

Report writing

Problem solving/analysis reports

ANU Academic Skills

ACADEMIC SKILLS WRITING CENTRE







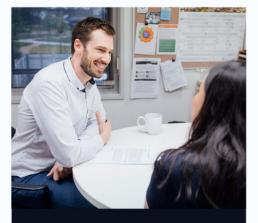
PEER WRITERS

10-15 minute drop ins



WRITING COACHES

30 minute booked appointments



LEARNING ADVISERS

45 minute booked appointments



LET'S SPEAK ENGLISH!

Join fun conversation groups, make new friends and meet local students! All ANU students welcome.

Weeks 1-12

Marie Reay Teaching

Centre

1-2pm Mon-Fri Room 5.02



5-6pm Mon Room 5.05







anu.edu.au/english





Missed some of our OWeek talks?

ENROL IN OUR WATTLE SITE: ACADEMIC SKILLS ORIENTATION 2020

for key resources and a recap of all of our talks.

What makes a great report?

Looking at the list – what's most important?



A key message is vital

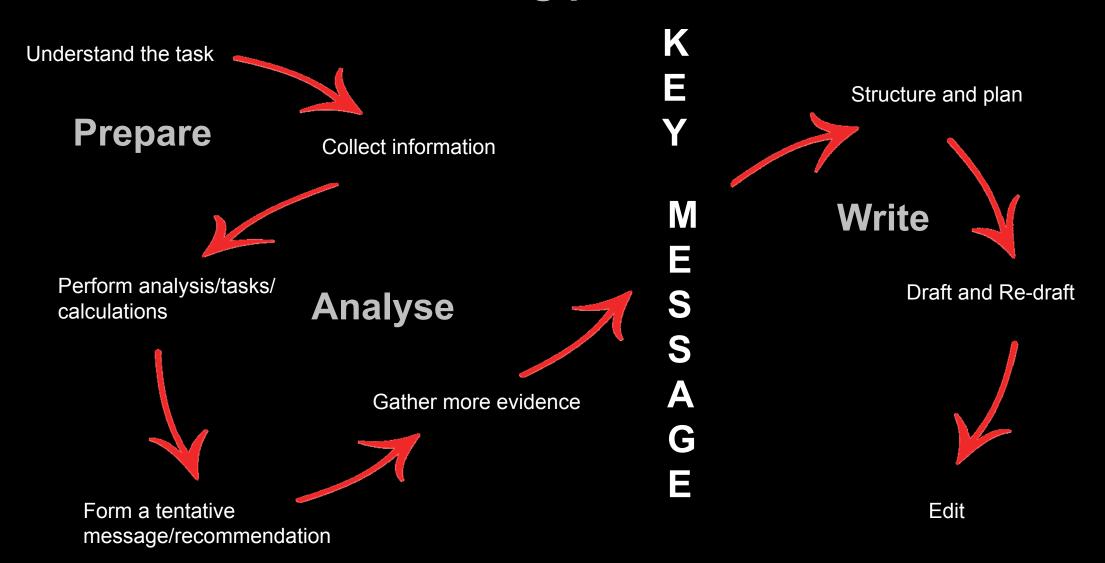
- You are being asked to analyse something or solve a problem.
- This means you need to:
 - Take a position or provide a solution
 - Have clear reasons for your position

⇒ Write to persuade





Writing process



Understanding the task

- What are you being asked to analyse?
- What problem are you being asked to solve?

⇒ What are you supposed to develop a key message in relation to?





Business Reporting and Analysis assignment

Prepare a report to a potential investor who is considering investing in Navitas Ltd (NVT). In this report, you should:

- 1. assess NVT's financial strengths and weaknesses, after
 - 1) interpreting and analysing at least three years annual reports of NVT and its competitor using ratio analysis
 - 2) examining relevant industry statistics
 - 3) analysing relevant stock exchange/market information
 - 4) analysing relevant media information, and
 - 5) gathering other relevant information you think is important to your analysis.
- 2. state, with reasons, whether or not the investor should invest in NVT.
- 3. identify limitations of your analysis and any additional information you would require to improve your analysis of NVT over the period specified.

Engineering Design report

This assessment item is a formal design report that documents the systems engineering design process that you undertook for your project. The document should outline the thinking in the application of the design tools, not just the final design decisions. In particular, the optimality or goodness of the final design should be justified in the report through evidence provided by the Systems Engineering Design process that you have undertaken.

Analysis will include...



Types of academic sources

- There are many different sources of information.
- The most common include:
 - Books or chapters in a book
 - Journal articles
 - Government reports
 - Newspaper articles
 - Some websites

Which are more academic? What makes them "academic"?



Tip: get to know <a>SuperSearch!

