C目录
ontents

ACADEMIC ENGLISH
for Economics and Business

学术英语 第二版

经管

主编

季佩英　王　薇

编者

季佩英　王　薇
吴晓真　叶如兰

Map of the book

VIEWING	SPEAKING	WRITING
Prediction	Analyzing your audience	Macro structure: Choosing a topic Micro skills: Searching for information
Finding major points	Having clear objectives	Macro structure: Shaping an essay; Writing an outline Micro skills: Writing a good research question
Listening for details	Having a clear structure and a sense of timing	Macro structure: Writing an introduction Micro skills: Thesis statement
Note-taking forms	Introduction	Macro structure: Body: Argumentation (1) Micro skills: Definition
Recognizing connectives	Body: Linking the points	Macro structure: Body: Argumentation (2) Micro skills: Supporting evidence
Dealing with unfamiliar words	Body: Making an argument	Macro structure: Body: Exposition (1) Micro skills: Quoting and paraphrasing; Marking the cited sources
Listening for stressed words	Body: Making a counterargument	Macro structure: Body: Exposition (2) Micro skills: Hedging
Recognizing digressions	Conclusion	Macro structure: Conclusion Micro skills: Summarizing
Recognizing filler words	Visual aids	Macro structure: Writing your references list Micro skills: Coherence
Listening for contrasting ideas	Rehearsal and delivery	Macro structure: Proofreading Micro skills: Achieving a formal style

UNIT
3

New Retail

The advent of online shopping has impacted the traditional retail industry. It presents a variety of opportunities for the business world to adapt to the new needs of increasingly sophisticated and demanding consumers today. However, business innovation never stops. A new and transformative retail model, New Retail, has come into existence. It combines the best of offline and online retail into an integral whole. In this unit, you will learn about New Retail and the future of the retail industry.

Text A

Lead-in

Task Work in groups of 4-5 and discuss the following questions.

1 What do you think are the strengths and weaknesses of the traditional physical retail?

2 What do you think are the strengths and weaknesses of the online retail?

3 Do you have any suggestions for overcoming the weaknesses of the traditional physical retail and online retail that you have mentioned?

Now read Text A to see how New Retail eliminates the distinction between offline and online shopping.

How New Retail[1] Can Help Take the Offline World Online[2]

David Lloyd

1 Talk about the decline of the UK High Street[3] is rife, and it's easy to think that the future of retail is exclusively about the rise of e-commerce. But the truth is that it doesn't have to be a case of either online or offline, it's more a question of how the established world of physical stores can best be combined with the world of e-commerce and technology to create seamless, super-convenient and fun ways to shop.

2 The most impressive demonstration of the power of New Retail to date was at this year[4]'s 11.11 Global Shopping Festival[5]. Now the biggest single shopping event in the world by a substantial margin, this

---

1 New Retail: a term originated by Jack Ma, founder of Alibaba Group. It refers to a transformative retail model that combines online and offline commerce. 新零售

2 The text was retrieved on Jan. 30, 2018 from http://internetretailing.net.

3 High Street: a metonym（转喻词）for the generic name of the primary business street of towns or cities, especially in the United Kingdom （英国市镇中商业区的）主要商业街道

4 this year: it refers to the 11.11 Global Shopping Festival in the year 2017.

5 11.11 Global Shopping Festival: a 24-hour online retail sale, which starts Nov. 11 at midnight China Standard Time every year since 2009. It was originally launched by Alibaba Group, and now is joined by major online retailers in China. 双十一购物狂欢节

year's event not only generated record-breaking revenues of $25.4 billion, but crucially enabled the brands taking part to engage with their customers in many different innovative and immersive ways that help to build their brands, too.

3 Across the 24 hours of 11.11, China's burgeoning 300 million strong middle class took to their smartphones and made 1.5 billion payment transactions, up 41 per cent from last year, buying everything from shoes and lipsticks to electronics, fashion and household goods.

4 Traditional retailers with substantial presence on the high street here in the UK can be forgiven for feeling a little despondent in the face of such mind-boggling numbers. But should they? A closer look at the success of 11.11 and the principles of New Retail that underpin it shows that there are real opportunities for all retailers to attract new customers, as well as increasing the spend of existing ones through blending online and offline channels more effectively.

New Retail defined

5 New Retail is Alibaba's strategy to redefine commerce by enabling seamless engagement between the online and offline worlds. There are two key aspects to New Retail. First, working with offline merchants to help digitally transform their businesses so that they can provide a more tailored shopping experience for their customers and second, how we respond to Chinese consumers who see shopping as a social activity and ultimately a form of entertainment.

6 At this year's 11.11 Global Shopping Festival around 100,000 'smart stores[6]' helped merchants to deliver that bespoke shopping service in 334 cities across China, and the opening of 60 pop-up stores[7] in 52 malls enabled international brands to curate consumer experiences specific to their brands and products.

7 Smart stores help brands to use technology to deliver more personalised and interactive shopping experiences. For example, in certain stores if a product is not in stock shoppers can browse a wider range on electronic 'cloud shelves'. These shelves automatically recognise when an item has been picked up and provide information about it on an adjacent screen. Customers can then buy the product there and then through their smartphone, meaning they don't have any bags to carry as they continue shopping in the mall.

Make the offline, online …

8 One of the biggest advantages of online vs offline has conventionally been the

---

6 smart store: a retail store that combines both online and offline channels to provide more personalized and interactive shopping experiences to customers 智能商店

7 pop-up store: a store that opens suddenly and usually exists for a short time 快闪店；游击概念店

ability to mine the pools of data generated by e-commerce, to target offers and new product suggestions.

9 This is one of the biggest opportunities for offline retailers, and also an area in which there is a lot of exciting technological innovation. Two examples of bringing online tech into the offline store are the virtual changing room and the magic mirror. The magic mirror uses augmented reality technology[8] to help users test out a whole range of lipstick and eye makeup combinations, on screen, to find the ones they like the best. It's 'try before you buy' taken to a whole new level, and it's being trialled by L'Oreal at a number of locations in China.

10 The virtual changing room does what it says on the tin, putting a photo of the customer on a large in-store screen and allowing them to 'try on' multiple different outfits — and even hairstyles to match — in an instant. All without the hassle of having to get changed half a dozen times. Exciting and innovative, these new technologies are both fun and functional — making the most of the in-store experience as well as helping shoppers to buy.

11 Among Alibaba's most high-profile recent initiatives in China are its Hema[9] supermarkets. Hema has digitalised the entire store providing consumers with a 3-in-1 retail experience that encompasses

---

8 augmented reality technology: the technology that adds information to a view of a real-world environment 扩增实境技术

9 Hema: a Chinese fresh items supermarket chain owned by Alibaba Group 盒马鲜生

all modes and desires of modern urban shoppers including technology-driven fulfilment of online delivery, seamless in-store purchases and in-store consumption. Consumers can not only make orders online, but can scan every product in store to find information about it. In turn, Alibaba can leverage consumer data, including purchasing habits and history and store visits to provide a more personal experience to each consumer.

Make it mobile.

12 Just like their Chinese counterparts, British consumers love their mobile phones, and increasingly want to be able to use them to manage all aspects of their lives. A good example of how we drive mobile engagement was the 'See Now, Buy Now[10]' fashion show which kicked off this year's 11.11 season. Viewing the show on TV or mobile phone, shoppers could buy the clothes they saw on the catwalk instantly, on screen. Payment was via Alipay[11] and fulfilment via our Tmall[12] platform. It was a great way of capturing the energy of the moment and converting it to sales.

Make it fun.

13 Gamification is a buzzword across multiple industries right now, and retail is no exception. Giving consumers games to play creates terrific engagement for brands and retailers alike. Competing with friends to win vouchers, for example, taps into social media trends and turns shopping into a shared experience. Alibaba's 'Catch the Cat' game goes one step further: Thanks to augmented reality technology, users chase the Tmall cat into stores, restaurants and cafes hoping to catch it and win vouchers to spend there. Chinese consumers see shopping as a form of entertainment, a trend which is also becoming increasingly evident in the UK. For example, we saw Westfield Shopping Centre[13] use virtual reality last year to show off the latest seasonal fashion trends, giving potential shoppers the option to customize designs to their taste.

14 All of this goes to show that for UK retailers with the foresight to get on board, the seamless offline / online world of New Retail has a great deal to offer in terms of giving the 21st-century, mobile-loving shopper the immersive, cross-channel experience they desire and will soon come to expect. 11.11 is a window into the next era of retail, where the old boundaries between 'real' and 'virtual' are breaking down. It's a transformative business model that is being invented in China and exported to the rest of the world.

