Academic Writing

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Session will:
Introduce different types of text encouraging students to identify their general and specific features - purpose and function, audience, structure, language and use of information and evidence – to enable students to recognise the features of good academic writing, and apply them to their own writing
Introduction and open discussion – introduce session – what we will cover

Me – academic writing – activity and discussion
Kirsty – Referencing and Plagiarism – Information, activity and discussion

Open questions and discussion – how much/what kind of academic writing have you done? How do you feel about writing at University? What questions do you have about it? What worries you?

Links with future academic practice and employability – development of writing skill is important.
Expectations of 1st year writing – simply to show that you have grasped an understanding of the core concepts covered – and can communicate this effectively
- **Language** – clear, simple, direct and objective

- **Information and evidence** – must be accurate and referenced
Give around 25 minutes to read text examples and identify main features (see powerpoint)

Feedback from groups – encouraging students to focus on feedback on key points

Academic writing - **Pre writing**: writing as learning: to identify and refine ideas/collection information/review existing knowledge/organise thoughts/exploration question/reflect on experience/- map ideas and review and organise them – what is relevant – what needs investigation and development. (pre writing) ;

**Drafting and editing**: Develop understanding; define focus and relevance of material; organising material into structure (drafting and editing). These processes often overlap with each other - not a linear process.
Students were given unmarked copies of these extracts to discuss in groups. The annotations reflect the class discussions, and the annotated versions were later uploaded to their VLE module.

**Cells and molecules writing style exercise**

**Text 1**

3.2 Cryotherapy and hydrotherapy

The RICE principle (i.e. rest, ice, compression and elevation) has been shown to be very practical and is often used to reduce pain and bleeding. In experimental research, ice has been shown to reduce inflammation and the size of the hematoma after injury, and thus reduce permanent scar tissue (Jarvinen et al., 2007; Swenson, Swan & Karlsson, 1996). Compression has been shown to reduce intramuscular blood flow to the injured site. However, it is debatable whether compression should be applied in the first 24 h. It has been recommended that ice and compression should be alternated as this combination has been shown to reduce intramuscular temperature (3-7°C) and blood flow (50%) (Thorsson, Lilja, Dahlgren, Hemdal & Westlin, 1985). However, no evidence of an optimal mode or duration of RICE exists, (Bleakley, McDonough, & MacAuley, 2004) and it has been suggested that more hamstring specific trials are needed (Hoskins & Pollard, 2005a).

Water immersion has gained popularity for its effects on increasing intracellular intravascular fluid shifts, reduction of muscle oedema, and increased cardiac output without energy expenditure which is thought to increase blood flow and transportation of nutrient and waste production throughout the body (Wilcock, Cronin & Hing, 2006). Unfortunately, the effects of immersion are only being studied on the physiology of recovery after exercise and no studies are investigating the effects of muscle injury and repair. As the body is submerged in water, a compressive force is applied to the body called hydrostatic pressure. This pressure causes the fluids in the body to become displaced from extremities to the central cavity of the body (Lollgen, von Nieding, Koppenhagen, Kersting, & Just, 1981). The amount of pressure that acts on the body is dependent on the depth of submersion, not on the total amount of water. At hip level submersion, the fluids are displaced from the lower extremities (i.e. higher pressure area) to the thoracic region (i.e. lower pressure area) (Lollgen et al., 1981; Wilcock et al., 2006). The potential benefits of water immersion on muscle strain injuries include: preventing inflammation and oedema, transporting blood from interstitial and intramuscular space to intravascular space, reducing the permanent scar tissue, and aid in the transportation of waste products away from the injured site (Wilcock et al., 2006).
IN BIRDS AND MAMMALS BLOOD IS PUMPED THROUGH A PULMONARY AND A SYSTEMIC SYSTEM

One of the main jobs of the circulation is to bring oxygen to all of the cells of the body. In humans, as in other mammals and in birds, blood is charged with oxygen in the lungs. Then it is returned to the heart to be pumped out into the arteries that deliver it to the other tissues and organs of the body. There is a double circuit of blood vessels – (1) the pulmonary circulation, which connects the heart and lungs, and (2) the systemic circulation, which connects the heart with all of the tissues of the body. This general pattern of circulation may be traced in Figure 42-18.

The Pulmonary Circulation Oxygenates the Blood

Blood from the tissues returns to the right atrium of the heart partly depleted of its oxygen supply. This oxygen-poor blood, loaded with carbon dioxide, is pumped by the right ventricle into the pulmonary circulation. As it emerges from the heart, the large pulmonary trunk branches to form the two pulmonary the two pulmonary arteries, one going to each lung. These are the only arteries in the body that carry oxygen-poor blood. In the lungs the pulmonary arteries branch into smaller and smaller vessels, which finally give rise to extensive networks of pulmonary capillaries that bring blood to all of the air sacs in the lung. As blood circulates through the pulmonary capillaries, carbon dioxide diffuses out of the blood and into the air sacs. Oxygen from the air sacs diffuses into the blood so that, by the time blood enters the pulmonary veins leading back to the left atrium of the heart, it is charged with oxygen. Pulmonary veins are the only veins in the body that carry blood rich in oxygen.

