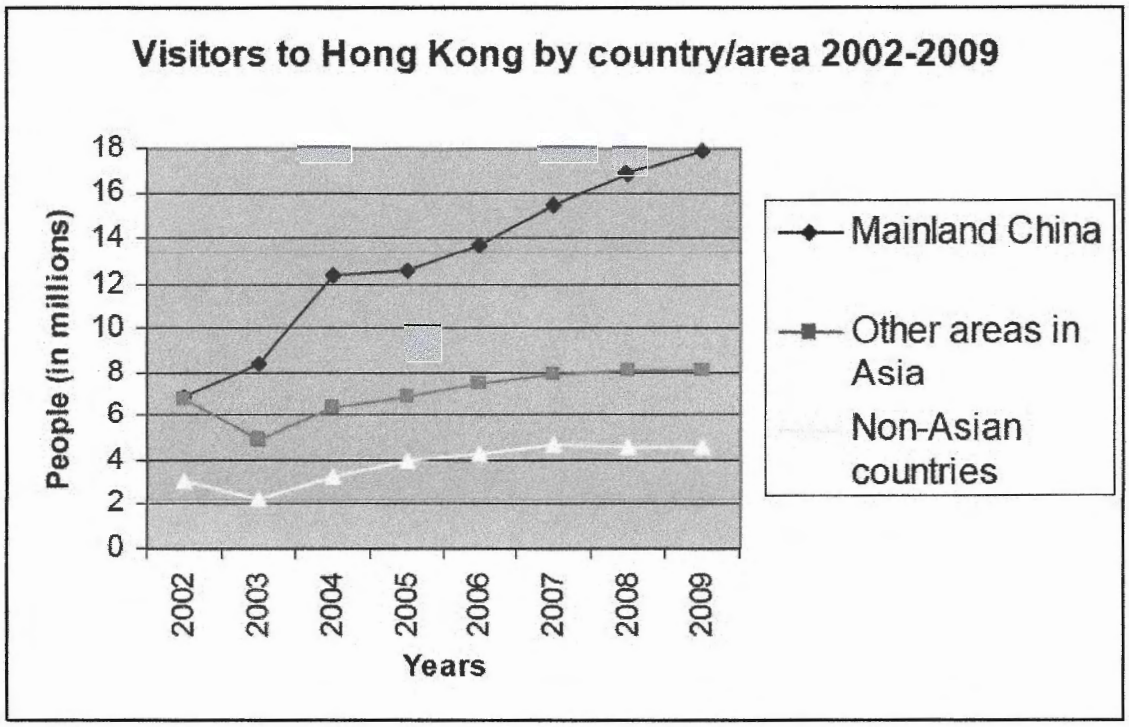
Preliminary Activity – A Sample Data Commentary

Figure 1



(1) Figure 1 shows the number of travelers from various parts of the world entering Hong Kong from 2002 to 2009. **(2)** It can clearly be seen that there has been a large increase in the number of Mainland Chinese visitors, while the number of visitors from other areas of the world has only shown a slight growth.

(3) The numbers of Mainland Chinese visiting Hong Kong have risen considerably over this period. **(4)** In 2002 there were nearly 7 million Mainland Chinese visitors, similar to the figure for other parts of Asia and just over double that for non-Asian travelers. **(5)** This number climbed to approximately 8 million in 2003, then rose dramatically to just over 12 million only one year later. **(6)** Since 2004, there has been a steady increase, with around 18 million Mainland Chinese travelers visiting Hong Kong in 2009. **(7)** This is more than double the number for that year of other visitors from Asia, and around four times the figures for non-Asian visitors.

(8) The figures for travelers from other parts of the world show similar trends: first a dip of roughly one-third the total number of visitors from 2002 to 2003, then slow growth until 2007 followed by a leveling out. **(9)** Overall, the numbers of Asian tourists rose from just under 7 million in 2002 to roughly 8 million seven years later, while the corresponding figures for visitors from non-Asian parts of the world were roughly 3 million and 4.5 million respectively.