(1102 words)

---

10 See Now, Buy Now: 即看即买

11 Alipay: a third-party mobile and online payment platform operated in China by Alibaba Group 支付宝

12 Tmall: an online retail platform operated in China by Alibaba Group 天猫

13 Westfield Shopping Centre: 威斯菲尔德购物中心（伦敦）

New words and expressions

rife /raɪf/ *a. (not before noun)* (especially of sth. undesirable) of common occurrence; widespread（常指令人不悦的事物）普遍的，盛行的

exclusively /ɪkˈskluːsɪvli/ *ad.* only 仅仅；唯独

seamless /ˈsiːmləs/ *a.* smooth and continuous, with no apparent gaps or spaces between one part and the next 流畅的；浑然一体的

margin /ˈmɑːdʒɪn/ *n.* the profit made on a product or service 利润

revenue /ˈrevəˌnjuː/ *n.* the money that is received by a business, usually from selling goods or services 收入；收益

crucially /ˈkruːʃli/ *ad.* with decisive or vital importance 至关重要地；关键性地

immersive /ɪˈmɜːsɪv/ *a.* providing, involving, or characterized by deep absorption in sth. 沉浸式的

burgeoning /ˈbɜːdʒ(ə)nɪŋ/ *a. (fml.)* growing or developing quickly 急速增长的

lipstick /ˈlɪpˌstɪk/ *n.* 唇膏；口红

despondent /dɪˈspɒndənt/ *a.* extremely unhappy and without hope 沮丧的；绝望的

mind-boggling /ˈmaɪnd ˌbɒglɪŋ/ *a. (infml.)* extremely surprising and difficult to understand or imagine 令人难以置信的；令人难以想象的

underpin /ˌʌndəˈpɪn/ *vt.* (underpinned, underpinning) give strength or support to sth. and help it succeed 巩固；支持

redefine /ˌriːdɪˈfaɪn/ *vt.* define again or differently 重新界定；重新确定；重新说明

tailored /ˈteɪləd/ *a.* specially made or done for sb.'s particular need or situation 根据特别需要的；专门的

bespoke /bɪˈspəʊk/ *a.* specially made for a particular customer 定制的；定做的

curate /ˌkjʊˈreɪt/ *vt.* care for or manage sth. 照顾；管理

personalised /ˈpɜːsnəlaɪzd/ *a.* designed or changed so that sth. is suitable for a particular

person 个性化的；符合个人特定需求的

adjacent /əˈdʒeɪsnt/ *a.* next to or near sth. 邻近的；与……毗连的

conventionally /kənˈvenʃn(ə)li/ *ad.* in a way that has been used for a long time and is considered the usual type 传统地；常规地

augmented /ɔːgˈmentɪd/ *a. (fml.)* having been made greater in value, amount, or effectiveness 加强的；提高的

test out try sth. to find out how well it works or to find out more information about it 试验；检验

does what it says on the tin *(infml.)* does exactly what it claims or is supposed to do 说到做到；名副其实

outfit /ˈaʊtfɪt/ *n.* a set of clothes worn together, especially for a special occasion（尤指在特殊场合穿的）全套服装

hairstyle /ˈheəˌstaɪl/ *n.* the style in which sb.'s hair has been cut or shaped 发型；发式

hassle /ˈhæsl/ *n. (infml.)* sth. that is annoying, because it causes problems or is difficult to do 麻烦

encompass /ɪnˈkʌmpəs/ *vt. (fml.)* include a wide range of ideas, subjects, etc. 包含；包括

leverage /ˈliːvərɪdʒ/ *vt.* use sth. to maximum advantage 充分利用

kick off *(infml.)* start 开始（活动、会议、讨论等）

catwalk /ˈkætˌwɔːk/ *n.*（时装表演时模特走的）T形台

gamification /ˌgeɪmɪfɪˈkeɪʃn/ *n.* the application of game-design elements and game principles in non-game contexts 游戏化

buzzword /ˈbʌzˌwɜːd/ *n.* a word or phrase from one special area of knowledge that has become fashionable and popular 时髦术语；流行行话
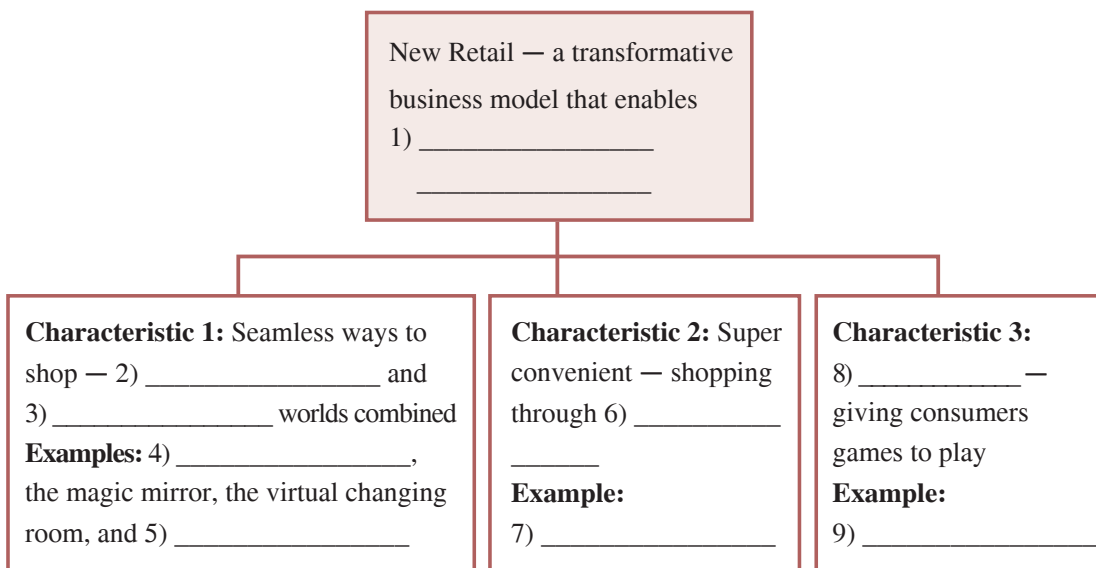
voucher /ˈvaʊtʃə/ *n.* 打折优惠券；代金券

customize /ˈkʌstəˌmaɪz/ *vt.* modify sth. to suit a particular individual or task（为更适合需要或按特别规格）改制，订做，订制；用户化

Critical reading and thinking

/ Overview

The following diagram shows the key points of the text: definition of New Retail and its three characteristics. Read the text and complete the following diagram.

New Retail ─ a transformative business model that enables
1) _____
_____

Characteristic 1: Seamless ways to shop ─ 2) _____ and 3) _____ worlds combined
Examples: 4) _____,
the magic mirror, the virtual changing room, and 5) _____

Characteristic 2: Super convenient ─ shopping through 6) _____
Example:
7) _____

Characteristic 3:
8) _____ ─ giving consumers games to play
Example:
9) _____

/ Points for discussion

Work in groups of 4-5 and discuss the following questions.

1   What is the role of information technology in New Retail?

2   Why does the combination of online and offline retail better engage shoppers?

Language building-up

/ Specialized vocabulary

1 Translate the following expressions from English into Chinese or vice versa.

1 New Retail   _____

2 physical store   _____

3 online and offline channels   _____

4 shopping experience   _____

5 transformative business model   _____

6 利润   _____

7 收入；收益   _____

8 店内体验   _____

9 有现货的；有库存的   _____

10 付款业务   _____

2 Complete the following passage with the words or expressions from Exercise 1. Change the form where necessary.

New Retail is a 1) _____ that bridges e-commerce, physical retail, and logistics in order to improve the efficiency of selling and buying, as well as improving customers' 2) _____. China is leading this revolution thanks to its strong consumer base, increasing purchasing power, and the widespread use of mobile 3) _____.

Big Data stands at the core of New Retail. Data on consumers' preferences, sales, and 4) _____ enables efficient delivery to consumers and reduces surplus inventory — two major challenges for retail. The integration of 5) _____ and logistics creates an omni-channel shopping experience, expanding the consumer base and increasing 6) _____.

The New Retail model poses an existential question to traditional retail players. The most important thing to keep in mind is to understand what motivates consumers to visit 7) _____ and buy. Retailers can try to diversify their products and utilize physical and digital assets to meet customers' changing needs.

