

Science, Health & Engineering



# Developed & compiled by staff of the College of Science, Health and Engineering La Trobe University

### **Authors:**

Student Transition Achievement & Retention Team College of Science, Health and Engineering (SHE) La Trobe University (2021)

### **Editors:**

Tania Blanksby, Mel Holland, Rita Manessis

### **Acknowledgements**

The First Year Success Guide builds on the work of the FSTE First Year Survival Guide.

The SHE STAR Team would like to thank all the staff who contributed to the development of the Guide.

### © All Rights Reserved.

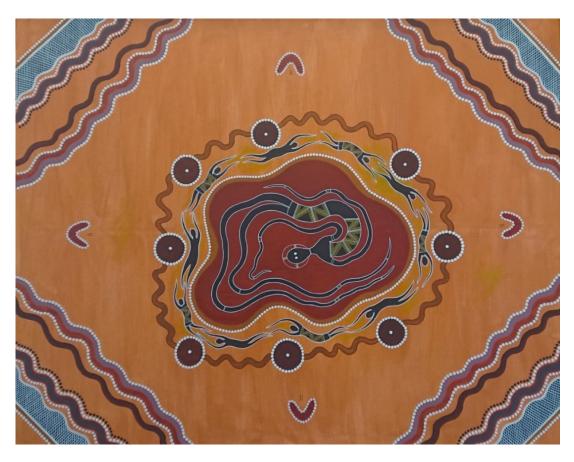
No part of this publication may be reproduced in any form, or by any means, without first contacting the SHE College Transition Manger: Tania Blanksby <a href="mailto:t.blanksby@ltu.edu.au">t.blanksby@ltu.edu.au</a>

## **Acknowledgement of Country**

La Trobe University proudly acknowledges the traditional custodians of the lands where its campuses are located.

We recognise that Indigenous Australians have an ongoing connection to the land and the University values their unique contribution both to the University and the wider Australian society.





Jimbeyer Boondjhil, Kane Nelson

# Checklist – tips to get you started

### **Pre-Orientation**

I have checked my student email account for messages
I have viewed my <b>Course Essentials Introduction</b> (OnDemand recording, access via <u>Orientation Planner</u> )
I have connected with a Peer Mentor and will attend a Meetup session
I have attended an online Advising and Enrolment support session
I have enrolled my classes, tutorial and labs for the semester via my Student OnLine account.
I have checked the online Orientation Planner to register for academic, social and support
information sessions
☐ I have explored the Online Orientation LMS
☐ I have saved a shortcut to the La Trobe website on my phone
☐ I have ordered my <u>student card online</u>
Orientation week
I have completed a campus tour or taken a <u>virtual tour</u>
I have attended my <b>Course Essentials Q&amp;A sessions</b> (live, online - access via <u>Orientation Planner</u> )
I have been on a library tour, and I know how to use the library for lending, research, printing
etc. Library Essentials workshops are available to help
I have checked my timetable for changes (Allocate Plus)
I have checked my student email account for messages
Week 1-3
I have read the <b>Subject Learning Guides</b> available on the <u>LMS</u> , for my subjects
I have checked my student email account for messages
I know how to contact ASK La Trobe for help
I know where to find the <u>Learning HUB</u> on my campus and where to find the drop in zoom link
via The Learning Hubs LMS
☐ I know how to access the Maths Hub, Science Hub and Coding Hub
☐ I have found and used the <u>Assessment Planner</u>
☐ I have signed up for <u>Studiosity</u>
☐ I know where the <u>Student Union/Student Association</u> is on my campus and how to contact them
I know what student support is available – see Chapter 10 for further details.
The first semester
☐ I have sought feedback on assessment items to identify where I can improve
I have met my lecturers, tutors, teachers and/or supervisors
I regularly checked my <u>student email account</u> for messages
I have found/organised a study group with other students (if applicable)
I have become involved in university life, connecting with clubs and societies
I know what is expected of me and where to find help if I need it
I have started thinking about a student exchange program

# **Contents**

Chapter One: Being Successful at Uni	6
Chapter Two: Get Ready to Study	10
Create a semester overview	
Weekly timetable	11
Weekly Study Routine	12
Chapter Three: Study Tips	14
Before attending your class	
After a class, lecture, lab, tute	
After a Topic	
Revision – during semester	17
Practice Professionalism	18
Study Groups	18
From School/TAFE/VET to University	20
Chapter Four: Reading and Reviewing at University	21
Getting the most out of your reading	
Chapter Five: Writing in Science, Health and Engineering	24
Writing style	
Adequate and accurate paraphrasing of information	
Formal – avoid personal, emotional and colloquial (everyday) language	
Clear structure and flow	
Common grammar errors	
Chapter Six: Referencing, Paraphrasing & Academic Integrity	40
Referencing	
Paraphrasing	
Chapter Seven: Maths and Stats Support	49
Chapter Eight: Working in a Team	50
Chapter Nine: Succeeding in Assessment Tasks	56
Essay Writing	58
Report Writing	65
Exams & Tests	72
Oral Presentations	73
Selfcare:	74
Chanter Ten: Student Services and Support	75

# Chapter One: Being Successful at Uni

### **Predictors of Success:**

During your first year of Uni, for you to be successful in your studies, you need to implement these seven actions. Read through them carefully and remember if you need help putting these into place, contact the <u>Learning Hub</u>.



### Time on Task

Put time aside to study for each subject every week – this is the strongest predictor of success!

### **Attend classes**

Whether online or face-to-face, attend lectures, tutorials and labs regularly! Opportunities to ask questions, test knowledge, practice and discuss. Complete all set work and preparations and submit all assessments.

### Focus on your goals

What's your purpose? Why are you here and what do you want to achieve by the end of the year; by the end of your degree? You don't have to have it all figured out now but start thinking about these questions and explore opportunities in and out of class to help you reach those goals.

### **Develop confidence**

Confidence is built over time; with each learning block you build. Nurture a sense of academic achievement with small successes and reflect on your mistakes, to help build your confidence. Confidence usually comes with perseverance.

### **Develop** relationships

Develop a social network with your peers – this will help you feel more connected and supported. Get to know your tutors, lab demonstrators, lectures, subject coordinators. You are part of a scholarly community now so start building your networks.

### Online engagement

Access and use the digital tools critical to teaching and learning – learning to use the LMS, student email and updates is central to academic success.

### Work-life-study balance

Planning is the key to finding this balance. Studying fulltime is equivalent to a fulltime job (40 hours); keep work to less than 10 -15 hours a week and make sure you allocate time for your other commitments, and leisure/rest.

### Time on Task – get the most out of study

Like all things in life, you get out of uni what you put in. The more you engage with activities, assessments, online resources and classes the better you will do.

To be successful at university, you need to study consistently throughout the semester, right from the first week. This study time is *additional* to the time you spend on assessment tasks, in tutes/labs, lectures (see <u>chapter 2</u> for strategies on developing a weekly study planner).

**Work in terms of tasks not time.** Set a task for each study period. A sense of achievement comes from successfully completing small tasks and breaking the work up into smaller sections, making the whole process of study more achievable. Follow this link to view the <u>Pomodoro Method</u>, which breaks down work into 25-minute intervals with short breaks.

**Review your approach.** If your study plan is not working effectively, review your strategies and consider making changes. Some minor adjustments may be all you need to stay on track.

**Make sure you include some recreation time.** Allocate time for recreational activity you will be less tempted to throw it all in and waste time avoiding study because of unrealistic demands you have made upon yourself.

Check out the Assessment Planner from La Trobe Library!

### **Attend Classes & Watch Recordings**

It is important to attend classes wherever possible. If you are watching recordings, ensure you watch them in sequence and within the week they are set.

So, if it's online, why attend lectures?

"I'll just print out the slides – these will provide all the information I need in an already summarised form".

- PowerPoint slides or other forms of lecture summary are not comprehensive enough on their own to cover the lecture material. To understand a summary, you need to hear it explained in full detail.
- Summaries do not always show the links between different points and how they relate to the 'big picture' ideas. Lecturers will often add these links verbally and with gestures during the lecture.
- Lecturers often give tips for assignments and exams that you won't find on the slides.
- Writing your own notes and summaries means you engage with the material in an active way.

### **Focus on Goals**

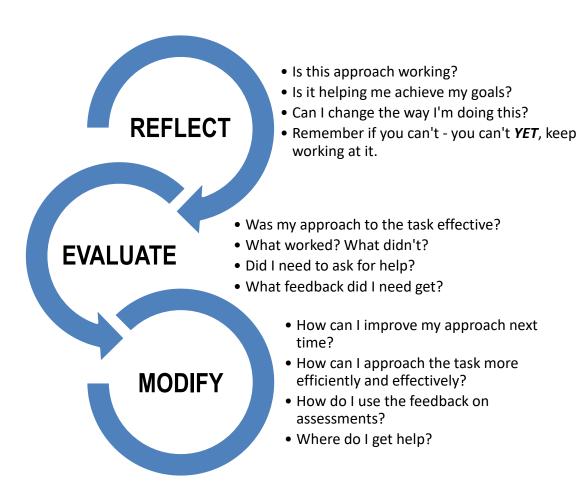
Many people start uni with a goal in mind, but it is not uncommon to be unsure of what your purpose at university is. Having a goal can provide the motivation to persist when things get challenging. It might be your time at uni is to build your capabilities and find out who you are. If you are unclear of big picture goals, start with smaller goals – what do you want to achieve in this

semester or by the end of the year. Think about what milestone you can tick off on the way to achieving these goals. You can talk to your Academic Advisor, Course Coordinator or the Careers staff to help you develop these.

### **Develop Confidence**

Building and maintaining your self-confidence is important to success. This may mean letting go of perfectionism, learning from your failures, and changing that negative internal dialogue. Remember to celebrate your successes.

We often learn more from our failures and struggles than from our successes. Take time to reflect on where to improve, what might need changing and what help is available. When undertaking learning or assessment task, ask yourself the following questions:



### **Develop Relationships**

Developing new friendships and connections can be daunting. University friendships will encourage and support you throughout your studies and often beyond. Many students remain friends with the people they met during orientation events or in their first classes. Talk to your classmates, get to know them. Forming a study group (see <a href="Chapter 3">Chapter 3</a>) can provide a good reason to hang out. Arrange to meet at a Café, the library or online once a week.

Drop into the <u>Peer Mentor Meetups</u> throughout the semester. The mentors can answer questions and share their experiences; and you will also meet other students from your discipline. Get to know your tutors, lab demonstrators, lectures, subject coordinators; ask them about their research and what they studied. Joining clubs and associations can be a great way to get connected and make friends.

### **Online Learning Technologies**

Learning in the 21<sup>st</sup> Century requires a certain amount of digital literacy. Part of preparing for includes skilling up on the relevant technology. If you have any issues navigating your way through the items below, contact <u>La Trobe student IT support</u>. There are also some excellent Google help guides or YouTube clips to help with the basics.

LMS The Learning Management System (LMS) – learning materials & activities for you subjects

La Trobe University student email account - via Outlook in Office 365

Zoom - to help you connect to online classes and live sessions

echo Echo360 - where you can watch recorded lectures online via the LMS

Office 365 - Word, PowerPoint, Excel, Outlook, OneNote

Pebblepad - a web-based program supporting a personal learning space/eportfolios

Turnitin - web-based text-matching software system used to submit assignments online

Microsoft Teams

36

Social media and chat forums such as Facebook, Instagram, Weibo and WeChat

Password resets

<u>(மு)</u> WIFI issues

### **Work-Life-Study Balance**

Whether you are a fulltime student or part time, juggling commitments can be a struggle. Chapter 2 outlines some strategies to help you organise your time. Be realistic about what you can achieve and stick to your plan. Remember to schedule in down time and family/friend time.

# Chapter Two: Get Ready to Study

Whether studying on campus or online, being organised and prepared for the semester is key to successful learning. Generally, it is required that a student spend 10 hours per subject each week including lectures, workshops and study. A full-time study load of 4 subjects is equivalent of a full-time job, and therefore during semester it essential to prioritise as much as possible, your study workload.

### 1. Subject Learning Guide

Download the Subject Learning Guides for each subject (found in the <u>LMS</u>)

### 2. Map out your semester

- Semester/Term dates, census date (check the <u>Academic Calender</u> for uni dates)
- Assessment dates (check the Subject Learning Guide)
- University Breaks and Public Holidays not all public holidays are recognised by the uni (check the <u>Academic Calender</u> for uni dates)
- Assessment periods and Exam blocks (check the Exams website)

### 3. Plan your Weekly Schedule

- Classes (on campus or online)
- Study and prep time for each subject
- Other commitments work, family, social, sport, etc

### Create a semester overview

A semester overview can help you prioritize work. Print it out for your desk or use a wall planner to see at a glance what you have coming up. Planner templates are available on <a href="https://doi.org/10.1007/jhear.100

- All assessment due dates add them into a calendar
- Keep exam block free of all other commitments. We are expected to be available for exams at any time during this block.
- Mid semester break let's face it, it is nice to know when we can catch up on things and relax a little.

Here's a small section of one to give you an idea.

### Semester Planner

SUBJECT	<b>1</b> 01/03	<b>2</b> 08/03	<b>3</b> 15/03	<b>4</b> 22/03	<b>5</b> 29/03	BREAK	<b>6</b> 12/04	<b>7</b> 19/04	<b>8</b> 26/04	<b>9</b> 03/05	<b>10</b> 10/05	<b>11</b> 17/05	<b>12</b> 24/05	Exams 3 weeks 04/06 – 25/06
CHE1XX		Quiz1		Quiz2	Report 1 Wed 5%	r Ò	Quiz3		Quiz4		Quiz5	Oral 5%	Report 2 Wed 15%	
PHY1ZZ			Group ex Tue 2.5%				Report 1 Thu 2.5%				Report 2 10% Thu			

### Weekly timetable

Creating a weekly timetable helps you map out the essential things you need to cover, including other aspects of your life. This may seem over organised, but making time for each thing, including down time will help you see if your load is achievable while balancing other commitments and family responsibilities. Locking in a regular study routine helps build good study habits.

Weekly planner templates are available on <u>The Learning Hub's LMS page here</u>. When developing your weekly timetable, consider:

- 1. Including everything that you do in your week such as, sport, co-curricular activities and commitments.
- 2. Adding in your live lecture times, workshops, labs and clinical placements
- 3. Making time for prerecorded online lectures, reading, assessment preparation and study.
- 4. Noting any work commitments
- 5. Including down time and self-care

### A grid can be useful to organise blocks of time to study

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
9.00 AM	Lec	study		study	lec		
10.00	study	study	prac		lec		study
11.00	study	lec		prac	study		study
12.00 PM					study	work	study
1.00	lec	lec	study				
2.00	lec			lec	lec		tennis
3.00	study	prac	prac	lec	lec		tennis
4.00	study			study	study		
5.00	study		yoga	study			study
6.00							
7.00	study			study			study
8.00	study			study			study

For more hints and tips on how to develop your time management skills, go to the <a href="mailto:Acheive@Uniwebsite">Acheive@Uniwebsite</a>

### **Weekly Study Routine**

### Make a space

To help you stay on track, set a specific time for study, and create a comfortable well lit, ventilated space. Lying in bed, isn't the best option for being alert and ready to learn. Ensure you are comfortable, supported and not straining at your desk.