In Summary, blood flows through the pulmonary circulation in the following sequence:

Right atrium → right ventricle → pulmonary artery → pulmonary capillaries (in lung) → pulmonary vein → left atrium
Institutes link up for dairy cattle research work

SCOTLAND yesterday consolidated its position as the world leader in dairy cattle genetics with the launch of a new Edinburgh-based scientific consortium by Deputy Rural Affairs Minister John Home Robertson.

He said that the new link between the Scottish Agricultural College, the Roslin Institute and Edinburgh University was an important milestone.

The Edinburgh consortium will have 12 of the world’s leading experts in dairy breeding and genetics as well as another 40 support staff working in three institutes.

Professor Geoff Simm, the head of the SAC’s animal breeding and genetics department, said Edinburgh had for the last 80 years been the leading world centre for dairy cattle research.

The three institutions have in the past informally worked together, but the new consortium will bring closer formal ties.

The consortium will bid for new research work from the Mil Development Council, the Scottish Executive and the Ministry of Agriculture, Fisheries and Food.

Prof Simm said a greater proportion of research work will be focused on cutting production costs and helping producers overcome the problems of mastitis and poor fertility in dairy cows.

Prof Simm said: “A lot of the work in the future will be getting a better handle on costs and some of the negative consequences of the production focus.”

“The emphasis on welfare and in reducing production costs is becoming even more important because of the steep drop in dairy profitability. Reducing costs of production even further will be essential.”

Mr Home Robertson underlined the Executive’s commitment to agricultural research.

He said the consortium will be well placed to consider research issues that are needed to help align today’s dairy cattle breeding with tomorrow’s consumer demands for affordability as well as product quality, animal welfare and environmental and safety concerns.

Comment [A20]: Headline – only essential words used – not a full sentence.

Comment [A21]: Lead work in bold capitals – to highlight start of story.

Comment [A22]: Short paragraphs throughout – only giving essential information – no detail.

Comment [A23]: Why? No explanation of context – just making the point.

Comment [A25]: Again – no detailed explanation or back up of why this is the case – just stating that it is. Evidence used is quotes/opinions.

Comment [A24]: Again – no explanation of what the new links are/how the consortium will work/what’s different from what’s gone before etc. WHY will it be better? In what way?
The elevator door opened and Tom stepped out into the corridor that led to a secure chrome and glass door with the legend Mendel Laboratory Suite. Authorized Entry only etched onto it. Putting his hand into the DNA sensor, he waited for the door to recognise him.

‘I reckon a gene therapy cure’s about five years away. I’ll make damn sure it’s no longer,’ he said. ‘So if Holly does have a susceptibility and it surfaces in her thirties, like her mother and grandmother, then she should be OK.’

The door hissed open and they both stepped through. Lights flickered on automatically and the sensors detected their presence. The tungsten bulbs gave the impression of natural daylight as they walked past the large cryopreserve bank where live tumour samples were stored at temperatures of -180°C. The empty laboratory looked eerie with nobody sitting at any of the workbenches; a pristine sea of white, chrome and glass. The only sound came from some of the instruments in the centre of the workbenches and the low hum of the air-conditioning system. Tom strained his ears for the growling sound of DAN, but of course he knew it would be silent by now, its task complete. He could see the doorway to the facility at the far right of the main lab and felt his stomach contract. He had run the test countless times before, but never on someone close to him with a suspected lethal defect.

‘But what happens if the prediction’s earlier Tom? Before the five years?’

He couldn’t answer that. Tom pulled open the door to the Genescope facility, revealing the six towering black swans that seemed to look down on him in malevolent pity. ‘Come on!’ he said. Let’s see what DAN has to tell us.’
Cells & Molecules

Essay advice:
Referencing and Plagiarism

http://www.uws.ac.uk/library/

Why do we use references?

• Science is about building on existing knowledge.
  – if you use facts, quotes or ideas from somewhere else, you need to say where they came from.
  – shows that you have read around the subject, and that you understand what you are reading.
  – use references to avoid plagiarising other people’s work.

At the centre of the circulatory system is the heart. The intermeshed structure of the heart’s cells allows it to withstand great pressure (Purves et al., 1998) and the average human heart will beat more than 2.5 billion times (Brum, McKane and Karp, 1994).


http://www.uws.ac.uk/library/

What do I reference?

• Need to reference:
  – quotes from other texts/people.
  – ideas and facts from elsewhere.
  – evidence for any claims you have made.

• Don’t need to reference:
  – established facts.
  – your lecture notes.

Examples

• “Humans need food to survive.”
  – Established fact, wouldn’t need a reference.

• An active adult male needs around 2,500 calories a day.”
  – Stating a specific fact that isn’t widely known, would need a reference for this.

• “The best time of day to exercise is before work, as this helps form a habit.”
  – Making a claim, would need evidence (e.g., a study reported in a text book) to back this up. Needs a reference.
From your reading

- If you read the following ...