Task 2 / Academic vocabulary

Complete the following sentences with the words from the box. Change the form where necessary.

decline	interactive	data	demonstration	generate
innovative	principle	initiative	transform	ultimately

1 The infrastructure project is a key part of China's Belt and Road _____.

2 The new rules were part of a set of _____ Google announced relating to the use of artificial intelligence.

3 Over the past 30 years, sharp _____ in communication and transportation costs and the reduction of trade barriers have reshaped the global economy.

4 The average hourly wage paid to retail workers dropped to $18.58 in June, from $18.65 a month earlier, according to _____ from the US.

5 Many workers want to join the company, which is widely considered one of the most _____ and exciting tech firms.

6 The emerging discipline of service science supported research undertaken to understand how technological advances rapidly _____ consumer roles.

7 There are many smartphone and tablet apps that offer a new, dynamic and _____ way to learn to read, starting from the basics of letter shapes and sounds.

8 The store is intended to serve as a work-training site, and Hogg is planning cooking _____ to teach shoppers how to eat better.

9 Many users of the technology say it _____ saves them time and money by improving efficiency and reducing accidents.

10 Unlike other automakers, Tesla doesn't _____ revenue simply by making cars.

Task 3 / Collocations

Complete the following sentences with the expressions from the box. Change the form where necessary.

be combined with	leverage data	build brands	in the face of
specific to	in terms of	engage with	

1 The company needs to take actions _____ the new challenge — dedication to advanced analytics may require changing management styles and human resources policies.

2 Global strategists need to go beyond such traditional questions as which markets are "closest" to them _____ institutions, level of development and culture.

3 Yelp, the reviews site for local businesses, is a common place for customers to talk about their experiences, and business owners often _____ people there.

4 By the acquisition of IBM's PC division in 2005, Lenovo Group's assets _____ a new set of capabilities so as to improve the company's advantage in international markets.

5 Marketing departments _____ on customer behavior and what competitors are doing.

6 Social networks and media are not simply promotional tools for organizations to attempt to _____.

7 While a company's home-developed capabilities allowed it to enter and survive in the foreign market, its subsequent efforts frequently require the development of capabilities _____ the new host country.

The following sentences are taken from Text A. Replace the underlined formal expressions with less formal ones.

_____ **1** Talk about the decline of the UK High Street is rife, and it's easy to think that the future of retail is <u>exclusively</u> about the rise of e-commerce. (Para. 1)

_____ **2** Now the biggest single shopping event in the world by a <u>substantial</u> margin, this year's event not only generated record-breaking revenues of $25.4 billion, but crucially enabled the brands taking part to engage with their customers in many different innovative and immersive ways that help to build their brands, too. (Para. 2)

_____ **3** Across the 24 hours of 11.11, China's <u>burgeoning</u> 300 million strong middle class took to their smartphones and made 1.5 billion payment transactions ... (Para. 3)

_____ **4** A closer look at the success of 11.11 and the principles of New Retail that <u>underpin it</u> shows that there are real opportunities for all retailers to attract new customers ... (Para. 4)

_____ **5** At this year's 11.11 Global Shopping Festival around 100,000 'smart stores' helped merchants to deliver that <u>bespoke</u> shopping service in 334 cities across China, and the opening of 60 pop-up stores in 52 malls enabled international brands to curate consumer experiences <u>specific to</u> their brands and products. (Para. 6)

_____ **6** Hema has digitalised the entire store providing consumers with a 3-in-1 retail experience that <u>encompasses</u> all modes and desires of modern urban shoppers including technology-driven fulfilment of online delivery, seamless in-store purchases and in-store consumption. (Para. 11)

Text B

As the retail landscape is dramatically changing, how can traditional retailers avoid becoming obsolete? Read Text B to look for insightful suggestions by Dr. Mike Walden.

What's the Future of Retail Buying?[1]

Mike Walden

1 As 2018 kicks off, there's good news and bad news for retail sellers. The good news is that consumers opened their pockets wider for the Christmas holiday buying season than at any time in the last decade. Aggregate retail spending at the end of 2017 is expected to be up 4 percent to 5 percent when all the receipts are in.

2 For the bad news, three items caught my eye showing the continuing struggle of some retailers. Sears[2] — once the leading retailer in the country — announced it was closing more than 100 stores nationwide. In my hometown of Cincinnati[3], the downtown Macy's store said it was shutting down. And a *Wall Street Journal*[4] article at the end of the year highlighted the plight of many small towns in North Carolina[5] that are without typical consumer services, like banks.

3 Of course, one factor behind these changes is the different way people now shop. When I was growing up in the 1950s and 1960s, people had to go to a store to buy anything. Even home delivery[6] was rare. Cities, towns and intersections were cluttered with retailers vying for consumers' business.

4 That all began to change when the Internet was perfected for mass usage beginning in the 1990s. Online buying became possible and has been growing ever since. Although cyber-buying still takes a back seat to purchases at physical stores — sometimes referred to as "brick-and-mortar stores[7]" — the click-and-buy technique has tripled in use in just the last 10 years. If this trend continues, cyber-buying will be the way most people shop in just a few decades.

---

1 The text was retrieved on Feb. 25, 2018 from http://www.morganton.com.

2 Sears: 西尔斯（美国传统百货连锁公司）

3 Cincinnati: 辛辛那提（美国俄亥俄州城市）

4 *The Wall Street Journal*: a US business-focused, international daily newspaper based in New York City 《华尔街日报》

5 North Carolina: 美国北卡罗来纳州

6 home delivery: the service of transporting goods from stores to customers' home 送货上门

7 brick-and-mortar store: 实体商店

5 Traditional brick-and-mortar retailers have been watching and know they have to change in order to survive. It's just that some can't change fast enough to stop the bleeding from their bottom line. The only option — other than throwing in the towel — is to shut down weaker stores and undertake a remake with their stronger outlets.

6 Still, I think several well-known national retailers may call it quits in the next few years. This may actually help the remaining retailers survive as there now would be fewer of them to compete in the marketplace.

7 But what do the brick-and-mortar retailers have to do to survive the emergence of online buying? First, they have to embrace it, and many have. Numerous traditional retailers already have an active online buying alternative. They offer store pickup[8] or home delivery. Plus — and this is becoming very important for cyber-buying — the retailers make it easy to return purchases directly to their stores.

8 But don't expect cyber-sellers to stand idly by. Many already offer free returns[9], while others have — or plan to have — physical locations for quick take-backs.

9 Yet there are two advantages traditional retailers will try to exploit in their ongoing showdown with the cyber giants. One is personal service. Even though cyber-sellers have developed several ways to personalize purchases and give attention to individual tastes, sometimes there's no substitute for seeing in person a product and receiving immediate reactions and suggestions from a trained salesperson.

10 The other advantage is physical convenience. Cyber-buying is convenient as a way to purchase, but not as a way to inspect a product prior to buying. Traditional brick-and-mortar stores realize this, which is a big reason why residential neighborhoods of the future might be interspersed with stores, shops, restaurants and entertainment venues. Young households — the millennials[10] — like this kind of living, as do the rapidly-retiring, empty-nester baby boomers[11]. If you put these two groups together, you have the majority of buyers in the country.

11 So the future of traditional retail might be a return to the past. Instead of driving to a large grouping of stores at a mall or shopping center, retail stores will be within walking distance of people's homes.

12 But will traditional retailers be in rural areas, many of which are struggling to keep people as well as stores? All the dynamics in the economy favor urban regions over rural communities, and futurists see little to change this in the coming decades.

---

8 store pickup: the service that customers collect goods from a store 店内提货；到店取货

9 free return: the act of returning a product without extra charge 免费退货

10 millennials: the generation born between the early 1980s and the early 2000s, generally characterized by an increased use of and familiarity with communications, media, and digital technologies 千禧一代

11 baby boomer: sb. born during a period when a lot of babies were born, especially between 1946 and 1964 in the US （尤指美国1946至1964年间的）生育高峰期出生的人

13 It is therefore somewhat ironic that cyber-buying, as well as cyber-banking and maybe eventually cyber-health care, may ultimately be more important in rural areas than in urban ones. It may be that as we look back from future years, it will be the Internet and Internet linkages that kept rural regions served, financed, healthy and viable.

14 Of course, this is all speculation based on trends, challenges and opportunities I see today. Some game-changing technology — like artificial intelligence or virtualization — could change everything about retail buying. Indeed, they could change everything about everything.

