

# Contents

<i>List of Figures</i>	vii
<i>List of Tables</i>	viii
<i>List of Activities</i>	ix
<i>Acknowledgements</i>	x
<b>Introduction</b>	1
<b>Chapter 1</b> What Is Critical Thinking?	5
<b>Chapter 2</b> What Is Academic Writing?	19
<b>Chapter 3</b> How Do You Get Started on Assessments? Using a Five-Step Process to Begin Thinking Critically	33
<b>Chapter 4</b> How Do You Read with a Critical Eye?	57
<b>Chapter 5</b> How Do You Use Evidence? Building a Logical System to Organise and Analyse Sources	75
<b>Chapter 6</b> How Do You Refer to the Evidence Effectively in Your Writing?	93
<b>Chapter 7</b> How Do You Put It All Together? Building Logical Academic Paragraphs That Demonstrate a Critical Voice	109
<b>Chapter 8</b> How Can You Apply Critical Thinking to Write Reflections and Develop Lifelong Learning Behaviours?	135

<b>Chapter 9</b>	<b>How Can You Demonstrate Critical Thinking and Effective Communication on Placement?</b>	<b>151</b>
<i>Glossary</i>		175
<i>References</i>		183
<i>Index</i>		187

# What Is Critical Thinking?

This chapter:

- Briefly introduces definitions and explanations for critical thinking commonly used in health and social care education
- Links critical thinking skills to working in health and social care professions
- Provides examples of critical thinking models that can help you understand what academics mean when they talk about critical thinking.

One of the key factors for success at university is being able to show that you can not only **describe** what you've learnt from course materials and independent research, but also show how well you can **analyse, question** and **evaluate** this information. These thinking processes, often called cognitive processes, belong to a set of skills and attitudes that form critical thinking.

**Being critical means being thoughtful and analytical about what you hear, see, read and experience.**

To demonstrate critical thinking in your assessments and in professional contexts, you need to choose appropriate and relevant sources of information to support your ideas, opinions or answers for health or social care problems. This means you need to avoid being biased in your thinking and recognise that, in complex situations, health and social care practitioners need to consider a range of opinions and options based on high-quality and reliable evidence that come from trustworthy sources.

As you progress through your course you may observe academics and professionals in your field referring to critical thinking using different

language and ideas. Here are some examples of how critical thinking can be defined and explained (Cottrell, 2017; Bottomley and Prymachuk, 2018):

- **Identifying** other people's ideas and **comparing** different ideas and evidence without bias
- **Evaluating** the strengths and weaknesses of evidence
- **Reflecting** on the evidence to see if there are missing ideas or facts
- Pulling different ideas together (**synthesising**) to create new ideas
- **Applying** evidence to real situations
- **Justifying** ideas, decisions and opinions with evidence from **synthesised** sources of information

While there is no single definition of critical thinking, in this book we define critical thinking as applying all of those thinking skills listed above in order to come to a judgement on an argument or idea. Critical thinking belongs to a set of skills that we use every day, but it may often happen subconsciously without reflection. After all, we make thousands of judgements, opinions and decisions about what we see, hear and read, but we don't often stop to consider the process which led to those decisions. One way to develop better critical thinking skills is to consciously think with an internal dialogue. This is called metacognition, thinking about how you are thinking. In other words, metacognition happens when you reflect and become aware of how you make decisions. Let's test the waters with a short activity.

#### ACTIVITY 1A

##### Forming opinions

Imagine your classmates are discussing the topic of caring for People Living with Dementia at home. Based on your knowledge and experiences, make a list of factors that family members who care for a relative living with dementia might need to consider before they decide the best place for their family member to live (e.g. at home, with a family carer, in an aged care facility?).

- How many ideas did you come up with?
- Where did your ideas come from?
- Where could you look for more information to help fill in gaps in your knowledge?

The length of the list will be influenced by various factors:

- Your depth of **knowledge** about People Living with Dementia
- Your **experiences** of interacting with People Living with Dementia in real life through family or friends' experiences
- The media
- **Underlying attitudes or beliefs** and **values** that you have about caring for a relative.

Now read another student's opinion. Think about how her knowledge, experiences and values may influence her future approach as a health or social care professional when discussing care strategies for People Living with Dementia.

