a program stops running) and *hang* (when the computer or program appears to still be running but will not accept input), students are asked a further question. If necessary, they can look at the audio script to help them.

1 The application is hanging.

Speaking

- 4 To practise the vocabulary in Activity 2, students describe a problem to a partner and the partner responds with the word or phrase for the problem.

Listening

- 5 ▶ 43 This activity is based around a conversation that would typically occur when someone calls a help desk with an IT problem – the situation could be an employee in a large corporation calling their IT help desk or a consumer contacting the call centre of a company that has sold them a computer or some software. The turns in the conversation are mixed up. In pairs, students put them in the correct order.

(The numbers on the left are the answers to Activity 5. The underlined words are the answers to Activity 7.)

- 7 Ah. Have you tried restarting your computer?
 - 9 Could you do that? And if you still have a problem, just call me again.
 - 5 Does it say anything else?
 - 1 Hi, help desk here. My name is Suki. How can I help you?
 - 8 Er ... no, I haven't.
 - 3 OK. Can you tell me exactly what happens?
 - 10 OK. Thanks very much. I'll do that.
 - 4 Sure. When I press 'Send', I get an error message saying 'This program has found a problem and needs to close'.
 - 2 Yes, hi. I've got a problem with my email. Whenever I try to send a message, the program crashes.
 - 6 Well, something about sending an error report to the software company. Oh, and an error code: it says 'Error 35A4'.
- 6 Students are asked two basic comprehension questions about the conversation: *What is the problem? What is the solution?*

Problem: The email program crashes when the user tries to send an email.

Solution: Restart the computer.

Language

This box looks at the present perfect used for actions in unfinished periods of time, where the focus is on the result of the action. In this situation, the present perfect is often used with *yet* and *already*. This use contrasts with the past simple, used for actions that were completed in a finished period of time. To avoid too much complexity, other uses of the present perfect are not mentioned here.

To introduce the language, you could ask students questions about what they have done today and what they did yesterday. Elicit answers, put them on the board and guide them towards making any corrections necessary. Then ask them to decide which relate to unfinished time (*today*) and which relate to finished time (*yesterday*). Finally, ask them to write, in pairs, similar questions about this year and last year. They should use the present perfect for this year and the past simple for last year.

- 7 If you have not done so already while working through the grammar point, ask students to identify and underline examples of the present perfect in the conversation in Activity 5 or, if they prefer, the audio script on page 79, which is in the correct order.

See Activity 5 above.

- 8 For controlled practice of the present perfect vs. the past simple, students complete the conversations using the appropriate tense of the verbs in brackets. Answers can be checked and discussed in pairs.

- 1 Have you charged, charged
- 2 Did you repair, I didn't
- 3 have you tried, restarted
- 4 Have you received, haven't received, Have you checked

- 9 Students now ask and answer questions using the prompts, thus performing further controlled practice. Stronger classes can do this in purely spoken form as a mingle. If so, you may want to do Activity 10 first. Weaker students could write the questions and answers first.

- 1 Have you checked the manual yet?
Yes, I have.
- 2 Did they contact support last week?
No, they didn't.
- 3 Have you checked the cable yet?
Yes, I have.
- 4 Did you test the broken computer yesterday?
No, I didn't.
- 5 Have you tried inserting another DVD?
Yes, I have.

Pronunciation

- 10 ▶ 44 While listening to some sentences that use the present simple, students mark the stressed syllables.

- 1 The computer's crashed three times today!
- 2 I've rebooted the computer.
- 3 Have you re-installed the software?
- 4 I haven't had time to finish the repair.

Speaking

- 11 Students use prompts to ask and answer questions about their own experiences of IT problems, for personalised, freer speaking practice. This extends the grammar point to a slightly different use of the present perfect, though the idea of 'unfinished time period' from the Language box still applies: the unfinished time is the student's lifetime; in other words, this covers lifetime experiences.
- 12 In pairs, students now have conversations using the prompts in the Partner Files section at the back of the Course Book.