15 Yet for now, there's a real heavyweight championship on the line between traditional retailers in one corner and upstart cyber retailers in the other. Let's just hope that when the match is over, the judges will decide that we buyers are the winners.

(803 words)

New words and expressions

aggregate /ˈæɡrɪɡət/ *a. (only before noun)* total 总数的；总计的

plight /plaɪt/ *n. (usually sing.)* a difficult and sad situation 困境；苦境

intersection /ɪntəˌsekʃn/ *n.* a place where two or more roads, lines, etc. meet or cross each other 十字路口；交叉路口

clutter /ˈklʌtə/ *vt.* fill a place with too many things so that it is untidy 凌乱地塞满；乱堆放

vie /vaɪ/ *vi.* (vied, vying) compete strongly with sb. to obtain or achieve sth. 激烈竞争；争夺

take a back seat take or be given a less important position or role 居于次要位置

mortar /ˈmɔːtə/ *n.* a mixture of sand, water, lime and cement used in building for holding bricks and stones together 灰泥；砂浆

throw in the towel *(infml.)* admit defeat 认输；承认失败

remake /ˈriːmeɪk/ *n.* the act of making again or anew 修改；改造

call it quits *(infml.)* decide to stop doing sth. 决定停止

marketplace /ˈmɑːkɪtˌpleɪs/ *n.* the arena of commercial dealings; a set of trading conditions or the business environment 商界；贸易界；市场

embrace /ɪmˈbreɪs/ *vt. (fml.)* eagerly accept an idea, a proposal, a set of beliefs, etc. 欣然接受；乐意采纳

showdown /ˈʃəʊˌdaʊn/ *n. (usually sing.)* an argument, a fight or a test that will settle a dispute 最后的较量；一决雌雄

personalize /ˈpɜːsnəlaɪz/ *vt.* design or produce sth. to meet sb.'s individual requirements 为个人特制（或专设）

neighborhood /ˈneɪbəˌhʊd/ *n.* a district or an area of a town 街区；居住点

intersperse /ˌɪntəˈspɜːs/ *vt.* (be interspersed with sth.) put sth. in sth. else or among or between other things 散布；散置

venue /ˈvenjuː/ *n.* the place where a public event or meeting happens 活动场地

futurist /ˈfjuːtʃərɪst/ *n.* sb. who studies the future and says what they think life will be like 未来学家

ironic /aɪˈrɒnɪk/ *a.* (of a situation) strange because it is very different from what you would expect（因出乎意料而）奇怪的

viable /ˈvaɪəbl/ *a.* capable of working successfully; feasible 可望成功的；切实可行的

virtualization /ˌvɜːtʃʊəlaɪˈzeɪʃn/ *n.* the process of being made, done, seen, etc. on the Internet or on a computer, rather than in the real world（通过电脑或者网络）虚拟化
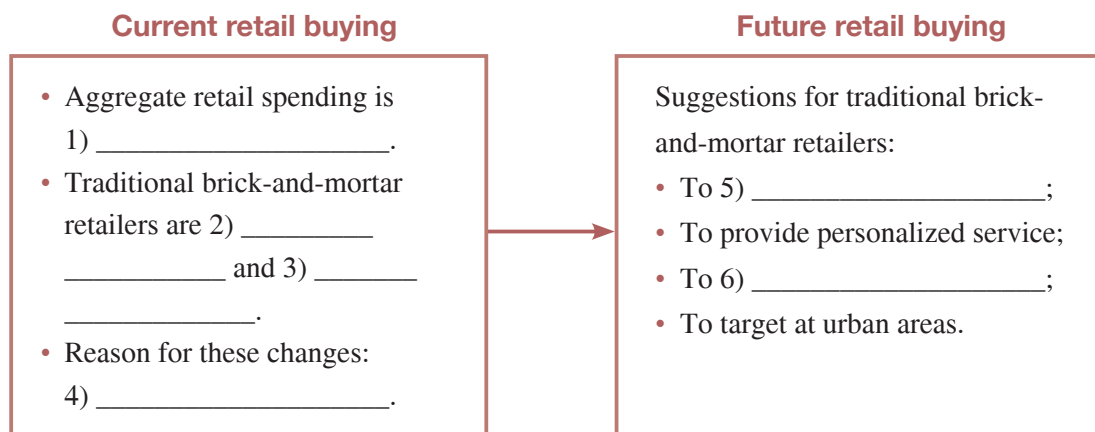
heavyweight /ˈheviˌweɪt/ *a.* serious, important, or influential 重大的；重要的；有影响的

upstart /ˈʌpˌstɑːt/ *a.* (of a company) quickly becoming very successful（公司）突然发迹的，暴发的

Critical reading and thinking

Task / Overview

Read the text and complete the following diagram.

Current retail buying

- Aggregate retail spending is 1) _____.
- Traditional brick-and-mortar retailers are 2) _____ and 3) _____.
- Reason for these changes: 4) _____.

Future retail buying

Suggestions for traditional brick-and-mortar retailers:
- To 5) _____;
- To provide personalized service;
- To 6) _____;
- To target at urban areas.

Language building-up

Task 1 / Academic vocabulary

Complete the following sentences with the words from the box. Change the form where necessary.

aggregate	technique	survive	undertake	emergence	exploit
ongoing	substitute	reaction	inspect	dynamics	

1 In a digital environment, the interaction and responsiveness operate very differently from in the past, as illustrated with the _____ of the Uber taxi app and a new business model.

2 They hope that the new cost control measures will reduce the _____ cost of health care in America over time.

3 To create and sustain a global competitive advantage, companies need a systematic approach to _____, renewing and enhancing their core capabilities.

4 The private investment funds use sophisticated _____ to try to achieve higher returns than the stock market.

5 The truth is, nobody really knows what to spend on marketing because every industry is different, every company unique, and competitive _____ are constantly shifting.

6 One critical aspect of building strong brands is the ability of the firm to devise _____ effective marketing communication strategies that ensure the market sees and hears the brand.

7 Brick-and-mortar stores struggle to _____ in the United States because of online competition.

8 Every entrepreneur knows there's no _____ for hard work and dedication.

9 We observed a positive market _____ to the announcements of relocations involving corporate headquarters and plants.

10 There are many good reasons to _____ corporate tax reform this year.

11 The store ensures that goods are _____ before home delivery.

Task 2 / **Collocations**

Complete the following sentences by translating the Chinese in brackets into English, using the given words in proper forms and collocations.

1 Since the firm does not observe its competitors' actions _____ (在……前面的；prior) choosing its own action, it makes decisions based on its expectations.

2 In today's knowledge-based economy, managers need to redefine their roles, rather than _____ (袖手旁观；stand) when several decisions need to be coordinated.

3 It is difficult to find _____ (对……的代替物；substitute) convenience stores in this residential neighborhood.

4 The financial report _____ (堆砌；clutter) too many diagrams.

5 As regards supermarket pricing strategies, the rich _____ promotional pricing _____ everyday low pricing. (比起……较喜欢……；favor)

6 Settlement with the polluting coke plant offers complex resolution to simple demand, that is, to fix it or _____ (关闭；shut).

7 In this article, the suggestions for competing with ordinary resources _____ (点缀，散布；intersperse) successful cases in the business world.

8 The question under what circumstances companies should involve customers in pricing decisions has _____ (引起经理的注意；catch).

Researching

Task   Work in groups of 4-5 to conduct a case study of a retailer that adopts the New Retail model. The following questions may be helpful for your analysis.

1   How does the retailer combine online and offline buying?

2   How does the retailer meet the needs and desires of modern urban shoppers? (For example, make it fun and make it mobile)

3   What kind of personalized shopping experiences does the retailer provide?

4   What cutting-edge technology does the retailer apply to its business? (For example, cloud, data analytics, AI, augmented reality, and virtual reality)

5   What kind of Big Data does the retailer leverage? (For example, data on consumers' preferences, shopping habits, and sales)

6   Is the New Retail model effective to expand the retailer's consumer base and increase its profitability?

7   Are there any problems arising from the New Retail model?

8   How can the retailer further enhance its business?

Now make a group presentation of your case study to the whole class.

VIEWING   Lecture

Listening for details

Before listening for details, you should decide what specific types of detailed information you need from a lecture, such as concepts, theories, examples, or facts. Usually details in a lecture are closely related to major points of the lecture, serving as explanation, illustration, or supporting evidence. You can make a prediction for detailed information by preparing some "what," "how," "why" questions. While listening, focus your attention on the specific information that you expect, and do not get distracted by anything irrelevant. In this way, you can narrow down your search and get the details you need.