*"I've always believed that when people get older they naturally become more forgetful. At this stage in their lives, after they have worked so hard and contributed to the family, it is the family's ethical duty to care for the older relative at home. I believe putting somebody into an "old people's home" is shameful for the family and based on recent news reports aged care home residents are poorly treated. Everybody in my family thinks that personal health matters are private and decisions, such as caring for an elderly relative, should not be discussed with outsiders."*

One helpful strategy for developing critical thinking processes is to recognise that we have gaps in our knowledge and need to continually question where our information comes from and how we evaluate the information we have. In the example above, the student needs to recognise not only her personal, subjective opinion but also the need to move towards a more critical way of thinking about the professional care that is appropriate for each person. In that sense, it is useful to consider the following elements that could guide her transition to becoming a more critical thinker:

- While maintaining respect for her personal values, as a future professional she has a responsibility to develop knowledge about what other health and social care professionals and researchers have learned about dementia. She also needs knowledge of the most appropriate strategies for different groups of people.
- Her experiences from family and informal sources of information (media and friends' stories) do not provide high-quality evidence for

professionally managing clients/patients who may be quite different from her relatives.

- To be effective as a professional she needs to be a critical reader, writer and problem-solver. This means reviewing high-quality, reliable evidence and reflecting on different factors (perspectives, advantages, disadvantages, risks and benefits) to inform good decision-making for the problem she is trying to address.

## 1.1 How do you think more critically?

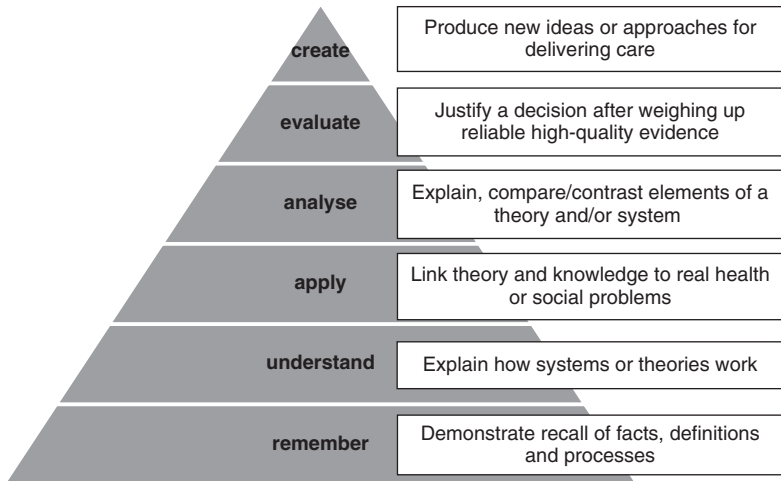
Critical thinking covers a range of thinking skills and processes. One way to consciously start on a critical thinking process is to develop the skill of **asking questions**. When you start thinking about a problem (e.g. caring for a person who has recently been diagnosed with dementia) you need to think about different kinds of questions. Some questions will simply be related to facts (**descriptive questions**), others will go deeper to figure out why something is happening (**analytical questions**) and others will focus on the most appropriate ways to address the unique factors related to the problem (**evaluative** and **reflective questions**).

**To think deeply and critically you need to ask many different kinds of questions. This professional curiosity will help you meet the expectations of your academic coursework and placement/fieldwork responsibilities and lead to deeper understanding of your future profession.**

If you have ever wondered what questions to ask and what types of questions lead to deeper thinking, you can use a range of thinking processes to progress logically from **describing** to **analysing** to **evaluating**. In academic culture these critical thinking processes become more organised and logical with frameworks or models. At university, lecturers often refer to theoretical frameworks or models to illustrate different approaches to critical thinking. In this book we use two models to show you how to develop critical thinking skills and processes, which you can apply to your course assessments and professional practice.

When academics talk about learning to think critically, they often refer to a model known as Bloom's taxonomy. This model classifies

different levels of thinking, learning and understanding (cognition), moving from lower- to higher-order cognitive thinking processes in a hierarchical pyramid. The figure has been adapted to illustrate how Bloom’s categories can be aligned with the skills you need to deliver safe, effective and evidence-based health and social care strategies (Figure 1.1).