### Make a study plan

After mapping time out for study, ensure that you include time for all the student essentials:

- Prepare with any pre reading before a lecture/tute/lab/workshop
- Watch the lecture, other recorded materials, or work through the eBook
- Complete online modules and other activities
- Finalise any other required readings
- Make a note of any areas you need clarification on and use the student forum to seek answers

- Revise the learning outcomes and ensure you can answer them based on what you have learnt
- Work on any assignments you have coming up or complete any quizzes set

Doing a little each week, allows you to build you knowledge, highlights any learning issues you need clarification on and help you prepare for any exams at the end of the semester. You will feel less overwhelmed and more prepared and be rewarded with learning that prepares you for your career ahead.

Each week develop a 'to do' list for your subjects.

# BIO1APM ✓ Revise lecture notes lectures 19 – 22 and write summaries (2 hrs) ✓ Make mind map for cell metabolism topic (1 hr) ✓ Do cell metabolism revision questions from LMS (1 hr) ✓ Read Knox Ch.2 p 49-60 & combine with lecture notes (2hrs) PHY1SCA ✓ Read Knight - Chapter 10 and make mind map (2 hrs) ✓ Write results and discussion sections for lab report (2 hrs) ✓ Review lecture notes for week 6 (2 hrs) ✓ Practice past exam questions 40-60 (1 hr) STA1SS ✓ Do past exam questions for topic 4 (1 hr) ✓ Review lecture notes from week 6 (2 hrs) ✓ Email lecturer about problems with topic

# **Chapter Three: Study Tips**

Now that you are organised, your timetable is ready, you have read you **Subject Learning Guides** and are aware of your commitments as a student, you are ready to get started.

### Before attending your class

Whether you are attending classes face to face or online, completing any set pre-reading (see <a href="Chapter 4">Chapter 4</a>: Getting the most out of your Reading), quizzes or other preparation, will help you to consolidate your learning, as well as linking this knowledge with what your lecturer is presenting. This will help you feel more confident with the content and allow you to develop any learning questions you may have to ask during the lecture, or on the online student forums.

### **Pre-recorded Lectures**

If your lecture is pre-recorded, you have the flexibility to watch it in smaller sections, make notes, take breaks when you need it. Make sure you schedule time to regularly watch recordings in your weekly planner. If your mind starts wandering or you are feeling distracted it is time for a break.

### After a class, lecture, lab, tute

Think about what was the main topics, concepts and arguments covered? How does this relate to the subject learning outcomes?

Review and note any questions or problems. If you don't understand something, seek clarification early. Make your question as specific as possible, for example, "I don't understand why low carbon dioxide concentrations cause stomata to open". Try using the discussion forum on LMS to find the answers or ask your demonstrator or lecturer.

### Use the student forums

If you have a question, chances are another student feels the same way. Using the online forums in your subjects to seek clarification is a great way to communicate with the teaching staff and other students. Even if you don't have a question, check the forums for any subject related posts to say informed. Student forums are also a great way to ask if anyone else is interested in forming a study group.



### **After a Topic**

**Make study notes.** Don't fall into the trap of spending 99% of your study time mindlessly writing out notes and 1% of your time reading them. You should be making notes for each topic area in each subject **throughout the semester** so that they are ready for SWOT VAC. The more 'active' you are in writing notes, the better you will be able to remember them. This may involve reconstructing your notes in a different format (see Chapter 3, Getting the most out of Reading at University)

### Organise study notes into topics/areas.

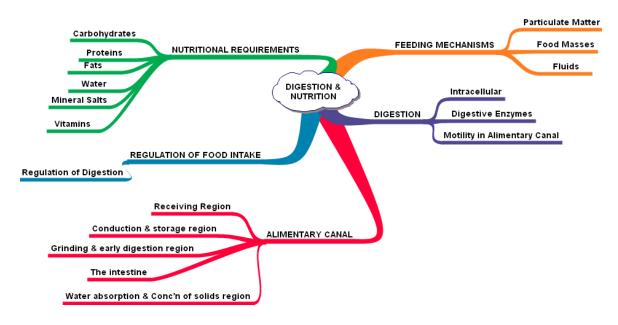
It is easier to remember individual details when they are grouped into mini sections. Make a list of the areas you need to know in each subject and write down headings and subheadings.

Here are some suggestions for effective study notes and summaries:

List summaries or dot point notes for each topic.
 Numbering each point can help with recall in the exam. Dot points are quick and good to highlight key information. Keep summaries brief but include enough information for understanding.

DIGESTION & NUTRITION
Feeding mechanisms
1. Particulate Matter
2. Food Masses
3. Fluids
<u>Nutritional requirements</u>
<ul> <li>Carbohydrates</li> </ul>
<ul><li>Proteins</li></ul>
• Fats
Water
Vitamins

2. **Mind Maps** or other diagrams such as flow charts and grids. During an exam, it is often easier to recall information which has been represented diagrammatically. These are great for illustrating the connections between information. *Colours and diagrams* are particularly helpful to stimulate the memory.



There are several mind map software programs, e.g. Freemind, Inspiration, Bubbl.us, Thinkgraph, and Visual Mind. Some of these are free or freeware programs and others are commercial.

**3. Flash cards.** This is especially useful for multiple choice questions. You can create your own based on the topic areas you've studied.

(FRONT) What kind of radiation will travel through an electric field on a pathway that remains	(BACK)
unaffected by the field?	B. a gamma ray.
A. a proton	
B. a gamma ray	
C. an electron	
D. an alpha particle	

**4. Glossary.** Try keeping a small notebook where you can record new terminology for each of your subjects, as in the example below. Some of your first-year subjects may have a glossary available on LMS or in your lab manual.

Term	Definition
Alkynes	Unsaturated hydrocarbons containing one or more triple carbon-carbon bonds
Nodal plane	A region where there is zero probability of finding an electron

**5. Create your own quiz.** These can help you gain confidence and master details in your subjects. There are a number of free online tools available. You can share these with your study group.

**6. Audio**. Try recording your summaries or prepared answers to practice questions. Comprehension improves if you listen and read at the same time. The other advantage for those who like multitasking is that you can listen while doing something else like walking, cooking or sitting on a bus.

### **Revision – during semester**

• **Form a study group**: Studying regularly (perhaps weekly) with a small group is a great way to learn. You can sort out difficulties with content, check that you're on the right track and test each other to practise recall. It is also easier to stay motivated and on track when you study in a group. (see Study Groups)

### Do past exam papers and revision questions.

- If available, you should do these at the end of each topic. Find the questions on a past paper
  that relate to a particular topic and do them after you finish each topic. At this stage, it is
  better to do past exam questions in an 'open book' style, using your lecture notes and
  textbooks to answer any questions you don't know. IMPORTANT exam formats may
  change from year to year, so check with your lecturer to find out if there are any major
  changes.
- During SWOT VAC, it is a good idea to practise answering questions under exam conditions
  in the time allotted, without looking at your notes or books. Make sure you focus on
  anything you got wrong. It is critical that you study before doing the practise questions.
  That way you can check how effective your study has been. If you do the questions prior to
  studying, you will likely focus on studying those topics, rather than learning ALL of the
  material that could be covered in the exam.

**SWOT VAC** is a time for refreshing your memory about content you have previously learned and understood. The key principle during this period is to move from recognising to understanding to recalling:



Many students, after having read over material several times, assume that because it looks very familiar, they have learned it. Simply being able to recognise material does not automatically mean that you understand it or will be able to recall it later in the exam.

### **Practise recall** - The following suggestions may be useful:

• Revise definitions from your glossary. Cover the definition side and practice recalling definitions; then cover the term side and practice recalling the terms.

- Use flash cards with the question on the front and the answer on the back. Keep aside any that you got wrong and then do these again. Keep doing this until you get them all correct.
- If you need to memorise diagrams, make large ones and stick them up on your walls.
- Use rhymes and mnemonics to assist recall. For example, to remember electron loss and gain in oxidation and reduction, the following may be easy to remember: OIL RIG Oxidation Is Loss; Reduction Is Gain (of electrons).
- Revise with a friend or a study group to share knowledge and exam strategies and to practice recall. Teaching is a great way to consolidate and improve your learning,

### **Practice Professionalism**

### **Email and online forum posts:**

Communicating without body language and vocal intonation can change how messages are perceived. Be sure to read and reread your correspondence, keeping it professional and to the point. This is great practice for when you begin your career.

### Zoom:

Zoom brings the wider student body community and your academic educators into your home. To maintain an appropriate level of professionalism, here are a few things to keep in mind:

- When on Zoom in a small group, it is always beneficial to have your video on to feel connected.
- If in a large lecture however, turning off your video may help promote better connectivity.
- Use the chat respectfully and ask questions when directed.
- Keep your microphone muted unless directed to talk.
- Be mindful of your background. We don't want our washing in the background, any inappropriate pictures or distracting virtual backgrounds. Be mindful of what people can see to keep your privacy.
- Let your family know you will be on Zoom to avoid any embarrassing walk by's.
- If you need to walk away from your computer, turn off your camera and mute your microphone.
- Remember, many of these are recorded, so what you present in your video and in the chat is also recorded.

### **Study Groups**

Study groups are a great way to improve your learning, makes friends and keep motivated. Ideally a study group should be no bigger than 4-6 people and should meet regularly for 1-2 hours. You can break up tasks amongst the group, research a topic and then take turns teaching each other. You can do this face-to-face, via Zoom, MS Teams and/or create a social media group where you can catch up, ask questions and keep each other on track. This will help you feel more connected, consolidate your understanding and fill in any blanks on information you need for the week.

### How to form a study group when studying online:

- Use the online study forums in your subject to reach out to other students, asking if any of them are interested in forming a study group.
- As you get to know students' in your workshops/labs or online classes (some of us are lucky
  to build relationships in break out rooms online), suggest you meet up each week to go over
  the content together.
- Email your teaching staff to ask if they could ask the students in your class if anyone would like to join a study group.
- Your discipline may have a club/society. You could contact them to see if they have any suggestions as to how you could connect with other students from your course.

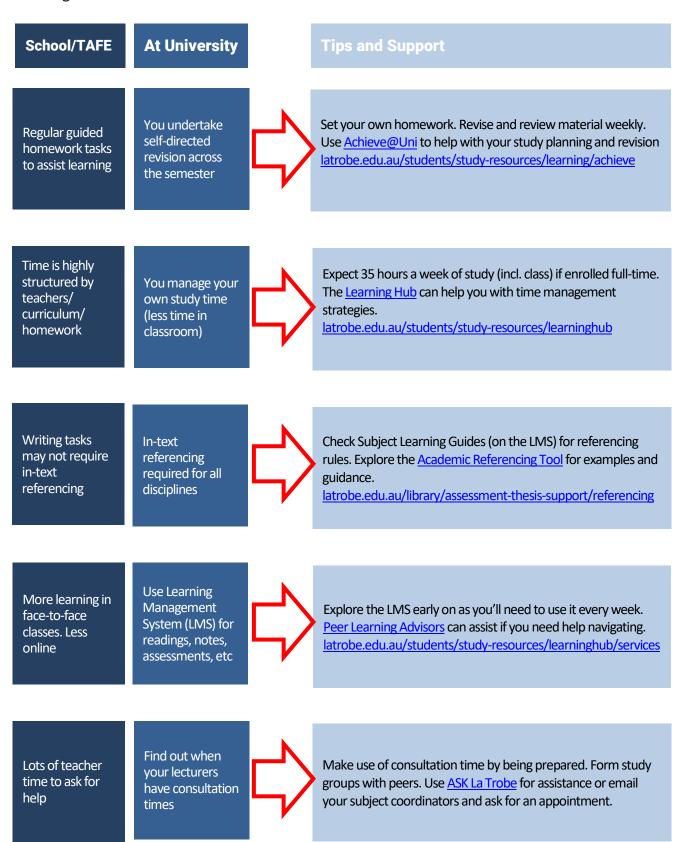
### Getting the most out of your Study Group:



Make sure you are acting according to the **academic integrity guidelines**. No collusion on assessments, copying other students work etc. For more information, see chapter 6.

### From School/TAFE/VET to University

There are some key differences between school, VET & TAFE learning environments and Universities. Here's a guide outlining those differences and how La Trobe will support your learning.



# Chapter Four: Reading and Reviewing at University

### Getting the most out of your reading

In most of your subjects at university, you are expected to do a large amount of reading related to your lectures to help you to understand the main concepts. You will also need to read multiple sources of information for essays, reports and other written assignments.

### Before a lecture (online, face-to-face or recorded)

Preview the textbook section (or other prescribed reading) by skimming the relevant pages to get a general understanding of the topic area. This is the very least amount of reading you should do before each lecture. Try the following strategies when skimming:

- take note of headings and sub-headings
- look at figures, tables and illustrations
- · read the first sentence of every paragraph to get the main ideas
- look for key words in the text
- read chapter overviews or summaries

Then, read the section in detail. At this stage, don't worry about anything you don't fully understand. It may be covered more clearly in the lecture, and you can follow it up later.

### After a lecture, or series of lectures on a topic

Re-read the relevant sections of the textbook in more detail. Then, do the following:

### **Check your understanding**

Make a note of anything you do not understand and follow it up by:

- reading about the same topic from another source
- posting a question on the LMS discussion forum
- asking your lecturer, demonstrator or tutor
- asking another student in your class

### Reading for assessment tasks

Many assignments in first year require you to use ideas from sources such as books and journal articles in your writing. It is very important that the information you use comes from high quality and reliable academic sources.

Further information about finding and evaluating sources is on the Library website:

► latrobe.libguides.com/libskills

Information about subject-specific reading material can be found in the Library's Libguides:

► latrobe.libguides.com/

### Reading a journal article

There are two main types of journal articles

### **Experimental or design papers**

these are written about a particular approach to a problem. They may be written by a single researcher or, more often, by a group of researchers. Each researcher, or group of researchers, writes a paper about their findings and publishes it in a journal.

### **Review papers**

these are written by the foremost experts in a field. They are a summary of all recently published research about a topic/problem.

They compare and evaluate the findings of recent experimental or design papers and comment on the current state of knowledge about a topic/problem.

### Remember

- Journal articles can be very difficult to understand at first year level. They often contain many technical terms and assume knowledge of complex concepts.
- When reading a journal article at first year, you are probably only looking for basic information on a topic.
- You will rarely need to read the whole article in detail.
- Start with review articles that give you an overview of a topic.

### What are you looking for?

Different sections of a journal article will contain different types of information. The following lists the sections you will most likely need to read.

### **Abstract**

An overview of the whole journal article. It provides useful background information, or a summary of the main findings related to the problem being investigated.

### Introduction

You will usually find some background information in the introduction relating to what is already known about the problem being investigated. This section is likely to be the most useful place to look for information relating to your written assignments.

### Method

This section provides information about exactly what was done to gain knowledge about the problem. In an experimental paper, it usually describes the setup of the experiment, materials used, and the methods used. The method section is often very complex and difficult to read. This section may be of use if your assignment asks you to compare conflicting research findings about a topic/problem. In this case, the methods section may provide information about the methods used which will enable you to evaluate which study finding is most likely to be more reliable. For most written assignments in first year, you will not need to read the methods section.

### Results

This section gives a detailed description of the results of the investigation. It is often very technical, and you are unlikely to need to read this section for first year assignments.

### Discussion

The discussion usually starts with a brief description of the main findings of the investigation. It then goes on to explain these findings in detail and compare them with the findings of other studies. You may find this section useful if you need to report on the current state of research about a topic/problem.