(10) To sum up, in recent years Hong Kong has become an increasingly popular destination for visitors, especially people from mainland China who currently outnumber those from all other parts of the world combined.

Questions

1. What is the purpose/function of the following?
   (a) sentence 1
   (b) sentence 2
   (c) sentences 3 and 8
   (d) sentence 10
2. What verb tense(s) is(are) used for each sentence? Why?
3. Does the commentary describe every piece of information in the figure?

From: Groves, J. *Introduction to writing a graph description.* Retrieved from https://lc.hkbu.edu.hk/sall/english/doc/Introduction_Steps_writing_graph_description.pdf

Activity 2 – "Task Eight" from Swales & Feak (2012) Ch 4

Academic writers often use "stance markers" to reveal their position, or stance, on a topic. For example, they may indicate a personal belief or attitude (e.g., "I think that…"); soften or hedge a claim ("It is likely that…"); or employ boosters to strengthen points (e.g., "Clearly there is a need to…"). These stance markers are part of one's textual or disciplinary voice (Hyland, 2008). Control of this voice is "central to building a convincing discourse" and integral to "texts that plausibly represent an external reality" (Hyland, 2008) and anticipate readers' reactions to those texts.

Table 9 shows three types of stance markers identified in Hyland's corpus of 240 published research articles from eight disciplines.

TABLE 9. Stance Features by Discipline (per 1,000 words in journal articles)

Feature	Philosophy	Sociology	Applied Ling.	Marketing	Physics	Biology	Mech. Engin.	Elect. Engin.	Avg.
Hedges	18.5	14.7	18.0	20.0	9.6	13.6	8.2	9.6	14.5
Attitude Markers	8.9	7.0	8.6	6.9	3.9	2.9	5.6	5.5	6.4
Boosters	9.7	5.1	6.2	7.1	6.0	3.9	5.0	3.2	5.8
Stance	**37.1**	**26.8**	**32.8**	**34.0**	**19.5**	**20.4**	**18.8**	**18.3**	**26.7**

Adapted from Hyland, 2004.

TASK EIGHT

Discuss Table 9 with a partner. What is interesting or possibly relevant? List a few observations and be prepared to share these with your class.

Activity 3

This sentence is an example of the writer being "confidently uncertain," but perhaps it is overdone. One of the qualifying phrases could probably be omitted to avoid excessive qualification. Too much caution may result in your saying almost nothing, as in the following example from a journal in Anthropology.

> It could be concluded that some evidence seems to suggest that at least certain villagers might not have traded their pottery with others outside the community.

Examples of extremely, possibly overly cautious claims in the hard sciences can even be found.

> Studies have found that quantum entanglement may play a role in some types of magnetoreception with certain molecules, but more work is needed to explore this phenomenon.

In some cases, these overly hedged statements may be constructed in response to reviewer criticisms.

TASK TEN

Underline the verb that makes the weaker claim.

1. **The results (indicate / establish) that there is a link between smoking and lung cancer.**
2. **The survey results (suggest / show) that the reuse of sentences or sections from one's previously published papers is a questionable practice.**
3. **The latest series of studies (question / challenge) the value of including consumer expectations in the assessment of service quality.**
4. **The results given in Figure 4 (validate / support) the second conclusion that certain bacteria can reduce arsenic (As) levels in groundwater.**
5. **Baseline conditions have been (assumed / shown) to be accurate at the time of the surveys.**

6. Several studies have (identified / alluded to) the importance of cultural sensitivity as a precursor to culturally appropriate medical care.
7. Changes in ambient temperature may have (influenced / distorted) the test results.
8. Previous studies (failed / forgot) to consider the change in the fiber interface during the cracking process.
9. As shown in Figure 3, trade liberalization has (stimulated / encouraged) economic growth in developing countries, leading to rising incomes.
10. Figure 12 (depicts / clarifies) the relationship between these two systems.

TASK ELEVEN

Now, try to soften the claims in any four of the items. Make the sentences academically respectable and defensible.