> **Word bank**
>
> evolve /ɪˈvɒlv/ *vi.* 逐渐形成；逐步发展
>
> soar /sɔː/ *vi.* 急升；猛增
>
> aggregation /ˌæɡrɪˈɡeɪʃn/ *n.* 汇集
>
> glimpse /ɡlɪmps/ *n.* 短暂的感受
> （或体验，领会）
>
> celebrity /səˈlebrəti/ *n.* 名人
>
> spontaneity /ˌspɒntəˈneɪəti/ *n.* 自发性；心血来潮
>
> apparel /əˈpærəl/ *n.* （商店出售的）衣服，服装
>
> garment /ˈɡɑːmənt/ *n.* (*fml.*)（一件）衣服

Task 1 Watch Video Clip 1 of a lecture "How China is changing the future of shopping" and answer the following questions concerning important details.

1 What is the growing speed of e-commerce in China as compared with the United States?

_____

2 How many consumers in China are buying on mobile phones every month?

_____

3 How long did it take China to become a country of mobile commerce?

_____

4 What are the two technology platforms that have largely driven the growth of e-commerce in China?

_____

Task 2 Watch Video Clip 2 of the lecture and complete the following sentences with the exact information you have heard.

1 Five years ago, in a fashion study, we found that on average, a Chinese consumer would be buying _____ pairs of shoes. This number _____ to reach about 25 pairs of shoes a year.

2 But really, for many of them, there was _____ to buy.

3 We have observed the same level of spontaneity in everything, from _____ _____ shopping to buying _____.

4 A lot of the Chinese consumers are still very new in their middle-class or upper-middle-class lifestyles, with a strong desire to buy everything new, new _____, and new _____.

5 The owner of a fashion company told me that he's so frustrated because his customers keep complaining that his products are _____.

6 You've got to give your consumers exactly _____.

7 These companies, they collect real consumer feedback from mobile sites, from _____, and then their designers will translate this information into _____, and then send them to microstudios for production.

8 These microstudios are really key in this overall ecosystem, because they take _____, 30 garments at a time, and they can also make _____ pieces.

9 The fact that all these production designs are done locally, the whole process, from transporting to product on shelf or online sometimes takes only _____.

10 That is super fast, and that is highly responsive to _____ on the market.

SPEAKING Presentation

Having a clear structure and a sense of timing

Having analyzed your audience and had clear objectives, what you need to do next is to design a clear structure of your presentation and calculate the time your presentation will probably take. Make sure to:

- create a clear and logical structure which consists of a strong introduction, a body and a conclusion.
- have clear connections between the different parts or ideas with the proper use of linking words for signaling the beginning and completion of each part, as well as the transition in between.
- find out how long your talk should be and stick to it; if necessary, modify the content of your presentation to fit in with the time limit.

Task Work in groups of 4-5 to structure your group presentation of the case study done in Researching of this unit. Limit the time of the presentation within 15 minutes. The following steps may be helpful:

1 List the key points of your study and remove the irrelevant information.

2 Work out an introduction and a conclusion based on the key points.

3 Organize the introduction, body part (key points), and conclusion in a logical structure, following a clear flow of reasoning.

4 Check the coherence and cohesion of the complete presentation.

5 Rehearse the presentation and time how long it lasts; make minor amendments to its content if you need more than 15 minutes to finish it.

Macro structure: Writing an introduction

The introduction is an important part in an academic essay. It provides readers with background information and presents the thesis statement of an essay.

An introduction usually starts broadly and ends narrowly. You need to catch readers' attention, get them prepared for the subject, set the stage for your essay, and put your topic in perspective. The following are some guidelines for writing an introduction:

- Try to create an "eye-catching" opening sentence that can engage your audience. Remember first impressions are important.
- Establish the context of your essay topic by stating the general ideas or information with regard to the subject.
- Clearly write your thesis statement, that is, the sentence(s) that include(s) the main idea and / or the central position of your essay.

Micro skills: Thesis statement

A thesis statement is an indispensable part of the introduction. It declares the main point or controlling idea of your entire essay. It answers the questions such as "What is the subject of this essay?" "What is the writer's opinion on this subject?" "What is the writer's purpose in this essay?" A thesis statement is often located at the end of the introduction part. And a good thesis statement only asserts one main idea.

Language patterns

... has received much attention.

... is an increasingly discussed subject concerning ...

Reports of ... show the importance of ...

... is currently regarded as a serious public concern.

Central to the research about ... is the issue of ...

The past decade has seen the remarkable growth of ...

The discussion about ... has given prominence to ...

Sample

Global competition is becoming tougher and more complicated than ever. Over the past 30 years, sharp declines in communication and transportation costs and the reduction of trade barriers have reshaped the global economy. Indeed, the global competitive landscape is becoming increasingly dynamic and complex, creating both new threats and new opportunities. Today, global strategists need to go beyond such traditional questions as which are the most attractive market for their company, and which markets are "closest" to them in terms of institutions, level of development and culture. They must sharpen their global strategies by focusing on how to exploit, enhance and renew or even transcend their home-based sources of advantage.

Provide background information about the changing global competitive landscape.

Narrow down to the topic of the essay: companies' global strategies in the new global competitive landscape.
Thesis statement: They must sharpen their global strategies by focusing on how to exploit, enhance and renew or even transcend their home-based sources of advantage.

Source:

Lessard, D., Lucea, R., & Nives, L. (2013). Building your company's capabilities through global expansion. *MIT Sloan Management Review, 54*(2), 61-67.

Task 1 Analyze the functions of the following introductory paragraphs.

In 1776, Adam Smith described how an "invisible hand" guides companies as they strive for profits, and that hand leads them to decisions that benefit society. Smith's insights led him to conclude that profit maximization is the right goal for a business and that the free enterprise system is best for society. But the world has changed since 1776. Firms today are much larger, they operate globally, they have thousands of employees, and they are owned by millions of stockholders. This makes us wonder if the "invisible hand" still provides reliable guidance. Should companies still try to maximize profits, or should they take a broader view and take more balanced actions designed to benefit customers, employees, suppliers, and society as a whole?

Chinese companies are opening up a new front in global competition. It centers on what we call accelerated innovation — that is, reengineering research and development and innovation processes to make new product development dramatically faster and less costly. What is distinctive about the strongest Chinese competitors is their capability to combine accelerated innovation with rapid scale-up to high volume at low cost, and to apply these techniques across a wide variety of traditional industries. We saw accelerated innovation being deployed in Chinese industries ranging from pharmaceuticals, telecommunications and information technology to medical and industrial equipment, consumer electronics and e-business. Although it may not impact companies that are consistently able to deliver breakthrough innovations, it presents real threats and opportunities to many mainstream competitors.

Source:

Williamson, P. J., & Yin, E. (2014). Accelerated innovation: Challenges from China. *MIT Sloan Management Review, 55*(4), 1-8.

Task 2   Start writing the introduction part of your essay.

Key terms for further study

3-in-1 retail experience	三合一零售体验
brick-and-mortar store	实体商店
cyber-buying	网购
free return	免费退货
home delivery	送货上门
in stock	有现货的；有库存的
in-store experience	店内体验
margin	利润
marketplace	市场
New Retail	新零售
online and offline channels	线上和线下渠道
payment transaction	付款业务
physical store	实体商店
pop-up store	快闪店；游击概念店
revenue	收入；收益
shopping experience	购物体验
store pickup	到店取货；店内提货
transformative business model	变革型商业模式

ACADEMIC ENGLISH
for Social Sciences

学术英语 _{第二版}

社科

主 编

季佩英　张　颖

Map of the book

UNIT	READING
1 Economics: Decision-Making Behaviors in Economic Activities	**Text A:** How People Make Decisions **Text B:** What People Want from Work: Motivation
2 Economics: The Economist	**Text A:** Thinking like an Economist **Text B:** Games People Play
3 Economics: Unemployment	**Text A:** Unemployment and Its Natural Rate **Text B:** Why You Can't Find a Job
4 Sociology: The Study of Society and People	**Text A:** The Study of Sociology **Text B:** The Sociological Debate: The Gender Pay Gap
5 Anthropology: The Study of Culture	**Text A:** The Nature of Cultural Anthropology **Text B:** Development of Culture Around the World
6 Psychology: Social Psychology	**Text A:** The Pursuit of Happiness **Text B:** Mind Games: Sometimes a White Coat Isn't Just a White Coat
7 Journalism: Change in Journalism	**Text A:** Has Big Data Really Changed Journalism? **Text B:** Social Media Challenges Social Rules
8 Education: Liberal Arts in Education	**Text A:** The Value of a Liberal Arts Education in Today's Global Marketplace **Text B:** The Failure of General Education
9 Political Science: Who Gets What, When, and How	**Text A:** The Science in Political Science **Text B:** "Cognitive Flexibility" Associated with Voting Attitudes in EU Referendum
10 Political Science: Globalization	**Text A:** Cultural Globalization **Text B:** The Good and Bad of Globalization
Glossary	
References	

