



Report writing: Cohesion, interpretation and critique

COMP90049 Introduction to Machine Learning

Ariana Henderson

Learning Strategist, Academic Skills



What are your academic writing pain points?

The task requires you to 'critically assess'. What does it mean to be 'critical'?

Writing with clarity, focus and academic style

In **COMP90049 Introduction to Machine Learning**, you'll be assessed on your technical report writing skills. It's therefore vital that you write in a clear, succinct and academic style in order to clearly communicate your analysis.

Three key academic writing techniques can help you to get your message across. Choose the one skill you most want to learn more about, or progress through all three areas. Soon, you'll be communicating your research in a clear, succinct and accessible way. Let's get started!

I want to:

Develop an academic writing style

Academic writing in English has a distinctive style – it is formal and uses particular language norms that you need to learn.

This section includes:

- A short academic style video
- An academic vocabulary quiz to test your skills

[GO TO THE ACADEMIC STYLE MATERIALS](#)

Connect my ideas and demonstrate my critical thinking

Being able to write in a critical and interpretive way ensures you go beyond simply describing what you've done or read to truly highlighting the significance of it in the context of your project. Cohesive devices help you to show the reader how your ideas connect.

This section includes:

- A short video on cohesive, critical and interpretive writing
- Tips and examples of functional language and connecting words you can use in your writing

[GO TO THE CONNECTING IDEAS AND CRITICAL ANALYSIS MATERIALS](#)

Write with clarity and focus (optional extension)

Keep your academic writing clear for your audience by learning how to structure sentences and paragraphs to achieve direction and focus.

This section includes:

- Tips and examples of clarity and focus techniques in practice
- A short clarity and focus video

[GO TO THE CLARITY AND FOCUS MATERIALS](#)



Assignment 3: Toxicity Classification in Online Comments

The goal: critically assess the effectiveness of various Machine Learning classification algorithms on the problem of determining a comment's toxicity, and to express the knowledge that you have gained in a technical report.

Task type

Anonymised report of 2000 words in length (+/-10%), excluding in-text references

Introduction: a short description of the problem and data set, and the research question addressed

Topic / function

Literature review: a short summary of some *related* literature, incl. min. 2 relevant research papers

What do others say?

Method: Identify the newly engineered feature(s), and the rationale behind including them (optional); Explain the methods and evaluation metric(s) you have used (and why you have used them)

How did I do this?

Results: in terms of evaluation metric(s) and examples

What did I find?

Discussion / Critical Analysis: provide reasons for relative performance, based on the research question and your understanding of the subject materials

What does it mean?

Conclusion: demonstrate identified knowledge

What do I now know?

Bibliography: incl. Jigsaw/Conversion AI + other related work (min 2) – APA 7 recommended

Evidence

What are your academic writing pain points?

The task requires you to 'critically assess'. What does it mean to be 'critical'?

Descriptive and interpretive writing

1. The **descriptive** / **reporting** element - 'the **catalogue**'

- **what** happened - describe
- **what** the author has discussed, found, did
- an **account** of the topic

2. The **interpretive** / **critical** element - 'the **dialogue**'

- **asks** & **answers** questions
- **analyses, explains** and **interprets** the information
- **synthesises** information to develop a point of view





Questions to ask yourself

What happened? What do I/we know? (describing, assessing, context)

What has changed? (gap btw expectation and actual)

*What worked? **Why?** (strengths)*

*What didn't? **Why?** (limitations)*

What have I learned? (understandings)

What might we do differently? (learning)

How can we get there? (development)

What do I know now? (conclusions)

Critique starts here



Functional language

Content language – topical, technical, discipline-specific (e.g. toxicity, algorithm, data)

Functional language – cohesive-linking-highlighting

Therefore, however, first, next, for example, though, and, which

This is important because ... This shows that... This tells us ...