### References

Looking at the reference list you may find older papers relating to the topic.

# **Chapter Five:** Writing in Science, Health and Engineering

### Writing style

Writing in science, health and engineering requires a different style from writing in other academic disciplines. If you study subjects in other faculties, you may find that there are different expectations and requirements for written assessments. Your subject guides provide specific information regarding written assignment requirements for particular subjects. The following are general features of good scientific writing:

### **Appropriate and Relevant Content:**

### Stick to the topic

In an essay, everything you write must relate to the essay question. In a laboratory report, everything you write in the introduction must be related to the exact topic and everything you write in your discussion must be related to your results.

### Substantiated (supported) claims

In order to build a strong argument, you must have supporting information, usually from a reliable academic source.



🖊 The population of koalas in outer Brisbane coastal areas is declining.

 $\checkmark$  The population of koalas in outer Brisbane coastal areas is declining. In 2008, numbers were found to be 64% lower than in 1999 (Queensland Department of Environment and Resource Management, 2008)

### High quality academic sources of information

It is CRITICAL to use reliable sources of information for your written assignments. For most (but not all) subjects, websites are NOT acceptable academic sources. Commercial (.com) websites are the most likely to be unreliable. The author of a commercial website is often unknown, and information may be biased or inaccurate. Ask your lecturer, demonstrator or tutor whether website information is allowed for a particular assignment.

When you use information from sources such as books and journal articles, you are using ideas that you did not create yourself, so you must acknowledge your sources. In academic writing, this is done by providing references to show where the ideas came from.

### Note:

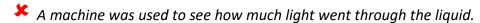
- For more information on finding credible sources and evaluating websites, go to Achieve@Uni
- <u>Click on this link</u> to view the library's short YouTube clip 'Why can't I just Google'
- There is a detailed guide to paraphrasing and avoiding plagiarism in Chapter 6 of this Guide.

### Adequate and accurate paraphrasing of information

In addition to providing references, you also need to paraphrase. This means you must put the ideas in your own words. This may seem difficult at first, especially if the information is complex and hard to understand, but there are good reasons for paraphrasing. Paraphrasing shows the person who is marking your work that you understand what you are writing about. It also helps you to keep a consistent writing style. Even if you provide a reference, you still need to paraphrase information before you include it in your written assignment. If you don't, you may be accused of plagiarism.

### **Precise**

Use specific terminology where appropriate



✓ A spectrophotometer was used to measure the absorbance of the sample solution in order to determine the concentration of haemoglobin.

Be careful with words like 'it' and 'they'. Sometimes it is better to be specific about what 'it' is, or 'they' are.

- \* After a while it went up.
- $\checkmark$  After 10 minutes, the temperature of the copper sulphate solution increased by 20°C.

### Concise – aim for maximum content, minimum words

If you are under the word count, you need to add more content rather than 'pad out' your writing with extra words. Adding 'filler 'words will not get you any extra marks. It's the number of ideas that are marked, not the number of words.

- In my opinion, up until the present time, it seems relatively unclear as to which will, in the long run, emerge as the best method of sampling to use in order to obtain the desired results in the shortest possible time.
- ✓ It is not known which sampling technique is the most efficient.

### Formal – avoid personal, emotional and colloquial (everyday) language

### Avoid personal language

It is advisable to avoid using personal language, particularly pronouns which refer to the reader e.g. *you, your, us, our*. It is sometimes acceptable to use 'I' and 'we' in academic writing, but this varies throughout the different scientific disciplines.

If you want to improve this experiment, you should increase the sample size. [informal]

✓ To improve this experiment, the sample size should be increased. [more formal]

### Avoid colloquial language

Colloquial language is everyday language which may be suitable when speaking, but should not be used in formal, academic writing.

Every day, more and more electronics are thrown out and end up in the tip. [informal]

✓ Electronic waste is an increasing problem with 75% of computers bought annually in Australia ending up in landfill (Australian Bureau of Statistics, 2006). [more formal]

### Avoid emotional language

The use of emotional language may weaken an academic argument.

It will be a tragedy if these graceful and beautiful animals are lost to the world forever. [emotional & informal]

It is vital that conservation measures are immediately put in place to save this vulnerable species from extinction. [more formal]

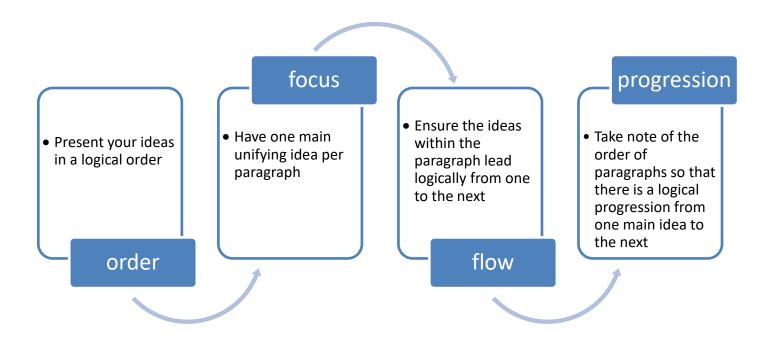
### **Avoid contractions**

Formal, academic writing uses the full forms of words rather than shortened versions (contractions). NB This Guide is *not* a formal, academic piece of writing and so we have used contractions.



### Clear structure and flow

### **Order points logically**



### Link ideas within and between paragraphs

Good writing makes clear links between ideas, as well as how each main idea relates to the topic. Where possible, linking words and expressions should indicate the relationship between ideas. For example, if you want to show that a second sentence is a result of the first sentence, you could start the second sentence with 'As a result'.

### The following table gives a brief list of linking words and expressions

Function	Linking word examples	Examples in sentences
Similarity	Similarly, Likewise, In a similar way, A similar study	Similarly, proteins in the endoplasmic reticulum function as  A similar study also found a correlation between
Contrast	In contrast, Conversely, On the other hand, (less formal) While,	In contrast, Van der Waals forces are much weaker.  While covalent bonds are very strong, Van der Waals forces are much weaker and only allow temporary associations between molecules.
	; however,	Although the design was adequate, insufficient planning had gone into the implementation stage.  There was an increase in the concentration of
Cause → Effect	X causes Y X leads to Y X results in Y X leads to Y X brings about Y	hydrogen ions; however, there was no change in  A reaction of this type causes extensive damage to the cells.  The build-up of charge leads to an electrostatic force.
	As a result of  Because of X,Y happened	As a result of the storm damage, the site was no longer suitable for the study.
	Due to X, Y happened Owing to X, Y happened	<b>Due to</b> the small sample size, significant results were not obtained.
	As X happened, Y happened	<b>As</b> this behaviour has not been observed in any other species, further research is needed to determine
	Since X happened, Y happened Because X happens, Y happened	<b>Since</b> there was no significant effect detected, it was decided to run the experiment again using a different sample.

### Common grammar errors

To understand simple grammar errors, you need to know a little bit about basic sentence structure.

Function	Linking word examples	Examples in sentences
Effect → Cause	X results from Y X was caused by Y X may be due to Y X could be a consequence of Y	A buildup of charge <b>results from</b> this interaction.  The signal noise <b>could be a consequence</b> of a semiconductor defect.
Additional point	*Moreover, Furthermore, In addition,	Moreover, there are no specific advantages of using this type of pathogen as a model.  In addition, these types of molecules have the disadvantage of forming aggregates.  * These linking words should be used infrequently. It is not necessary to have a linking word between every sentence. It is also much better to use more specific linking phrases e.g. "A further disadvantage is"
Chronology (time order)	First, Firstly,  After that, Then, Next,	The sample was <b>first</b> treated with nitric acid in order to <b>After that</b> , the trace metal was extracted with  The sample was <b>then</b> analysed using a
Summary	In conclusion, To sum up, In summary, In short,	In conclusion, no significant difference between the reproductive rates of the two species was found.
Example	For example, To illustrate,such as	<b>For example</b> , subsoil physiochemical constraints are a major factor limiting crop productivity.
Purpose	In order to  So that	The sample was agitated <b>to</b> ensure an even distribution of the colloid particles.  The sample was agitated <b>in order to</b> evenly distribute the colloid particles.  The sample was agitated <b>so that</b> the colloid
	So as to	particles became evenly distributed.

### What is a sentence?

For a sentence to be complete it must usually contain a *subject* and a *verb*. A sentence must also convey a complete thought. For example, 'A student is.' contains a subject and a verb but doesn't express a complete thought. It doesn't convey any information and so, is not a complete sentence.

The subject says who or what does the action e.g. 'who wrote?'

**The verb** is the 'doing word' and describes an action or state.

For example,

The students wrote. (subject) (verb)

A simple sentence can also have other elements:

An object answers the question 'what' after the verb e.g. 'wrote what?'

For example,

The students wrote a report. (subject) (verb) (object)

A complement says what something is/was etc.

For example,

The students were confused. (subject) (verb) (complement)

An adverbial tells us how, when, where, or why.

For example,

The students wrote their reports carefully.

(subject) (verb) (object) (adverbial - how)

Eventually, the students wrote their reports carefully.

(adverbial) (subject) (verb) (object) (adverbial – how/when)

Notice that we use a comma when the adverbial element comes before the subject.

### Seven of the most common grammar errors

### 1. Comma splice error

A comma splice error occurs when two complete sentences are joined by a comma. For example:

The benefits of this kind of therapy are substantial, there are relatively few adverse side effects.

Comma splice errors are quite common, particularly for native speakers of English. They often result from the desire to avoid writing short sentences. A comma splice error can be fixed in different ways, depending on the length of the sentences.

If the two sentences are short, it is best to join them with a conjunction (joining word) such as 'and', 'so', or 'but', as in the following example:

✓ The benefits of this kind of therapy are substantial, and there are relatively few adverse side effects.

If the two sentences are short and they are of equal grammatical weight and value, it is best to use a semicolon.

▼ The benefits of this kind of therapy are substantial; the adverse side effects are relatively few.

If the two sentences are already rather long, it is better to put a full stop between and have two separate sentences.

✓ The reported benefits of this kind of therapy are substantial, particularly when used in conjunction with more traditional approaches. However, there are relatively few adverse side effects, and these are generally not severe.

### 2. Run on sentence

Run on sentences are the same as the comma splice errors described above, except that there is no comma placed between the two sentences. These are less frequent than comma splice errors and can be fixed in the same way.

The benefits of this kind of therapy are substantial there are relatively few adverse side effects.

### 3. Sentence fragment

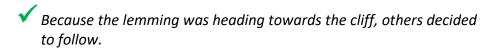
A fragment is an incomplete sentence. Fragments may be missing a verb or a subject or they may not convey a complete thought.

Example of a fragment that has a subject and a verb but does not express a complete thought.

★ Because the lemming was heading towards the cliff.

The above fragment contains a subject and a verb, but it does not contain a complete thought. We have the reason for something, but we don't have the 'something'. This is the most common form of fragment error. The word 'Because' at the beginning has turned a complete sentence ('The lemming was heading towards the cliff.') into a fragment, which requires another part to be a complete sentence.

To correct this sentence, it needs another part. For example:





There are many words similar to 'because' that when used in this way, require another part to make a full sentence. Some examples are given in the table below. Don't be confused. This doesn't mean that you can't start a sentence with 'Because' (a common urban grammar myth!). You can start a sentence with 'Because' as long as you make sure to include the other part of the sentence.

	Fragment example
because	Because measurements were not taken at regular intervals.
although	Although the paramecium was not observed.
whereas	Whereas the left ear showed no sign of swelling
since	Since there were no other parameters.
unless	Unless future studies find otherwise.

The fragments in the above table can be corrected by adding another sentence part with a subject and a verb.

Example of a fragment with no verb or subject

Being a very headstrong and independent lemming with a mind of her own.

This fragment does not contain a full verb or a subject. The word 'being' at the beginning of the sentence looks like a verb, but it is only part of one. To be a full verb, an –ing word needs to be combined with a 'helping verb' such as am, is, are, was or were. (e.g. The lemming is being

stubborn). To fix the fragment in the above example, another part needs to be added to make it a complete sentence.



 $\checkmark$  Being a very headstrong and independent lemming with a mind of her own, Fifi did not join the others in their rush towards the cliff.



Here's another example of a fragment.

🖊 At the edge of the extremely steep cliff near a group of boulders.

The example above is a fragment because it only tells us the 'where' part of the sentence. It does not contain a subject or a verb. We don't know who is doing what. The fragment needs another part to make it a complete sentence.



✓ At the edge of the extremely steep cliff near a group of boulders, the lemmings gathered for a brief, final meeting.



### 4. Subject verb agreement

In English grammar, subjects must 'agree with' verbs. We use different forms of verbs for different types of subjects. The following table gives some examples.

subject	example of subject	verb	object
I	(1)		learning grammar.
You	(You)	like	
We	My friends and I		that game.
They	The people in the pub		
He	That guy in our lab		doing it.
She	The woman in the photo	like <b>s</b>	
It	(Even) my dog		chocolate.

Subject verb agreement with the verb 'to be' is a little more complicated.

subject	example of subject	verb (to be)	complement/adverbial
I	(1)	am	
You	(You)		a great example.
We	My friends and I	aro	extremely unreliable.
They	The people in the pub	are	extremely unreliable.
He	That guy in our lab		in the right place.
She	The woman in the photo	_	intovicated
It	(Even) my dog	is	intoxicated.

Making subjects agree with verbs is fairly easy when the sentence is short, and the subject is right next to its verb. However, when sentences are long and complex, subject verb agreement can be more difficult, as in the following example.

- Punctuating long sentences, such as the ones in the following examples, <u>cause</u> difficulties for many writers. (verb)
- ✓ Punctuating long sentences, such as the ones in the following examples <u>causes</u> difficulties for many writers. (verb)

In order to check whether the subject agrees with the verb, you first need to identify the main verb in the sentence ('cause' in the sentences above) and then ask who or what causes difficulties? The answer is 'punctuating'. Punctuating = 'it', so we need to use the verb form with the 's' i.e. punctuating... causes difficulties...

Errors also frequently occur when the sentence starts with 'there is/are'.

- There is not many studies which have investigated the science of navel gazing.
- ✓ There are not many studies which have investigated the science of navel gazing.

### 5. Problems with commas

Few people know how to use commas correctly. A lot of the time, this doesn't matter as many sentences 'requiring' a comma can be easily understood even without the comma. However, there are some instances where a sentence becomes ambiguous, or even unreadable, without a comma. **Example 1** 

I told them to eat, Lucy.

I told them to eat Lucy.

The difference in punctuation is small, but the difference to Lucy is considerable.

### **Example 2**

When we finally packed up the instrument had already completed the scan.

When we finally packed up, the instrument had already completed the scan.

(introductory part) (main part of sentence)

The first sentence is difficult to read because it may seem like the instrument was packed up. In the second sentence, the comma after the introductory part makes the meaning clearer. The introductory part of the sentence is not a full sentence on its own. If there is an introductory part at the beginning of a sentence, it is a good habit to always place a comma between it and the main part of the sentence.

### Example 3

In the lab reports were made about people altering data to fit the hypothesis.

In the lab, reports were made about people altering data to fit the hypothesis. (adverbial) (main part of sentence)

This is like example 2. The first sentence is difficult to read and its meaning is not clear because the words 'lab' and 'reports' are often used together as a compound noun. In the second example, a comma separates the adverbial element 'in the lab' from 'reports' making the meaning clear.