VIEWING	SPEAKING	WRITING
Prediction	Analyzing your audience	Macro structure: Choosing a topic Micro skills: Searching for information
Finding major points	Having clear objectives	Macro structure: Introduction Micro skills: Asking the right question
Listening for details	Having a clear structure and a sense of timing	Macro structure: Literature review Micro skills: Summarizing
Note-taking forms	Introduction	Macro structure: Methodology Micro skills: Defining
Recognizing signal words	Body: Linking the points	Macro structure: Findings / results Micro skills: Describing and interpreting data
Dealing with unfamiliar words	Body: Making an argument	Macro structure: Discussion Micro skills: Quoting and paraphrasing (1)
Listening for stressed words	Body: Making a counterargument	Macro structure: Conclusion Micro skills: Quoting and paraphrasing (2)
Recognizing digressions	Conclusion	Macro structure: References Micro skills: Hedging
Recognizing fillers	Visual aids	Macro structure: Abstract Micro skills: Coherence
Listening for contrasting ideas	Rehearsal and delivery	Macro structure: Proofreading Micro skills: A formal style (Dos & don'ts)

UNIT 6

Psychology: Social Psychology

Psychology is the scientific study of the mind and behavior of people. This unit illustrates how social psychology — a branch of psychology, approaches the subject. Text A reports studies of a basic human motive: the pursuit of happiness; Text B presents studies that explore how our physical experiences affect our psychological processes.

Text A

Lead-in

Task Read the following question with six choices. Circle the number from the 5-point scale (5-strongly agree, 4-agree, 3-undecided, 2-disagree, 1-strongly disagree) that indicates how much you agree with each item, and then share your ideas with your classmates.

Do you think happiness is connected with the following things?					
Age	5	4	3	2	1
IQ	5	4	3	2	1
Educational level	5	4	3	2	1
Nationality	5	4	3	2	1
Money	5	4	3	2	1
Physical attractiveness	5	4	3	2	1

Now read Text A to compare your answers with what the social psychology studies have found.

The Pursuit of Happiness[1]

Saul Kassin, et al.

1　Long before the emergence of social psychology, philosophers regarded happiness as the ultimate state of being. In the US Declaration of Independence[2], Thomas Jefferson[3] thus cited life, liberty, and "the pursuit of happiness" as the most cherished of human rights. But what is happiness, and how is it achieved? Aristotle[4] said it was the reward of an active life. Freud[5] linked it with both work and love. Others have variously suggested that happiness requires money and power, health and fitness, religion, beauty, the satisfaction of basic needs, and an ability to derive pleasure from the events of everyday life. In recent years, social psychologists have applied their theories and methods to the study of this most basic human motive:

1　The text is taken from *Social Psychology* (8th ed.) by Kassin, S., Fein, S., & Markus, H.R. 2011.

2　Declaration of Independence: （美国的）《独立宣言》

3　Thomas Jefferson: 托马斯·杰斐逊（1743-1826，美国第三任总统，《独立宣言》的主要起草人）

4　Aristotle: 亚里士多德（384-322 BC, 古希腊哲学家、科学家）

5　Freud: 弗洛伊德（1856-1939，奥地利心理学家、精神病医师，精神分析学派创始人）

the pursuit of happiness (Diener & Biswas-Diener, 2008; Gilbert, 2006; Haidt, 2006; Lyubomirsky, 2007)[6].

2 To study happiness or subjective well-being, as social psychologists like to call it — one must be able to measure it. How do researchers know whether someone is happy? Simple: They ask. Better yet, they use questionnaires such as the Satisfaction with Life Scale[7], in which people respond to statements such as "If I could live my life over, I would change almost nothing" (Diener et al., 1984; Pavot & Diener, 1993). As Marcus Aurelius[8] said, "No man is happy who does not think himself so."

3 Using self-reports, surveys show that 75 percent of American adults describe themselves as happy and that in 86 percent of all nations sampled, the ratings are, on average, more often positive than neutral (Diener, 2000). In general, people who are happy also have cheerful moods, high self-esteem, physical health, a sense of personal control, more memories of positive as opposed to negative events, and optimism

about the future (Myers & Diener, 1995). It's no secret that our outlook on life becomes rosy right after we win a big game, fall in love, land a great job, or make money and that the world seems gloomy right after we lose, fall out of love, or suffer a personal tragedy or financial setback. Predictably, the events of everyday life trigger fluctuations in mood. For example, people are most happy on Fridays and Saturdays and least happy on Mondays and Tuesdays (Larsen & Kasimatis, 1990). Even during the day, happiness levels fluctuate like clockwork. For example, David Watson and others (1999) asked college students to rate their mood states once a day for 45 days, always at a different hour. They found, on average, that the students felt best during the middle of the day (noon to 6 p.m.) and worst in the early morning and late evening hours.

4 But what determines our long-term satisfaction, and why are some of us happier in general than others? Seeking the roots of happiness, Ed Diener and his colleagues

---

6 The reference list is omitted from the article due to limited space.

7 Satisfaction with Life Scale: (SWLS) a measure of the life satisfaction components of subjective well-being 生活满意度量表

8 Marcus Aurelius: 马可·奥勒利乌斯（121-180，新斯多葛派哲学的主要代表，罗马帝国最伟大的皇帝之一，有以希腊文写成的著作《沉思录》传世）

(1999) reviewed many years of research and found that subjective well-being is not meaningfully related to demographic factors such as age, sex, racial and ethnic background, IQ, education level, or physical attractiveness. Contrary to popular belief, people are not less happy during the so-called crisis years of midlife or in old age than during their youth and "peak" young-adult years. Men and women do not differ on this measure, and, in the United States, African and Hispanic Americans are as happy as white Americans.

5 Overall, there are three key predictors of happiness: social relationships (people with an active social life, close friends, and a happy marriage are more satisfied than those who lack these intimate connections), employment status (regardless of income, employed people are happier than those who are out of work), and physical and mental health (people who are healthy are happier than those who are not). Reflecting the impact of these factors, worldwide surveys of more than 100,000 respondents in 55 countries have shown that happiness levels vary from one culture to the next (Diener & Suh, 2000). Although rankings fluctuate a bit from one survey to the next, national happiness ratings are consistently high in Denmark, Sweden, Switzerland, and Australia. Canada ranks fifth in the world, and the United States ranks seventh (Veenhoven, 1993).

6 Perhaps the most interesting statistical relationship is between income and subjective well-being. We all know the saying that "money can't buy happiness" — though some people (particularly those who are financially strapped) do not believe it. But is wealth truly a key to happiness? To some extent, yes, but the evidence is complex. Ed and Martin Seligman (2004) noted that multimillionaires from the *Forbes*[9] list of the 400 richest Americans report high levels of life satisfaction (5.8 on a 7-point scale[10]), but so do the Masai, a herding people in East Africa with no electricity or running water who live in huts made with dung (5.7 on the same 7-point scale).

7 Cross-national studies reveal a strong positive association between a nation's wealth and the subjective well-being of its people. There are some exceptions. But as a general rule, the more money a country has, the happier its citizens are, at least up to a point. Within any given country, however, the differences between wealthy and middle-income people are modest. In one survey, for example, a group of the wealthiest Americans said they were happy 77 percent of the time, which was only moderately higher than the 62 percent figure reported by those of average income. And when comparisons within a single culture are made over time, there is no relationship between affluence and

---

9 *Forbes*：《福布斯》（美国商业杂志，以发布榜单而著名，如福布斯富豪榜）

10 7-point scale: also called 7-point Likert scale 7级李克特量表（一种心理反应量表，常在问卷中使用。此量表由伦西斯·李克特于1932年建立）

happiness. Americans on average are two to three times richer now than 50 years ago — before we had computers, flat-screen TVs, BlackBerrys[11], iPhones, and digital cameras that fit into the palm of your hand. Yet the number of respondents who said they were "very happy" was 35 percent in 1957 and only 32 percent in 1998.

