



24/7 Instant Feedback on Writing: Integrating AcaWriter into your Teaching + ChatGPT!

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WELCOME & INTRODUCTION!

AGENDA

- Introduction: academic writing can be hard to learn (and teach!)
- Learning Context 1 (Law Essay & Business Report)
- Learning Context 2 (HDR Research Abstracts/Summaries)
- Learning Context 3 (Critical Reflection)
- The rise of Generative AI
- Discussion
- Follow up with us to discuss next steps...

AcaWriter now a UTS-wide tool

May 2020 announcement to students:



Get instant feedback on your academic writing

Introducing AcaWriter, an online tool that uses artificial intelligence to give you detailed feedback on your writing. Developed in-house at UTS, AcaWriter can help you express your ideas clearly in formal academic language – and is available to help 24/7.

[Learn how it works](#)

Academic Writing Analytics: a long-term R&D project in CIC

<https://cic.uts.edu.au/tools/awa>

Academic Writing Analytics (AWA) Project

The Challenge How does AcaWriter work? **How is AcaWriter used @UTS?**

How do I get started? Underpinning research

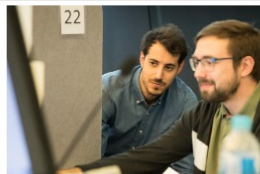
Access AcaWriter: Current and Future Options

How is AcaWriter used @UTS?

On the orientation website is a section with examples of how AcaWriter has been integrated into UTS degree programs, for instance...



Improving pharmacy students' reflective writing



Improving Business Report Writing (Accounting)

Research publications

Learn more from the publications and replays below, visit our [Writing Analytics blog](#), and browse the **Events** menu to see the workshops we convene, where many of the world's leading researchers meet to reflect on the state of the art and future of automated writing assessment.

(overview of 5 years research, joint with academics from Law, Accounting and Pharmacy) Knight, S., Shibani, A., Abel, S., Gibson, A., Ryan, P., Sutton, N., Wight, R., Lucas, C., Sándor, Á., Kitto, K., Liu, M., Mogarkar, R. & Buckingham Shum, S. (2020). [AcaWriter: A learning analytics tool for formative feedback on academic writing](#). *Journal of Writing Research*, 12, (1), 141-186.

(insights into the academics' experience) Shibani, A., Knight, S., Buckingham Shum S. (2020). [Educator Perspectives on Learning Analytics in Classroom Practice](#). *The Internet and Higher Education*, Volume 46. Available online 20 February 2020.

Buckingham Shum, S. and Lucas, C. (2020). [Learning to Reflect on Challenging Experiences: An AI Mirroring Approach](#). Proceedings of the *CHI 2020 Workshop on Detection and Design for Cognitive Biases in People and Computing Systems*, April 25, 2020. [slides]

Shibani, A. (2019). [Augmenting pedagogic writing practice with contextualizable learning analytics](#). *Doctoral Dissertation*, Connected Intelligence Centre, University of Technology Sydney, AUS.

(students' responses to reflective writing feedback) Lucas, C., Gibson, A. and Buckingham Shum, S. (2019). [Pharmacy Students' Utilization of an Online Tool for Immediate Formative](#)

WRITING IS HARD



WRITING IS HARD



AcaWriter aims to help...

- Students need **precise, timely feedback** on academic writing to learn how to ‘make their thinking visible’
- **Humanly impossible** to provide that to all students, 24/7
- AcaWriter is a website providing **instant formative feedback (not grading)** on “rhetorical moves” in writing
- Two types of writing genres are supported
 1. **Analytical Writing**
e.g. Essay, Research Paper Introduction or Abstract
 2. **Reflective Writing**
e.g. Learning Journal, Reflective Essay, Project Review

Rhetorical moves in analytical writing

A rhetorical move is “a discursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse” (Swales, 2004).

Example

Little research exists on how automated feedback impacts students' writing.

Recent studies indicate that the Earth's climate is changing rapidly.

This approach fails to address the issue of bullying outside the classroom and schools.

Stormwater pollution is a significant environmental issue that arises from intense urbanisation.

This framework provides a new approach to tackling childhood obesity.

These results are unexpected considering the device was only a prototype.

Futsal was introduced in 1930 and its popularity is growing worldwide.

We show how the constructs included in the model link to relevant research.

Rhetorical moves in analytical writing

A rhetorical move is “a discursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse” (Swales, 2004).

Function	Example
Raising a question or missing knowledge.	Little research exists on how automated feedback impacts students' writing.
Consensus or background knowledge	Recent studies indicate that the Earth's climate is changing rapidly.
Contrast, disagreement, tension, inconsistency	This approach fails to address the issue of bullying outside the classroom and schools.
Emphasis on significant, important ideas	Stormwater pollution is a significant environmental issue that arises from intense urbanisation.
Novelty, improvement	This framework provides a new approach to tackling childhood obesity.
An unexpected outcome	These results are unexpected considering the device was only a prototype.
A trend, growth, pattern or tendency	Futsal was introduced in 1930 and its popularity is growing worldwide.
Authors' goals, contribution or conclusion	We show how the constructs included in the model link to relevant research.

Rhetorical moves in analytical writing

A rhetorical move is “a discursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse” (Swales, 2004).

Rhetorical move	Function	Example
Question	Raising a question or missing knowledge.	Little research exists on how automated feedback impacts students' writing.
Background	Consensus or background knowledge	Recent studies indicate that the Earth's climate is changing rapidly.
Contrast	Contrast, disagreement, tension, inconsistency	This approach fails to address the issue of bullying outside the classroom and schools.
Emphasis	Emphasis on significant, important ideas	Stormwater pollution is a significant environmental issue that arises from intense urbanisation.
Novelty	Novelty, improvement	This framework provides a new approach to tackling childhood obesity.
Surprise	An unexpected outcome	These results are unexpected considering the device was only a prototype.
Trend	A trend, growth, pattern or tendency	Futsal was introduced in 1930 and its popularity is growing worldwide.
Summary	Authors' goals, contribution or conclusion	We show how the constructs included in the model link to relevant research.

LEARNING CONTEXT 1

Law essay writing

Law essay context – Feedback tuning

Analytical Report
Feedback
Examples

The analytical report highlights salient rhetorical moves AcaWriter identified in your essay for reflection. For more specific feedback, go to the Feedback tab.

Rhetorical Moves

<ul style="list-style-type: none"> S Summarises or signals the authors goals E Emphasis to highlight key ideas C Contrasting idea, tension or critical insight S Surprising or unexpected finding T Trend or tendency related to ideas 	<ul style="list-style-type: none"> P Perspective or stance N Novel improvements in ideas B Background information and previous work Q Question or gap in previous knowledge
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Technology is an enabler in providing greater access to justice through its ability to connect people with legal needs to legal assistance, information, and advice. T With the increasing popularity of internet-enabled hand held devices and laptop computers, there is a tendency to assume that even the socio-economically vulnerable in our society have access to technology and the skills to use online services with confidence. This is not necessarily the case.

Examples of the application of technology to provide legal information and assistance include case studies, guides and virtual legal advice clinics. S C The 2012 Review does not address the role of courts in serving the legal needs of the community. The court system is not regarded as a part of the wider legal assistance services. C This omission questions the role of the court in facilitating access to its services, including dispute resolution and trials. It also identified uses of technology to expand the delivery of services, many of which are transferable to an online court. These services include e-access for remote communities, availability outside of business hours, interactive processes and virtual appearances. S This essay will discuss uses of technology to expand the delivery of services, many of which are transferable to an online court.

Analytical Report
Feedback
Examples

The rhetorical moves highlighted by AcaWriter are used in good academic writing but use them with caution according to the context. Remember, AcaWriter does not really understand your writing, the way people do. You may have written beautifully crafted nonsense - that's for you to decide! Moreover, writing is complex, and AcaWriter will get it wrong sometimes. If you think it got it wrong, that's fine - now you're thinking about more than spelling, grammar, and plagiarism.