### **Example 4**

- Recent studies on the mating behaviour of the endangered three toed sloth from South America, have analysed the frequency of the 'ay-ay' mating call.
- Recent studies on the mating behaviour of the endangered three toed sloth from South America have analysed the frequency of the 'ay-ay' mating call.

**Do not use a comma after the subject of a sentence.** When the subject of a sentence is very long, you may feel that you need to put a comma between the subject and the verb. This is not correct.

### 6. Parallel structure

Problems with maintaining parallel structure often occur when constructing lists, either as dot points or within a sentence. Items in a list should be the same type of word in terms of grammar, for example, a list of nouns or a list of verbs. The following examples should illustrate.

### The objectives of this review are:

- Outlining the main conceptual areas behind the science of navel gazing
- To give an account of the controversy surrounding the benefits of navel gazing
- The different ways to navel gaze

Each of the dot points has a different grammatical form. To give the items in the list parallel structure, they should have the same grammatical form as in the list of verbs (actions) below.

### ✓ The objectives of this review are to:

- outline the main conceptual areas behind the science of navel gazing
- give an account of the controversy surrounding the benefits of navel gazing
- describe the different ways to navel gaze.

### 7. Apostrophes

Apostrophes are notoriously difficult to use correctly. There is even a website showing examples of 'apostrophe abuse' on signs from around the world:

### ► apostropheabuse.com/

Once you know the rules, it's not that hard. Apostrophes are used for two main reasons:

### I. To denote a missing letter

When we put two short words together, we use an apostrophe to show that a letter is missing. It is not common to use these shortened forms in academic writing. Here are some examples.

do not	$\Rightarrow$	don't
is not	$\Rightarrow$	isn't
you are	$\Rightarrow$	you're
it is	$\Rightarrow$	it's
we are	$\Rightarrow$	we're

We do not use an apostrophe to make an abbreviation or acronym (e.g. CD, USB, ATM) plural. Also, we do not use an apostrophe when making years plural. So,

×	✓
CD's	CDs
USB's	USBs
ATM's	ATMs
1960's	1960s

### II. To denote possession

Apostrophes are used to show possession or ownership of something, as in the following examples. Note that the apostrophe is placed after the 's' if the noun is plural. We can also use *pronouns* in place of the noun. The table below contains some examples.

Singular Nouns	Pronoun	Plural Nouns	Pronoun
The student's writing	his/her	The students' writing	their
The paper's references	its	The papers' references	their
The bee's knees	its	The bees' knees	their
The computer's functions	its	The computers' functions	their
Robyn's office	her	n/a	n/a

We do not use apostrophes before an 's' in plural nouns where there is no possession. Thus, the following are *incorrect*.



#### A point of confusion

The words that cause the most confusion when using apostrophes are it's and its.

- It's the apostrophe denotes a missing letter (i.e. short form of it is)
- *Its* is used to show possession but has no apostrophe (e.g. Its ears are big).

#### **Commonly confused words**

The English language can be very confusing, so it's easy to make mistakes. Some commonly confused words are listed in the following tables.

Word Confusion	Explanation
effect/affect	e.g. There was no effect on the reaction rate.  Affect is usually verb (action).  * remember 'a' for action & affect e.g. The reaction rate was not affected.
would of/would have	'Would of' is incorrect. 'Would have' is correct.   ★ The experiment would of worked.  The experiment would have worked.
few/less	Use <b>few</b> or <b>fewer</b> with 'countable' nouns. e.g. There were <b>few</b> errors. Use <b>less</b> with 'uncountable' nouns. e.g. There was <b>less</b> air in the container.
comprise/consist	Use <b>comprise</b> without 'of'. e.g. <i>The sample comprised 42 males and 47 females.</i> Use <b>consist</b> with 'of'. e.g. <i>Water consists of hydrogen and oxygen atoms.</i>
its/it's	Use <b>it's</b> as a short form of 'it is' Use <b>its</b> as a possessive
practice/practise	Practice is a noun. e.g. I need more practice with this technique. Practise is a verb. e.g. I need to practise this technique.

#### Singular/plural confusion

Some commonly used words in the sciences have irregular plurals that can be confusing. The table below gives some examples.

Singular	Plural
hypothesis	hypotheses
criterion	criteria
phenomenon	phenomena
thesis	theses
datum	data
medium	media
appendix	appendices/appendixes (both correct)
bacterium	bacteria
stimulus	stimuli
index	indices/indexes (but different meanings)
analysis	analyses
axis	axes
formula	formulae/formulas (both correct)
basis	bases
diagnosis	diagnoses
parenthesis	parentheses
genus	genera

#### A word about Microsoft Word grammar checker and spell checker

Automatic spelling and grammar checkers are not as accurate as a human editor, and Microsoft Word spellchecker and grammar checker make mistakes, particularly the grammar checker.

The grammar checker often misses subject verb agreement errors or identifies a sentence as containing an error when it doesn't have one.

Grammar checkers are useful for writers who have a knowledge of correct grammar. They can alert the writer to inadvertent mistakes and typos, but ultimately, it is the writer that makes the final decision whether to accept or reject the suggestion.

The Microsoft Word spellchecker is generally more accurate; however, it may not recognise alternative spellings.

#### Communicating science to the public

When talking about their work, scientists can be easily misunderstood by the public. In an article in *Physics Today, Richard* Somerville and Susan Hassol highlighted the importance of clear communication of science to the public. They listed words which scientists often use when communicating about climate change and highlighted the difference between scientists' intended meaning and the public understanding of those terms.

#### Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term value

Somerville, R.C.J., & Hassol, S.J. (2011). Communicating the science of climate change. *Physics Today, 64*(10), 48-53.

# Chapter Six: Referencing, Paraphrasing & Academic Integrity

Using **references** in your writing enables readers to check your ideas or follow up your sources for themselves and credits the person/people who produced the original information. If you do not make this difference clear, you may be accused of **plagiarism**. This is a serious academic offence and may result in failing an assignment or even a whole unit. Using references also gives your assignment credibility and authority and supports your arguments.

When you use information from sources, most of the time you need to put it in your own words (called **paraphrasing**). Writing something in your own words shows that you have understood what you are writing about. Paraphrasing also helps to give your writing a consistent style as you blend your own sentences with paraphrased information from other sources into your own personal style.

This section aims to show you how to reference correctly and to provide guidance in paraphrasing and avoiding plagiarism. It is specifically targeted at first year students, but you may find it a useful reference for other year levels.

The Academic Integrity Module (AIM) covers why it is important to reference and what plagiarism is. All La Trobe undergraduate and postgraduate coursework students must complete this module in the first semester of their first year, to avoid the consequences of misconduct. You can find this module listed under 'My Subjects' in your LMS.

# Referencing

There are two places where references must be included in a piece of writing:

- 1. In-text references (citations) in the text of your writing
- 2. **Reference list** at the end of your writing (before the appendix)

Every source (e.g. textbook, journal, electronic source) that you cite in your report (in-text references) must be included in the reference list and every reference included in your reference list must be cited in your report.

It is VERY IMPORTANT to use the correct format for in-text references and reference lists. There are hundreds of different referencing styles. In most first-year subjects in the College of Science, Health and Engineering, you are expected to follow the **APA7** (American Psychological Association) style of referencing - check your Subject Learning Guide for the style you are expected to use in each of your subjects. You should **always check** the referencing style required for all written work

submitted. For more information on the APA7 referencing style and other referencing styles used at La Trobe University, check the <u>Academic Referencing Tool</u>

#### In-text references

Every idea that is not your own (e.g. information from a book or journal article) needs to include an in-text reference (also called a citation) to show where the idea came from. Even if you have put the information in your own words (paraphrased) you must still provide an in-text reference.

#### Author or idea focus?

In-text references can either focus on the *author* or the *idea*, depending on which is the most important. In first year, you will probably focus more on the idea than the author. Author-focused referencing is more commonly used when citing important research or experimental work.

#### Using et al.

In text references with three or more authors are shortened to et al. (short for *et alia*, meaning *and others*). Note, there is always a full stop after 'al' and it is not necessary to use italics for 'et al.' in APA7 format. Write the name of the first author followed by et al., as per the example below.

#### Example:

Most fungi consist of tubular filaments called hyphae, and a mass of these in one organism is known as a mycelium (Raven et al., 2005). The walls of the hyphae are usually made of a strengthening polymer called chitin (Kimball, 2005) and can grow more than one kilometre in 24 hours (Raven et al., 2005).

If multiple references shorten to the same form, cite the surnames of as many authors required until the references can be distinguished. This may mean citing the first two, or occasionally three, authors followed by *et al*.

#### Same idea from more than one source

Sometimes you may find the same idea in two (or more) sources and are unsure about which source to cite. The simple answer is to cite them both. When doing so, order the citations alphabetically, based on the *first* author's surname. Do *not* change the order of authors within a piece of work. Separate the citations with semicolons.

#### **Example:**

In insects, gas exchange occurs by diffusion through a system of tubes called trachea, which are connected to the external environment through holes called spiracles (Knox and Jones, 2019; Raven et al., 2005).

#### **Reference Lists**

As well as using in-text citations, you must also include a reference list at the end of your piece of work. A reference list is different from a bibliography, which lists all works read, whether or not they are cited in your work. A reference list contains only those works that you have cited in your writing.

In the APA7 referencing style, references are listed at the end of your piece of writing, in alphabetical order of the first authors' surnames (A - Z). List the order of authors' name exactly as they are listed in the original source.

The format of the reference list depends on the type of source you are citing. Reference lists should be double-spaced, without a line space between each reference, and with a hanging indent.

#### Hint: How to format a hanging indent.

- 1. Highlight your citation
- 2. Right click your mouse
- 3. Select 'paragraph' from the menu
- 4. Under 'indentation' section, click on the down arrow for the 'special' menu and select 'hanging'.

It is critical to know how to list the **order** of details, when to use **italics**, where to put **full stops** and **commas**, **capitalisation** of words, and **parentheses**. Use the <u>Libraries Academic Referencing Tool</u> (ART) to check your formatting and familiarise yourself with the style notes for APA7.

#### **Using DOIs and URLs**

When citing an electronic resource, APA7 referencing style recommends the inclusion of uniform resource locators (URLs) or digital object identifiers (DOIs). URLs map digital information on the Internet, however they are susceptible to error when a document is moved, reconstructed, or deleted. The DOI system allows consistent identification of sources: Unique DOIs are assigned to particular content, allowing readers direct access to such content regardless of its location on the Internet. DOIs are often located alongside copyright information on the title page of an electronic journal article (top right corner) and look like this: 10.xxxx/xxxx-xxxx.xxxx.xxxx. Follow these guidelines from ART:

- When a DOI is available, no further retrieval information is required. The DOI should be in the format: https://doi.org.xxx, with no full stop. (it's now a direct link and can be copy and pasted in).
- If there is no DOI, and you obtained the article through a library database, treat the article as if it were a print version: no URL required.
- If there is no DOI, include the direct URL to the article, if available.

Do not place a full stop at the end of a URL or DOI. This may create confusion for the reader when searching for the information.

### Examples taken from the ART tool available to you from the Library website.

#### Figures, Tables and Images

For some assignments, it may be acceptable to use figures from other sources. You should check the requirements for specific tasks with your lecturer, tutor or demonstrator.

The APA7 section of the ART has detailed examples of how to reference Images, Figures and Tables under the <u>Images tab</u>.

#### Chapter in an Edited Book

Some books have different chapters written by different authors plus an editor or editors. Many students find this referencing difficult at first, but remember help is always here. There is a section in the ART that steps you through how to format references for a <u>chapter in an edited book</u>. Remember to seek help from a <u>Librarian via their chat service</u>, or drop in and see a <u>Peer Learning Advisor (PLA) in The Learning Hub (and online)</u> if you need support with any of your referencing.

In-text citation	Reference List
One author The author prominent is cited. That is the author who wrote or edited the chapter you are using from the	Author, A. A. (Year). Title of chapter or entry. In A. Editor & B. Editor (Eds.), <i>Title of book</i> (Xed., pp. xxx-xxx). Publisher.
compilation text.  Author Notes: Include the surname/s of the author and year. For example,	Higgs, J., McAllister, L., & Sefton, A. (2012).  Communication in the health sciences. In J. Higgs, R. Ajjawi, L. McAllister, F. Trede, & S. Loftus (Eds.), Communicating in the health sciences (3rd ed., pp. 4-14). Oxford University Press.
No author (note capitalisation): The Life of Insects (1979) or (The Life of Insects, 1979)	Ryan, M. J. (2005). Evolution of behaviour. In J. Bolhuis & L. Giraldeau (Eds.), <i>The behaviour of animals</i> (pp. 294-314). Blackwell.
One author: Seaton (2018) or (Seaton, 2018)	
• Two authors: Grant and Grant (2018) or (Grant & Grant, 2008)	
• Three or more authors: Fraser et al. (2014) or (Fraser et al., 2014)	
Group / corporate author: La     Trobe University (2018) or (La     Trobe University (2018)	
Trobe University, 2018)	

Encyclopaedia Article/Dictionary

In-text citation	Reference List
(Plummer, 2003).	Print (or an eBook from a library database with no DOI)
or Plummer (2003) conducted	Author, A. A. or Author, A. A. (Ed.) or Group Author. (Year). <i>Title of work</i> . Publisher.
Author Notes taken from ART	Krebs, R. E. (Ed.). (2008). Encyclopedia of scientific principles, laws, and theories (Vol. 1). Greenwood Press.
Include the surname/s of the	With DOI
<ul><li>author and year. For example,</li><li>No author (note</li></ul>	Author, A. A. or Author, A. A. (Ed.) or Group Author. (Year). <i>Title of work</i> . Publisher. https://doi.org/xxxxxx
capitalisation): The Life of Insects (1979) or (The Life of Insects, 1979)	Bender, D. A. (2014). A dictionary of food and nutrition (4th ed.). Oxford University Press. https://doi.org/10.1093/acref/9780191752391.001.0001
• One author: Seaton (2018) or (Seaton, 2018)	Without DOI, not archived
<ul> <li>Two authors: Grant and Grant (2018) or (Grant &amp; Grant, 2008)</li> <li>Three or more authors: Fraser</li> </ul>	Author, A. A. or Editor, A. A. (Ed) or Group Author. (n.d). <i>Title of work.</i> Retrieved Month Day, Year, from https://xxxxxx
et al. (2014) or (Fraser et al., 2014)  Group / corporate author: La	Merriam-Webster. (n.d). <i>Merriam-Webster.com dictionary</i> .  Retrieved May 20, 2020, from https://www.merriam-webster.com/
Trobe University (2018) or (La	Without DOI, archived
Trobe University, 2018)	Author, A. A. or Editor, A. A. (Ed) or Group Author. (Year). <i>Title of work</i> . Publisher. https://xxxxxx
	Zalta, E.N. (Ed.). (2020). The Stanford encyclopedia of philosophy (Spring 2020 ed.). Stanford University. https://plato.stanford.edu/archives/spr2020/

#### Webpage

Electronic sources, particularly websites, should be used cautiously. **Not all information found on the Internet is reliable.** Websites with URLs that end in *.com* are commercial sites and may not be reliable (they may contain bias or inaccurate information). If you are unable to identify the *author* (person or organisation) or the *date* of an Internet source, it is less likely to be reliable, and probably should not be used as a source in your writing.