1. Tall people have higher incomes than short people.
2. Economic sanctions are ineffective.
3. Alcohol causes brain damage in teenagers.
4. Passive smoking causes cancer.
5. Recycling is the best solution to the waste disposal problem.
6. Physical exercise prevents depression.
7. Deep tunnels are safer and less vulnerable to earthquake shaking than are shallow tunnels.
8. Private schools provide a better education than do public schools.

Activity 4

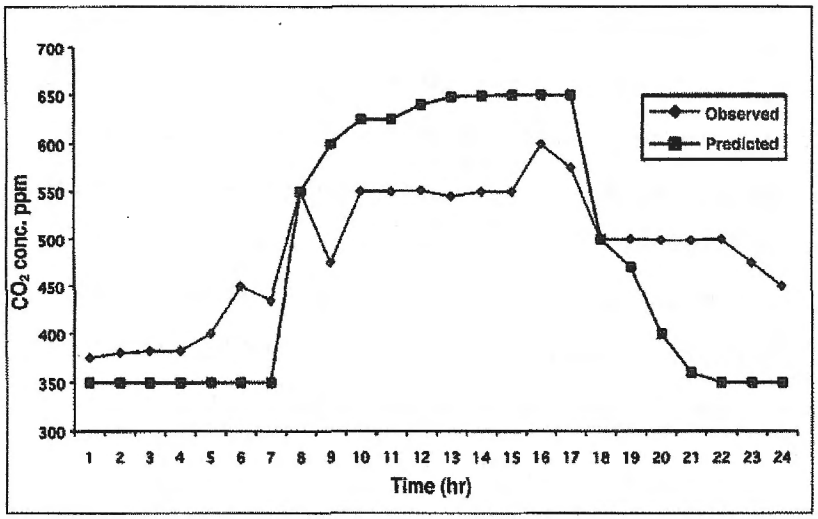
Dealing with Graphs

So far we have primarily focused on tables. Discussions of graphs essentially follow the same principles as those for tables, with one major difference. Much of the vocabulary used to comment on graphs is quite different.

TASK EIGHTEEN

Look at the graph in Figure 9 and the data commentary on page 178 that was written by one of our students. We have omitted certain words and phrases. Can you complete the passage? Work with a partner.

FIGURE 9. Comparison of the Actual CO_2 Levels with the Model Predictions



The observed and predicted CO_2 levels for 24 hours in a commercial building ❶ _____ in Figure 9. The actual CO_2 concentrations were ❷ _____ directly from sites in the building by the CO_2 Trapping Method. The predicted concentrations were calculated by using one of the available indoor air quality models. In this case the "fully stirred and conservative reactor with internal source model" ❸ _____ since it was assumed that the air was completely replaced and mixed with fresh air every hour, and there was no degradation.

❹ _____ shows that the predicted CO_2 concentrations increase sharply after 8 AM and ❺ _____ steeply after 6 PM. This is because the CO_2 levels were ❻ _____ to be dependent on the number of people in the building since people produce CO_2 as a result of respiration. However, the model overestimates the CO_2 levels during the occupancy periods (8 AM–5 PM) and ❼ _____. The lower CO_2 levels found in the occupancy period ❽ _____ several factors such as the presence of plants, which generate oxygen, while using CO_2. ❾ _____, the predicted levels are lower than the ❿ _____ during the vacancy period because the model assumed that nobody was in the building after 6 PM and that the air was fully mixed. In fact, there might be overtime workers in the building after 6 PM or the ventilation rate ⓫ _____ during the vacant period. Although the "fully stirred and conservative reactor with internal source model" tends to overestimate or underestimate ⓬ _____ occupancy, overall, it performs well with a coefficient of 0.9 ($r = 0.9$).