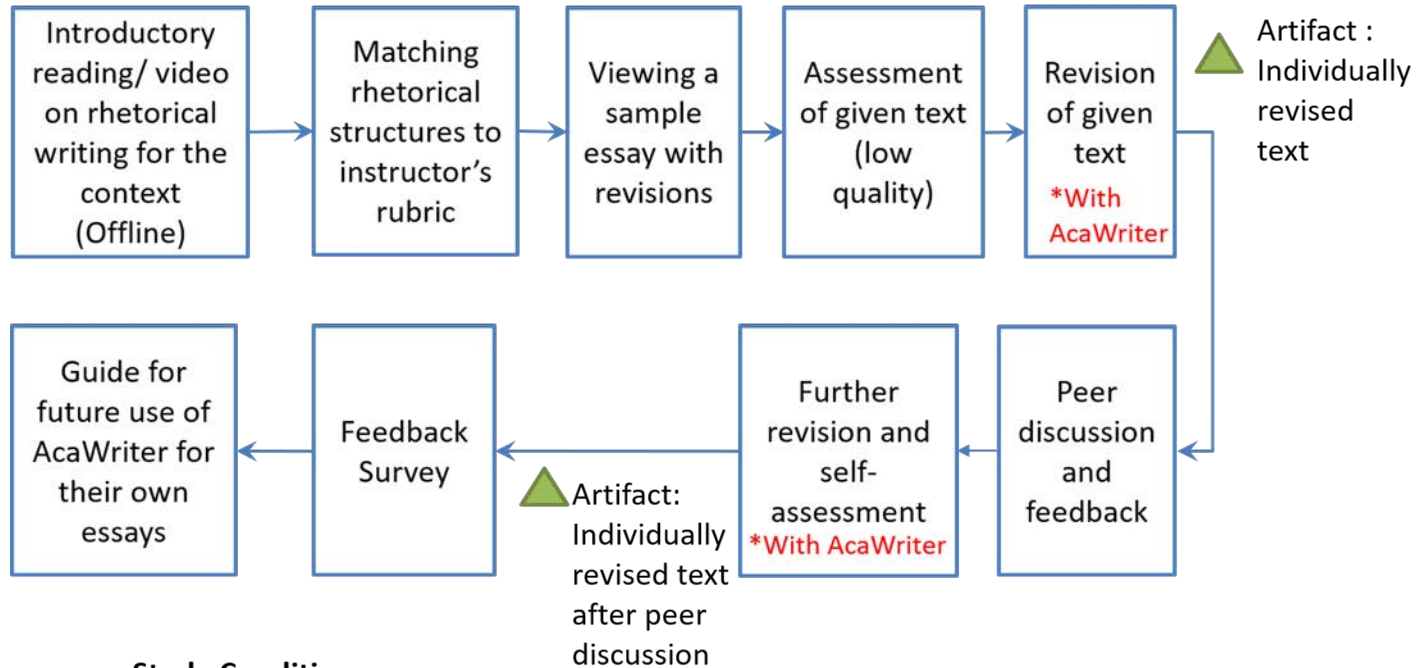
I It looks like you are missing a Background move in your text, which highlights background information and previous literature on the topic. Try including linguistic cues to make this move clearer in your writing. Examples: The past decade has seen, Recent studies indicate ... ,It is generally accepted that..., the concept has previously been thought to be...

I If there is a key idea you did like to emphasises in your essay try including linguistic cues to make this move clearer in your writing. Examples: It is important to note that, It makes a proper understanding important...

Law essay – customising Tab 3 to your students and rubric

Analytical Report	Feedback	Examples
<p>A list of sample sentences with rhetorical moves, mapped to your essay assessment rubric is provided below:</p>		
SAMPLE SENTENCE	ESSAY ASSESSMENT RUBRIC ELEMENT	ACAWRITER MOVE
<p>The concept of good faith has previously been thought to be a work in progress in Australia.</p>	<p>Engagement with the law and scholarly literature</p>	<p>Background</p>
<p>This article will trace the origins of good faith and its development in the common law. This essay contains three parts. The first part will talk about the origins of good faith.</p>	<p>Statement of thesis, Essay plan</p>	<p>Summary</p>
<p>However, where the obligations are found in statute and they conflict with contractual obligations, it is important to note that the former must prevail.</p>	<p>Identification of relevant issues, Critical analysis and original insight</p>	<p>Contrast, Emphasis</p>

Student Writing Activity (a learning design pattern you can adopt/adapt)



Study Conditions:

- *With automated feedback from AcaWriter for revision
- Without automated feedback from AcaWriter for revision

Accounting students – *Tab 3* tuned to the assignment

Analytical Report

Feedback

Tips

Here are certain rhetorical moves you can look for in your report and example sentences for your reference.

Organisational analysis

Where does your report provide contextual information about the organisation's objectives, strategy, structure and activities?

Defining performance

Where does your report provide your perspective **P** about how to define performance or success for the organisation? Where does your report provide emphasis **E** to highlight the most important aspects of performance for the organisation?

Justification of your definition of performance

Where does your report provide convincing, persuasive justifications for your definition of performance by proposing novel **N** or critical insights, contrasting ideas or tension **C**? Where does your report justify your definition of performance with reference to prior work or background **B**?

Written communication

Where in your report do you use appropriate summary statements **S** to signal the content, sequence and goals of the report?

Acawriter	
Move	Sample Sentences
Summary	S This report defines performance for Nike Inc as a whole from the three main perspectives of economic, social and environmental performance.

Accounting students – *Tab 3* tuned to the assignment

Acawriter Move	Sample Sentences
Summary	<p>S This report defines performance for Nike Inc as a whole from the three main perspectives of economic, social and environmental performance.</p> <p>S This section will explain how sustainability can result in the achievement of organisational objectives and contribute to company success.</p>
Perspective, Emphasis	<p>P Importantly, research has suggested a link between stronger brand perception and customer loyalty.</p> <p>E Therefore, to effectively measure performance for the Canadian Head Office of Lululemon it is essential to consider how the transformational self-improvement ethos of the company is achieved by analysing non-traditional metrics.</p>
Background	<p>B Previous market analysis shows that Nike is the world's largest supplier of athletic shoes, equipment, and apparel.</p> <p>B Such an evaluation by a global organization has been observed previously.</p>
Contrasting ideas and Issues	<p>C These requirements maintain product quality as unethically produced garments could be of lower quality, damage its reputation and ultimately contradict the companys objective.</p> <p>C While the companys corporate mission is to maintain its market position as a leading brand for an active and mindful lifestyle, a holistic approach to defining performance is necessary given that Lululemons strength lies in its premium image</p>
Novelty	<p>N This closer connection with their customers allows Nike to create new ideas and convert them into products quicker while also being in touch with their demands.</p> <p>N Nike believes that through investing in employees and communities, they can inspire while also creating a new method of growth (Nike 2018c).</p>

Promoting deeper engagement with the feedback:

As part of the assignment, annotate the PDF with what AcaWriter seemed to get right, and what it missed or got wrong

Impact evidence:

<https://doi.org/10.1145/3506860.3506912>

(Later we'll see the Canvas module that scaffolds this)

Feedback with Annotations

What does 'performance' mean for Lululemon?

EXECUTIVE SUMMARY

(P) This provides background information about Lululemon

Lululemon Athletica ("Lululemon") is an athletic apparel brand that produces high-end products and has expanded globally since its establishment in 1998. Commercial performance is important for the company however Lululemon's success relies on providing a "consistent, high quality product and guest experience" (Lululemon Athletica 2017 p.5).

Therefore, performance for Lululemon can be defined by two factors:

1. producing high quality merchandise
2. continuous innovation

I INTRODUCTION

Lululemon is a premium fitness brand that designs and retails 'healthy lifestyle inspired' athletic apparel for women, men and children (Lululemon Athletica 2017). Lululemon is a commercial success as attested to in its current operation of 406 stores in over 12 countries. This global expansion has resulted in the continuous increase of net revenue in recent years, with FY17 seeing a 15% rise to \$2.3bn from FY16 (Lululemon Athletica 2017). **(P E)**

However, academic theory holds that while financial measures are important, organisational performance can be defined through a range of methods as organisations will have different objectives (Rasula, Vuksic & Stemberger 2012). **(E)** Therefore, to effectively measure 'performance' for the Canadian Head Office of Lululemon it is essential to consider how the transformational self-improvement ethos of the company is achieved by analysing non-traditional metrics. **(S)**

The report will first examine Lululemon's overall objectives and how the company achieves these through business strategies and activities. **(S)** Drawing from the company's objective, the report will then define performance for Lululemon using non-traditional metrics. Ultimately, the report will comment on why the aforementioned definition of performance is appropriate for Lululemon.