*Wikipedia* can be a useful source of background information in the initial stages of researching a topic. However, because the authors are not identified, it is advised NOT to cite *Wikipedia* in lab reports, assignments, essays etc. If possible, a reference to an Internet source should include:

- The author of the document (often an organisation rather than an individual)
- The year of publication or most recent update
- The title, or a description of the document
- The date the document was viewed if the information is likely to change
- Either the URL (i.e. http://www...) or the DOI (i.e. 10. xxxx/xxxx-xxxx.xx.xxxx)

## **Frequently Asked Questions about Referencing**

#### If I write something in my own words, do I need to provide an in-text reference?

Yes, we reference ideas, not just the words used to express them, so you need to show where the original idea came from. Most sentences without a reference are considered to contain your own ideas, so you must make it clear whether your sentences contain ideas that are your own or someone else's.

#### Does that mean I need to provide a reference for nearly every sentence?

Yes, in first year it is likely that you will not have a great deal of your own knowledge of the subject matter, so most of the information you use in your writing will come from other sources and therefore, will need a reference. Sometimes, if it is clear that two or three sentences come from the same source, it is only necessary to reference one of the sentences.

#### When can I 'own' an idea and so do not have to provide a reference for it?

There is not always a clear dividing line between what constitutes your own knowledge and what is knowledge from others and hence needs to be referenced. It can sometimes be difficult to decide whether you need to put a reference or not. As you progress through your studies your own knowledge base will increase, and you will be able to express much more information without needing to look it up in a reference. In first year, there is very little information that you 'own', so it is usual for first year pieces of writing to contain many more references than a postgraduate piece of writing.

#### Can I summarise from one source into a paragraph and just put the reference at the end?

No, if you do this, you may be accused of plagiarism. Any sentence which cannot clearly be attributed to another author is considered to be your own. A person reading your work would have no way of telling which sentences in the paragraph were your own and which came from another source. It is also poor writing style to take large slabs of information from a single source. It is better to synthesise information from several sources.

#### Can I reference lecture notes?

It is not good practice to cite your lecture notes. It is better to find the same information in a textbook.

## **Paraphrasing**

#### How to paraphrase

Many students find paraphrasing difficult. In order to paraphrase well, you must first understand what you are reading. Poor paraphrasing is often the result of poor understanding of the text. Some students try to paraphrase at the sentence level rather than the ideas level. Changing a few words and shifting parts of the sentence around does not result in a good paraphrase.

A better way to paraphrase is to read a section of the text, write down a few key words that summarise the main idea(s) and then build up a sentence in your own words without looking back at the original sentence(s).

#### Example 1

#### **Original text:**

"Some dinoflagellates reproduce in enormous numbers in warm and somewhat stagnant waters. The result can be a 'red tide', so called because of the reddish colour of the sea that results from the pigments of the dinoflagellates" (Purves et al., 2004, p. 552).



#### Paraphrase:

Because of their red coloured pigments, some dinoflagellates can cause a 'red tide' when they reproduce in great numbers in warm, still seas (Purves et al., 2004).

#### Example 2

#### **Original text:**

"There are some orchids whose flowers mimic the shape and colouring of female insects. The mimics are so realistic that male insects will attempt to copulate with the flower, thereby pollinating them" (Knox et al., 1994, p. 827).



#### Paraphrase:

Male insects sometimes attempt to mate with orchids that have flowers which appear like female insects. In this way, the male insect inadvertently pollinates the flower (Knox et al., 1994).

# **Paraphrasing & Summarising**

Sometimes, only some of the information you read is relevant to what you are writing about. If so, it is possible to select the parts of the text that are relevant. Look at the following example from Raven et al. (2005):

#### **Example**

#### **Original text:**

"It is the mesophyll – the ground tissue of the leaf – with its large volume of intercellular spaces and numerous chloroplasts, that is particularly specialised for photosynthesis. The intercellular spaces are connected with the outer atmosphere through the stomata, which facilitate rapid gas exchange, an important factor in photosynthetic efficiency" (Raven et al., 2005).



#### Paraphrase:

Gases are exchanged between the external environment and the intercellular spaces in the mesophyll of the leaf via the stomata (Raven et al., 2005).

#### Paraphrase or quote?

If you want to use the exact words of the original, then use a direct quote. To show that it's a direct quote, use quotation marks to enclose the quoted text and include the page number.

Quotations are generally used less frequently in the sciences than in the humanities because the ideas expressed are normally more important than the words used to express them. You must have a good reason to use a quote. Being unable to write a better sentence than the original is *not* a good reason. Your lecturers are more interested in your understanding rather than your ability to locate the perfect quotation, so it is much better to put the information into your own words and then reference it.

Sometimes, however, the exact words may be important, as in the following example from Charles Darwin's *Origin of Species (1859)*.

#### Example

"I have called this principle, by which each slight variation, if useful, is preserved, by the term of Natural Selection" (Darwin, 1859, p. 61).

#### **Academic Integrity**

If you do not reference or paraphrase correctly, you may be accused of academic misconduct. Misconduct can take many forms (including plagiarism). The University's <u>Academic Integrity</u> policy clearly outlines students' responsibilities. Each student is responsible to check in with this policy, and ensure they understand what we agree to when studying at La Trobe University.

#### **Collusion and group work:**

Working in groups or participating in a study group is a great way to learn and is essential moving into your career. However, you need to be careful that you do not overstep and find yourself colluding with other students.

**Students responsibilities taken from section 38 of the** <u>Academic Integrity Policy.</u> Please check the most recent policy for updates as this policy document may be varied, withdrawn or replaced at any time. Reproduced components such as the section below, may differ, therefore it is the student's responsibility to always check the latest policy.

#### Students will:

- a. not submit their own academic work for assessment if it has already been submitted for assessment at another time (including at another institution), without the express permission of the academic staff member who will assess the work;
- b. never purchase or commission work and submit this as if it were their own work;
- c. ensure that they do not knowingly or carelessly make their work available to other students in any form;
- d. comply with exam conditions, for example, not bring unauthorised materials into the exam;
- e. observe and apply the University's academic integrity values, ethical standards, and practices of honestly conducted scholarship;
- f. consult and use the University's guides and information in order to avoid plagiarism and academic misconduct;
- g. consult with staff when in doubt about any matter where plagiarism or other academic misconduct may be involved;
- h. attend individual meetings or group instruction sessions when they are counselled to do so by their teachers, subject coordinators or an AIA;
- i. declare all printed, electronic, graphical, artistic work, and other kinds of sources from which they obtained material or ideas used in work submitted for assessment;
- j. acknowledge sources in the ways approved and expected by the discipline and school in which the assignment is set;
- k. produce assignments independently, except when they are asked to participate in a group project requiring a joint group response to a task;
- I. ensure that when doing group work, the scholarship of the group's submissions has been honestly conducted and properly referenced;
- m. read and comply with the Statement of Student Responsibility shown on the University's website;
- n. use text-matching software appropriately, including as a learning tool to check for potential text matches before submitting work for assessment;
- o. retain copies of submitted (written) assignments for a minimum of one year;
- p. use the Assignment Declaration Form available on the Academic Integrity website if asked to submit hard copies of work for assessment.

#### Before you submit your first piece of written work

- 1. Read the information about academic integrity on the Achieve@Uni website
- 2. Complete the Academic Integrity Module (AIM) via your LMS

# Chapter Seven: Maths and Stats Support

#### **Maths Hub**

Mathematics underpins all the Sciences including Health. A good grounding of basic mathematical skills is essential for success in all courses offered in the College of Science, Health & Engineering.

The Maths Hub can assist if you

- lack confidence with mathematics and statistics
- haven't studied mathematics for a while
- have problems with some mathematical or statistical topics
- feel intimidated or overwhelmed by mathematics and/or statistics

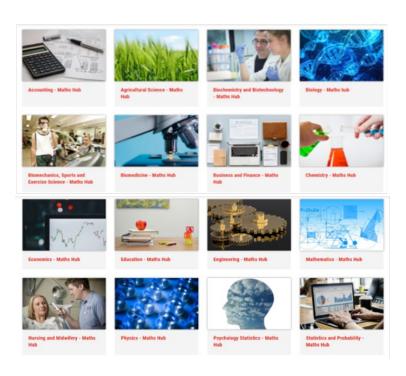
At the Maths Hub you can access mathematics and statistics online resources and Zoom support from our expert tutors.

The Maths Hub supports

All students, on

All campuses (including online), across All disciplines.

Access via Zoom, sessions in the Timetables section of the <u>Maths Hub LMS</u>. For more information on the Maths Skills Program at your campus log into the Maths Hub LMS or contact the Maths Hub by emailing <u>Maths.Hub@latrobe.edu.au</u>



# Chapter Eight: Working in a Team

## Teamwork – an important graduate capability

Teamwork is an important employability skill and is used to produce more or better work than individuals could achieve working on their own. You can greatly improve your effectiveness and success in teams if you have experience in working in groups, developing teamwork skills and an understanding of theory that underpins teamwork capability.

To get the most out of teamwork it is essential to collaborate on activities and be prepared to work in a team that has a diverse membership – to work and listen to others, respecting all contributions.

**Note:** When working in group, be careful to maintain academic professionalism. Collusion and copying another students work is academic misconduct. See <u>chapter 6</u> for further information.



Photo by Novartis AG - ttp://www.flickr.com/photos/51868421@N04/sets/72157631271307884/ CC BY-NC-ND 2.0

So, how can you make this work?

Typically, building an effective team involves 3 steps:

- 1. Forming the team and planning the activity/task
- 2. Working on the task collaboratively and monitoring progress
- 3. Putting together the group output and reflecting on the team process

#### 1. Team formation and planning the task

In the first group meeting

- Get to know one another work out each other's strengths/skills and weaknesses
- Set ground rules and formulate a Team Agreement
  - o everyone should feel safe, respected and heard

- o decide how to manage conflict if it arises
- Establish ways of working together (rules/norms)
  - Common roles during meetings (notetaker, timekeeper, meeting chair you may rotate these)
  - How often and where (online, face-to-face)
  - Share contact details and decide on ways of communication (emails, Facebook group, WhatsApp, MS Teams, etc)
- Discuss and understand the assessment task check the rubric to ensure that you're aligning your work to marker's expectations
- Agree on clear goals (personal and team)
- Plan the project with sequenced deadlines and check-ins to monitor progress
- Identify subtasks and assign responsibilities to team members
- Schedule next meeting

Successful teams usually have members take on designated roles:

- **Chair**: the person responsible for the meeting, decisions being made, everyone being heard and assigning a task
- **Liaison**: the person who liaises between team members and ensures that members understand tasks. If someone does not attend a meeting this person would follow up to find out if they are OK.
- Organiser: the person responsible for bringing the assessment and marking rubric to the meeting; collecting contact details from each team member, making sure timelines are met, ensuring everyone knows where to get resources
- **Scribe:** person who records what is decided at the meeting, documents an action plan with the team members and emails it to everyone in the team

In addition to formal roles such as observer or scribe, team members can sometimes take less formal roles that influence the dynamics of the group such 'compromiser', 'joker' or 'encourager'. See links at the end of this chapter to learn more about this.

Team members may decide to swap roles or to keep the same role for the duration of the project. It is a good idea to challenge yourself to take on different roles so that you develop your teamwork capabilities. Asking your team for feedback on your role performance, is an excellent strategy to help you develop and/or enhance different capabilities.

#### 2. Monitoring progress of the task

Scheduling regular team meetings to update each other on progress, difficulties or changes should be agreed to, early in the process. Meetings can be face-to-face or online via MS Teams or Zoom (be aware that anything, including your assignments, which you share on social network sites, such as Facebook, becomes the property of the site).

During a meeting it is essential the scribe records all decisions and actions, which is then sent to all team members after the meeting. This ensures that everyone is clear about their responsibilities and can be helpful if misunderstandings arise. You can find good <u>examples of an agenda and minutes</u> at the <u>Learnhigher</u> website.

A simple format for recording a meeting could look like the following:

Due Date	Action	Whose Responsibility	Done	Follow up
March 20	Schedule meetings, zoom set up	Paul	✓	
March 20	Set up MS Teams	Charlotte	✓	
Apríl 16	Literature review completed & added to MS	Demí S	✓	Need more on
	Teams	Ahmad		
Apríl 20	Interview participants in study §	All (2 each)		
	summary added to MS Teams			
May 5	Consolidate ppt sections	Peter		

When teamwork goes well, it is often because everyone knows what needs to be done, and what they are responsible for, and communication is open and respectful. You may want to consider:

- What skills/knowledge each member brings to the task
- What skills/knowledge each member would like to develop
- What constraints each member has (time; distance from uni; cultural constraints on certain activities; language; disability). Nobody should do less because of a constraint; but you should find ways of enabling each member to do the best they can.
- What could be usefully done in pairs (someone with expertise in some aspect of the task partnered with somebody inexperienced, so skills are shared)
- Fairness. Some sub-tasks need to be done earlier in the process, some later. Some are bigger than others.

#### **Dealing with Possible Problems in a Team**

The table below itemises some common types of problems and likely solutions.

#### Communications within the team

- •At the first meeting make a **contact list** for all members to record who must communicate what, with whom, by when, etc.
- Email this to all members of the team after each meeting
- If a team member goes silent, contact them to see if they are OK and offer support, if possible

#### Keeping to the timetable you've planned

- Make a realistic plan for the team to follow
- •If a team member is having difficulty, find out why and suggest how the rest of the team can help
- •The team may need to adjust the plan but make sure the person who falls behind contributes fairly in return
- •Keep a written record of this process it is useful for team skill development

#### Differences in personal styles

- Focus on people's strengths; find out how they would like to contribute
- •Remember cultural differences in some cultures, it may not be appropriate to be openly critical or outspoken
- •If English is a second language for some team members, they may need a little more time to formulate what they want to say; make space for them to contribute

#### Dominant team members

- Have a Chair who ensures everyone has an opportunity to contribute effectively during meetings
- •Swap roles within the team perhaps the dominant person can take on the role of scribe for a while

#### A quiet team member

- •Set an expectation that everyone speaks at a meeting and all contributions are heard and respected
- •You might approach the person outside the meeting for an informal chat. If they know that someone else on the team thinks their ideas are sound, they are likely to feel confident to contribute to the group
- •Some people need to be invited to speak until they are comfortable in the team.

#### A lazy team member

- •Offer team support there's always a reason for not contributing. Is there something that the team can help with so that the person <u>can</u> contribute?
- •Give them clear timelines that are fairly short; this might mean that their task is broken up into small stages.
- •Acknowledge work done well; it builds confidence.
- Document the process.

#### Team member lacking skills

- Find out if there is something else they can do and offer them the opportunity to work with another team member to learn the new skill.
- •Check out workshops available via the Library, Learning Hub, LinkedIn, etc

#### Technology

- •Troubleshoot within the group it is likely someone else knows the solution.
- •Keep duplicate files never rely on a memory stick.
- Contact Student IT Support

# Conflict within the team - this is a normal part of learning to work together

- Recognise it is occurring and talk about it openly and respectfully in the team.
- Seek to understand the other party. Most people in a team start-off wanting to do their best.
- If you notice behaviour that is having a negative effect on some members of the group you may need to shine a light on it not to blame, but to start a conversation and be an impetus for positive change.
- Focus on achieving the team goals and be prepared to compromise.
- You may feel in conflict with someone because they have a different style from you. In this case, a wise saying is "Neither better nor worse, <u>only different</u>."
   Remember that difference is valuable in a team.
- Early in the stage of team development discuss the issue of conflict and plan how the team will deal with it when it arises. If your team plan is not enough to manage the conflict, the team may need help to resolve serious conflict. You could bring in a third party such as your tutor/demonstrator.