8 So what are we to conclude? At this point, it appears that having shelter, food, safety, and security is essential for subjective well-being. But once these basic needs are met, particularly in an already prosperous society, additional increases in wealth do not appreciably raise levels of happiness. Why doesn't money contribute more to subjective well-being? One reason is that our perceptions of wealth are not absolute but, instead, are relative to certain personally set standards (Parducci, 1995). These standards are derived from two sources: other people and our own past.

(1050 words)

New words and expressions

variously /ˈveəriəsli/ *ad.* in different ways, by different people or at different times 不同地

fitness /ˈfɪtnɪs/ *n.* the state of being physically healthy and strong 健康

well-being /ˌwel ˈbiːɪŋ/ *n.* (*also* wellbeing) the state of feeling healthy and happy 安康；幸福

predictably /prɪˈdɪktəbli/ *ad.* as expected 不出所料地

clockwork /ˈklɒkˌwɜːk/ *n.* 发条装置

like clockwork happening at the same time and in the same way every time 非常准时地；极有规律地

meaningfully /ˈmiːnɪŋfli/ *ad.* in a way that has meaning 有意义地

demographic /ˌdeməˈɡræfɪk/ *a.* relating to the structure of populations 人口的

IQ *n.* (intelligence quotient) a number that represents a person's intelligence, based on the results of a particular type of test 智商

attractiveness /əˈtræktɪvnɪs/ *n.* the quality of being pleasing or appealing to the senses 吸引力

midlife /ˈmɪdlaɪf/ *n.* the central period of a person's life 中年

Hispanic /hɪˈspænɪk/ *a.* relating to Spain or to Spanish-speaking countries, especially those of Latin America 西班牙的；西班牙语的；拉丁美洲的

predictor /prɪˈdɪktə/ *n.* sth. that is helpful or useful in making an accurate prediction 预报性的事物

ranking /ˈræŋkɪŋ/ *n.* a position in a scale of achievement or status 排名

consistently /kənˈsɪstəntli/ *ad.* in the same way and without changing in behavior, attitudes, or qualities 一致地

---

11 BlackBerry: a line of smartphones, tablets, and services originally designed and marketed by Canadian company BlackBerry Limited 黑莓手机

financially /faɪˈnænʃli/ *ad.* in a way that relates to finance 经济上

multimillionaire /ˌmʌltiˌmɪljəˈneə/ *n.* a person with assets worth several million dollars, pounds, etc. 千万富翁

flat-screen /ˈflætˌskriːn/ *a.* (about a television or computer screen) not curved and usually in a thin case 平板荧幕的

prosperous /ˈprɒsp(ə)rəs/ *a.* successful and rich 繁荣的；富裕的

appreciably /əˈpriːʃəbli/ *ad.* to an appreciable extent; considerably 显著地

Critical reading and thinking

Task 1 / Overview

Analyze the structure of Text A by rearranging the order of the main ideas and decide which paragraph(s) go(es) with which idea.

Paragraph(s)	Main idea
	Studying happiness from the perspective of social psychologists
	Things related to happiness
	The relationship between wealth and subjective well-being
	Survey results of how happy Americans think they are
	Conclusions of these studies

Task 2 / Points for discussion

Work in pairs and discuss the following questions.

1   Is there anything that the researchers in this text have not mentioned but you think might influence the subjective well-being of people? Give examples to illustrate your point.

2   Are there any subjective well-being surveys with Chinese people? What are the results?

Language building-up

Task 1 / Specialized vocabulary

1 Read the following incomplete statements and choose from the box the right term to fill in the blanks. Change the form where necessary.

motive	mood	questionnaire	self-esteem
self-report	social psychology	social relationship	subjective well-being

1 _____ is the branch of psychology that studies individuals and their relationships with each other, with groups and with the society as a whole.

2 A _____ is any test, measure or survey that relies on individuals' own report of their symptoms, behaviors or attitudes.

3 A _____ is a series of questions, used to gather information from respondents.

4 _____ refers to how people experience the quality of their lives and includes both emotional reactions and cognitive judgments.

5 _____ are the key elements which drive humans to do what they do.

6 _____ are the sum of the social interactions between people over time.

7 A _____ is an emotional state that may last anywhere from a few minutes to several weeks.

8 In psychology, the term _____ is used to describe a person's overall sense of self-worth or personal value.

2 Complete the following sentences with the terms from the box in Exercise 1, Task 1. Change the form where necessary.

1 The higher your _____ is, the better you get along with yourself, with others, and the more you'll accomplish.

2 Exercising releases chemicals in the brain that have a strong effect on your _____, helping reduce anxiety, stress and depression.

3 The enjoyment of getting feedback was mentioned as a "significant" _____ to participate in the research by many of the respondents.

4 Any student of _____ should know that the subjects of their experiment cannot be informed of the nature of the experiment without destroying its validity.

5 _____ studies rely on the respondents to be honest and self-aware of themselves to make them useful and reliable.

6 We are social beings. It's in our nature to form _____.

7 We used a slightly modified version of the _____ tested in the preceding pilot study.

8 Usually, what we see across countries is that, as GDP goes up, happiness goes up and _____ also tends to go up.

Complete the following sentences with the words from the box. Change the form where necessary.

cite	contrary	derive	fluctuate	perception
positive	pursuit	statistical	trigger	ultimate

1 The exact cause of the disease is not known but it is understood that stress can _____ an outbreak.

2 His work _____ in the professional literature about 1300 times.

3 The findings seem to be quite _____ to the general belief that smoking is on the rise.

4 Since the two procedures _____ from the same conceptual foundations, they are essentially complementary.

5 Moods and emotions are varied and _____ as people deal with adversaries (对手) and rally around friends.

6 An advocate has a goal in mind and, in _____ of this goal, searches for legal arguments that might persuade a court.

7 All data were tested to determine if they met the assumptions of _____ analysis.

8 The company initiated a project of awareness raising, with the _____ aim of seeing cleaner manufacturing processes being implemented.

9 He suggested people's _____ of the situation did not always match the reality.

10 The experiment has shown _____ results, and presently, the infants are living normally.

Task 3 / **Collocations**

1 Match the words in Column A with the words in Column B.

Column A	Column B
land	basic needs
suffer	a tragedy
meet	strapped
trigger	attractiveness
physical	fluctuations
financially	a job
consistently	standards
personally set	high

2 Translate the following expressions from Chinese into English with the formed collocations in Exercise 1, Task 3.

1 获得一份工作 _____

2 遭遇不幸 _____

3 引起波动 _____

4 拮据的 _____

5 个人设立的标准 _____

6 满足基本需求 _____

7 一直处于/保持高（位/水准/质量） _____

8 外表魅力 _____

Task 4 / **Formal English**

Replace the underlined words and expressions with the words from the box to make the sentences more formal. Change the form where necessary.

| apply | appreciably | derive | emergence | moderately | perception |

1 Mr. Smith is one of those happy people who <u>get</u> pleasure from helping others.

   _____

2 A group of the wealthiest Americans said they were happy 77 percent of the time, which was only <u>somewhat</u> higher than the 62 percent figure reported by those of average income.

   _____

3 In an already prosperous society, additional increases in wealth do not <u>seriously</u> raise levels of happiness.

   _____

4 We need to challenge many popular <u>ideas</u> of old age.

   _____

5 Long before social psychology <u>was born</u>, philosophers regarded happiness as the ultimate state of being.

   _____

6 In recent years, social psychologists have <u>used</u> their theories and methods <u>in</u> the study of this basic human motive.

   _____

Text B

Despite the saying "Don't judge a book by its cover," psychological studies have found that people tend to do otherwise. But does clothing affect how we think about ourselves? Would we think differently when we wear clothing of different professions? Read Text B to see what psychologists have found.

Mind Games: Sometimes a White Coat Isn't Just a White Coat[1]

Sandra Blakeslee

1   If you wear a white coat that you believe belongs to a doctor, your ability to pay attention increases sharply. But if you wear the same white coat believing it belongs to a painter, you will show no such improvement.

2   So scientists report after studying a phenomenon they call enclothed cognition: the effects of clothing on cognitive processes.