Diagnosis

Speaking

- 1 Students look at two photos and discuss what is happening. Then they discuss any personal experiences they may have of calling a help desk.

- 1 Students' answers will vary, but the man is probably calling the help desk about a problem with his computer. The woman is answering the phone in a call centre.
- 2 Students' own answers

Vocabulary

- 2 Ask students to look at the form and explain that it is a form that might appear on an operator's screen in a call centre. The form is for recording details of the caller, the problem and the action taken. In pairs, students use context to match words from the form to the definitions given.

1 issue tracking system 2 ticket 3 tier
4 escalate

Listening

- 3 ▶ 45 Students now listen to a conversation between a help desk technician and a customer. While listening, they complete the form in Activity 2. Before listening, make sure that students know *missing* and *accounting* (*accounting* appeared earlier in the book). During feedback, elicit from students whether the problem has been solved at this stage (It hasn't, which is the reason for it being escalated to the next tier.).

1 Marten Schwarz 2 Account Office 3 7
4 can't/won't install 5 error type 3
6 downloaded again and reinstalled
7 Escalate to Tier 2

- 4 Students listen a second time and answer three comprehension questions.

1 a missing file on the caller's computer
2 The problem will be escalated to tier 2 support. A software engineer will call back within twenty-four hours.
3 tier 1

Language

The language of speculation and deduction is useful for diagnosis, the topic of this section. Diagnosis is often carried out through a trial-and-error process: the first step is to speculate about what might be the cause of the problem, then checks are made to see if this is correct. If not, another round of speculation and checking begins.

To introduce the language, you could follow this procedure:

- Play track 45 again from *OK*. *Have you tried downloading ...* (A's second turn from the end). Ask students to write down what the technician actually said about the cause of the problem (*there might be a missing file*).

- Ask: *Was the technician sure about the cause of the problem? How do we know?* (No. She said *might*, not *is*).
- Elicit other language that conveys the same lack of certainty, such as *I think ...*, and the language in the Language box.

- 5 In pairs, students look at six situations and speculate about what the problem might be, using language from the Language box.

Suggested answers

- 1 The computer might have a virus.
- 2 You must have saved it somewhere else./ Someone might have cleaned up the server.
- 3 He could be helping someone, somewhere else in the building.
- 4 The battery must be flat by now.
- 5 It/The problem can't be the cables.
- 6 The network cables might not be plugged in.

Reading

- 6 Students read a troubleshooting guide or 'script' of the kind that could be used by a help desk technician working in the call centre of a computer monitor vendor. It presents a series of questions that the worker might ask when someone calls with a particular problem. The guide also indicates the action to take in response to the caller's answers.

Students read the guide and complete the gaps with language from the Language box. This could be done in pairs or individually, with pairs then comparing their answers, to provide discussion and peer feedback.

- 1 must be switched on
- 2 may/might not be connected
- 3 may/might not be switched on
- 4 can't be a power problem
- 5 may/might not be connected
- 6 may/might be faulty
- 7 must be faulty
- 8 may/might be faulty

Speaking

- 7 In pairs, students roleplay using the troubleshooting guide: one is the caller and the other is the help desk technician. Students should have at least one turn in each role. They could change partners between turns. For each turn, they have the same problem (the blank monitor screen in the troubleshooting guide) but the caller will need to decide what the symptoms of his/her problem are before

commencing. Alternatively, you could give students the suggestions below.

- 1 *Can't see any lights on the computer or hear any sound from it. Cables are fine. No spare computer available.*
- 2 *Can see lights on the computer. Can't see lights on the monitor but it's switched on and plugged in. No spare monitor available.*
- 3 *Can hear the computer and see lights on the monitor. Spare monitor also doesn't work.*

The results students should reach from these are:

- 1 *unknown fault; site technician will visit*
- 2 *unknown fault; site technician will visit*
- 3 *escalate to site technician; video card may be faulty*

Extra activity

Ask students to work together to write their own troubleshooting guide (similar to the one in the Course Book) to solve a problem of their own choosing. This could be done in pairs or small groups and would work well for students currently working in IT or studying IT because they can choose a problem relevant to their own work or study.