#### 3. Group Output and Reflection on team process

Whatever your task, you will need to bring together the components at the conclusion, so you can present what you have done, for evaluation. There are many ways to do this, depending on the tasks, how you shared them and what skills your members brought to the work. You will need to decide whether to:

- prepare contributions individually, then collaborate as a group to decide how these are to be combined and presented, so that the output is jointly constructed.
- work together and draft a joint output.

Students also say that a coordinated team effort produces a more cohesive output than a disjointed compilation of individual efforts – the chop and glue approach.

However, the work is put together, it is essential that each team member ensures their tasks are completed and proofread before being submitted. If you are making an oral group presentation, ensure you practise together using your visual aids – at least one full rehearsal is essential. You are going to share the mark, so you want to share the responsibility.

Remember along the way to celebrate achievements, small and large. A bit of positive feedback lifts the team spirit. You will need to give fair feedback to team members on their work and to accept reasonable feedback on your work. Use this feedback to reflect on your team skills to add to your personal growth. This reflection will be helpful when you are applying for jobs and you need to articulate your skills.

Sometimes reflection is a component of your assessment. If so, the purpose is to think about what you have learned about working in a group.

- What went well, and why? What didn't go well, and why not?
- What could you have done differently for a better result?
- Based on this experience, what would you do differently when next asked to work in a group?
- What models, theories or ideas about teamwork have you read about and used to inform your teamwork?



Your reflections will also help your tutor or demonstrator to monitor the success of each groups' learning and can explain any problems that may need to be considered in assessing the work submitted by the group.

#### **Useful links**

- <u>Learnhigher</u> Resources designed to help assess and develop group work skills
- Achieve@Uni Managing teamwork and group presentation skills
- <u>De Bono</u> Ways of thinking
- Tuckman Model of team development
- Belbin Team Role Theory
- Lazear group Self-analysis on team skills
- Myers-Briggs Personality types
- Oregon State University Group think
- <u>Carleton College</u> Student Roles, interaction and group processing

# **Chapter Nine: Succeeding in Assessment Tasks**

# **Assessment at University**

The Assessment section of your **Subject Learning Guide** will list the details on what assessments you have, when they are due and how much they are worth.

Mark the deadlines of all your assessments in your calendar and wall planner. You can use the <u>Assessment Planner</u> to create a schedule to complete your assessment on time; it will take you from analysing the assignment, gathering information, making a plan, first draft, revise and rewrite to submission.

#### **Unpacking your assessments**

Make sure you read the instructions carefully and you are aware of the requirements. You need to consider:

- What percentage of my overall grade is the assignment worth?
- What is the word count?
- Is there a minimum number of references to be cited and what referencing style is required?
- Is there a template outlining the format and structure to be used? Are all elements or criteria equally assessed?

#### How rubrics can help you get a better grade

Many assessment tasks will have a rubric which defines what is expected and what will be assessed. A rubric contains:

- the criteria (elements of the task) required
- the descriptors of these elements for each level of performance
- a rating scale (level of performance)
- the weighting of each criteria (sometimes criteria are weighted differently)

#### Make sure that you:

- Read the rubric/criteria carefully
- Ask your lecturers or tutors anything you don't understand
- Refer to the rubric as you do your assessment to ensure you stay on track and include everything required
- Before you hand in your assessment, check your work against the rubric (if you have time, make changes)

#### How to use feedback to improve your grade

Always read the feedback for every assessment. Plan how to improve your next assessment.

Do you need to improve your referencing and/or paraphrasing? Do you need to improve the quality and number of references you used?

Do you need to improve your writing skills?

Do you need assistance with calculations or understanding statistics?



#### Tap into academic support services

The <u>Learning Hub</u> will help you break down your question, structure your assignment, get your referencing right and use feedback to improve your academic skills in your next assessment task. Go to <a href="https://www.latrobe.edu.au/students/study-resources/learninghub">https://www.latrobe.edu.au/students/study-resources/learninghub</a> and drop in to see a Peer Learning Advisor (PLA) in The Learning hub or online via Zoom.



#### Studiosity

Studiosity is free for all current students, on every campus and online.

- Get writing assessment feedback Studiosity offers constructive feedback, usually within 24 hours. You simply upload your file, and an English Subject Specialist will send it back to you with suggestions, comments and areas you could improve on.
- **Connect Live** this is one-to-one assistance from subject specialists ready to help you with questions in maths, stats, English, referencing, assignment research and more.

This is not a rewrite service, nor do they comment on the content or how to better answer your essay questions, but they will build your skills to improve your spelling, structure, grammar and writing style.

Download the **Studiosity** app from the App Store or Google Play. Sign up via the link on the Learning Hubs LMS which you can access via <a href="https://www.latrobe.edu.au/students/study-resources/learninghub">https://www.latrobe.edu.au/students/study-resources/learninghub</a>

# **Essay Writing**

These are general guidelines only. It is VERY IMPORTANT that you check specific requirements in each of your subjects. This information will be in your subject guides or on LMS. If you are not sure, check with your tutor, demonstrator or lecturer.

No matter what field of study, the same basic process can be used to plan and write your essay. This process can be divided into six steps:

- 1. Analyse the question identify key instruction words (see table on the next page), the topic/s and specific aspects to be discussed. You will need to read and re-read the essay topic to ensure you understand what is being asked.
- 2. Research the topic ask a series of questions about your topic to focus your research. Seek information from a wide range of sources. Keep a record of all sources used so that you can include them in your in-text references and reference list.
- 3. Plan the essay organise key ideas and related themes, taking into consideration format restrictions and word limits. Make sure you record which sources you used for which information. The easiest way to do this is to write an in-text reference next to your notes.
- 4. Write the essay construct these ideas into the key elements of an essay: an introduction, a discussion (or body) divided into a number of paragraphs, and a conclusion. The writing style is formal and impersonal. Remember to edit for errors.
- **5.** Write your reference list (see Chapter 6 for information about referencing) using the appropriate referencing style for your discipline as detailed in the assessment information or rubric.
- **6.** Review and Edit Take time to read your work carefully. It is important to leave enough time to take a break from writing our work, and editing. Submit it to Studiosity for feedback as part of your editing process.

Don't forget, the Library's <u>Assessment Planner</u> can help you create a schedule to complete your essay on time; it will take you from analysing the assignment, gathering information, making a plan, first draft, revise and rewrite to submission.

Common essay 'instruction' words		
Analyse	Break subject into parts and show how they relate to each other.	
Comment	Express your view/interpretation of a statement in the question. Support your view with argument and/or experience.	
Compare and contrast	Show similarities and differences between two or more systems, ideas or concepts.	
Define	Give clear concise meanings of terms. If necessary, use examples	
Describe	Give an account with clear, well organised, logical structure. Present the different aspects of a problem. Judgements are not required	
Discuss	Present different points of view about a subject from the readings. Give a balanced range of information. Investigate by argument and analysis.	
Evaluate	Make judgments using argument, opinion and evidence. Similar to 'criticise' but emphasis is on establishing standards of quality.	
Examine	Similar to 'analyse', with a little more emphasis on judgment	
Explain	Interpret meanings clearly by analysing events or systems, giving reasons, describing how things develop. Ask 'how' and 'why' of an issue.	
Identify/illustrate	Select particular factors or circumstances required by question.	
Prove	Confirm or verify by logical reasoning and evidence.	
Relate	Show how things are connected, correlated or cause one another.	
Review	Examine a subject critically, dealing with a number of explanations or theories; listing and relating a series of events being used as evidence for a theory.	
Summarise	Give a brief statement or account that covers the main points in sequence; without critical comments.	

#### The essay writing process is demonstrated below, from a first-year student's Psychology essay.

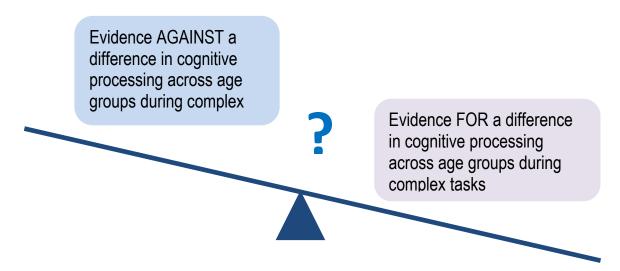
Evaluate the evidence for differences in cognitive processing across age groups when engaging in complex tasks such as driving. Can rates of car accidents in younger drivers be directly attributed to these differences? Based on this information, what would you recommend to policy makers seeking to reduce car accidents in the 18–25 age group?

#### 1. Analyse the question

Identify the key instruction words and think about what they mean in relation to the essay topic.

**Evaluate the evidence** for differences in cognitive processing across age groups when engaging in complex tasks such as driving. **Can rates** of car accidents in younger drivers **be directly attributed** to these differences? Based on this information, what would you **recommend** to policy makers seeking to reduce car accidents in the 18–25 age group?

**Evaluate the evidence** - this instruction indicates that there is some debate about whether there is a difference in cognitive processing across age groups when engaging in complex tasks such as driving. We can assume that studies have been conducted in an attempt to determine the answer, but that different studies have found different things. Some findings may have supported a difference in cognitive processing across age groups when engaging in complex tasks and some may not have. When researching the essay, you would need to search for different studies representing a range of findings and then **evaluate** the evidence from the studies. This means you need to 'weigh up' the evidence on both sides and come to a conclusion based on this evidence.



Can rates of car accidents in younger drivers be directly attributed to these differences? This instruction is asking you to apply the evidence you have evaluated to a specific situation – rates of car accidents. If you think there is a difference in cognitive processing across age groups during complex tasks, could this be contributing to higher rates of car accidents among young people? If you think there is no difference, then you might need to argue that there is a different cause of the higher rates of accidents among young people.

What would you **recommend** to policy makers seeking to reduce car accidents in the 18–25 age group? This part of the question asks you to make recommendations based on your response to the

first two parts of the question. You may need to think about who the policy makers are. You may also need to consider current policies which aim to reduce the rate of car accidents for this age group and whether these policies relate to or acknowledge cognitive processing as a factor. If they don't, should they?

#### 2. Research the topic

Start by making a list of research questions. This will help you to search for and read the exact information that you need in order to answer the question. For the example essay topic, these questions might include:

- What evidence is there that younger drivers have more accidents? Is this evidence recent? From Australia?
- What is cognitive processing?
- What is a complex task? Examples?
- Are there any differences in cognitive processing across age groups when engaging in complex tasks? If so, what are they and what causes them?
- What cognitive processing occurs when driving?
- Which has the greater influence on accident rates among younger drivers inexperience or cognitive development?
- How do the stages of brain development in those aged 18 25 affect their decision-making, hazard perception and risk-taking behaviour?
- What current policies aim to reduce car accidents in the 18 25 age group?
- Do any policies base their recommendations on cognitive processing differences in young people?

Begin with what you know from lectures and tutorials then proceed to books and journal articles. Use library catalogues – including electronic data bases and seek the assistance of your subject librarian (see Chapter 4 for more information on reading for assignments).

#### 3. Plan the essay

This involves three main steps. Firstly, **brainstorm** - Jot down everything you can think of from your research related to the topic. The next step, **grouping**, is where you attempt to find common ideas within the brainstorm. Give your grouped ideas a heading. These groups then become the **themes** for your essay. Finally, **outline** the essay in detail with each theme becoming a main point supported by factual evidence. **Write down all necessary referencing details as you plan.** 

#### 4. Write the essay

Construct these ideas into the key elements of an essay: an introduction, a discussion (or body) divided into paragraphs, and a conclusion. The writing style is formal (see Chapter 5 for guidelines on writing in a formal, scientific style).

#### 5. Write your reference list

Make sure that all references cited (in-text) are included in your reference list and all references in your list have been cited in your essay (see Chapter 6 for more details on referencing).

#### 6. Review and Edit you work.

Giving yourself time to edit will improve your grade. It will eliminate any minor errors, issue with grammar and referencing mistakes.

- Check your grammar and punctuation
- Proofread your writing in a hard copy often screen reading is not effective
- Read it out aloud to yourself this help you hear how it sounds.
- Check your referencing and formatting of your document make sure it is consistent.
- Submit it to Studiosity for feedback This may take up to 24 hours, so again leave yourself enough time to review their feedback and make appropriate changes.

#### The structure of academic essay writing

The following examples illustrate the essential elements of an essay – an introductory paragraph, a body paragraph and a concluding paragraph.

#### **Model Introductory Paragraph**

The introductory paragraph sets the scene for the whole essay and consists of **four sections** which move from general to specific information.

- **Introduce** the general topic of your essay in an interesting way.
- Give background or context which gives relevance to the discussion.
- Include a thesis statement which is the main point of the essay
- List **subtopics/themes** to indicate the order of discussion to follow (each theme mentioned in the introduction, is addressed in the same order in the body).
  - o A brief definition may belong in the introduction (one sentence only).
  - Keep all information relatively general (no detailed evidence).

#### For example

The rate of fatal car accidents among young drivers (defined in this essay as drivers aged 18-25 years old) is proportionally greater than those among other age groups. In Victoria in 2008, 24% of car accident fatalities were in the 18-25 year old age group, though this age group makes up only 12% of the Victorian population (Age Group Statistics, 2009). During adolescence and into early adulthood changes continue to occur in the brain (Dahl, 2008). This ongoing brain development means young people are still developing and refining cognitive processing skills, which impacts upon their ability to engage in and complete complex tasks (McAnarney, 2008), such as driving. As a result, it can be argued that higher rates of car accidents involving young drivers can be directly attributed to differences in their cognitive processing abilities compared to more mature drivers. To support this statement this essay will discuss brain development in young people, particularly in relation to decision making, engaging in risky behaviours, hazard perception and the ability to divide attentional resources. Finally, it will conclude by reviewing and suggesting ideas policy makers could utilise to reduce car accidents among young drivers.

Introduce topic

Background or context

Thesis
Statement/hypothesis

Themes or sub-topics

#### Model Body (Discussion) Paragraph

Each body paragraph develops or expands the original thesis statement in a logical manner using evidence to illustrate the specific point being made. Using the TEEL Structure, you can organise your paragraphs in a clear, well-ordered way.

- Topic sentence
  the specific topic of this paragraph (only **one** per paragraph)
- E Evidence
  evidence to support the topic sentence
- E Explanation
  explain what you mean in greater detail
- Link
  in the concluding sentence you may restate initial point made,
  lead into next paragraph, provide a link to overall argument or
  make a final statement

**Connectives** = words and phrases that **link** one idea to another and show the relationship between them. They provide the **logic and cohesion** for the essay.

Engaging in risky behaviours is a major cause of accidents among young drivers. **Topic sentence** This may be due to cognitive factors. Development in frontal and parietal regions of the brain continues into early adulthood (Dahl, 2008). This part of the brain (dorsolateral prefrontal cortex or DLPFC) is where neural networks involved in risk taking behaviour reside. Beeli et al. (2008) suggest the DLPFC does not mature until late adolescence, when many young people are driving. This late maturation of the DLPRC may explain why young drivers take risks, including speeding and Evidence/ driving after drinking alcohol. Indeed, Steinberg (2010) hypothesises that young **Explanations** people's heightened risk taking behaviour is due to immature self-regulatory systems combined with easily aroused reward systems. Two studies suggest there is a strong link between risky driving behaviours of young drivers and their higher rate of traffic accident involvement. Fergusson, Swain-Campbell, and Horwood (2003) completed a 21-year longitudinal study of New Zealand children. They reported that 90% of young drivers who participated admitted to risky driving. In addition, an Australian study by Vassallo et al. (2007) using data from the Concluding Australian Temperament Project (ATP) reported similar results. Thus, it can be sentence argued that brain development may be linked to risk taking behaviour of young drivers involved in accidents.