II ORGANISATIONAL ANALYSIS

Lululemon's organisational objective is to "produce products which create transformational experiences for people to live happy, healthy, fun lives" (Lululemon Athletica 2017 p.2). **(N)** This aim is achieved by a threefold competitive strategy of differentiation through quality, innovation and supply chain sustainability. These strategies are achieved through the company's corporate strategy of a single business with a vertical retail and distribution structure.

insight into what Lululemon does

Defining the perspective of Lululemon's performance

States the goal and focus of the report

LEARNING CONTEXT 2

HDR research writing

Adapting AcaWriter to the “CARS” model

Create A Research Space

Move 1	Establishing a research territory
Step 1	Claiming centrality and/or
Step 2	Making topic generalisation(s) and/or
Step 3	Reviewing items of previous research
Move 2	Establishing a niche
Step 1A	Counter-claiming or
Step 1B	Indicating a gap or
Step 1C	Question-raising or
Step 1D	Continuing a tradition
Move 3	Occupying the niche
Step 1A	Outlining purposes or
Step 1B	Announcing present research or
Step 2	Announcing principle findings or
Step 3	Indicating RA structure

Example AcaWriter feedback on an abstract

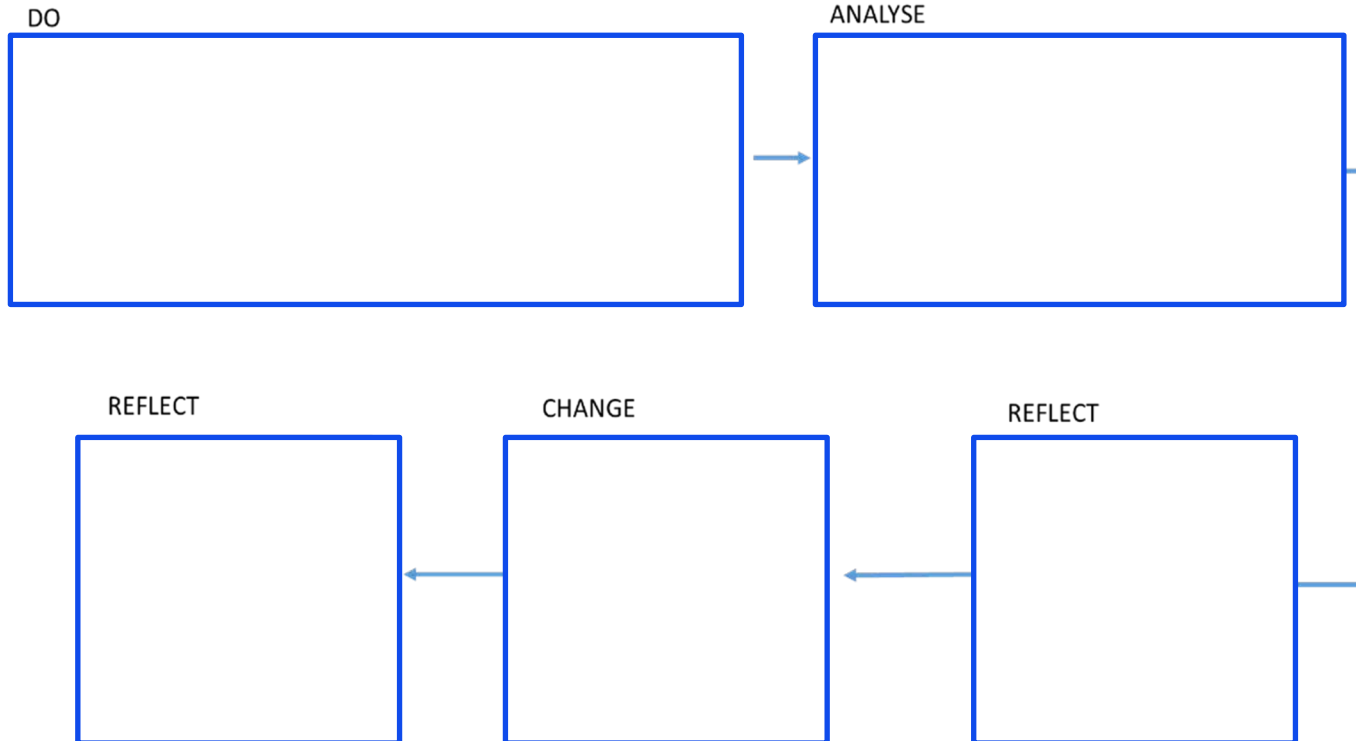
Analytical Report
Feedback
Resources

[Show move details](#)

Background / Context move
<ul style="list-style-type: none"> B Background information E Emphasis of a significant or an important idea T Trend
Purpose of the Paper / Present Research move
<ul style="list-style-type: none"> S Summary of the author's goal or stating the nature of the research
Research Problem / Issues / Gap in the literature move
<ul style="list-style-type: none"> C Contrasting idea, issues, disagreement or critical insight Q Question or gap in previous knowledge
Results / Findings move
<ul style="list-style-type: none"> N Novelty and value of the research S Summary of the author's goal or stating the nature of the research

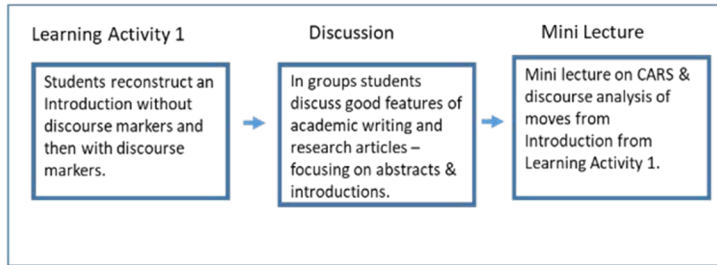
It is now widely accepted that timely, actionable feedback is essential for effective learning. In response to this, data science is now impacting the education sector, with a growing number of commercial products and research prototypes providing “learning dashboards”, aiming to provide real time progress indicators. From a human-centred computing perspective, the end-user’s interpretation of these visualisations is a critical challenge to design for, with empirical evidence already showing that ‘usable’ visualisations are not necessarily effective from a learning perspective. Since an educator’s interpretation of visualised data is essentially the construction of a narrative about student progress, we draw on the growing body of work on Data Storytelling (DS) as the inspiration for a set of enhancements that could be applied to data visualisations to improve their communicative power. We present a pilot study that explores the effectiveness of these DS elements based on educators’ responses to paper prototypes.

Embedding AcaWriter in an HDR activity

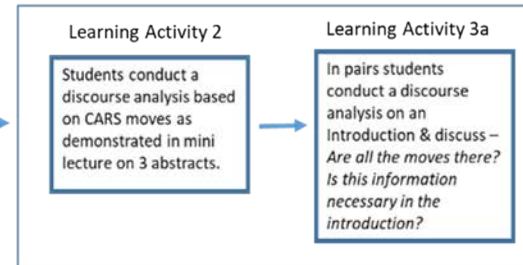


Embedding AcaWriter in an HDR activity

DO



ANALYSE



REFLECT



CHANGE

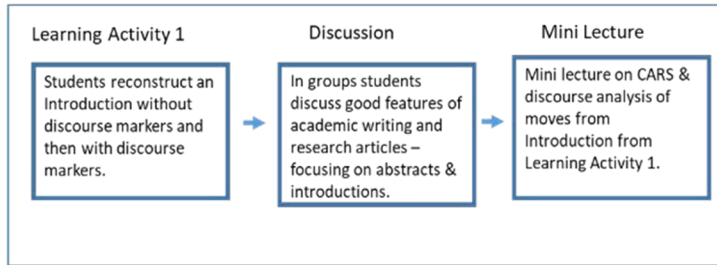


REFLECT

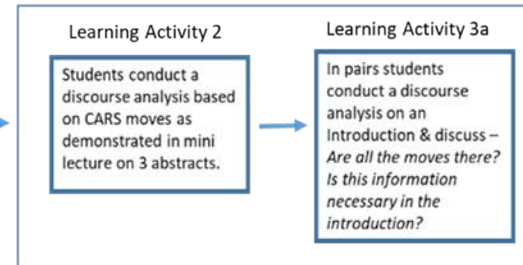


Embedding AcaWriter in an HDR activity

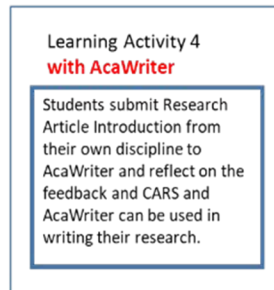
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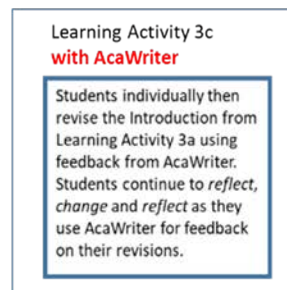
ANALYSE