When they have finished, students could swap their guides with another group, who would then try to follow them. Any problems they find could be discussed with the original authors who would then amend the guide as necessary. Finally, if appropriate, the guides could be put on the classroom walls so that they can be shared (this is unlikely to be appropriate if your class is in a formal business environment).

If this is done for homework, students could use their guides in a later lesson as the basis for roleplays similar to activity 7.

Solutions

Speaking

- 1 To introduce the activity, you could elicit from students the steps they generally take to solve a problem: if they are very familiar with IT, this could be an IT problem but otherwise, non-IT problems are fine. Then ask students to look in their books and, in pairs, put the steps there in the correct order.

- 3 Decide which of the possible solutions is the most likely.
- 5 If that doesn't work, try another solution.
- 1 Check what the symptoms of the problem are.
- 6 Continue this process until something works.
- 2 Think of some possible solutions.
- 4 Try the most likely solution.

Listening

- 2 ▶ 46 Tell students that they will listen to two repair technicians in a computer shop talking about a computer that a customer has brought in for repair. Ask them to decide, while listening, whether they have solved the problem yet. If necessary, draw attention to this use of the present perfect from earlier in this unit.

no

- 3 Students listen again and tick the box or boxes corresponding to the tests the speakers have already tried. All three are mentioned, so students will have to pay attention to the tenses they hear.

After feedback, for review and further practice of the language point from the previous section, you could play the recording again, this time asking students to identify the points of speculation and deduction made by the speakers. Students with IT knowledge may be able to mention other possibilities using the same language.

test memory, replace memory

Language

This box covers two ways in which suggestions can be made, beyond the language of suggestions covered in Unit 1: *try + noun/-ing* and first conditionals with modal verbs to express consequences of a suggestion. These could be introduced by asking students to underline the suggestions in audio script 46 on page 79, or by eliciting suggestions (and consequences of a suggestion) about a problem (not necessarily IT-related) that is of relevance to your students.

- 4 Students complete the sentences in four conversations using the grammar in the Language box.

- 1 If you change your settings, your phone app should update soon.
- 2 Try checking the network and connections settings.
- 3 Try removing it.
- 4 If you check your usage regularly, you should be OK.

- 5 Students use context to match the bold words in Activity 4 to their definitions.

1 usage 2 bloatware 3 bill

Speaking

- 6 In pairs, students take the role of technicians discussing a problem and practise a conversation using the prompts provided. They should take both roles, changing partners in between, if possible.

Extra activity

Have students roleplay similar conversations based around problems they have experienced. They may need time to write down some prompts first.

Vocabulary

- 7 The topic now switches to occupational health and safety. Students match illustrations A-F to dangers 1-6 in the leaflet, then match the dangers to the appropriate advice, a-f. For maximum speaking practice and to provide the opportunity to learn from each other, run this as a pairwork activity. Before starting, make sure students are aware that illustration E shows toner cartridges in a colour printer and that these cartridges can get very hot.

A 1 B 2 C 3 D 5 E 6 F 4
1 b 2 d 3 e 4 a 5 f 6 c

Writing

- 8 Ask students to write sentences expressing suggestions about (and, where appropriate, consequences of) not following the advice in Activity 7. They should write one piece of advice for each item in 7.

Suggested answers

- A If you bend your back sitting at a desk, you might get backache.
B Unplug the computer before working inside it. If you don't, you might get an electric shock.
C If you don't keep your wrists straight while typing, you could get RSI.
D Don't spill your drink on your computer. If you do, your computer might short circuit.
E When you change the toner in the printer, let it cool down first. If you don't, you might burn your fingers.
F Don't leave cables where people walk. If you do this, they might trip and fall.