Cohesion – linking and highlighting

2 Related Work

Several studies have formerly investigated hate speech using neural network techniques; Badjatiya et al., used extensive experiments with multiple deep learning architectures to learn semantic word embedding to handle toxic comments identification [13]. In another study, sentiment analysis model of YouTube video comments, using a deep neural network was proposed that led to 70-80% accuracy [14]. Also, general use of different types of neural network methods for comment classification have been extensively used in recently published literature [6,15,16,17]; however, these approaches only addressed some of the task's challenges while others still remain unsolved. Furthermore, Farag, El-Seoud [18] reported that extensive numbers of literature have shown that supervised learning techniques have been the most frequently used methods for cyber-bullying detection. Nevertheless, other non-supervised techniques and methods have recognized to be operative on cyber-bullying recognition. Also, Karlekar and Bansal [19] reported an increased number of personal sexual harassment and abuse that are shared and posted online. In this study, authors presented the task of automatically categorizing and analyzing various forms of sexual harassment, based on stories shared on the online forum SafeCity and used labeling levels of groping, ogling, and commenting; their results indicated that single-label CNN-RNN model achieves an accuracy of 86.5.

One of the main undiscovered issues is how to identify algorithms that are able to implement high sensitivity in detection of toxic comments. Of course,



Functional language – highlighting and interpreting

This shows* that ... (*suggests tells us / reveals / highlights / points to / implies)

This is important / significant because...

This is worth noting as / because it ...

This calls attention to ...

This can be illustrated by ...

What this means* is ... (*shows / tells us / reveals ...)

... tells us that ...

... importantly* this suggests that ... (*crucially, significantly)

... which points to / suggests the need for ...

... which is vital / crucial as it ...

... which shows / illustrates that ...

... which is significant as it ...

... meaning that ...

... illustrating / pointing to the need for ...

Critiquing past work

Deficit critique: e.g.

A question that needs to be asked, however, is whether ...

A weakness with this argument, however, is that ...

One of the limitations with this explanation is that it ...

This approach fails to take ... into account.

The study would have been more useful if it had ...

The findings may have been more applicable if ...

solutions

Strengths critique: e.g.

In this milestone* study, Smith found ...

This was significant / influential in that it ...

Moss (2013) correctly argues that ...

Ling (2015) makes the very valid point that ...

** significant, ground-breaking,
detailed, useful, thorough,
impressive, wide-ranging,
comprehensive, pivotal*

Find more useful phrases
here:

<http://www.phrasebank.manchester.ac.uk/>



Cohesion - linking

<https://students.unimelb.edu.au/academic-skills/explore-our-resources/developing-an-academic-writing-style/connecting-ideas-in-writing>

Short link: <https://go.unimelb.edu.au/89si>

Search for: 'Connecting ideas in writing Academic Skills UniMelb'



Addition To add an idea	Additionally, and, also, apart from this, as well (as), in addition, moreover, further, furthermore.
Condition to provide a condition	If, in that case, provided that, unless.
For comparison To show how things are similar	Correspondingly, equally, for the same reason, in a similar manner, in comparison, in the same way, on the one hand, similarly.
For contrast To show how things are different	Alternatively, although, but, conversely, despite, even so, even though, however, in contrast, in spite of, instead, on the contrary, contrary to, nevertheless, nonetheless, notwithstanding, on the other hand, rather, still, though, yet, whereas, while.
For emphasis To put forward an idea more forcefully	Again, in fact, interestingly, indeed, it should be noted (that), more important(ly), most importantly, to repeat, (un)fortunately, unquestionably.
For illustration To provide examples	A further instance of this is..., an example of this is..., for example, for instance, such as, thus, as follows.
For restatement For rephrasing statements	In other words, more simply, namely, simply put, to put it differently / another way, such as, that is.
The cause of things To attribute the reasons for something occurring	A / the consequence of, because, due to, for, the effect of ..., since, the result of ...

Sentence length

If the sentences are **short and related**,
then join them

Less than 8 words in the sentence (1 line in a Word doc)	Very short sentence	OK, but don't use too many of these; writing can appear short and choppy, hard to read.
8-15 words (1 - 1.5 lines)	Short	✓ OK combined with 15-25.
15-25 words (2 - 3 lines)	Average number per sentence.	✓✓ This length will form the majority of your sentences.
25-35 words (3 - 4 lines)	OK, but becoming long.	✓ Can be effective if the point is worth making in a single sentence; make sure you have control over the idea(s) though and use appropriate connecting / linking words.
35-45 words (4 - 5 lines)	Long	Consider breaking up the idea(s) into two or more shorter sentences.
More than 45 words (+ 5 lines in a Word doc)	Too long	✗ Avoid this; the point gets lost, control over the language is lessened and chances for errors in form and logic increase.