Structuring your report

 No set structure – will depend on the course and the task



Basic generic report structure

- Title page
- Table of contents
- Executive summary
- Introduction
- Discussion
- Conclusion
- Recommendations
- References
- Appendices

This section can vary from report to report depending on the course and the report task



CECS Design report structure

- Executive summary
- Introduction
- Analysis of context (what's the problem?) and requirements (what does your design need to do?)
- Exploration of design ideas and decisions
- Design proposal or recommendation
- Conclusion
- References



You're often given specific instructions

Your CECS business plan should include:

- Title page and contents (not included in page count)
- Executive summary (1 page)
 - One page overview of your report. This is not an introduction.
- Business case (6 pages) provide supporting evidence throughout
 - Why (purpose and opportunity) why does your company exist? What need is it aiming to fill?
 - What (your innovation) explain your product/service, its functions, and how it works (photos of your prototype would fit well here)
 - Who (your market and competitors) who is your target market? What segments exist in your market and how are you addressing them? Who are your competitors?
 - Competitive edge what is your unique selling position? Why will consumers buy your product/service over those of your competitors?

- Strategic plan (5 pages)
 - Vision and objective what is your business trying to achieve? What are your business's short and long term goals?
 - Funding and pricing how will you raise initial funds? How much will your product/service cost to produce? What is your pricing strategy?
 - Sales and distribution strategy how will you market and sell your product/service? What is your strategy to attract customers?
- Summary (1/2 pages) this is your conclusion
- Appendices if needed
- References (not included in page count)

Your structure should support your key message

Even if the different sections of the report are specified for you, there must be

- A logical sequence of ideas and information
- A line of narrative that persuades the reader you have a good solution/recommendation/analysis

Therefore:

- Each section has a purpose that ties it to the overall message
- Each paragraph has a point that ties it to the purpose of the section



Tip: write out your key message before you start writing the report. If you are working in a group - agree on this together

Key message: The investor should invest in NVT because of reasons A, B and C.

Structure 1

Introduction

Ratio analysis

Reason A

Industry statistics

Reason A

Stock exchange

Reason B

Media information

Reason B

Reason C

Conclusion

Structure 2

Introduction

Ratio analysis

Industry statistics

Stock exchange

Media information

Reasons A B C

Conclusion

Structure 3

Introduction

Reason A

Ratio analysis

Industry statistics

Reason B

Stock exchange

Media information

Reason C

Media information

Conclusion

Key message determines structure

Writing the paper

Focus on:

- Setting up your key message in the introduction
- Developing your key message through your sections and topic sentences
- Supporting your ideas with good evidence
- Summarising your findings in concluding sentences and your conclusion





Executive summaries

- Provide a succinct overview of the entire report.
- They typically include:
 - Brief outline of the context and aim
 - Outline of main findings
 - The key message
 - Recommendations



Business report executive summary example

This report was prepared to provide ABC Recruitment with information regarding ways to improve profitability and improve its overall financial position.

The profitability, liquidity and capital structure of ABC Recruitment for the month of August 2018 were analysed. Results show that the company has a low net profit ratio. Gross profit ratio suggests an initial high profit, however when compared to the net profit the business' expenses have eroded much of the income generated. Analysis of liquidity shows that the company can comfortably meet its liabilities. Compared to the ratios of an established firm 45.13% and industry average of 55%, the business is currently quite comfortable with the capital structure.

Profitability could be improved by introducing an incentive-based wage scheme, and reducing other expenses. It is also suggested that ABC Recruitment focus on advertising to establish a 'brand', and look to managing its debtors to improve its overall financial position.

PowerBlocks brings an innovative approach to modular technology in the electronics industry. Our product's Unique Selling Point is based on customisability and user-centred design, also reflected in our business and brand.

The electronics industry is a growing and transforming one, with an increasingly technology-dependent and mobile culture pervading globally...

Our product is composed of functional modules which 'snap' together to create a powerboard with more customisability and flexibility than any existing product on the market...

The initial target market for PowerBlocks is the 'innovator' segment of the consumers [1]. The 'innovative' population is characterised by higher prosperity, education and risk orientation. They like to try new things, have the capability to do so and may also be more interested in being involved with the design and development of the product. Hence, our marketing strategy is designed to capitalise on the product's customisability and target market's willingness to experiment.

A KickStarter campaign and an interactive website will provide engagement with consumers, a platform for initial sales, and funds to start the venture. Competitions for new module designs will be run through the website, further engaging the target market and providing an avenue for 'open innovation' - allowing us to outsource development of the blocks and respond to user feedback. Eventually, we envision PowerBlocks being sold through regular retail outlets as well in order to compete with established manufacturers.