#### **Model Concluding Paragraph**

The concluding paragraph rounds off your essay by reminding the reader of your **main point**, the supporting *themes or sub-topics* and a strong final comment. There are **four** aspects to consider in the conclusion.

- Signal the end of the essay with a connective: "In conclusion; To summarise".
- Paraphrase your thesis statement (the main point of the essay).
- Paraphrase and summarise the sub-topics/themes addressed in the essay to remind the marker of your main discussion points.
- Leave the marker with a **strong effective comment**; a message they will remember.
  - Don't add any new material.

abilities and the risks associated with driving.

Avoid detailed information – the conclusion is a more general statement.

In conclusion, the underlying cause of higher car accident rates among young **Paraphrased** drivers may be directly attributed to differences in their cognitive processing thesis statement abilities when compared to more mature drivers. Young peoples' brains are still developing in regions responsible for making decisions, participating in risk taking activities, perception of danger and capacity to concentrate. Hence, **Summary of** young drivers are more likely to engage in risky driving behaviours and have less paraphrased developed cognitive processing skills to enable them to drive safely. To address themes this problem, it was suggested to policy makers that there is a continued need to try to limit or reduce the risks young drivers are able to take, and to cater for more practice of decision-making and hazard perception skills and more effective use of attentional resources. Although the Victorian Graduated Licensing Scheme helps to address such concerns, it is also recommended that stronger young driver education programs, and more parental and community **Final comment** involvement be included. This will help change young drivers' attitudes towards risky driving behaviours and ensure they are better informed about their own

# **Report Writing**

Report writing is an important communication tool which enables you to share information with colleagues, managers, clients and others. It takes a lot of time, effort and practice to become a skilled report writer. The structure and style vary from discipline to discipline, although they share common elements. A report allows the reader to understand the experiment or investigation – the why, the how and the outcomes.

A well-written report requires several skills including:

- research skills to acquire high quality, relevant information for your report
- analytical and critical thinking skills in order to select appropriate content, analyse it, evaluate it, and make recommendations
- the ability to write clearly and concisely in English
- excellent formatting skills and attention to detail to achieve a high-quality presentation of your report
- the ability to proofread your own work

These are **general guidelines** only. It is **VERY IMPORTANT** that you check specific requirements in each of your subjects. This information will be in your **Subject Learning Guides** or on LMS. If you are not sure, check with your tutor, demonstrator or lecturer.

Format (check requirements for each subject)

- Double space your report (except reference list & appendix)
- Make headings centred and in bold UPPER CASE
- Number all pages
- Use 12-point (check which font is required)
- Write using paragraphs do not use dot points

#### Style

See Chapter 5 for guidelines about how to write your report in a scientific writing style.

#### **Binomial Names**

When writing reports involving living things, the full scientific name of each species is given on first mentions in the text and on first mention in each report section in longer reports. Thereafter, the generic name may be abbreviated to its initial letter (except when starting a sentence where the full form is needed). For example, *Bufo marinus* becomes *B. marinus*. However, if two species with different names start with the same letter then this does not happen.

#### **Calculations**

- Include units for all relevant calculations e.g.  $1mA \times 1K\Omega = 1V$
- Numbered answers need to be rounded to 2 or 3 decimal places. However, you need to check how many decimal places are required for the data you present in your report.
  - E.g.  $\pi \times 2 = 6.283185307 \rightarrow =6.283$

#### Figures (photos, graphs, diagrams, maps) and tables

- Figures and tables should be used to summarise data and to add clarity to your report.

  Tables with large amounts of uncollated data should go in a separate section (the appendix) at the end of the report. The appendix is also used for any calculations required for the report.
- Figures and tables need to be numbered and labeled. If you include figures or tables that you did not create yourself, you must provide a reference. The label for a table goes above the table and the label for a figure goes below the figure.

#### **Word Limit**

• Word limits may vary so check with your tutor, demonstrator, prac/lab coordinator or subject coordinator for each report.

#### Scientific reports and Technical reports

These two reports have similar sections. They are tabled below, then explained in more detail.

Please ensure you check what your Subject Coordinator has asked you to do. Some of these sections may not be relevant, or they may use different terminology and may vary in formatting.

Scientific Report	Technical Report
Title Page	Title Page
Abstract	Summary/Abstract
Introduction	Acknowledgments
Material and Methods	Table of Contents
Results	Glossary of Terms
Discussion and Conclusion	Introduction
Acknowledgments	Body
References	Conclusions
Appendices	References
	Appendices

#### Title

Write a short title that specifies the nature of the project. A report title should be concise (key words only) and informative and should include the Latin species name (in italics) and/or higher taxonomic category if appropriate.

Your Name
Student ID
Subject
Practical Group
Demonstrator/Tutor
Date

#### **Abstract**

This section contains the following elements:

- Background, purpose and hypothesis (if required) what the report is about, in 1-2 sentences
- A concise **summary** of the main information contained in the report (this will vary depending on the nature and purpose of the report)
- the **main conclusions** (e.g. recommendations, outcomes of a project, was the hypothesis supported).

In your Abstract, you should not refer to specific figures or include references. The length will vary depending on the total number of words required in the report. For a first-year report, the Abstract would be approximately 100 - 300 words, but you should check the requirements for each subject.

#### **Acknowledgements**

This is the section where you can acknowledge anyone who helped with a project or a report. People to thank in the acknowledgements may include members of your team or group, people who provided specimens, anyone who proofread your work, or anyone who gave feedback or critical comments. Check the requirements of where to place this, in Technical reports this comes after the Abstract, in Scientific reports it is included prior to the Reference list.

**Acknowledgements** - It is important to acknowledge the assistance of others when writing a laboratory report.

#### **Table of Contents**

The Table of Contents (TOC) lists all sections in your report and includes the section numbers and page numbers. It is written on a separate page and must be formatted correctly. Use the automatic TOC function in Microsoft Word to assist with formatting. Not all reports require this, so check if you need to include this.

#### Glossary of terms

Include a glossary if you have many technical terms in your report.

#### Introduction

#### **Background and context**

This section introduces the specific problem addressed in the investigation, providing the context in which it fits. It is a step-by-step, logical argument to arrive at a reason for your investigation.

Starting with general information and becoming more specific, begins with background to theory and current knowledge of the topic or problem under investigation. How much introduction is required will vary, depending on word limits. The introduction integrates ideas from different sources and explains why it is important to investigate (i.e. its significance). Information about specimens under study may also be included.

General information



An **outline** of what is in the report and what is not (the scope of the report)

**Purpose** 

You must use references to provide information in your introduction. You MUST include **in-text references** for all information and ideas that you have cited from other sources, and list these in the **reference list** at the end of your report. <u>See chapter 6 for referencing guidelines.</u>

The introduction finishes with a clear statement of the aim(s) and (if required) hypothesis(es).

#### **Materials and Methods**

This section describes the procedures and materials used in the experiment. It should be written so that a peer could read it and reproduce what you did. It can include details about experimental procedures, apparatus, study sites, data collection, reagents used, analytical procedures and statistical techniques (if relevant). In some reports you combine the materials and methods as one section. This section should be written in the **past tense**, following a scientific style using appropriate scientific terminology and well-structured sentences (rather than lists or dot points).

#### Results

This section contains a clear and accurate presentation of your data in both written and graphical/tabular form. You should provide a written description of your results before presenting your results quantitatively in tables or figures (graphs, charts, diagrams). You must also report the results of any statistical tests used to analyse your data.

The results section contains:

#### **Descriptive text**

This should go **above** the relevant figure or table (e.g. Looking at Figure 2 below) and should describe trends or significant features in your data using appropriate scientific terminology (e.g. "the majority of seeds germinated within ten days of planting" or "the temperature rose steadily for the first 10 minutes and then remained constant.") You **must not discuss the data**, i.e. do not give reasons for your results. This comes in the discussion section.

#### Reporting results of statistical tests

If you used statistical tests to analyse your data, report on the type of test used, its calculated statistic, the degrees of freedom and the probability value. Often this is placed in the parentheses after a statement on the significance of a particular result. Calculations would be included in the Appendix.

#### **Examples:**

**Basic statement (bare minimum)**: Abundance of the sea star *Patiriella exigua* differed significantly between sites (t-test, t=0.165, d.f.=19, p<0.05).

Basic statement plus biological meaning of statistical result (good response): Abundance of the sea star *Patiriella exigua* differed significantly between sites (t-test, t=0.165, d.f.=19, p<0.05). Abundance of sea stars was greater at Altona than Queenscliff (Figure 1).

**Most concise (best response)**: Abundance of the sea star *Patiriella exigua* was significantly greater at Altona than Queenscliff (t-test, t=0.165, d.f.=19, p<0.05) (Figure 1).

#### Tables and/or figures.

Do not display the same data in both a table and a figure. Label each figure and/or table with a caption which tells the reader what is being shown. By convention,

- table captions go above the table and
- figure captions go below the figure.

Captions do not need to be double line spaced. Include units where appropriate.

#### Discussion/Body

The structure of the discussion is the reverse of the introduction. It starts with specific information about your results and then becomes more general. It usually has four main components.

- An accurate statement of your main findings (without repeating a detailed presentation of results) including whether or not your hypothesis(es) was/were supported (if relevant). You may give an indication of which data tells you this.
- An explanation of what your results mean and a comparison with other published sources of
  information (i.e. books, journal articles etc.) Include in-text referencing of sources don't forget
  to paraphrase and include sources in your reference list (see <a href="Chapter 6">Chapter 6</a>).

- Any methodological issues that may have influenced your results and suggestions for improvement
- What can or should be done next to further our understanding of the problem. For example,
   "Future studies could investigate..."

Your discussion should be clearly and concisely written with logical flow of the ideas presented. In the discussion, explain what your results mean by analysing them and assessing their significance against published studies/sources. Don't forget the <u>TEEL Structure</u> when writing each paragraph.

**Conclusion** (this may be the last paragraph in your discussion or a separate section)

The first sentence should answer the purpose which was stated in the introduction and then present a summary of the main findings. It may also be appropriate to include suggestions or recommendations based on these findings. This is particularly relevant if the report involves a project where something new was designed or created.

#### Reference List

At the end of your report, you must list the references (journal articles, books, web pages, lab manuals and handbooks, etc.) you cited throughout the text of your report as well as references for figures and tables. **Check the referencing requirements** for your report to see which style (APA7, Havard, IEEE, etc.) you are to use. If you are required to use a different referencing style from APA7 (see <u>Chapter 6</u>), you will need to ask your lecturer, tutor or demonstrator for the referencing guidelines for that style.

See <u>Chapter 6</u> for further information on referencing, or the Academic Referencing Tool (ART) on the Libraries Website: <a href="http://www.lib.latrobe.edu.au/referencing-tool/">http://www.lib.latrobe.edu.au/referencing-tool/</a>

#### **Appendix**

Any data that is too bulky to include in the results section should go in an appendix(ces). You may need to check with your demonstrator about which data needs to go in an appendix.

- Details of statistical calculations (if relevant) should also go in the relevant appendix
- Statistical analyses may include null hypothesis (H<sub>o</sub>), alternative hypothesis (H<sub>a</sub>), calculations and conclusion with respect to the null/alternative hypotheses (was the alternative hypothesis supported?)
- There is no need to double space an appendix
- Each appendix is numbered using Roman numerals (I, II, III and so on) and must be referred to in the appropriate place in the Results section

# **PRE-SUBMISSION REPORT CHECKLIST** - The more you tick, the higher your mark! (make sure you check the rubric to ensure you meet each criteria)

REPORT SECTION	CRITERIA	TICK ☑
ENGLISH EXPRESSION	My ideas are expressed clearly and concisely, and I have checked for grammar and spelling errors.	
TITLE	The title of my report is concise and informative.	
ABSTRACT (IF REQUIRED)	My abstract clearly states the aim, hypothesis/es (if needed) and summarises findings.	
ACKNOWLEDGM ENTS	If required	
TABLE OF CONTENTS	If required	
INTRODUCTION	My introduction identifies and uses relevant information to provide a context for the investigation. I have stated the aims and hypothesis/es (if needed) of the study.	
MATERIALS & METHODS	I have described the procedures, materials and statistical analysis used in the investigation concisely and logically.	
RESULTS	My results section has a written description which describes patterns and trends in the data includes (if appropriate) a statement of the results of statistical analysis (i.e. are differences/relationships significant).	
	I have presented my data in a figure(s) (with a caption below) and/or table(s) (with a caption above). Any figures that are graphs have labeled axes with relevant units included.	
DISCUSSION	I have stated my main findings concisely and compared my results with results of similar studies (if appropriate). I have then explained what my results mean, using information from books or journals. I have drawn valid conclusions from my data. I have discussed possible weaknesses and suggested possibilities for future study on this topic.	
REFERENCES	I have adequately and correctly cited both in-text and in my reference list, using appropriate style.	
APPENDIX	I have included detailed calculations (if required)	
FORMAT	My report includes all necessary sections including acknowledgments and is the correct length – as outlined in the Subject Learning Guide. My heading styles are correct, and I have double spaced my report.	

### **Exams & Tests**

#### Tips for specific types of exam questions

#### Multiple choice questions

- Carefully note the connecting words as well as the key words in both the question stem and possible answers.
- Beware of double negatives. For example, the question might ask, "which of the following is true?", and the first answer may read, "(a) it is not the case that..."
- Think carefully about sentences with words such as never and always.
- Try considering each alternative of a multiple-choice question as a true/false statement and then choose the odd one out – you may be asked to choose the "correct response" or the "incorrect response" or "odd one out".
- If you see an answer that you think is correct, check to make sure that the others are incorrect. You may find that you've been a bit hasty.
- Does the question contain any clues to the answer? Do the alternative answers give clues? Through careful analysis and a process of elimination it may be possible to arrive at the correct answer even if at first sight you did not have any idea.
- If you don't know, make an educated guess after careful consideration of all the options.

#### Short answer and essay questions

- Don't rush into a question. Give yourself time to think about and plan your answer. Before writing, make notes or a brief outline to aid your memory if you have a mental block later.
- **Short answer** summarise the main points in the first sentence. This means that you will have to carefully plan your answer first. Also, if you run out of time your examiner will be able to see where you were heading with your answer.
- **Essay** your introduction should outline the main points of your argument. The body of the essay should consist of a logical sequence of these ideas. Have one main idea per paragraph and express the main point of the paragraph in the first sentence. The conclusion should provide a summary of your argument.
- If you run out of time or misjudge things and still have a question to go, then write notes/points. Set out a plan of how you would have answered the question if you'd had time. A well-structured outline is often sufficient to achieve a pass for that question.
- In a short answer question, content must be strictly relevant. Make sure that your answer is clear and concise.

• If appropriate, include clearly labelled graphs or diagrams. These may help you to remember things which you have forgotten or provide you with a basis for your writing.