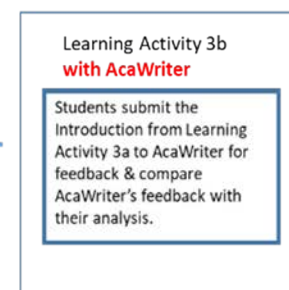
REFLECT



CHANGE



REFLECT

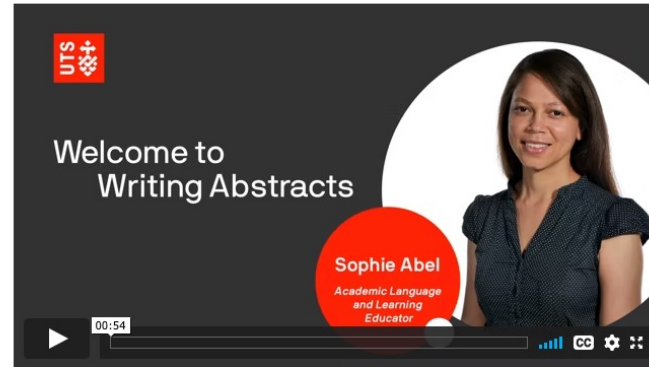


UTS module: Writing an Abstract (REShub Canvas module)

Faculties have adapted this to their own subjects, as orientation for students to Abstract/Summary writing, prior to using AcaWriter

<https://canvas.uts.edu.au/courses/18124>

RES Hub: Writing an Abstract



Welcome to the Writing an Abstract module

This module focusses on the [Research Communication](#) ^o outcome of the [Research Outcomes Capability Framework](#) ^o.

Want to write an amazing abstract for that paper? In this module you will learn how to write an effective abstract. You will be introduced to the 'moves' in abstracts, analyse abstracts, and have a go at writing your own abstract.

Interactive matching exercises to learn “the moves”

Drag and drop the implied questions below to match the corresponding move.

MOVES		IMPLIED QUESTIONS	
Background / Context	Purpose of the paper / Present research	What do the findings mean? What's the significance of the findings? What are the implications of the study?	
Research problem / Issues / Gap in the literature	Methods / Approach / Procedure	What is this study about? What is the aim of this research?	What problem or issue are you trying to solve? What gap are you trying to fill? What is unknown?
What's the answer to the problem? What was discovered?	Conclusion / Implications / Significance	What do we know about the topic? Why is this topic / research important?	How was the study carried out? What methods, models, approaches, or data are used in the study?

You've got the moves, so let's try finding the moves in abstracts in your discipline. But, before you make your move, have a go at matching the moves to the sentences in the below abstract.

Designing Academic Writing Analytics for Civil Law Student Self-Assessment

Simon Knight¹ · Simon Buckingham Shum¹ · Philippa Ryan² · Ágnes Sándor³ · Xiaolong Wang¹

Published online: 3 November 2016
© The Author(s) 2016. This article is published with open access at Springerlink.com

Abstract Research into the teaching and assessment of student writing shows that many students find academic writing a challenge to learn, with legal writing no exception. Improving the availability and quality of timely formative feedback is an important aim. However, the time-consuming nature of assessing writing makes it impractical for instructors to provide rapid, detailed feedback on hundreds of draft texts which might be improved prior to submission. This paper describes the design of a natural language processing (NLP) tool to provide such support. We report progress in the development of a web application called AWA (Academic Writing Analytics), which has been piloted in a Civil Law degree. We describe: the underlying NLP platform and the participatory design process through which the law academic and analytics team tested and refined an existing rhetorical parser for the discipline; the user interface design and evaluation process; and feedback from students, which was broadly positive, but also identifies important issues to address. We discuss how our approach is positioned in relation to concerns regarding automated essay grading, and ways in which AWA might provide more actionable feedback to students. We conclude by considering how this design process addresses the challenge of making explicit to learners and educators the underlying mode of action in analytic devices such as our rhetorical parser, which we term *algorithmic accountability*.

Keywords Learning analytics · Writing analytics · Argumentation · Natural language processing · Rhetoric · Civil law · Participatory design

Matching Exercise:

- Purpose of the paper / present research
- Conclusion / Implications / Significance
- Background / Context
- Research problem / Issues / Gap in the literature

Note: While this module focuses on *Abstracts*, since this uses all the *Analytical* moves, this module is relevant for many genres of analytical writing, and several faculties have dropped this Canvas module into their courses

LEARNING CONTEXT 3

Reflective Writing

Close work with IML Academic Learning & Literacy team

(Rosalie Goldsmith)

1. Describing the context of the event that triggers the reflection (*why, when, where, who, how much, what*): the more detail the better, as long as the event is non-trivial
2. Expressions about learning something specific, e.g., *I learned that* (i.e., not merely “I learned a lot”)
3. Expressions of reflecting specifically, e.g., *On reflection I could see that*
4. Expressions of increased confidence or ability, e.g., *I am more confident, am now able, feel/am comfortable, can plan, can utilize, can develop a strategy*
5. Expressions of experimentation and ability, e.g., *I tried, I tested, I experimented, I developed my capability to, I was/am able to, I was/am unable to, I practised, I asked, I sought advice, I overcame, I couldn't overcome*
6. Verbs that show awareness or shifts in perception, e.g., *I began to understand, I could see, I could visualize, I could perceive, I became aware, I became, I grew, I realized, I recognized*
7. Reference to the past: time markers and use of past tense (e.g., *when I started; before my internship*); shift between habitual past tense (e.g., *I used to*) and the present or the recent past (e.g., *since then I have*)
8. Reference to the present and future in the context of reflecting on changed behaviour, expectations or beliefs, e.g., *since, now, when, as it turned/turns out, it became clear*
9. Expressions of the unexpected and of prior assumptions, e.g., *I thought, I believed, I expected, I assumed, I was surprised, I didn't think, I didn't expect, I didn't know at first, I didn't understand, I didn't have adequate, I lacked*
10. Expressions of challenge, e.g., *I felt challenged, I was under-prepared, I didn't know how, I wasn't sure, I wasn't comfortable, I felt inadequate, I felt uncertain, I was scared/frightened, I was overwhelmed, it was difficult/hard*
11. Verbs that show pausing, e.g., *I stopped, I paused, this made me stop, I thought, I reflected*
12. Expressions about applying theory to practice, e.g., *I could see how this worked, I learned how to apply, I realized that there are different ways of doing something, what we were taught is not how they do things here*

Different kinds of rhetorical moves

The key to automated annotations of the reflection

Important aspects of reflective writing:

- Initial thoughts and feelings about a significant experience.
- The challenge of new surprising or unfamiliar ideas, problems or learning experiences.
- ▲ How new knowledge can lead to change

Bold: Deeper reflection, personally applied.

Plain: Expressions indicating belief, learning, or knowledge.

.....
Dotted: Expressions indicating self critique.

.....
Dashed: Words associated with strong feelings.

Tutor highlights*

Mid subject reflection

Currently, I find it particularly difficult to put the principles that I have learnt so far into practice. The reason for this is that when I am working as a paralegal at a boutique law firm I am still a voiceless follower. I do not feel as though I have sufficiently developed my practical knowledge, or phronesis (Schwandt 2007), to a point where I can speak up and challenge my manager. The reason being is that I have not been allowed to contribute equally and take responsibility for my work (Follett 1942). I understand that phronesis is not technical or cognitive but rather it is something that matures as my understanding of MLS progress. Moreover, I do not feel that my practical-moral knowledge (Schwandt 2007, p. 242) has evolved to the point where I can make a difference in my workplace.

Nevertheless, on a personal level I have been able to utilise phronesis to understand and interpret conflict situations in my social and personal life through critical self-reflection. I believe this has improved remarkably since the first class where we were required to "fire" a classmate. That early role-play felt distant and impersonal, as I made a conscious effort not let my emotions interfere with the job I had been given. Following the completion of that role-play, I realised that I had failed to ask the tutor "why" we had to fire the other person. It made me realise that I have spent most of life making decisions or engaging in acts without stopping to reflect and simply ask: "Why?"

Post-subject Reflection

I reflected upon our stewardship discussions and how I understand that as we move up through an organisation, we must progressively subvert our needs for cooperative behaviours (Davis et al., 1997). This subversion includes encouraging followers to take on greater responsibility and give them the freedom to develop their opinions (Follett 1942). This notion is the opposite of destructive leadership (Padilla et al. 2007). If I were asked to describe a leader fourteen weeks ago, I would have listed qualities such as intelligence, charisma, decisiveness, enthusiasm, strength, integrity, self-confidence, etc. I now appreciate that the majority of those characteristics are hallmarks of destructive leaders. In the end, these characteristics simply influence our opinion that someone is a leader, not whether they truly transform an organisation so that it is both successful and ethical. Furthermore, this tension exists between creating and protecting value for others, avoiding harm and maximising cooperation. To achieve this balance, managers need to subordinate their views and sustain rather than resolve the healthy tension.