**Figure 1.1** Example of Bloom’s revised taxonomy (inspired by Ouda and Ahmed, 2016, p. 430)

Although Bloom’s model is presented as a pyramid with “levels of thinking”, this doesn’t necessarily mean that we should move from the bottom row to the top in sequence. The pyramid shows you different skills with the highest level “creating” considered to be the pinnacle of critical thinking skills. But like all pyramids you need a solid base and supporting building blocks to reach the top. It’s also important to realise that not all decisions and actions require every category of the pyramid. Depending on where you are in your studies (first year undergraduate or postgraduate) and the assessment you are preparing, you will use these thinking skills to varying degrees.

It is also possible to represent critical thinking as more of a circular process. The University of Plymouth model suggests that there is no

specific start or end point, but rather a wider more organic approach to asking questions to develop deeper thinking (Figure 1.2).

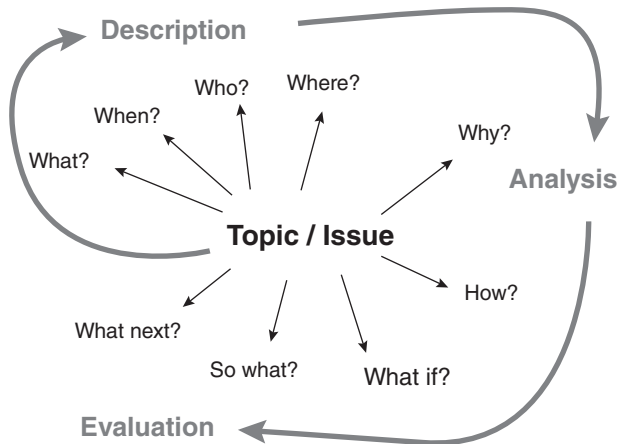


Figure 1.2 University of Plymouth-Higher Learning Model. (Learning Development, 2010)

#### ACTIVITY 1B

### Creating critical questions

This activity uses Bloom's pyramid and the University of Plymouth's critical thinking models to promote questioning skills. Read the example of a health and social problem below.

*Is it better for People Living with Dementia (PLwD) to be cared for in their homes or in healthcare facilities?*

**What different types of questions would help you develop a deeper understanding of the topic?**

For example, you could start with *what*, *when* and *where* questions and then try to create *why* and *how* questions to deepen your brainstorming about the topic.

Bloom's pyramid and the University of Plymouth model are helpful because they can act as a guide to creative questioning. There are no right or wrong questions! Start with what you remember and understand from lectures and readings to create **describing questions**. You could also brainstorm about the whys and hows of the topic to create **analysing questions**. At different stages in your thinking, researching and reading you may find yourself comparing ideas and their strengths and



weaknesses which form the basis of **evaluating questions**. The images below show what the critical thinking process could look like in the early stages of creating questions (Figures 1.3, 1.4 and 1.5).

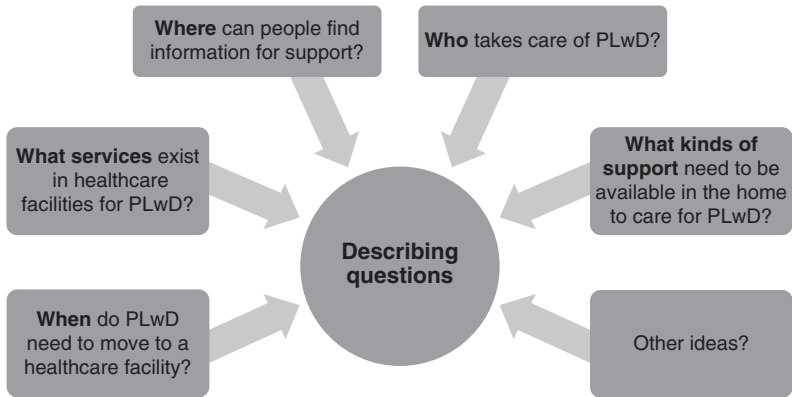


Figure 1.3 Describing questions



Figure 1.4 Analysing questions



Figure 1.5 Evaluating questions

By asking **describing**, **analysing** and **evaluating** questions, thinking becomes more critical. This is a messy process, and you may start in one direction and find yourself lost or having your viewpoints challenged. The process is continuous and takes practice. Even after asking so many questions, good critical thinkers will expand on their thinking strategies by taking a step back and asking “What am I missing? Are there any gaps in my questions?”