Jiyoung Lee, minor editing

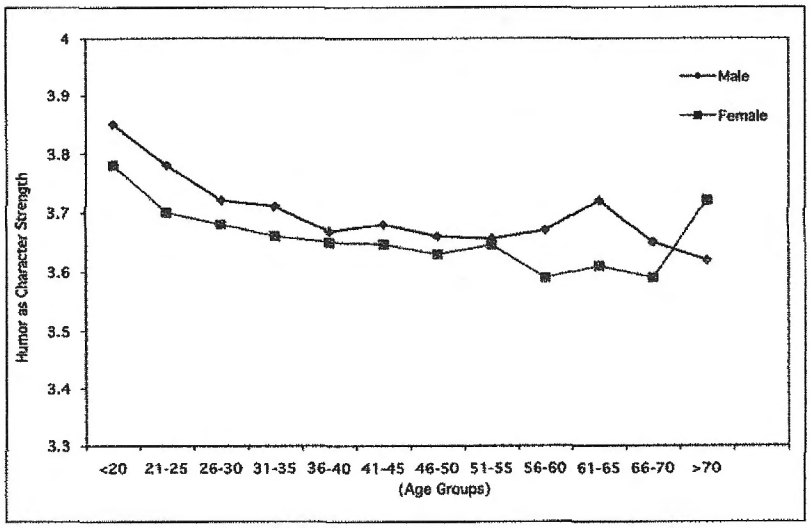
Jiyoung has produced an excellent draft of a data commentary. But, look at the last paragraph again. What changes would you suggest? Do you have any suggestions for changes in tense usage?

One feature of Jiyoung's data commentary in Task Eighteen is that she made little explicit reference to the lines on her graph, as many writers do when dealing with historical or technical data. As you know, graph lines have a special terminology. In fact, they have somewhat different terminologies depending on the discipline.

TASK NINETEEN

Choose a term from the list on page 180 that you think best describes the graph in Figure 10 at each of the given ages.

FIGURE 10. Sense of Humor as Character Strength for Different Ages



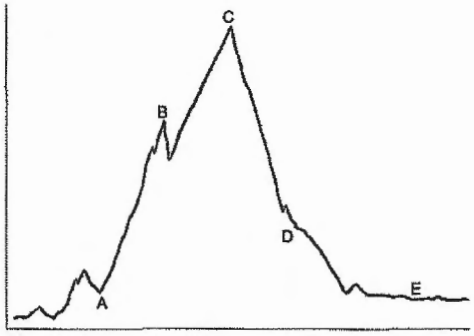
Based on Ruch et al., 2010.

downward trend	peak	low point	sharp rise
steep fall	rise	level off	fall off
remain steady	spike	increase	decline

1. Humor as character strength ages 61–65 for males:
   _____
2. Humor as character strength ages 26–45 for females:
   _____
3. Humor as character strength ages 65–70 for males:
   _____
4. Humor as character strength ages 60–65 for females:
   _____
5. Humor as character strength ages 20–50 for males:
   _____

Now look at this graph from the physical sciences in Figure 11 and choose a term from the list that best describes each letter. Some terms may be used more than once.

FIGURE 11. Hard Sciences Graph



minimum	local dip/local minimum	local maximum
spike	maximum/peak	level off
kink	linear increase	

A. _____ D. _____

B. _____ E. _____

C. _____

In what way are the terms for the physical sciences different?

Post-Activity

Organization

Data commentaries are usually ordered from general to specific. We saw this pattern, for example, in the short commentary on the Japanese scientists in Task Seven. Decisions about organization, however, become more complex with comparative data. Consider the following case: You are taking a graduate course in the social sciences. You have been studying differences in parental behavior with regard to their adolescent children. Your instructor suggests that, contrary to popular belief, American parents may be stricter with their teenage sons than they are with their daughters. You are given Table 10 on page 166, which is based on a survey conducted among suburban families in a midsize midwestern U.S. city, and asked to prepare a short commentary on the main findings.

TASK TWELVE

The information in this task contributed to a published study of how children begin to make choices regarding the time spent on doing homework and watching television, as well as deciding how to spend their money. Read the incomplete data commentaries based on Table 10 written by three students. The commentaries (on pages 166–167) include only the location statements and some highlighting statements. What are the differences among the three? Which do you think makes the best highlighting statement? Why?