I have highlighted sections of your original text that identify reflective considerations and these have been further colour coded as Yellow = Moderate; Green = Moderate / High and Red = High / Very High in terms of your depth and constructive response. In general terms the range leads from making sense of a situation (yellow), relating the situation to an understanding of yourself (green) and finally to an intention on your part to constructively change (red) to allow you to address future scenarios. For a more comprehensive list of attributes for each level please refer to your class notes.

*We thank Peter Jones from UTS to have provided us with his annotations of some student essays.

AWA highlights

Mid subject reflection

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Nevertheless, on a personal level I have been able to utilise phronesis to understand and interpret conflict situations in my social and personal life through critical self-reflection. I believe this has improved remarkably since the first class where we were required to "fire" a classmate. That early role-play felt distant and impersonal, as I made a conscious effort not let my emotions interfere with the job I had been given. Following the completion of that role-play, I realised that I had failed to ask the tutor "why" we had to fire the other person. It made me realise that I have spent most of life making decisions or engaging in acts without stopping to reflect and simply ask: "Why?"

Post-subject Reflection

I reflected upon our stewardship discussions and now understand that as we move up through an organisation, we must progressively subvert our needs for cooperative behaviours (Davis et al., 1997). This subversion includes encouraging followers to take on greater responsibility and give them the freedom to develop their opinions (Follett 1942). This notion is the opposite of destructive leadership (Padilla et al. 2007). If I were asked to describe a leader fourteen weeks ago, I would have listed qualities such as intelligence, charisma, decisiveness, enthusiasm, strength, integrity, self-confidence, etc. I now appreciate that the majority of those characteristics are hallmarks of destructive leaders. In the end, these characteristics simply influence our opinion that someone is a leader, not whether they truly transform an organisation so that it is both successful and ethical. Furthermore, this tension exists between creating and protecting value for others, avoiding harm and maximising cooperation. To achieve this balance, managers need to subordinate their views and sustain rather than resolve the healthy tension.

Important aspects of reflective writing:

- Initial thoughts and feelings about a significant experience.
 - The challenge of new surprising or unfamiliar ideas, problems or learning experiences.
 - How new knowledge can lead to change
- Bold:** Deeper reflection, personally applied.

AcaWriter feedback on reflective writing

Reflective Report	Feedback	Resources
	<ul style="list-style-type: none"> ✓ ■ Initial thoughts and feelings about a significant experience. ✓ ● The challenge of new surprising or unfamiliar ideas, problems or learning experiences. ✓ Deeper reflection, personally applied. ✓ ► How new knowledge can lead to a change ✓ <u>Expressions indicating belief, learning, or knowledge.</u> ✓ <i>Expressions indicating self critique</i> ✓ <i>Words associated with strong feelings</i> ✓ ⚡ Sentence too long, might disengage the reader. Try breaking it into smaller sentences 	

outcomes for the patient. ► **Thus, this experience taught me that in future, I must take a patient-centred approach.** ■●► **I must spend time addressing the patients concerns and demonstrate excellent communication with them so they can fully understand their clinical picture and history.** This relates to Domain 2: Communication and Collaboration, Standard 4: Apply Interpersonal Communication Skills to Address Problems, which is a standard in the National Competency Standards Framework for Pharmacists in Australia (2016). The incident has taught me to use a whole range of communication techniques when counselling a patient. It gave me the opportunity to practice this sort of behaviour in my subsequent weeks of clinical placement. ● **It has strongly encouraged me to shift my perspective to one that focuses more on patient-centred care.** ■ I personally think that this is crucial in ensuring that a patient's health objectives are met. This standard I have obtained is important for any practising pharmacist.

Example student feedback

“It prompts you into developing those reflective ideas. ..you can only go so far on your own”¹

“It makes you think of things that you normally would disregard”¹

“because it (the feedback) was in front of me, I could see what I was thinking”¹

“Building self-confidence because it seems to provide “clarity” of your thoughts and reasoning” and “a better understanding of yourself”¹

“makes you discover things not only about things that you’re doing but things about yourself that you really never thought of”¹

Utilising AW makes students more confident with writing submissions (pretest 3.2, posttest 3.7, $p=0.05$)²

“Prompted me to follow through with the reflection to the last step of the process - I had written about my thoughts and feelings, discussed challenges, but had not followed through with reflecting on how this can lead to change”³

¹ Lucas C, Buckingham Shum S, Liu M, Bebawy M. Implementing AcaWriter as a novel strategy to support pharmacy students' reflective practice in scientific research. *Am J Pharm Edu*, 2021. <https://doi.org/10.5688/ajpe8320>

² Lucas, C, Gibson, Buckingham Shum S. Pharmacy students' utilization of an online tool for immediate formative feedback on reflective writing tasks. *Am J Pharm Edu*, 2019. <https://doi.org/10.5688/ajpe6800>

³ Gibson et al. 2017 Reflective writing analytics for actionable feedback. Proceedings of the LAK'17 Conference, Canada (Best Full Paper Award) <https://dl.acm.org/doi/proceedings/10.1145/3027385>

Promoting deeper engagement with the feedback:

As part of the assignment, reflect in Canvas on the feedback

(a module for Reflective Writing you can drop into your course)

Question 1

1 pts

Look closely at the Reflective report tab of your AcaWriter feedback. Remember, some of the features that AcaWriter looks for in your reflective writing are in fact closely linked to your assessment criteria.

What does your AcaWriter feedback tell you about the strengths and weaknesses of your current draft, with respect to the criteria for this assignment?

Reflective writing criteria (as per your assessment rubric)

Practice of skills (10%)

Evidences the sustained practice of skills over the duration of semester. **Worthwhile and important incidents are clearly depicted in evidence and writing.¹**

Depth and quality of reflection (20%)

Clarity of communication (20%)

What AcaWriter looks for in your reflective writing

- Initial thoughts and feelings about a significant experience
- The challenge of new surprising or unfamiliar ideas, problems or learning experiences
- Ⓐ Underlined: Expressions indicating belief, learning, or knowledge

- Initial thoughts and feelings about a significant experience
- The challenge of new surprising or unfamiliar ideas, problems or learning experiences
- ▲ How new knowledge can lead to change
- Expressions indicating self critique
- Bold:** Deeper reflection, personally applied

(if sentences are too long)

- ⚡ Sentence too long, might disengage the reader. Try breaking it into smaller sentences

¹AcaWriter is unlikely to detect the whole of this criterion in your writing, but it will be able to pick up whether you have clearly depicted important incidents.

Edit View Insert Format Tools Table

12pt Paragraph | B I U A v e v T² v | :

Question 2

1 pts

Now look closely at the Feedback tab, which gives specific suggestions for improving your draft. Spend some time editing your draft in AcaWriter, according to how you see fit. While AcaWriter feedback is aligned to some of your assignment criteria, do also bear in mind the other criteria included in the rubric.

When you have finished your editing, click on "Get feedback" to re-run your AcaWriter analysis. (Remember, you can keep doing this many times to get feedback!)

Now compare this new feedback with the feedback you downloaded. What effect did the changes have on your feedback?

Edit View Insert Format Tools Table

12pt Paragraph | **B** *I* U A P T² | :

p

  | 0 words |   ⋮

Question 3

1 pts

After using AcaWriter, what changes did you / will you make to your draft?

Edit View Insert Format Tools Table

12pt Paragraph | **B** *I* U A P T² | :

p

  | 0 words |   ⋮

Question 4

1 pts

Upload your AcaWriter feedback pdf report here. But note that AcaWriter is available to use 24/7! You are encouraged to continue using AcaWriter any number of times after this session, to improve your draft until it's due for submission, and for any other written assignments you need to do.

Upload

Choose a File

SUMMARY:

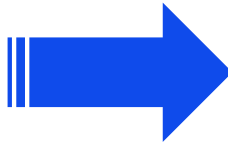
3 WAYS OF ADAPTING ACAWRITER
VIA THE 3 TABS

Levels of customisation for a specific subject and students

AcaWriter comes loaded with several different 'genres' of writing.