Forecasts of PowerBlocks' financials for the first year indicate that the company can maintain positive cash flow throughout the year due to KickStarter funding and high potential revenues. Our net revenue for the year has been projected close to \$0.9 million with a net profit of \$150,000 ensuring we achieve growing ROI (Return On Investment).

While risks and challenges for both the technology and our venture exist and have been identified, we believe PowerBlocks has the capability and opportunity to succeed in a growing market. Our marketing strategy and product alike have been carefully tailored to succeed in our target market. With a growing ROI in offer for a start-up funding of \$100,000, we believe the PowerBlocks venture presents a sound opportunity for investors who can partner with us to develop the business.

Introductions contain...

- Background or context
 - e.g. details of problem addressed
- Aim, scope and limitations
- State your key message
 - e.g. suggested solution/response
- Outline the report structure
 - · e.g. what you did



This report is prepared for ABC Recruitment at the request of the owner/manager Mr. David Foo, for the month of August 2005. ABC Recruitment is newly established, and the owner is seeking advice on how to improve the business at this early stage. An examination of the profitability, liquidity and capital structure of ABC Recruitment for the month of August 2005 shows that the company has a low net profit ratio, which could be improved by introducing an incentive-based wage scheme, and reducing other expenses. It is also suggested that ABC Recruitment focus on advertising to establish a 'brand', and look to managing its debtors to improve its overall financial position.

Background/ context

Aim/ purpose

Key message

Outline

Introduction to a CECS research report

Interest in nanofibrous materials stems from their unique properties, such as high porosity, large surface area to volume ratios, and enhanced mechanical performance (Huang et al. 2003). They show potential in many fields, such as environmental engineering (membranes and filters), clothing (chemical and biological protection), and healthcare (drug delivery, wound dressing, and tissue engineering) (Ramakrishna et al. 2006). Consequently, the ability to manufacture such materials has been a subject of much research and several processes have been developed, including drawing, template synthesis, phase separation, self assembly, and electrospinning (Huang et al. 2003). Electrospinning requires only simple instrumentation and is a cost effective, scalable, and feasible method for fabricating polymeric fibres ranging in diameter from 3nm to 1µm (Kumbar et al. 2008; Reneker et al. 2001). It is not yet a perfect technique however, and research must be conducted to fully understand the jet instability the method depends on, the effects of fabrication parameters on the created mat, and the tailoring of materials for different applications. This review aims to give an overview of the electrospinning method and its potential application in tissue engineering.

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Background/ context

Issue/problem

Possible solution

Key message

Aim/ purpose

Body

- Provides the justification for your recommendation(s)
- Presents findings
- Is based on evidence
- Keeps the discussion concise by using appendices



Organising the body of your report

- Break your report into major points
 - These are your sections and sub-sections
- For each section/sub-section, break again into points
 - These become your paragraphs



Paragraphing to be persuasive

Body

Topic sentence

Evidence/Examples

Concluding/linking

Topic sentence

Evidence/Examples

Concluding/linking

Topic sentence

Evidence/Examples

Concluding/linking



:

Introduction to profitability section

Profitability is an indicator of a business' operating success, which affects its growth, liquidity, and availability of funds. While the initial profitability of ABC Recruiting is low, with some adjustments to the salary structure and targeted marketing long term profitability should improve.

Profitability paragraphs

ABC Recruitment's initial net profit is low.

Increasing employee performance and reducing monthly expenses will help improve net profit.

Targeted marketing of ABC Recruitment's services will also help to improve performance.

Higher profits can be expected in the future as growth in IT recruitment industries is forecasted (Cho 2014)

Topic sentences for the section on profitability give the argument for how profitability can be increased.

Tip: organise your writing around your topic sentences – they are your outline



Topic sentence states the *point* - the idea and the argument

Supporting sentences provide evidence and analysis to support the point

Concluding sentence summarises the idea and/or links to the next



Your analysis

- Think about how best to present your results e.g. percentages, ratios, tables, charts etc.
- Make it clear where the data came from
- Formulas, long calculations and data can be placed in Appendices – then refer to them in your text (e.g. "see Appendix A")



Ways to incorporate academic sources into your writing

Quote

- Copy others' words exactly
- Use sparingly when you want to highlight a key idea or key researcher/scholar

Paraphrase

- Explain someone's idea in detail using your own words
- Use when you need to provide specific detail/evidence of an author's argument

Summarise

- Succinctly explain someone's argument using your own words
- Use to capture the essence of an argument by so focusing on the main ideas only

Synthesize

- Combine multiple sources that have a similar argument
- Use to summarise multiples sources or to strengthen your argument

Targeted marketing of ABC Recruitment's services will also help to improve performance. Return on equity measures profit generated per dollar of initial investment by the owner over the period. The value of 0.77% for ABC Recruitment Recruitment, for the month of August, suggests a reasonable performance for a newly established business. However return on assets of 0.63% shows the entity has not efficiently used its assets to generate revenue. Prepaid advertising has been shown to be helpful during a business' infancy (French et al, 2014). ABC Recruitment should capitalize on a niche market by using specialist in placements for senior IT&T professionals.

