Scientific Writing in English
－英语科研论文写作－

Lecture 18 Friday 20.11.2015
(13.30-15.10pm/18.30-20.40pm)

Scientific Writing in English
－英语科研论文写作－

Volunteers for Note Taking
(Chinese/English)

compiled version to:

赵竹轩 zhaozhuxuan@ucas.ac.cn
&
吕平平 pplv10@126.com

Scientific Writing in English
－英语科研论文写作－

Reminder:

Q&A Session from 8.50pm

Tonight

Comments

* Yizhou to explain use of NEW platform
* DEADLINE for 1. abstract: Saturday 10pm
* >450 students already submitted
* all others: Please RE-SUBMIT to MOOC platform
* Peer reviewing 1. abstract by Monday 7am
* 2nd article: provided on Monday 8am
                   to read by Thursday 26th (Take notes!)
* 2nd abstract: to write in class Friday 27th (on paper)
                   to be submitted by Friday 11pm

Scientific Writing in English
ー英语科研论文写作ー

OVERVIEW - Module 2

Unit 1: Approach to Academic Writing

Unit 2: Writing General -> Specific Texts

Unit 3: Problem-Process-Solution Texts

Unit 4: Data Commentary (Results/Discussion Section)

Unit 5: Writing Summaries

Unit 6: Writing Critiques

Unit 7: Constructing a Research Paper I and II

OVERVIEW - Module 2
Unit 4: Data Commentary

1. Strength of Claim
2. Structure of Data Commentary
3. Language Focus: Verbs in Indicative and Informative Summaries
4. Language Focus: Linking as-Clauses
5. Language Focus: Qualifications and Strength of Claim
6. Language Focus: Qualifying Comparisons
7. Language Focus: Dealing with Problems
8. Language Focus: Referring to Lines on Graphs
9. Language Focus: Prepositions of Time

Unit 4 – Data Commentary

* all about how to discuss data presented in graphs, tables, figures

* either your own data, or data from a different source

* more on writing data in Unit 7 (Constructing a Research paper I)

Unit 4 – Data Commentary

Strength of Claim

* data commentaries are exercises in **positioning** yourself

Unit 4 – Data Commentary

Strength of Claim

* danger 1: to simply repeat in words what the data has expressed
          in nonverbal form
     -> description (rather than commentary)

Unit 4 – Data Commentary

Strength of Claim

* danger 2: to read too much into the data and draw unjustified conclusions

---

Unit 4 – Data Commentary

Strength of Claim

* general-specific direction (as described in Unit 2)

Unit 4 – Data Commentary

Strength of Claims
TASK 31:
Evaluate the strength of the claims provided, and put in order
(1-strongest; 6-weakest)

Time: 15 min

Unit 4 – Data Commentary

TASK 32A: Strength of Claims

___a. contributed to
___b. caused
___c. may have contributed to
___d. were probably a major cause of
___e. were one of the causes of
___f. might have been a small factor in

TASK 32A

http://www.wenjuan.com/s/nMRF7n/

Unit 4 – Data Commentary

TASK 31: Strength of Claims

___b. caused
___d. were probably a major cause of
___e. were one of the causes of
___a. contributed to
___c. may have contributed to
___f. might have been a small factor in

Unit 4 – Data Commentary

TASK 32B: Strength of Claims

Now apply one of those claim phrases to the sentences provided.

Group work

Time: 15 min

TASK 32B

http://www.wenjuan.com/s/fAZz2a/

Unit 4 – Data Commentary

What exactly is required in a data commentary?

some of the more common purposes:

1. Highlight the results
2. Assess standard theory, common beliefs, or general practice in light of the given data
3. Compare and evaluate different data sets
4. Assess the reliability of the data (sound methods used?)
5. Discuss the implications of the data

-> data commentary contains 3+ of these elements

OVERVIEW - Module 2
Unit 4: Data Commentary

1. Strength of Claim
2. Structure of Data Commentary
3. Language Focus: Verbs in Indicative and Informative Summaries
4. Language Focus: Linking as-Clauses
5. Language Focus: Qualifications and Strength of Claim
6. Language Focus: Qualifying Comparisons
7. Language Focus: Dealing with Problems
8. Language Focus: Referring to Lines on Graphs
9. Language Focus: Prepositions of Time

Unit 4 – Data commentary

Structure of Data Commentary

* Data commentaries contain following elements:

1) Location elements and/or summary statements

2) Highlighting statements

3) Discussions of implications, problems, exceptions, recommendations

---

Unit 4 – Data Commentary

Structure of Data Commentary
-Location elements and Summaries-

* **location elements** refer readers to important information in a table, chart, graph
* sentence or phrases that help readers make their way through a text
* reveal organization of results
* refer to relevant parts of a text
* establish logical connections

Unit 4 – Data Commentary

Starting a data commentary – **Active Voice**

Table 5 shows	the points of entry of computer viruses for businesses.
Table 2 provides	details of fertilizer types used.
Figure 2 plots	the two series for the last five years.
Figure 4.2 gives	the results of the second experiment.

Unit 4 – Data Commentary

To note:

* consistent use of *present tense* for location elements **- Why?**

Unit 4 – Data Commentary

Starting a data commentary – **Passive Voice**

The most common modes of computer infection for businesses	are shown in Table 5.
The details of the fertilizer used	are provided in Table 2.
The two series for the last five years	are plotted in Figure 2.
The results of the second experiment	are given in Figure 4.2.

Unit 4 – Data Commentary

Task

Chose some of your 10 articles, and extract **location elements** used.