But we can provide you with a template to help you think through what (if anything) you might change in AcaWriter's feedback

There are different depths of adaptation possible — requiring different levels of effort from both you and the tech team



AcaWriter customisation template

AcaWriter's feedback can be customised for specific writing assignments in specific subjects. There are 3 tabs on the right-side of the screen, each of which can be changed.

The image displays three screenshots of the AcaWriter interface, each showing a different level of feedback customisation. The interface includes tabs for 'Analytical Report', 'Feedback', and 'Resources'. The 'Feedback' tab is active in all three screenshots.

Tab 1: Shows a list of feedback moves. The 'Results / Findings' move is highlighted with a blue box labeled 'Tab 1'. The feedback text for this move is: "It is now widely accepted that data visualisation is a critical challenge to design for, with empirical evidence already showing that 'usable' visualisations are not necessarily effective from a learning perspective. Since an educator's interpretation of visualised data is essentially the construction of a narrative about student progress, we draw on the growing body of work on Data Storytelling (DS) as the inspiration for a set of enhancements that could be applied to data visualisations to improve their communicative power. We present a pilot study that explores the effectiveness of these DS elements based on educators' responses to paper prototypes."

Tab 2: Shows a list of feedback moves. The 'Purpose of the Paper / Present Research' move is highlighted with a blue box labeled 'Tab 2'. The feedback text for this move is: "Thank you for submitting your draft to AcaWriter. Quality writing comes from revision. Research shows that writing drafts and revising your text helps improve the quality of your writing. Remember AcaWriter is a machine - so it may not highlight all your moves correctly and could give you incorrect feedback. So, don't be afraid to disagree with the feedback, if you believe you have included all the moves in your abstract."

Tab 3: Shows a table of feedback moves. The 'Emphasis' move is highlighted with a blue box labeled 'Tab 3'. The feedback text for this move is: "High level literacy and written academic style are expected for higher students, as a factor when writing an abstract. Recent studies indicate that the Earth's climate is changing rapidly. The aim of this study is to examine the effects of physical activity in children and adolescents. We present a pilot study on users' habits."

Most academics change only Tab 3 (simple)

Some change Tab 2 (more complicated, since you have to think about all the possible combinations).

Note that changing Tab 1's rules is a complicated and time-consuming task, so this requires detailed planning and testing, and creates a new 'genre' in the tool.

EDUCATOR RESOURCES

AcaWriter Educators portal

<https://www.uts.edu.au/research-and-teaching/teaching-and-research-integration/acawriter/educators>

For educators

Using AcaWriter in your teaching

Educator Welcome to AcaWriter at UTS

Available Report Feedback Courses

Technology is an enabler in providing greater access to quality teaching and learning experiences. @UTS @UTS

Improving pharmacy students' reflective writing



Improving pharmacy students' reflective writing

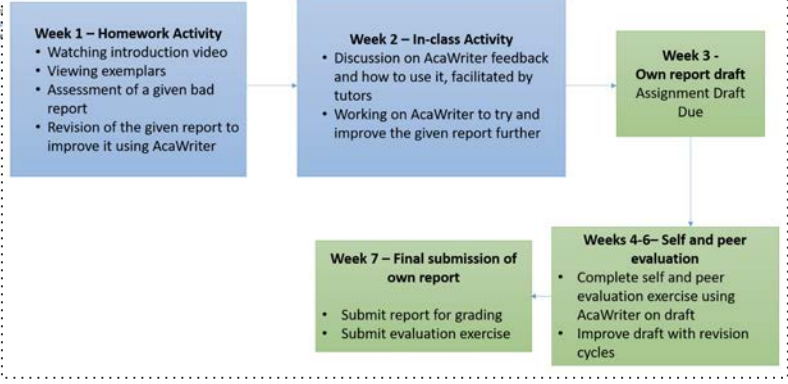


Improving Business Report Writing (Accounting)

Improving Business Report Writing (Accounting)



This Writing Act by Shibani Arora Sydney's Convo



AcaWriter is just one example of *automated feedback* at UTS

Check out the LX.lab resources to learn how UTS academics are using other kinds of automated feedback:

<https://lx.uts.edu.au/blog/2021/06/11/automated-feedback-looking-back-forward/>

Learn how to enrich your feedback ecosystem

David Yeats | 09 April 2021 | 0 comments

assessment automated feedback feedback learning technology online

'Automated Feedback' has existed in various forms at UTS for quite some time: from online learning platforms, to conditional messaging. But...

- But what really is it?
- Is it really automated?
- How does it extend upon my existing feedback practices?
- What can we use it for?
- Where is it the most effective?

In this event series, we will look at the key categories of automated feedback and how you a range of common and pressing issues associated with learning and teaching.

The first session provides an introduction to the key types of auto feedback technology. The sessions each look at how these can address some key issues around teaching and learning.

Learn from experience

Alongside experts from UTS CIC, you will also get to hear from UTS academics about how of these tools. We aim to grow a community of interest around this topic to help inform teaching decisions and LX.lab support strategies.

1. Enriching your feedback ecosystem with automated feedback

While feedback is often thought of first as the educator's response to a student's assignment submission, the process is enriched through a wide range of different moments throughout a student's experience. Perceiving feedback as an ecosystem shows the potential enriching properties of automated feedback tools.

Exploring automated feedback possibilities

Enriching your feedback ecosystem with automated feedback

2. Building student belonging with automated feedback

Automated feedback can be shaped to provide an opportunity to address the experiences of individual learners. You can use automated tools to help foster a greater feeling of connection for students. It's also used to generate academic literacy, scaffolding feedback without direct intervention.

Challenges of engagement and belonging

Automated feedback in building student belonging in large classes

3. Responding to variable student pace of learning

Feeding into the process using these auto tools leads to an awareness that can be responded to either automatically manually or through designed change. An automated feedback system is collecting information about a student's situation. Ultimately the more meaningful information we can learn from students, the more we can help them succeed by responding to their pace and preferences.

How can AI tools flex to student needs to create the best experience for them? (Duration: 30 minutes)

4. Diagnosing your students' needs with automated feedback

Having the opportunity to see whether feedback was received as relevant provides the opportunity to configure practices when it would not otherwise be available. The traditional 'feedback loop' suggests that this is done by seeing the work produced by students. However, generating responses using other more direct tools gives a space where less integration is needed. Students can tell you directly what they feel they need and you can make data-driven decisions.

The use of Automated Feedback in responding to UTS:UIC CONNECTED IN EXPERIENCE CENTRE

Automated feedback and diagnosing your students' needs (Duration: 30 minutes)

The dawn of Generative AI for writing...

OpenAI has released a demo app called ChatGPT:
sign up and play (for as long as it is freely available)

<https://openai.com/blog/chatgpt/>

ChatGPT is the first widely accessible app to demonstrate AI's ability to synthesise text on many topics, via text chat



Do you know about Swales' work on Rhetorical Moves in academic writing?



Yes, I'm familiar with John Swales' work on "Rhetorical Moves in Academic Writing." Swales was a linguist and discourse analyst who studied the structure and organization of academic writing in English. He is best known for his work on the "moves" that authors make in the introduction section of research articles in various academic disciplines, which he described in his 1990 book "Genre Analysis: English in Academic and Research Settings". According to Swales, academic writing in English is characterized by certain common patterns, or moves, that authors follow in introducing a research article. These moves include establishing a research territory, establishing a niche, and occupying the niche.

Using ChatGPT to analyse writing in terms of rhetorical moves



Are you able to analyse my writing to identify rhetorical moves?



Yes, I can analyze your writing to identify rhetorical moves. Please provide the text or a sample of your writing, and I'll do my best to identify the moves and provide feedback on your writing.



Transitioning Education's Knowledge Infrastructure: Shaping Design or Shouting from the Touchline?

Bit by bit, a data-intensive substrate for education is being designed, plumbed in and switched on, powered by digital data from an expanding sensor array, data science and artificial intelligence. The configurations of educational institutions, technologies, scientific practices, ethics policies and companies can be usefully framed as the emergence of a new "knowledge infrastructure" (Paul Edwards).

The idea that we may be transitioning into significantly new ways of knowing –

Using ChatGPT to analyse writing in terms of rhetorical moves



This text is an introduction to the topic of the emergence of a new "knowledge infrastructure" in education, which is being powered by digital data and data science. The author is raising several important questions about the implications of this transition, including who has ownership over the data and algorithms, how all stakeholders can be empowered to engage in the design process, and how researchers, educators, and learners can engage with this infrastructure mindfully.