## 1.2 Why is critical thinking so important in health and social care?

Health and social care professionals all need to think critically to perform well at their jobs, whether they are working with individuals or creating plans or policies to improve the well-being of a community. They must also consider the quality of care they are providing and the need to meet client expectations at all times. In every care situation, professionals have the responsibility and ethical duty to address problems with a critical thinking perspective.

Practitioners have expressed similar ideas about the importance of critical thinking in professional situations. They stress the need to individualise decisions and care to unique cases.

Scientific techniques and healthcare knowledge are continually advancing. During our entire careers we keep learning new ideas and evaluating new evidence. We need to be aware of changes and how they influence decisions in practice.

You'll quickly learn there are many opinions about how to address a problem. Listen, read, discuss and objectively think about information before acting. Don't just obey the person with authority. Evaluate the facts.

Every patient is different! Every time I assess a patient I have to think about different aspects of their situation. For example, a patient may be really distressed. This could be related to a psychological cause or a physical issue. I need to ask questions, make observations and think critically in every moment to deliver the best health outcomes possible.

Weigh up the evidence and make sure it is high-quality evidence! There's so much misinformation (Dr Google, social media). I spend a lot of time educating people about what is real evidence versus urban myths.

Our professional guidelines, standards and legal codes require us to think critically. We can't make assumptions about our clients. We must use multiple sources of information and weigh these against each other before we make decisions that can seriously impact people's lives. If we don't do this we could be negligent and even found legally accountable.

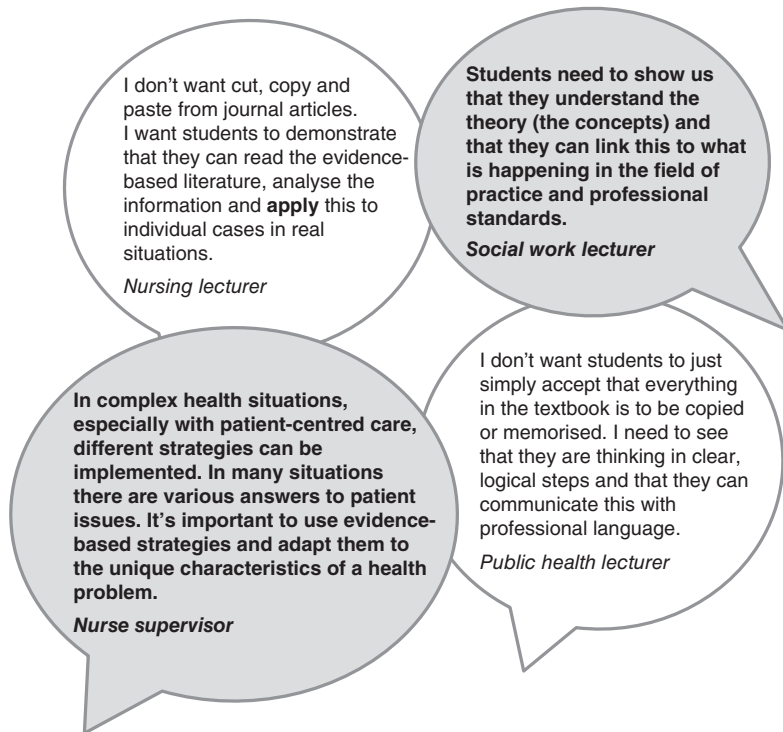
In my work, there are many ways to develop a deep understanding of a client's situation. We need to be reflective and learn from our experiences. It's a matter of asking questions: What did we do? Why did we do this? What were the outcomes? What changes do we need to make? If we are open and honest about this learning process, we are demonstrating critical thinking.

### 1.3 Why is it important to demonstrate critical thinking in health assessments?

To meet the relevant academic requirements and professional standards you need to develop your critical thinking and writing skills because it demonstrates:

- You have gained **knowledge** about the specific content and theories related to your study.
- You have gained **critical thinking skills** in evaluating evidence that can be applied to real problems.