Can you see a trend towards **active voice** or **passive voice**?

Task Code provided in next handout

Unit 4 – Data Commentary

To note:

-> both active form and passive form appropriate to use

* location elements can be either indicative or informative

Structure of Data Commentary
-Location elements and Summaries-

* location elements can be either *indicative* or *informative*

indicative	informative
Table 2 **provides** details of the fertilizer used.	Table 2 **shows that** the active ingredients are all inorganic.
Figure 4.2 **provides** the results of the second experiment.	Figure 4.2 **suggests that** the experimental results confirm the hypothesis.

OVERVIEW - Module 2

Unit 4: Data Commentary

1. Strength of Claim
2. Structure of Data Commentary
3. **Language Focus: Verbs in Indicative and Informative Summaries**
4. Language Focus: Linking as-Clauses
5. Language Focus: Qualifications and Strength of Claim
6. Language Focus: Qualifying Comparisons
7. Language Focus: Dealing with Problems
8. Language Focus: Referring to Lines on Graphs
9. Language Focus: Prepositions of Time

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative Summaries

* good news: only ~10+ verbs to make reference to graphs/tables

* some can be used for both **Indicative and Informative summaries**, some only for one type

---

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative Summaries

* most commonly used verb: *show*

Examples:

Table 5 *shows* the most common sources of infection.

Table 5 *shows that* email attachments are the most common source of infection.

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative Summaries

Table 5 **shows** the most common sources of infection. **indicative**, general summary

Table 5 **shows that** email attachments are the most common source of infection. **informative**, highlight of a specific aspect of the data

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative Summaries

* some verbs can be used with **only one type** of summary statement

Table 5 **provides** demographic information for the study participants.

Table 5 **provides that** most study participants were over age 45.

?

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

* some verbs can be used with only one type of summary statement

Table 5 provides demographic information for the study participants.

Table 5 provides that most study participants were over age 45.

X

-> **provide** only used for indicative summaries!

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

Examples:
Table 2 _____the effect of playing computer games on the duration of student's study time.

Table 2 _____that playing computer games has a considerable effect on the duration of student's study time.

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

Examples:
Table 2 **shows** the effect of playing computer games on the duration of student's study time.

Table 2 **shows** that playing computer games has a considerable effect on the duration of student's study time.

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

Examples:
Table 2 **summarizes** the effects of playing computer games on the duration of student's study time.

Table 2 **suggests** that playing computer games has a considerable effect on the duration of student's study time.

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

Task 33 (Homework)

Which of the verbs in the following table can be used for an indicative statement, an informative statement, or both? Use your 10 original research articles for this task, and search for the verbs provided in the table to check how often they occur with or without *that*.

Code provided in handout

Language Focus: Verbs in Indicative and Informative summaries

	Indicative	Informative	...that?
show	Y	Y	THAT
provide	Y	N	-
give			
present			
summarize			
illustrate			
reveal			
display			
demonstrate			
indicate			
suggest			

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

To NOTE:
* Writing scientific papers are NOT exercises in Creative Writing!

* if *show that/shown in* is the best verb to use, use it!

* no editor/reviewer will reject your manuscript because you use *show* all the time!

Unit 4 – Data Commentary

Language Focus: Verbs in Indicative and Informative summaries

Ref: Hyland 2000 (frequency of use of 80,000 words from 80 research articles)

Table 10 **Active Verbs** (in order of frequency)		Table 10 **Passive Verbs** (in order of frequency)	
1. shows	~40%	1. shown in	~40%
2. presents	~10%	2. illustrated in	~30%
3. illustrates	~8%	3. presented in	~10%
4. summarizes	~5%	4. given in	~6%
5. demonstrates	~4%	5. listed in	~6%
6. contains	~4%	6. provided in	~4%
7. provides	~3%	7. summarized in	~4%
8. depicts	~2%	8. seen from	~3%
9. lists	~2%		
10. reports	~2%		

* **shows** mostly used for Figures (30%) and Tables (15%)

OVERVIEW - Module 2
Unit 4: Data Commentary

1. Strength of Claim
2. Structure of Data Commentary
3. Language Focus: Verbs in Indicative and Informative Summaries
4. **Language Focus: Linking as-Clauses**
5. Language Focus: Qualifications and Strength of Claim
6. Language Focus: Qualifying Comparisons
7. Language Focus: Dealing with Problems
8. Language Focus: Referring to Lines on Graphs
9. Language Focus: Prepositions of Time

Unit 4 – Data Commentary

Language Focus: Linking *as*-Clauses

Examples:

As shown in Fig. 1 and Fig. 2, the companies used in this survey varied significantly in geographical location, size, and method of operation.

As can be seen in Table 5, the overall rate of recall, while low, also showed considerable variation

Incubation of non-canonical sites in parallel with their converted, canonical versions with nuclear protein extracts from B cells, L cells and HeLa cells revealed in EMSAs mainly quantitative differences in factor binding. This is true for all three sites, although, as shown in Fig. 4, the affinity of Oct factors to the UPS and UPS_O differed by a factor of two, whereas that

As shown in Fig. 2, in EMSAs the converted Octamer-UPS (UPS_O), TREp (153T-TREp) and TCEd (TCEd A/C) probes generated the same complexes as canonical binding sites upon incubation with nuclear protein extracts of El4 T lymphoma cells.

Hepatomegaly suggested that some of the liver functions might be suboptimal. As shown in Table 1, homozygous animals had higher plasma transaminases and