Topic sentence states the **point** - the idea and the argument

Supporting sentences provide evidence and analysis to support the point

Concluding sentence summarises the idea and/or links to the next

Conclusions

- What has been found?
- What are the recommendations?
- Any limitations?



Conclusion from Business report:

Limitations of the report include:

- Figures only for the month of August, hence no prospective outlook
- Ratios only describes current situation and likely to change in next period
- Comparison with other firms/industry average only approximation due to different accounting methods

In conclusion, ABC Recruitment recruitment is comfortable in relation to profitability, liquidity and capital structure for the moment. However, to ensure the business remains financially sound and experiences growth, ABC Recruitment should adopt some of the suggested recommendations. These recommendations are: ...

Conclusion of CECS Business Plan assignment:

In conclusion, PowerBlocks has the potential to revolutionise the powerboard market with its modularity, customisability and flexibility. Our product and business strategies have been carefully chosen to align with our targeted market segment of innovative consumers. Hence, we can extend the level of user functionalities currently present in the market while being cost-competitive as the industry grows in the future.

The financial forecast for PowerBlocks also looks promising with our KickStarter campaigns and high sales volume in the market ensuring positive cash flow. We project that the company can start delivering returns on investment within our first year with a net revenue close to \$0.9 million underpinning a net profit of \$150,000. While our KickStarter campaign provides an initial funding source, an additional minimum of \$100,000 will be necessary to be obtained from other investment sources.

As a business with the potential to escalate innovation and user-centric design in the electronics supply industry through our unified product and marketing strategies, PowerBlocks can transform the current market. Therefore, PowerBlocks would like to seek and secure partnerships with investors who can share expertise and resources in helping us translate this potential to reality.

Edit in four levels:

ARGUMENT Is there a clearly stated key message or response to the question?

STRUCTURE Is the structure logical and does it outline the reasons for our response?

PARAGRAPHING Are the paragraphs clear and well balanced – do they support our message?

EXPRESSION Is the expression clear and consistent?

Some reports may contain a reflective element

Reflective questions on the Systems Engineering process:

- What did you feel was the most useful activity that you learnt in the course?
- What do you feel were the most important steps in the Systems Engineering Design process?
- What was the most challenging aspect in undertaking Systems Engineering Design?
- What sort of risks to the project did you see in the Systems Engineering Design paradigm?
- Where do you think the most time and energy in undertaking Systems Engineering Design.



Reflection on team work (CECS)

The following questions were also posed from the same Systems Engineering Design project

- Do you feel that the team achieved its goals?
- How did you manage the communication with your engineers? What worked and what didn't work? Could you have managed this better?
- How did you find that the team functioned as a team? What worked and what didn't work so well? How could you improve the team operation?
- Did you meet the expectations that you set early in the semester for meetings, workload, etc.?



Reflective writing

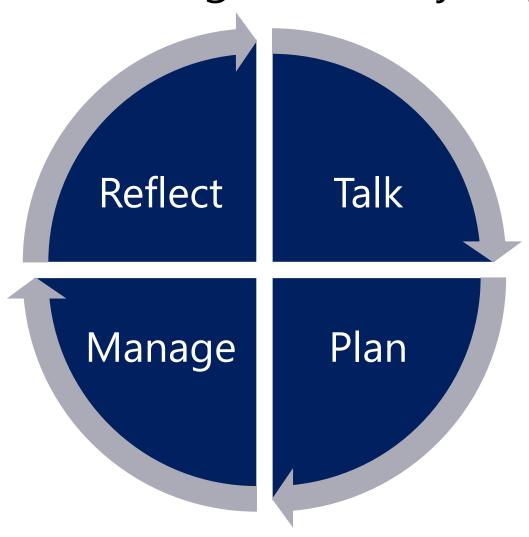
- Not just a summary of everything that you have learnt or found challenging etc. – this is descriptive writing
- Reflective writing is all about you your thoughts, feelings and experiences so use the personal pronoun. It requires deep insights into your strengths, development and areas for improvement
- Requires you to process what it is that you are learning and how
 - Opportunity to think about what you already know about something and to question current thinking.
- You must argue why your key learning insight is significant. Be forward looking: what are the implications of your new insight for future practice?
- Can't just assert learning, must provide specific evidence/examples of learning

Good presentation

- Proofread
- Check referencing
- Format consistently
- Label appendices and refer to them correctly in the body (Appendix A, B, etc.)



Strategies for working effectively in groups



What can you do if your group falls apart?