- You are **communicating** clearly and effectively about care decisions or recommendations.
- Your ability to present justified ideas with a **professional voice**.
- Your ability to **reflect** on learning experiences and apply lessons learned to future practice.



Clearly, showing that you are critically thinking is important for both safe and effective health and social care in professional practice and for meeting academic expectations. When you first start university, this can seem overwhelming, but making decisions and judgements is a natural process that we do all the time. You can use Bloom's pyramid and the University of Plymouth model to be more strategic in the way that you approach a complicated problem and demonstrate a deeper level of thinking by being aware of how you speak and write. This takes practice, and you will have opportunities to develop these skills as you progress through your course.

To respond to assessment tasks or professional practice with an analytical and evaluative approach you will need to be able to:

- Describe ideas, processes and situations
- Ask questions to gather more information
- Justify your opinions, recommendations or actions.

You can achieve these fundamental skills by using different kinds of thinking and reflecting on your own thinking processes. Becoming aware of your metacognitive processes (thinking about how you are thinking) and the way you communicate your ideas (through writing and speaking) is essential for delivering safe, effective and individualised care and addressing social and health problems.

## 1.4 Recognising differences between descriptive and critical statements

To improve your analytical thinking, it is important for you to first recognise how others in your academic and professional worlds use language to communicate their ideas. As you progress through your course a helpful strategy is to pay close attention to the different types of written or spoken statements that demonstrate different thinking approaches. Statements, such as those in the examples below, can be grouped into descriptive, analytical/evaluative or reflective statements.

**Descriptive** statements tend to use strong reporting verbs related to facts:

- State, find, report, is/are, have, experience

**Example:** “Active listening, positive body language and repetition **are** three techniques which **create** a positive communication climate (author, year).”

**Analytical/evaluative** statements can include more tentative language choices to show there are other possibilities:

- Seem to, appear to, may, tend to, could result

**Example:** Healthcare workers who are not aware of how their gestures or facial expressions impact on clients’ emotions **may** unintentionally create a negative communication climate.

**Personal reflective** statements use first person to demonstrate a personal opinion or connection:

- I, me, my, mine, we, us, our, ours

**Example:** While working with Mr P **I experienced** a communication problem. Mr P became upset and **told me I was ignoring** his request for help.

***What you say and write is how other people determine what you are thinking!***

**Your lecturers and supervisors can only respond to your thinking by listening and reading statements you provide in discussions or through writing tasks.**

As you read academic texts or listen to lecturers, take note of how language is used and how tuning into language choices can help you decode the different types of thinking.

By focusing on how good writers and speakers express themselves, you will gain confidence and an ability to review your own writing.

### ACTIVITY 1C

#### Identifying types of sentences

Read the statements below and identify whether the sentence is descriptive (D), analytical/evaluative (A) or reflective (R). Check your answers at the end of the chapter.

	D	A	R
1. Over the past 20 years, the local community has experienced a 25 per cent increase in the population of 75 years and over (Green, 2018).			
2. A recent discussion I participated in indicated that nurses are experiencing greater job stress because of increasing aged populations. So, as a future professional, workload balance will be an issue I need to address.			
3. The increasing ageing population will need to rely on healthcare facilities (Green, 2018). This could result in pressing workload issues for health and social care professionals.			

Compare your answers with ours at the end of the chapter.

## Stop and Reflect

- How aware are you of your own cognitive processes? For example, do you just try to memorise what you learn, or do you actively question the ideas behind what you are learning?
- How confidently do you feel you can differentiate between descriptive and analytical statements?
- How can you apply the questioning strategies introduced in this chapter to become a more analytical thinker?
- How much attention have you paid to the language that people use to discuss their opinions or when they present facts?

## Summary

Critical thinking is fundamental to everything we do. Becoming a critical thinker means becoming aware of how you make decisions, evaluate ideas and reflect on your own thinking processes. In health and social care disciplines and professional work, you need to develop and demonstrate your critical thinking to deliver optimal care and make sound decisions. After reading and completing the activities in this chapter you should have a better understanding of:

- How academics may explain or refer to critical thinking.
- How you can use Bloom's pyramid and the University of Plymouth's model to create critical questions.
- Why critical thinking is important in academic and professional practice.
- How critical thinking is demonstrated through descriptive, analytical/evaluative or reflective statements.