Based on the moves described by John Swales in "Genre Analysis: English in Academic and Research Settings", I would identify the following rhetorical moves in this text:

1. Establishing a research territory: The author is introducing the concept of a new knowledge infrastructure in education and setting the context for the discussion.
2. Establishing a niche: The author is identifying the learning analytics community as the group of people who are concerned with the human factors that will impact the design and adoption of new educational tools.

3. Occupying the niche: The author is positioning themselves as a leading voice in the learning analytics community and highlighting their experiences in designing code, competencies, and culture for learning analytics.
4. Raising a research problem: The author is posing several questions about the implications of the transition to a new knowledge infrastructure in education, including who has ownership over the data and algorithms, how all stakeholders can be empowered to engage in the design process, and how researchers, educators, and learners can engage with this infrastructure mindfully.

Using ChatGPT to draft writing

Please can you write a research abstract reporting the following: The existence of extraterrestrial life is an important topic. Nobody has hard evidence, until now. We have made contact with aliens and exchanged messages via Google Translate. They have warned us that Earth will not survive a 3 degrees rise in temperature.



Please can you write a research abstract reporting the following:

The existence of extraterrestrial life is an important topic

Nobody has hard evidence, until now

We have made contact with aliens and exchanged messages via Google Translate

They have warned us that Earth will not survive a 3 degrees rise in temperature



Here's a possible research abstract based on the information provided:

The search for extraterrestrial life has captivated humanity for centuries, but until now, hard evidence of its existence has eluded us. In a groundbreaking development, we have made contact with an extraterrestrial civilization and exchanged messages, using Google Translate to overcome the language barrier. The aliens have issued a warning: if Earth's temperature rises by 3 degrees, our planet will not survive. This communication raises profound questions about the future of our planet and the importance of protecting it. This paper explores the implications of this message and its potential impact on our understanding of the universe and our place within it. It considers the scientific, social, and ethical dimensions of this contact and suggests avenues for further research in this fascinating and timely field.

...and seeing what
AcaWriter thinks of
ChatGPT's writing...

[Hide move details](#)

Background / Context move

- B** Background information
- E** Emphasis of a significant or an important idea
- T** Trend

Purpose of the Paper / Present Research move

- S** Summary of the author's goal or stating the nature of the research

Research Problem / Issues / Gap in the literature move

- C** Contrasting idea, issues, disagreement or critical insight
- Q** Question or gap in previous knowledge

Results / Findings move

- N** Novelty and value of the research
- S** Summary of the author's goal or stating the nature of the research

The search for extraterrestrial life has captivated humanity for centuries, but until now, hard evidence of its existence has eluded us. In a groundbreaking development, we have made contact with an extraterrestrial civilization and exchanged messages, using Google Translate to overcome the language barrier. The aliens have issued a warning: if Earth's temperature rises by 3 degrees, our planet will not survive. **E C** This communication raises profound questions about the future of our planet and the importance of protecting it. **S** This paper explores the implications of this message and its potential impact on our understanding of the universe and our place within it. It considers the scientific, social, and ethical dimensions of this contact and suggests avenues for further research in this fascinating and timely field.

(From the prompt: Please can you write a research abstract reporting the following: The existence of extraterrestrial life is an important topic. Nobody has hard evidence, until now. We have made contact with aliens and exchanged messages via Google Translate. They have warned us that Earth will not survive a 3 degrees rise in temperature.)

...and seeing what AcaWriter thinks of ChatGPT's writing...

Computers don't read writing like humans. So, if you're sure your writing's good, it's fine to disagree with AcaWriter's feedback, just like you'd ignore a poor grammar suggestion.

Analytical Report

Feedback

Resources

i Thank you for submitting your draft to AcaWriter. Quality writing comes from revision. Research shows that writing drafts and revising your text helps improve the quality of your writing.

Remember AcaWriter is a machine – so it may not highlight all your moves correctly and could give you incorrect feedback. So, don't be afraid to disagree with the feedback, if you believe you have included all the moves in your abstract.

✓ Well done, it looks like you have **Purpose of the Paper / Present Research** moves in your abstract.

You have stated the purpose of your research, and/or presented what your research is about which will make it easier for your reader to understand the goal of your research.

✓ Well done, it looks like you have **Research Problem / Issues / Gap in the literature** moves in your abstract.

You have highlighted the research problem, identified issues or indicated a gap in the literature. By including this move your readers will know what problem you're trying to solve.

! AcaWriter didn't identify any **Background / Context** moves in your abstract.

Here you explain why your research is important, or provide background information on your research. To achieve this move try including these sentences: *x is an important feature in y*, *Substantial evidence in x suggests that...*, *The study of x is important because x impacts y*, *x has been previously proposed...*, *Recent, literature concerning x has reported that...*, *Recent studies indicate that...*, *It is widely agreed that...*

Check if you have included these sentences in your abstract.

! AcaWriter didn't identify any **Results/Findings** moves in your abstract. Here you state what you found and/or your answer to the research problem.

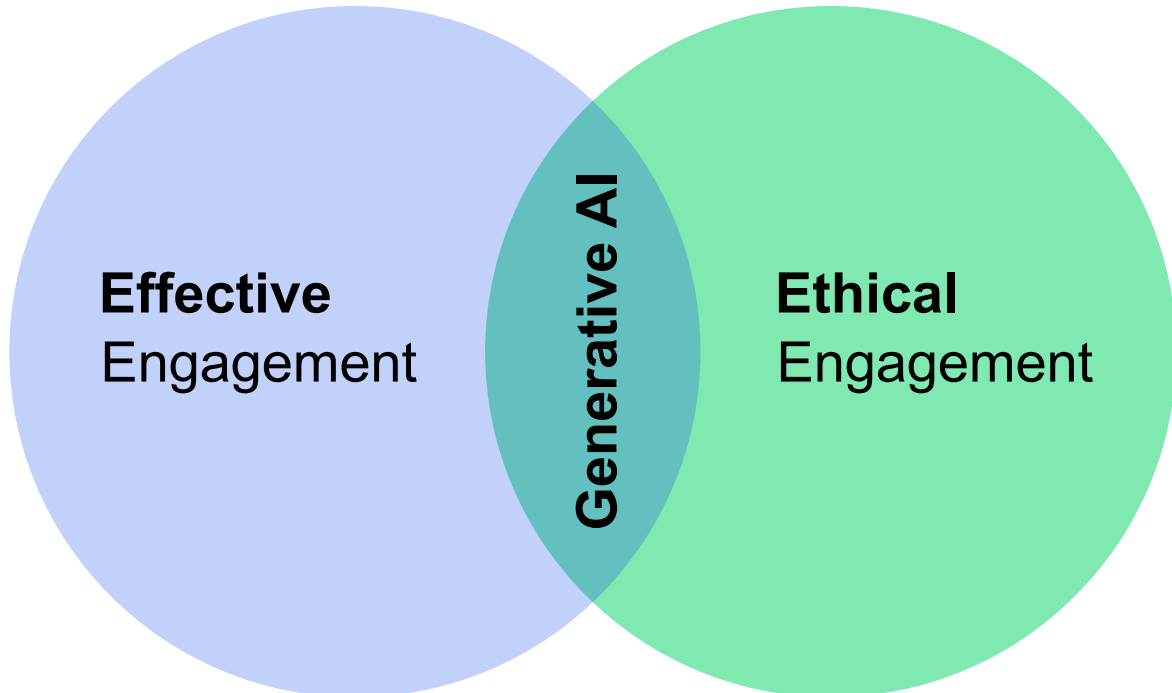
Our evidence confirms that..., *The analysis shows...* *Our review found...* *Significant improvements in x have been developed..* *We present a new method/approach/model/framework...*, *The major innovation of x is its ability to identify/detect y.*

Check if you have included these sentences in your abstract.

GenerativeAI@UTS: Effective Ethical Engagement

For instance...

- Is it deepening learning or undermining it?
- How do we play to its strengths and guard against its weaknesses?
- Do we understand which prompts elicit the best responses?
- Are you setting assignments that can't be passed by an AI?
- Does AI improve learning outcomes – and are these the right outcomes?