TABLE 10. Decision-Making Patterns of U.S. Parents and Adolescents (N = 6327, roughly similar numbers of boys and girls)

Adolescent Child Is Sole Decision-Maker	Total Sample (%)	Girls (%)	Boys (%)
Amount of allowance	2	2	3
Clothes	28	29	27
Spending	50	50	51
Friends	53	52	54
Curfew	2	2	3
Television	42	44	41
Religion	23	22	26
Parents Are Sole Decision-Makers			
Amount of allowance	91	91	92
Clothes	39	32	45
Spending	27	25	29
Friends	30	28	31
Curfew	88	88	88
Television	43	41	45
Religion	60	56	64

Based on Lundberg et al., 2009.

Student A

Table 10 shows who makes important decisions in key aspects of adolescents' lives. As can be seen, parents alone are responsible for the amount of allowance for 91% of girls and 92% of boys. Another category where parents exert a lot of control is curfew, as revealed by 88% of all adolescents. Most decisions about religion are also made by parents. In this category, however, there is a difference between boys and girls. Fifty-six percent of girls report that their parents decide matters of faith in contrast to 64% of boys. However, nearly one-fourth of the adolescents make decisions about religion on their own.

Student B

Table 10 shows the percentage of adolescents and parents who are solely responsible for important decisions in the lives of adolescents. As can be seen, decision-making patterns are very similar for both boys and girls for all types of decisions except one. Specifically, more boys than girls report parental involvement in clothing decisions. In this category, 45% of the boys reported sole parental decision making, but only 32% of girls did so.

Student C

Table 10 shows the decision-making patterns of parents and adolescents in relation to key aspects of adolescents' lives. As can be seen, overall, parents are similarly involved in decisions for both boys and girls, but the level of involvement differs depending on the type of decision. The percentage of sole parental decision making is highest for the amount of allowance, the time of curfew, and religion. The lowest percentages were reported for decisions regarding the child's friends and spending of money. Television viewing is the one area where similar percentages of children and their parents make decisions.

Language Focus: Comparisons

There is another kind of qualification that can be usefully employed in data commentary. We can illustrate this by looking again at the data on parental restrictions in Table 10. We have already said that it may not be a good idea to simply repeat the data in words. Therefore, it may not be a good strategy to make a series of statements like this example.

> Fifty-six percent of girls report that their parents decide matters of faith in contrast to 64% of boys.

A series of such statements seems to imply that the reader is unable to read the numbers. Instead we might opt for comparative statements like the following.

> Fewer girls than boys reported that their parents decide matters of faith.
>
> More boys than girls reported that their parents decide matters of faith.
>
> Not as many boys reported that their parents decide matters of faith.

One problem here is the vagueness of *more* or *fewer*. How much, for example, is "more"—2%, 10%, or 50%? We could more exactly write this.

> Eight percent more boys than girls reported . . . .

Look at the information in Table 11 about cell phone use while riding a bicycle.

TABLE 11. Bicycle Commuters' Perception of Danger while Using Mobile Phones

	Men n = 1000	%	Women n = 1000	%	p value*
Not at all	51	5.1	18	1.8	<0.001
Slight	158	15.8	73	7.3	
Moderate	426	42.6	469	46.9	
Quite a bit	248	24.8	333	33.3	
Extreme	117	11.7	107	10.7	

Based on Ichikawa and Nakahara, 2008.

In a data commentary, it would be possible to make these observations.

a. Almost twice as many women as men reported . . . .
b. A smaller percentage of women reported . . . .
c. Nearly three times as many men reported . . . .
d. Nearly the same number of men and women . . . .

These observations are also possible.

e. The percentage of men who thought there was only a slight risk was over twice that of women
f. The percentage of men who thought there was only a slight risk was over two times higher than that of women
g. The percentage of women who thought there was quite a bit of risk exceeded that of men.