## Chapter 1 Answers

### Activity 1C: Identifying types of sentences

Notice the words in bold below. The use of this language influences whether the statements are descriptive, analytical/evaluative or personal critical reflections.

<b>Descriptive</b> <b>(Sentence 1)</b>	<b>States what happened/facts</b> Over the past 20 years, the local community <b>experienced</b> a 25 per cent increase in the population of 75 years and over (Green, 2018).
<b>Personal Reflection</b> <b>(Sentence 2)</b>	<b>Reflects on Personal Learning Experience</b> A recent discussion <b>I participated</b> in indicated that health and social care professionals are experiencing greater job stress because of increasing aged populations. This agrees with Green (2018) who reported that <b>our</b> local community has experienced a 25 per cent increase in 75+ residents over two decades. <b>I think as a future professional</b> , workload balance will be an issue <b>I need</b> to address.
<b>Analytical</b> <b>(Sentence 3)</b>	<b>Identifies the significance</b> The increasing ageing population will need to rely on healthcare facilities (Green, 2018). This <b>could result</b> in pressing workload issues for health and social care professionals.



# Index

- academic paragraphs 110–27
  - academic voice 110
  - cohesion 119–20
  - concluding sentence 116–17
  - good and bad 122–3
  - incorporating evidence into 94–102, 125–6
  - structure of 110–11
  - supporting sentences 114–16
  - supporting sentences, asking questions 115
  - topic sentence 112–13
  - see* writing techniques
- academic writing 19–29
  - analytical 8–12, 15–16, 34, 44, 55
  - audience 23–5
  - cohesion 119
  - creating logical paragraphs 110–11
  - descriptive 8, 15–16, 33, 43–4, 116, 146
  - elements 19–20, 94
  - first person 15, 25, 29, 139
  - five-step process, overview 34–5
  - framework, plan, outline 23, 44–6
  - genres 21–4, 34, 136
  - identifying informal vs formal language 24–8, 123
  - message 19–20, 111
  - purpose 19, 23–4
  - references 93–6, 98
  - structure 20, 23, 34, 44–6
  - style 19–20, 28
  - synthesising 6, 99–101
  - voice 20, 63, 94, 96, 109–10, 120–3
  - see also* academic paragraphs
- acknowledge, analyse, consequences, strategies (ACCS) 166–7
- example of 168–9
- see* placements; communicating; critical thinking
- active listening 155–6
- argument 6, 65, 87–8, 109–10
  - and reading 57, 65, 67, 87
  - and topic sentences 111–13
  - and writing 123–6, 87–8, 94, 98, 109–17
  - see also* academic paragraphs
- assessment writing 33–50
- audience, purpose 23–4, 29
- brainstorming 10, 35, 42
- concept words 35–6
- directive words 35–6, 176
- five-step process, overview 34–5
- genres 21, 34, 177
- marking guides, examples 40–1
- marking guides/rubric/criteria 38
- marking guides, terms 39
- planning 23, 44–5
- outlining 46
- searching for evidence 46–8
- understanding the question 35–6
- audience 19, 23–4
- speaking to people 153–5, 172
- see also* types of writing (genres)
- see* understanding the question
- Bloom’s taxonomy (revised), critical thinking model 8–9, 14, 59, 156
- see* critical thinking
- communicating and critical thinking 163–4
- language tips in difficult situations 166
- strategies: ISBAR, AACCS 160–2, 166–7 *see* active listening
- critical reading 57–72
  - asking questions 63, 65–6
  - critique texts, how to 63, 67–8
  - definitions of 57
  - evaluating an article 71–2