Speaking

- 9 Students have conversations in which they warn each other of dangers from Activity 7. They should follow the pattern provided and should use language from the Language box. Below is an example, with advice for illustration A:
A: *Be careful! You shouldn't sit like that, with a bent back!*
B: *Why not? What's the problem?*
A: *If you sit like that, you might get backache.*
B: *Oh! That's not good! What should I do?*
A: *It's better to sit straight.*
B: *Oh, OK! Thanks very much.*

Extra activity

With students, come up with several IT issues relevant to their work, study or lives. Then put them in pairs and ask them to have conversations similar to those in recording 46, in which they speculate about what the cause of the problem might be and suggest possible solutions.

Your future in IT

Speaking

- 1 You could lead in to the topic of this section by talking with your students about their work aspirations, then ask them to continue their discussions in small groups. One question is provided that will work for most users of this book but you could also provide more based on your students' situation. Examples include:
What job do you think you will do? Is it the same or different from what you most want to do?
Think about your current job. What duties do you most enjoy? Least enjoy? Why?

Reading

- 2 Ask students to skim-read the CV and then match the headings to the gaps.

1 d 2 j 3 f 4 b 5 a 6 i 7 g 8 e
9 c 10 h

Speaking

- 3 Students now look in more depth at two of the headings in the CV, *Technical skills* and *Personal skills*, and personalise the concepts in discussion with another student by relating them to their own lives. With stronger classes, encourage students to take this as far as they can beyond the language on the page – they may be able to think of a wide range of personal and technical skills. Where there are things they wish to say but for which they are struggling with the language, supply them with the correct words: providing language when the student has a need to know it and have an interest in it is one of the best ways to ensure learning occurs.

Writing

- 4 Students use the model in Activity 2 to write their own CV. Alternatively, provide another model if your students require a different style of CV, such as one with a personal statement.

Language

Ask students to talk about their plans for after the course. Write responses on the board and try to elicit a range of different future forms, including the ones from the Language box on schedules in the previous unit (page 58), and discuss the differences between them.

Speaking

- 5 Students use the language in the Language box to talk about their own career plans. This can be done in pairs, and each student from these pairs can later report what they heard to another student. Interesting points from willing students can be shared with the class in feedback.

Extra activity

Ask students to write six or more sentences expressing their future plans, using language from the Language box. If students need help to think of ideas, put the following on the board as prompts: *further qualifications, personal skills, technical skills, positions*.

Business matters

In this section students discuss jobs and job interviews and then roleplay a job interview.

Speaking

- 1 Questions are provided for students to discuss their experiences of interviews. Younger students may not have experienced a job interview previously; instead, they can talk about other interviews they have had experience of (for example, at school) or about interviews they have seen on TV.

Extra activity

This is for students with some experience of the workplace. Ask them to discuss questions such as these, as appropriate to your context, in pairs or small groups:

- 1 How should you prepare for a job interview?
- 2 What are your experiences of job interviews? How did you prepare? How did you feel before it? During it? After it?
- 3 Have you ever interviewed anyone for a job? What did you do well in the interview? What didn't go so well?
- 4 What advice would you give a young person applying for a job?

- 2 Ask students to work in the same groups as in the previous activity to discuss what personal and technical skills they might need for the jobs in the box. This will review some of the vocabulary from the previous page.
- 3 Students now speculate and/or share knowledge about what kinds of questions are commonly asked in a job interview and when in the interview it is usual for the interviewee to ask questions.
- 4 Students first read the job advertisement at the bottom of the page, then decide which of the jobs listed to apply for. If students are already in an area of IT or know what career they are heading for, they should be encouraged to choose the job most closely related to that.

Then ask students to follow the steps provided: first, they prepare for the interview by thinking of questions and answers (depending on their role) that are appropriate for the chosen job role. Then they roleplay the interviews. Finally, they swap roles and repeat, with a different partner if possible.