If the sentence is 5 lines (and not a list),
consider breaking it up

APA 7 - Using quotes

When should we use a quote?

- ✓ When **phrasing is unique** and cannot be paraphrased without changing the meaning.
- ✓ When wording is particularly **memorable, witty, succinct** or appropriate.
- ✓ When words create **a particular effect** or **reveal something** about the author.
- ✓ When there is a large amount of **fixed vocabulary**, detail or evidence that is difficult to paraphrase.

Ravi et al. (2019) suggest these results are affected by the “imbalance in the frequency of the data towards non-toxic comments” (p. 11). The implications of this are...



APA 7 - Paraphrasing

What is the difference between a summary and a paraphrase? How are they similar?


- ✓ The vocabulary is different
- ✓ The sentence structure is different
- ✓ The meaning is the same

Toxic comments in online forums can lead people to “stop expressing themselves and give up on seeking different opinions” (Ravi et al., 2019, p.24).


Some users no longer contribute to online forums, and in turn stop engaging with the diverse views of others to avoid harassment (Ravi et al., 2019).



re:cite

**Re:cite**


Referencing



Re:cite

Helping you manage your citations


Referencing styles



Guides on how to reference in the styles commonly used at the University


View >

Referencing software




Download reference management software or find a citation generator

View >

**Re:cite**

Re:cite > Referencing styles



Referencing

The Library's expert guides to referencing styles: examples of how to cite different resources in your bibliography

AGLC

AGLC

The Australian Guide to Legal Citation (AGLC) is a footnote/reference system.


APA 7

APA 7

The American Psychological Association (APA 7th) style is widely used in the social sciences and other fields, such as education, commerce and nursing.

Harvard

MLA

**Re:cite**

Referencing styles > Referencing software > Guides and tutorials > Help > Search

Re:cite > Referencing styles > APA 7

APA 7

APA 7

General style notes

Architectural drawings and plans

Books and book chapters, theses, online dictionaries and encyclopedias

Conference presentations, proceedings and poster sessions

Datasets

Figures and images (graphs, flow charts, charts, illustrations, drawings)

Indigenous knowledge or oral traditions

Journal and magazine articles

Manuscripts and advance online publications

Maps

Music Scores

Newspaper articles

Non-English sources

Patents and standards

Personal communications (interviews, letters, emails)

PhD and Master's theses

Reports (Government, Company, Annual and Industry)

General style notes

Before selecting a referencing style check with your tutor, lecturer or supervisor for the style preferred by the School or Department.

Introduction to the style

The APA style is widely used in the social sciences and other fields, such as education, commerce and nursing.

APA is an author-date style with two key components:

1. Citations in the text, including the name of the author and year of publication.
2. Reference list at end of the paper, alphabetically listing of all references used in the text.

The purpose of referencing is to acknowledge the source and to enable the reader to trace the sources. Reference data must be accurate, including specific page numbers or specific URLs (web addresses), when otherwise it might be difficult to retrieve the original text.

Access to the full style manual

This guide is based on the 7th edition of the APA's style rules which are set out in the Publication Manual of the American Psychological Association, 7th edition.

For more information:

1. Information about In-Text Citations and References are also available on the APA Style website.
2. APA Style Blog <https://apastyle.apa.org/blog>

In-text citations



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Referencing and using sources

Effectively integrate and appropriately cite sources in your assessment tasks.

Referencing resources

<p>Quick read</p> <p>Referencing essentials</p> <p>A step by step approach to help you manage and acknowledge sources effectively.</p> <p>Referencing</p>	<p>Online learning module</p> <p>Using sources</p> <p>You've done the research, but how do you integrate it seamlessly into your academic writing?</p> <p>Referencing</p>	<p>Online learning module</p> <p>Referencing</p> <p>Why do we reference? What should be referenced? How can we apply an appropriate referencing style?</p> <p>Referencing</p>
<p>Video</p> <p>Paraphrasing ideas in your writing</p> <p>This video will show you how to best paraphrase ideas from other sources in your academic writing.</p> <p>Referencing</p>	<p>Quick read</p> <p>Using sources in assessments: voice in academic writing</p> <p>Effectively combine your ideas with those of other writers.</p> <p>Referencing</p>	<p>Quick read</p> <p>Incorporating music examples</p> <p>Music writing tasks often require you to support your arguments and ideas with examples from musical scores, which can help illustrate your points clearly and succinctly.</p> <p>Referencing Essay writing</p>
<p>Quick read</p> <p>Writing an annotated bibliography</p>	<p>Quick read</p> <p>Using APA 7</p>	<p>Quick read</p> <p>Using sources: checklist</p>