- evidence-based literature, peer-reviewed 48, 177
- matrix 1 example 77, 79–80
- matrix 1 explained 75–81
- matrix 2 example 85–6
- matrix 2 explained 75, 81–3
- notemaking 70, 101
- organising sources of information 75, 87
- summarising, how to 67–8, 70–1
- understanding a journal article 59–62
- see also* journals, reading a journal article, sections of a journal article, database, sources
- critical thinking
  - asking questions 10–12, 42–3, 54–5, 63–6, 115, 137, 156
  - definitions 5–6
  - and health 12–14
  - metacognition 6, 140
  - models (Bloom’s taxonomy; University of Plymouth) 9–10
  - processes, how to 8–10
  - and reading 15–16, 47–9, 57–8
  - and reflecting 87, 135–7, 165
  - and speaking 153, 158–9, 163–6
  - and writing 15–16, 99, 109–10, 115
- evaluating 48–9, 57–8, 65–6, 67–8, 71
  - evidence-based 48, 177
  - grey literature 47, 177
  - matrix 1, 75–81
  - matrix 2, 81–3
  - notemaking 70
  - organising sources of information 75, 87
  - peer-reviewed 48
  - reliability 49, 57
  - searching for 46–7
  - selecting 48–9, 51
  - see* critical reading; evidence; journals
- evidence 94–102, 125–6
  - see also* sources
- feedback, responding to, reflecting on 141–6
- genres 21–4, 136
  - see also* types of writing; assessment writing
- identification, situation background
  - assessment, recommendation (ISBAR model) 161–2
  - see also* communicating and critical thinking; placements
- journals
  - databases 47–8
  - reading a journal article 59
  - sections of a journal article 59–62
    - abstract 60
    - introduction 60
    - discussion 62, 66
    - gap 62, 66
    - implications 62, 66
    - limitations 62, 66
    - literature review 60
    - method 61, 66, 178
    - results, findings 61, 66
- matrix 1
  - example 77, 79–80
  - explained 75–81
- matrix 2
  - example 86–6
  - explained 75, 81–3
- metacognition 6, 140
  - cognitive processes 5, 9, 102, 158
  - see* critical thinking
- placements, work-integrated learning, field work
  - acknowledge, analyse, consequences, strategies (AACSB model) 166–7
  - active listening 155–6
  - asking questions, open, closed, tag, negative 156–9

- communication skills, strategies 153
- creating rapport 160
- difficult discussions 166
- handovers 161
- identify, situation, background, assessment, recommendation (ISBAR model) 161–2
- speaking styles 153–4
- talking to supervisors 164
- purpose 19, 23–4
- see also* types of writing (genres), understanding the question
- questions
  - analytical 8–10, 33, 43, 115, 158–9, 165
  - closed 157, 176
  - critical 10–12, 42–3, 54–5, 57, 63, 65–6, 136–7, 143, 156
  - descriptive 8, 10, 115, 158
  - evaluative 8, 12, 15, 43, 116, 158–9, 165
  - negative 157
  - open 157
  - reflective 158
  - tag 157
- referencing 93
  - bibliographic information 50
  - citation 78, 95–9
  - direct quotes 94–5
  - good and bad examples of 97–8, 103–4, 106
  - incorporating into paragraphs 109–10, 110–11
  - paraphrases 96–8
  - style, conventions 93
  - summaries 98
  - synthesising 99–101
  - techniques 94
- reflection and critical thinking 135–6
  - asking questions 137
  - example 138–9, 140
  - language 139
  - strategies 141–4
- reflective learning 140–1
  - feedback 144–6
  - strategies 141–4
- reflective writing 135–6
  - example reflection 138–9, 140
  - language, use of first person 15, 25, 29, 139
  - styles 136
  - and thinking strategies 137, 141–4
- sources 47–8
  - citing 94, 102, 125–6
- types of writing (genres) 21–4, 136
  - case studies 22, 175
  - critiques, critical review, appraisal 22, 67–8, 176
  - literature reviews 22, 178
  - reflections, critical 22, 135–6
  - reflective 135–6
  - research essays 22, 180
  - understanding purpose and audience 23–4, 29
  - see* genres
- University of Plymouth model, critical thinking model 10
  - see* critical thinking
- voice 20, 63, 94, 96, 109–10, 120–3
  - see* writing techniques
  - see* academic paragraphs
- writing techniques, skills, tips
  - cohesion 119
  - connecting evidence to your argument 125
  - contractions 28, 32
  - expanding ideas 121
  - hedging 124
  - introducing explanation/expansion of idea 125

- introducing sources and ideas 125
- judgemental writing 32
- linking words 119
- overgeneralising 32, 179
- qualifiers 124
- referencing pronouns 119
- repetition 120
- showing your voice 109–10, 120–1,  
123
- use of first person 15, 25, 29, 139