#### **Problem solving questions**

#### (particularly for statistics, mathematics, computer science and engineering)

- Read the question carefully. Take note of each part of the question you will have to address.
- Check carefully what data you have been given and what has been left out.
- Think about which principles could be applied to the data. List the formulae you will need to answer the question, without placing the given values in them. This will help to avoid unnecessary slips resulting from a faulty transcription of the formulae.
- Decide the order of the steps you will have to take to get to the answer.
- Double check your arithmetic before moving onto the next step. Make sure you haven't misplaced any decimal points or made an incorrect substitution in the formula.
- Include all your calculations in your answer. That way, even if the outcome is incorrect, your examiner will be able to see where the mistake was made and may still award you some marks for your approach to the question.

If the dimensions of the result do not seem right, check your computations again and if you still come up with the same answer, write down whether or not you believe it to be valid and provide a possible explanation for such a result.

### **Oral Presentations**

Oral presentation skills are essential for academic success and future employability. Being a good presenter means having good oral communication skills and being able to prepare engaging and effective presentations. Spending time preparing the content of the presentation and working on your communication skills are equally important.

Practice is key to becoming a good presenter. You will find that preparing for and rehearsing your presentations will increase your confidence in your communication skills.

The **Achieve@Uni** <u>presentations module</u> provides you with resources to develop your presentation skills, including individual and group presentations. It also includes tips on how to use technology to effectively deliver presentations.

### Selfcare:

Assessments and exams can be very stressful, there are several strategies you can try to reduce your anxiety.

- Start early and stay on track with your preparation to reduce your stress levels. Start working on your topic summaries well before the exam period. For other assessments, use the <u>Assessment Planner</u> to help you break the work down.
- Look after your health. Get plenty of sleep, eat healthy food and try to find time to exercise. Many people find that yoga and breathing exercises can help physically and mentally.
- A good way to refresh a tired mind is to go on a brisk 15-minute walk. A 15-minute TV break is not usually refreshing and can easily turn into a 1-hour break.
- Set yourself a goal and reward yourself when you achieve it to keep you motivated.
- La Trobe provides a free counselling for current students. If you feel overwhelmed by exam stress or study motivation problems and unable to cope, you can make an individual appointment with one of the counsellors on your campus. Check out the <a href="Counselling webpage">Counselling webpage</a> for more information.

The next chapter outlines many of the support services available to students.

# Chapter Ten: Student Services and Support

# **Academic Support Services**

#### **The Learning Hub**

Drop-in for a one on one consultation (online or on campus) or register for workshops.

- Peer Learning Advisors (PLAs) Students with experience helping students
- Maths Hub, Science Hub, Coding Hub
- Book for a one on one with an Academic Skills and Language Advisor

Specialist and peer support with

- English Language Development
- Writing, study skills, time management
- · Library skills and digital literacy
- How2Uni workshops

For more information, about Learning Hub times on each campus and Learning Hub materials, please check details when you self-enrol into the <u>Learning Hub LMS site</u> by clicking the link or typing in <a href="https://lms.latrobe.edu.au/login/index.php">https://lms.latrobe.edu.au/login/index.php</a>.

#### **Studiosity:**

- Study help anywhere 24/7
- · Writing feedback
- Connect live via their chat service



Find Studiosity by going to www.studiosity.com or find it in the Learning Hub online via the LMS

#### **Library Workshops and Resources**

Access a range of resources, including:

- Expert Help Guides
- Library Essentials for new students
- Workshops
- Online theses support

Find out about training and workshops on Excel, SPSS, Endnote and more: https://www.lib.latrobe.edu.au/training/all-campuses

#### Achieve@Uni

Online academic skills support:

- Finding, evaluating & using information
- Academic integrity; Paraphrasing, Quoting & Referencing
- Presentations preparing & presenting
- Maths & Stats at Uni worksheets & guides

Find out more by going to <a href="http://www.latrobe.edu.au/students/study-resources/learning/achieve">http://www.latrobe.edu.au/students/study-resources/learning/achieve</a>

# **Uni Life**

#### **Ask La Trobe**

Help service for students providing general advice on administrative processes including:

- Enrolment, fee payments, graduations
- Exam dates and general information
- Student ID cards
- Form submission

#### Access Ask La Trobe via

- 24/7 online FAQ's <a href="http://latrobe-current.custhelp.com/app/home">http://latrobe-current.custhelp.com/app/home</a>
- Ask a question <a href="http://latrobe-current.custhelp.com/app/ask">http://latrobe-current.custhelp.com/app/ask</a>
- 1300 LATROBE (1300 5208 762)

#### **International Student Services (ISS)**

https://www.latrobe.edu.au/students/international/support/supportservices

Support for all international students which includes:

- One-on-one help with ISS staff
- Visa and CoE related queries
- Afterhours student hotline: 1800 758 360
- Referrals to specialty services
- Social and language support programs

Ask a Question online by typing in <a href="http://latrobe-current.custhelp.com/app/ask/session/">http://latrobe-current.custhelp.com/app/ask/session/</a>

#### **Special Consideration**

Must meet criteria:

- Assessment worth more than 15%
- Serious, short-term, adverse and unforeseen circumstances (illness, emotional disturbance, misadventure)

Complete online application, less than 3 working days after due date and provide supporting documentation. For more information go to <a href="https://www.latrobe.edu.au/students/admin/forms/special-consideration">https://www.latrobe.edu.au/students/admin/forms/special-consideration</a>

#### **Student Financial Support**

- Emergency Aid
- Interest free student loans
- Student grants for extreme hardship
- E: finaid@latrobe.edu.au

More information: https://www.latrobe.edu.au/students/admin/fees-and-money/assistance/loans

#### **Career Ready**

The Career Ready team provides advice and resources on:

- how to prepare your job application documents
- strategies you can use to search for jobs or other industry experiences
- researching your career options and planning your career

<u>Career Ready Advantage</u> is a self-paced employability award program that helps you to:

- Develop highly valued transferrable skills and experience that you can showcase to employers
- Show employers the initiative and commitment you have taken to stand out from other graduates
- Build fantastic content for your graduate resume

W: https://www.latrobe.edu.au/students/opportunities



LTSA's aim is to give students the best student experience possible to make your time at La Trobe as productive, immersive, and enjoyable as it can be. LTSA offer

- <u>advocacy</u>
- financial counselling
- legal advice
- clubs and societies
- events and well-being activities

#### **Multifaith Spiritual Wellbeing**

Supporting the expression of diverse religious and faith traditions, our Multifaith Spiritual Advisors here to listen, encourage and develop each person's unique spiritual or faith journey. We also have <u>prayer rooms and locations</u> on most campuses.

**Contacts** – are individual to each campus.

W: http://www.latrobe.edu.au/students/support/wellbeing/chaplaincy

#### **Indigenous Support**

- One-on-one tuition
- Group support
- Exam preparation

E: indigenous enquiries@latrobe.edu.au T: (03) 9479 3464

W: http://www.latrobe.edu.au/indigenous/contact

#### That's What SHE Said - student blog

Find us in the **Student Update** emailed each week at <a href="https://www.latrobe.edu.au/mylatrobe/">https://www.latrobe.edu.au/mylatrobe/</a>
SHE students share their experience and tips on how to make the most of university. Stay informed about social, academic and administrative issues with blogs like:

- Tips to better assessments
- Studying online
- Peer Mentor Meetups
- One for the parents who study
- Finding my motivation





#### **SHE Peer Mentor Program**

The SHE Peer Mentor Program can help **connect you with discipline/course.** Connecting with other students provides a support.

SHE Peer Mentors host weekly online Meetups throughout

You can drop in and get help with:

- Tips and tricks for studying and getting involved at the can't be together on campus
- Building friendships with your cohort and sharing your experiences (the positive and the challenging!)
- Your personal skill set to complement your academic studies

Check out the Peer Mentor LMS https://lms.latrobe.edu.au/course/view.php?id=86178



**your peers** from the **same** network for advice and

the semester.

University, even when you

## Health and Wellbeing - Latrobe.edu.au/wellbeing

\*\*All of our services are available face-to-face, over the phone or via video conferencing (Zoom)\*\*

#### **Wellbeing Connect and Wellbeing Check-ins**

Wellbeing Connect is complex case management for student experiencing extreme difficulty. Staff can refer <a href="here">here</a>

Wellbeing Check-ins are initiative during COVID19 designed to provide extra Wellbeing support recognising the impact the pandemic has had on all aspects of student's lives. Request a check-in call from our Wellbeing team during the pandemic, or if student's are not sure what support you need.

Request a call-back online at latrobe.edu.au/students/support/wellbeing/wellbeing-support-during-covid19

#### **Student Health and Wellbeing Resource Centre**

First point of call for student health and wellbeing needs. Drop-in or give us a call to find out about our student wellbeing services or more information for your students. Students can get help to make appointments, access community support and resources, attend our information drop-in sessions and workshops. Find information on:

- Breastfeeding facilities
- Food and material collection
- Community wellbeing services
- La Trobe wellbeing services
- Hiring of scooters
- Advice and referrals

#### Location and opening hours

- Monday to Friday, 10.00 am–4.00 pm
- Location: Peribolos East Ground Floor (PE101), Bundoora Campus
- Phone: (03) 9479 1085
- Email: <u>respect@latrobe.edu.au</u>

#### **AccessAbility Hub**

If students are living with a mental health condition, ongoing medical condition or disability (including physical, neurological, intellectual, sensory, acquired brain injury, or specific learning difficulty), then **AccessAbility Advisors** can assist them to meet the requirements of your course.

They may also be eligible to register for services if you are caring for someone living with any of these conditions, or someone who is frail and aged.

They can help with:

- advice on managing university study
- implementing reasonable adjustments, including alternate assessment/exam arrangements, assistance negotiating extensions, placement arrangements etc.
- information on assistive technology options.

#### Contact:

- Registration link
- Phone: +61 (0) 3 9479 2900
- Email: access.ability@latrobe.edu.au
- Offices vary by campus

#### **Safer Community**

Previously known as *Speak Up*, <u>Safer Community</u> is a free, confidential support service for students who experience something concerning, threatening, inappropriate or uncomfortable.

They provide expert advice and information, will offer you options and referrals to help resolve your concerns and keep yourself and others safe. About Safer Community

- W: <a href="https://www.latrobe.edu.au/students/support/wellbeing/services/safer-community">https://www.latrobe.edu.au/students/support/wellbeing/services/safer-community</a>
- Click here for Safer Community resources and to view what types of issues they deal with

You can contact Safer Community via email <u>safercommunity@latrobe.edu.au</u> or call them during business hours on (03) 9479 8988. On Campus: Bundoora PE level 2 and Bendigo SSC

#### **LGBTIQA+ Health and Wellbeing**

- Specialised queer counsellors
- Group session and support, <u>Queer Chat</u>
- Program support and events such as Pride Week, IDAHOBIT
- LGBTIQA+ resources

Contact - Book an appointment directly, or email counselling@latrobe.edu.au

#### **Indigenous Health and Wellbeing**

- Social, emotional health and wellbeing support for Indigenous students
- Group sessions, program management and campaigns
- Culturally appropriate counselling service

Contact - Book an appointment directly, or email Indigenous.wellbeing@latrobe.edu.au

#### Men's Health and Wellbeing

- Counselling support for men
- Workshops and peer supported groups
- Special events ie, Movember and Men's Health Week
- Frank: The Men's Wellbeing Blog

Contact - Book an appointment directly, or email menswellbeing@latrobe.edu.au.

#### **Counselling**

Free and confidential short-term counselling

- Individual counselling via face to face, phone or Zoom
- Specialist sessions for Men's Wellbeing, LGBTIQA+ and Indigenous students

**Appointment Booking** - Follow this link to find your campus, and your counselling contact details or type in <a href="https://www.latrobe.edu.au/students/support/wellbeing/counselling/contacts">https://www.latrobe.edu.au/students/support/wellbeing/counselling/contacts</a>

After-hours crisis line - call: 1300 146 307, or text: 0488 884 100

(5pm - 9am weekdays and 24 hours weekends and public holidays)

**Emergencies** – if there is a risk of imminent harm to you or someone else,

call Emergency Services on 000

**Psychiatric Triage** (Crisis Assessment and Treatment teams)

Campus	Service	Phone contact
Bundoora	Psychiatric Triage – North East	1300 859 789
Bendigo	Psychiatric Triage – Loddon Campaspe/Southern Mallee	1300 363 788
Shepparton	Psychiatric Triage – Goulburn & Southern	1300 369 005
Albury/Wodonga	Psychiatric Triage – North/Eastern Hume	1300 881 104
Mildura	Psychiatric Triage – Northern Mallee	1300 366 375

- Lifeline 24/7 telephone counselling on 13 11 14, or https://www.lifeline.org.au/crisis-chat/
- (7pm 4am, 7 days)
- Suicide line 24/7 telephone counselling on 1300 651 251
- Suicide Call Back Service 24/7 telephone counselling on 1300 659 467 or go to
   https://www.suicidecallbackservice.org.au/phone-and-online-counselling/ for 24/7 text-based online counselling
- Kids Helpline available if you are 25 years old or younger.
- 24/7 telephone counselling on **1800 55 1800** or contact them via email counselling on <a href="https://kidshelpline.com.au/get-help/email-counselling">https://kidshelpline.com.au/get-help/email-counselling</a> and web chat

#### **Student Advising**

The Student Advising team offer individualised, case management support for students, providing them with one main point of contact within the university. Our advisors act as key mentors for students, helping to guide their transition into university and enable them to develop a sense of connection and community with La Trobe University. The advising team also assist students to clarify career goals, develop a sustainable educational plan, connect with appropriate support mechanisms, develop positive learning and help-seeking behaviours and build resilience, motivation and self-efficacy.

- Regional Senior Support Advisors work in partnership with students attending the campuses of Albury Wodonga, Bendigo, City, Mildura, Online and Shepparton as well as those in the Tertiary Enabling Programs and diploma programs to provide enriched and supportive experiences that enable student success.
- The **Senior Support Advisor**, Scholarships provides proactive outreach, advice and support to identified groups. This cohort includes students on Equity and Access Scholarships, Care Leavers and Military Veterans.
- Academic Advisors support commencing (first year) undergraduate commencing students in cohorts to develop self-regulation through developmental advising and specialised course advice.

Appointments can be booked via the <u>La Trobe Career Hub</u>.

# That's what SHE said

A Science, Health and Engineering blog written by SHE students

Find us in the **Student Update** emailed each week at <a href="https://www.latrobe.edu.au/mylatrobe/">https://www.latrobe.edu.au/mylatrobe/</a>

SHE students share their experience and tips on how to make the most of university. Stay informed about social, academic and administrative issues with blogs like:

- Mindfulness
- Studying online
- Peer Mentor Meetups
- One for the parents who study
- Finding my motivation



# The SHE Peer Mentor Program

The SHE Peer Mentor Program can help **connect you with your peers** from the **same discipline/course.** Connecting with other students provides a network for advice and support.

SHE Peer Mentors host weekly online Meetups throughout the semester.





You can drop in and get help with:

- Tips and tricks for studying and getting involved at the University, even when you can't be together on campus
- Building friendships with your cohort and sharing your experiences (the positive and the challenging!)
- Your personal skill set to complement your academic studies

Check out the Peer Mentor LMS <a href="https://lms.latrobe.edu.au/course/view.php?id=86178">https://lms.latrobe.edu.au/course/view.php?id=86178</a>