Strategies: editing

- Print out*, edit hard copy, read deliberately, aloud
(* alternatively, convert to PDF or change the font)
- Try a 'reverse outline' or 'topic sentence paragraph'
- Intensive edit 'sprints' 15-20 mins, sections of work
- Have a break from work before editing
- Edit when fresh
- Edit for one aspect of writing at a time
- Ask a critical reader: outside of discipline OK



Assignment 3: Stage II

Write two reviews, responding to three 'questions':

- Briefly summarise what the author has done in one paragraph (50-100 words)
- Indicate what you think that the author has done well, and why in one paragraph (50-100 words)
- Indicate what you think could have been improved, and why in one paragraph (50-100 words)

Why is feedback so important?

“Feedback is one of the most powerful influences on learning and achievement”
(Hattie & Timperley, 2007, p. 81).

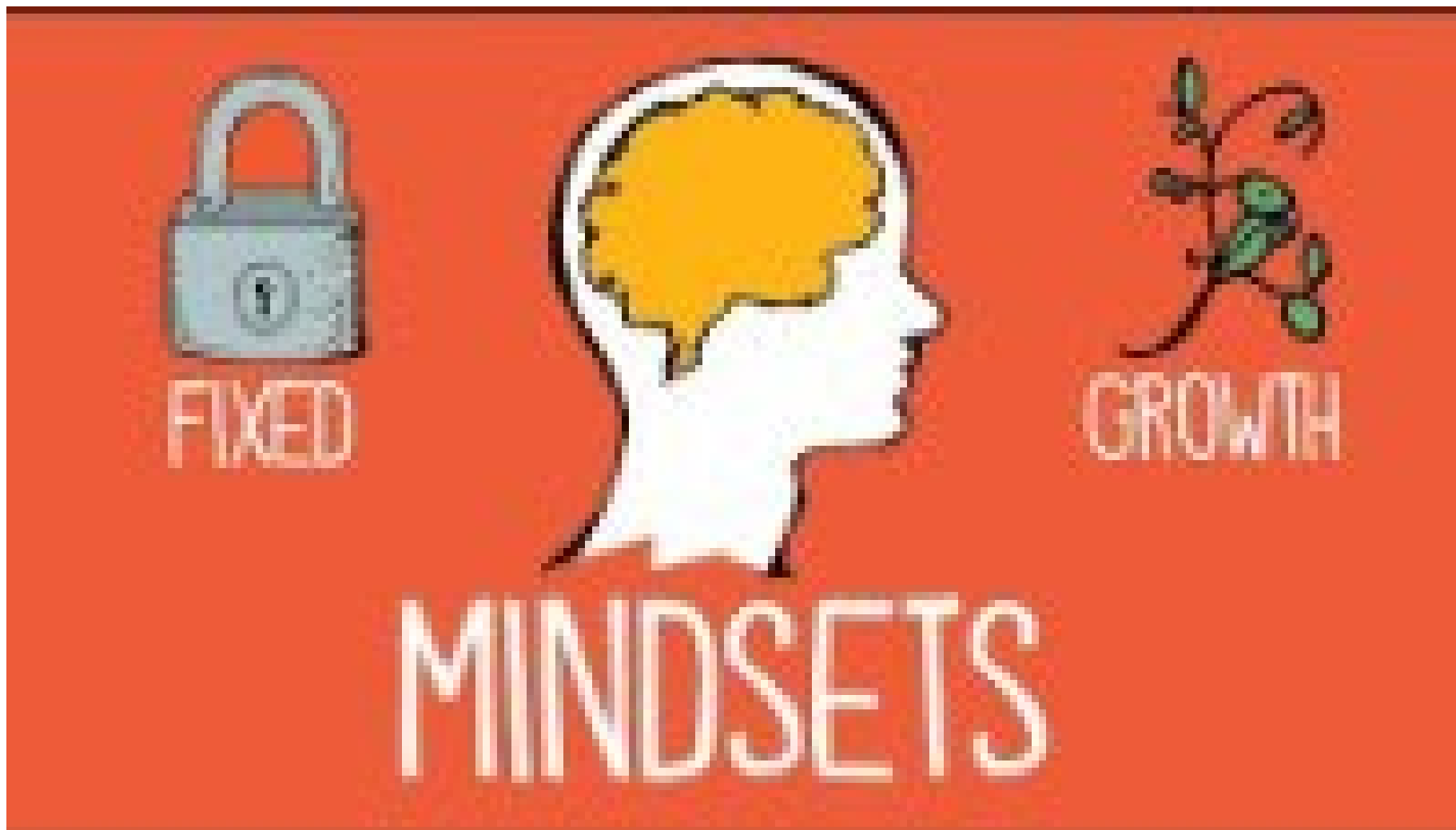
What am I
doing well?