12.3.4.1 Silicon
Silicon is known to be essential for the development of connective tissue and the bones, although its function in these processes is not known. The silicon content of blood vessel walls decreases with age and with the development of atherosclerosis. It has been suggested, although the evidence is not convincing, that silicon deficiency may be a factor in the development of atherosclerosis.

... you might want to use this information in an essay.

http://www.uws.ac.uk/library/

Using your reading

- Quoting from your reading:
  - Short quote – put in quotation marks; quote is part of sentence; include citation and full details of book at end of essay.

Silicon is “essential for the development of connective tissue” (Bender, 1997, p.308).

Using your reading

- Longer quote – put in quotation marks; type longer quotes as indented paragraph.

Silicon also plays a role in the ageing circulatory system:

“The silicon content of blood vessel walls decreases with age and with the development of atherosclerosis. It has been suggested … that silicon deficiency may be a factor in the development of atherosclerosis. (Bender, 1997, p.308)”

- More marks if you use your own words – shows understanding.

Using your reading

- Own words:

Bender (1997) states that silicon is involved in the development of blood vessels, and that the silicon content of blood vessels declines with age.

- Or:

Silicon is involved in the development of blood vessels, and that the silicon content of blood vessels declines with age (Bender, 1997).

“UWS Harvard”

- Use “UWS Harvard” for your references.
- Very precise format:
  - spaces and full stops are important.
- Referencing guides in “Guides & Online help” section on Library website:

http://ow.ly/6Jkii

http://www.uws.ac.uk/library/
Students were given an unmarked version of this mock essay answer. They were asked to work in pairs to decide where references were needed. This was followed by a class discussion, and this annotated version was uploaded to their VLE.

This essay was also used for the TurnItIn demonstration, so it contains lots of plagiarism from Wikipedia, journal articles, etc!

Introduction

Plants use many different techniques to spread their seeds, including wind dispersal, animal dispersal, bursting, and dropping.

Seed dispersal by ants

Myrmecochory is the process where ants are used to spread plant seeds. Myremecochorous plants have evolved specialist structures called elaiosomes, which are fleshy structures attached to their seeds. Ants take the seeds to their nest and feed the elaiosomes to their larvae. After the larvae have consumed the elaiosome, the ants take the seed to their waste area (Author, year). Some researchers (Author A, year; Author B, year) believe this helps the seeds to germinate as the waste area is rich in nutrients from ant droppings, but other researchers (e.g., Author C, year) state that this soil does not contain any more nutrients than the area surrounding the parent plant, which will have been enriched with leaf litter.

Myrmecochorous plants include species of “violet, primrose, hepatica, cyclamen, anemone, corydalis, and bloodroot” (Author, year, page number). Elaiosomes develop either from seed tissues or from fruit tissues, but, despite having different origins and developmental pathways, all elaiosomes appear to serve the same main function, i.e., attracting ants. This is an example of convergent evolution in flowering plants.

The relationship between plants and ants appears to be mutualistic; the plant benefits because its seeds are dispersed to favourable germination sights, and the ants receive food for their larvae.

Comment [KST1]: Probably an established fact (something that most people with basic knowledge of subject would know), therefore wouldn’t need referenced.

Comment [KST2]: Probably need to reference this section, e.g., what textbook did you get this from? If the information in the first three sentences came from the same book you can reference it at the end of the group of sentences.

Comment [KST3]: Definitely need to reference the conflicting opinions in this paragraph.

Comment [KST4]: Must reference quotations. Include a page number for quote. (You only need to include page numbers in citations for quotes).

Comment [KST5]: Your opinion? If so, doesn’t need referenced. It might be better if you started the paragraph with “As shown above” or similar, to illustrate that this opinion is based on the evidence that you have presented in your work.
How to reference

Referencing help is available on the Library website: http://www.uws.ac.uk/schoolsdepts/library/guides/referencing.asp and from Library or Effective Learning staff.

Examples

**Book**

**Chapter in a book**
*In the example below, Orb wrote the chapter you are referring to and the chapter is published in the book by Hawley.*

**Electronic book (eBook)**
*Same as a printed book except you must say where and when you accessed it.*

**Journal article**

**Electronic journal article**

**Website or page from the Internet**
Plagiarism

- Passing off someone else’s writing/ideas/research as your own.
- Easy to do accidentally.
- Need to reference ideas, quotes and facts.
- Remember to put quotes in quotation marks.


Skeletal muscle tissue is highly specialized to generate force and thus movement. The major function of muscle is to produce motion, to aid in the maintenance of posture, and to produce heat.

Is this plagiarism?


Skeletal muscle tissue is highly specialized to generate force and thus movement. The major function of muscle is to produce motion, to aid in the maintenance of posture, and to produce heat. (Birch, MacLaren and George, 2005).

Is this plagiarism?


“Skeletal muscle tissue is highly specialized to generate force and thus movement. The major function of muscle is to produce motion, to aid in the maintenance of posture, and to produce heat” (Birch, MacLaren and George, 2005).

Is this plagiarism?
Skeletal muscle generates force and therefore movement. The major functions of muscles are motion, maintenance of posture, and heat production.

Is this plagiarism?
http://www.uws.ac.uk/library/