Effective Engagement

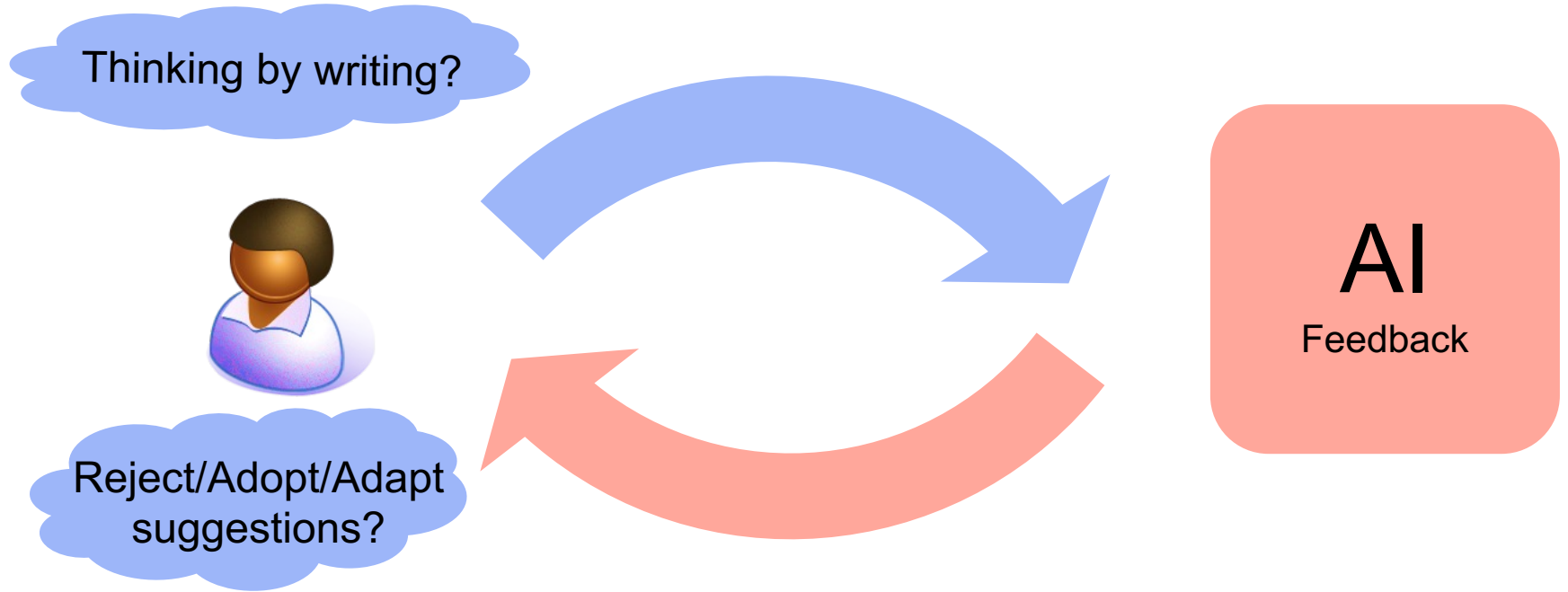
Generative AI

Ethical Engagement

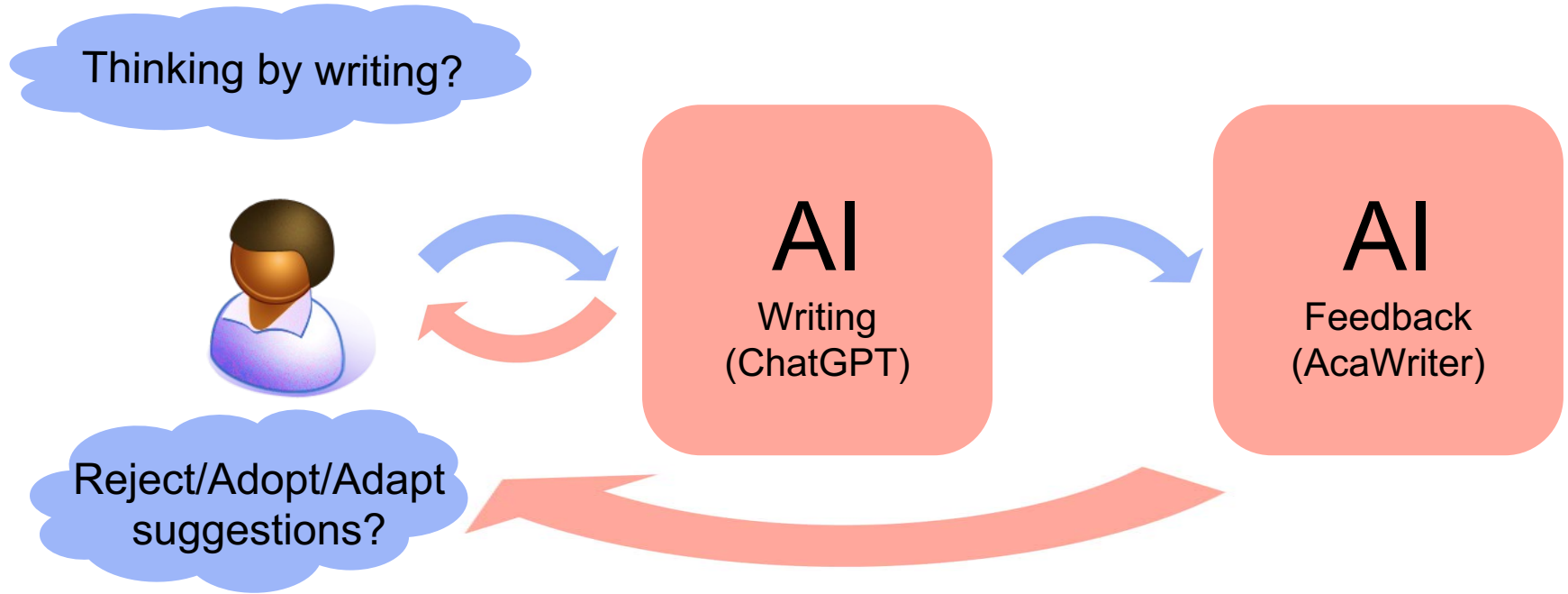
For instance...

- Do students understand how to maintain their academic integrity with these new tools?
- Do we all understand how the data has been sourced and cleaned?
- Can students reflect more critically on ChatGPT in their contexts, than ChatGPT itself can?
- Do assignments incentivise students' critical engagement with AI?

Are our students capable of “Effective Ethical Engagement”?



Are our students capable of “Effective Ethical Engagement”?



This was just the
conversation starter.

We will support 1-1 to
help you get going...

Enquiries:

cic@uts.edu.au

Play with AcaWriter

- Go to <https://acawriter.uts.edu.au> and login with your UTS ID.
 - Create your own assignment using a genre type.
 - If you have a sample text to try, paste it into the editor and click on Get Feedback.
 - Revise the text to see if it changes the feedback.

AcaWriter: create a new document

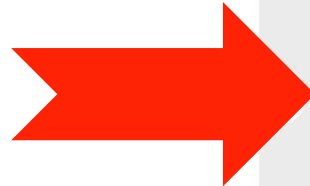
 UTS AcaWriter

[Help & Support](#)

Welcome to AcaWriter!

AcaWriter helps develop your academic and reflective writing by providing instant, automatic feedback on your drafts, 24/7. Automatic feedback is just the latest addition to the [other UTS writing support services](#).

<https://acawriter.uts.edu.au>



Please visit the
information website
first.

(You won't have used a tool like this
before!)

UTS isn't here to tell you what to think, but to help you learn how to think. Similarly, **AcaWriter** won't tell you what to write, but will help you learn how to say it in the most rigorous, effective way.

Before you just jump in, please visit the [AcaWriter information website](#). This will help maximise the impact that AcaWriter has on your academic and reflective writing.

AcaWriter is available to all UTS staff and students.

[Login to AcaWriter](#)

AcaWriter: create a new document

UTS AcaWriter

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My documents

[Add document](#)

Create using assignment code Create a new document

Create a new document

Document name

Analytical Essay/Report

Reflective Journal/Report

Research Abstract

Research Introduction

Create document

Choose the right document type for your writing...

Feedback in [Analytical Essay/Report](#) is tuned for essays and reports where you're demonstrating your critical, analytical thinking, such as your ability to analyse or construct arguments. This includes literature reviews, scientific/technical reports and persuasive essays.

Feedback in [Reflective Journal/Report](#) is tuned to writing in the first person about a learning experience (e.g. an internship; working as a team), the thoughts, feelings and emotions they provoked, and how you're developing as a learner/professional.

Feedback in [Research Abstract](#) is tuned for the Abstract to your research report/article. You can use this in addition to the above to clarify right from the start if you have explained the topic, stated the aim of the research, identified the issue you're trying to solve and presented the findings.

Feedback in [Research Introduction](#) is tuned for the introduction to your research report/article. You can use this in addition to the above to clarify right from the start how important the topic is, what problem you've identified, and what your contribution is.

<https://acawriter.uts.edu.au>