What do I
need to
work on?

Where to
next?

Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, 77(1), 81–112.
<https://doi.org/10.3102/003465430298487>

Developmental approach to feedback



How can you apply a growth mindset to giving and receiving feedback in this subject?

Giving feedback

- ✓ Be honest
- ✓ Focus on the report – not the person
- ✓ Be specific
- ✓ Be realistic



Assignment 3: Stage II

Write two reviews, responding to three 'questions':

- Briefly summarise what the author has done in one paragraph (50-100 words)
- Indicate what you think that the author has done well, and why in one paragraph (50-100 words)

The strengths of the writing to me are ... What is clear about the paper is ...

You have ... and this is evident in the way you ... because ...

- Indicate what you think could have been improved, and why in one paragraph (50-100 words)

The writing could improve in the following areas ... You could ... It needs more ...

You could try to ... Think about having more of ... / less of...



Receiving feedback

- ✓ Read carefully
- ✓ Acknowledge your emotional reaction
- ✓ Address feedback in a calm way
- ✓ Be open to other ways of thinking
- ✓ View feedback objectively and critically
- ✓ Treat feedback as a learning opportunity





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Learning from feedback

ON THIS PAGE

[How should I engage with feedback?](#)[What if I don't understand the feedback?](#)

[How can a growth mindset help me engage with feedback?](#)[Manage your feelings about feedback](#)

[Related resources](#)

Feedback isn't simply about someone telling you what you did right or wrong – it's a process in which you reflect on your past performance and take action to improve future performance.

As students and professionals, we need to learn to appreciate feedback and understand our role in the process; manage our feelings and adopt a growth mindset; and develop capacity to evaluate our own work.



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PLAY LIVE RADIO

9:00AM to 10:00AM
Life Matters ...

FULL EPISODE

The art and science of receiving feedback

Broadcast Sun 14 Aug 2022 at 1:30pm

A composite image showing a woman on the left shouting into a pink megaphone and a man on the right listening intently with his hand to his ear. The background is a light blue and white geometric pattern.

This working life (ABC Podcast) → The art and science of receiving feedback

<https://www.abc.net.au/radionational/programs/this-working-life/this-working-life/101322906>

Q & A

What do you want to ask
about your upcoming
assessment?

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English language development



Online resources & communities

Plan your semester



Semester Planner

SEMESTER 2 2022

	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN														
JULY					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
	personal preparation with important student deadlines							WINTER BREAK							WINTER BREAK							WINTER BREAK							WINTER BREAK													
AUGUST	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31											
	WEEK 1							WEEK 2							WEEK 3							WEEK 4							WEEK 5							WEEK 6						
SEPTEMBER					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
	WEEKS							WEEK 7							WEEK 8							WEEK 9							WEEK 10							WEEK 11						
OCTOBER					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30								
	WEEK 12							WEEK 13							WEEK 14							WEEK 15							WEEK 16													
NOVEMBER	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30											
	WEEKS							WEEK 17							WEEK 18							WEEK 19							WEEK 20													
DECEMBER					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
	WEEKS							WEEK 21							WEEK 22							WEEK 23							WEEK 24													

WINTER BREAK

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