3   It is not enough to see a doctor's coat hanging in your doorway, said Adam D. Galinsky, a professor at the Kellogg School of Management at Northwestern University, who led the study. The effect occurs only if you actually wear the coat and know its symbolic meaning — that physicians tend to be careful, rigorous and good at paying attention.

4   The findings, on the website of *The Journal of Experimental Social Psychology*, are a twist on a growing scientific field called embodied cognition[2]. We think not just with our brains but with our bodies, Dr. Galinsky said, and our thought processes are based on physical experiences that set off associated abstract concepts. Now it appears that those experiences include the clothes we wear.

5   "I love the idea of trying to figure out why, when we put on certain clothes, we might more readily take on a role and how that might affect our basic abilities," said Joshua I. Davis, an assistant professor of psychology at Barnard College and expert on embodied cognition who was not involved with the study. This study does not fully explain how this comes about, he said, but it does suggest that it will be worth exploring various ideas.

6   There is a huge body of work on embodied cognition, Dr. Galinsky said. The experience

---

1   The text was retrieved and adapted from http://www.nytimes.com/2012/04/03/science/clothes-and-self-perception, written by Sandra Blakeslee, 2012.

2   embodied cognition: a growing research field in cognitive science that claims that many features of human cognition are shaped by aspects of the body beyond the brain 具身认知

of washing your hands is associated with moral purity and ethical judgments. People rate others personally warmer if they hold a hot drink in their hand, and colder if they hold an iced drink. If you carry a heavy clipboard, you will feel more important.

7   It has long been known that "clothing affects how other people perceive us as well as how we think about ourselves," Dr. Galinsky said. Other experiments have shown that women who dress in a masculine fashion during a job interview are more likely to be hired, and a teaching assistant who wears formal clothes is perceived as more intelligent than one who dresses more casually.

8   But the deeper question, the researchers said, is whether the clothing you wear

affects your psychological processes. Does your outfit alter how you approach and interact with the world? So Dr. Galinsky and his colleague Hajo Adam conducted three experiments in which the clothes did not vary but their symbolic meaning was manipulated.

9   In the first, 58 undergraduates were randomly assigned to wear a white lab coat or street clothes. Then they were given a test for selective attention[3] based on their ability to notice incongruities, as when the word "red" appears in the color green. Those who wore the white lab coats made about half as many errors on incongruent trials[4] as those who wore regular clothes.

10   In the second experiment, 74 students were randomly assigned to one of three options: wearing a doctor's coat, wearing a painter's coat or seeing a doctor's coat. Then they were given a test for sustained attention[5]. They had to look at two very similar pictures side by side on a screen and spot four minor differences, writing them down as quickly as possible.

11   Those who wore the doctor's coat, which was identical to the painter's coat, found more differences. They had acquired heightened attention. Those who wore the painter's coat or were primed with merely seeing the doctor's coat found fewer differences between the images.

---

3   selective attention: the process of directing one's awareness to relevant stimuli while ignoring irrelevant stimuli in the environment 选择性注意

4   incongruent trials: the tasks in which the stimuli are not in agreement with one another 不一致试次

5   sustained attention: a directed focus on a stimulus for the duration of a cognitive task 持续性注意

12　The third experiment explored this priming effect[6] more thoroughly. Does simply seeing a physical item, like the coat, affect behavior? Students either wore a doctor's coat or a painter's coat, or were told to notice a doctor's lab coat displayed on the desk in front of them for a long period of time. All three groups wrote essays about their thoughts on the coats. Then they were tested for sustained attention.

13　Again, the group that wore the doctor's coat showed the greatest improvement in attention. You have to wear the coat, see it on your body and feel it on your skin for it to influence your psychological processes. Clothes invade the body and brain, putting the wearer into a different psychological state, Dr. Galinsky said. But what happens, he mused, if you wear a priest's robes every day? Or a police officer's uniform every day? Do you become habituated so that cognitive changes do not occur? Do the effects wear off?

14　More studies are needed, he said.

(788 words)

New words and expressions

rigorous /ˈrɪgərəs/ *a.* thorough and careful 严密的；缜密的

embody /ɪmˈbɒdi/ *vt.* include sth. 包括；包含

set off　cause sth. to happen 引起

ethical /ˈeθɪkl/ *a.* involving the principles used for deciding what is right and what is wrong 伦理的

clipboard /ˈklɪpˌbɔːd/ *n.* 写字夹板

masculine /ˈmæskjʊlɪn/ *a.* having qualities considered typical of men 男性的；男子气概的

casually /ˈkæʒuəli/ *ad.* in a relaxed and informal way 随意地；随便地

outfit /ˈaʊtfɪt/ *n.* a set of clothes worn together, typically for a particular occasion or purpose 着装

randomly /ˈrændəmli/ *ad.* chosen or happening without any particular method, pattern or purpose 随机地

incongruity /ˌɪnkənˈgruːəti/ *n.* sth. which seems strange because of being very different to other things which happen or exist in the same situation 不协调的事物；不相称的事物

prime /praɪm/ *vt.* (*usually passive*) prepare sb. for a situation, so that they know what to do 使（某人）准备好（应对某种情况）

thoroughly /ˈθʌrəli/ *ad.* very carefully, so that nothing is missed 彻底地；详尽地

muse /mjuːz/ *vt.* say to oneself in a thoughtful manner 若有所思地说

robes /rəʊbz/ *n.* （尤指正式典礼时穿的）长袍，礼服

habituate /həˈbɪtʃuˌeɪt/ *vt.* make or become accustomed or used to sth. 使习惯

wear off　gradually disappear 逐渐消失

6　priming effect: the implicit memory effect in which exposure to a stimulus influences response to a later stimulus 启动效应

Critical reading and thinking

Task / **Overview**

Read the text and complete the following table.

Research topic	Enclothed cognition		
The objective	To study the effects of 1) _____ on cognitive processes		
Research questions	Does the clothing people wear affect their 2) _____? Does the outfit people wear alter how they 3) _____ with the world?		
Literature review	Previous experiments have found that clothing affects how people perceive each other as well as how they think about themselves, but few have studied how putting on certain clothes might 4) _____.		
Research methods	Three experiments	**the subjects**	5) _____
		instruments	white lab coats, street clothes, 6) _____
		procedures	tests for selective attention and 7) _____ attention
Findings	8) _____		
Recommendations for future research	To study the long-term effects of wearing certain clothing on cognition		

Language building-up

Task 1 / **Academic vocabulary**

Complete the following sentences with the words from the box. Change the form where necessary.

display	ethical	identical	intelligent	option
perceive	randomly	selective	sustained	symbolic

1   These scientists maintain that their search results _____ in order of relevance.

2   The sample was _____ picked from the unemployment register for 16-30 year olds.

3   _____ attention is a cognitive process in which a person attends to one or a few sensory inputs while ignoring the other ones.

4 _____ guidelines or codes are used by groups and organizations to define what actions are morally right and wrong.

5 It appears that after months of debate, none of the four _____ was chosen.

6 Although the two cases seemed to be _____, one lawyer showed that there were some slight differences between them.

7 _____ attention is the ability to focus on one specific task for a continuous amount of time without being distracted.

8 Ineffective management _____ to be the main obstacle for both groups.

9 It is reported that scientists are searching for _____ life forms in other solar systems.

10 The massive garbage dumps seem to be _____ of the throwaway consumer society today.

Task 2 / Collocations

Expressions describing the quantity of academic work	
several studies	**a large number of** studies
a number of studies	**a great deal of** research
various studies	**much** research
numerous studies	**a large body of** work
many studies	

Translate the following sentences into English with the expressions from the box. More than one option is possible.

1 到目前为止，有几项研究已经调查过这个问题。

_____

2 相当多以前的研究重点关注我们社会生活的这个方面。

_____

3 不少研究试图解释这个现象。

_____

4 一些研究开始探索这个现象。

_____

5 大量已发表的研究表明着装影响人们相互之间的看法。

_____

6 对这个问题已有一定的研究。

_____

Researching

Task Form groups of 4-5. Each group chooses a department of your college to carry out a survey of the satisfaction level of the students in this department. Your survey can be based on the Satisfaction with Life Scale test developed by Ed Diener and his colleagues.

Below are five statements that you may agree or disagree with. Using the 7-point scale below, indicate how much you agree with each statement by writing the appropriate number on the line. Please be open and honest in your responding.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

____ 1 In most ways my life is close to my ideal.

____ 2 The conditions of my life are excellent.

____ 3 I am satisfied with my life.

____ 4 So far I have gotten the important things I want in life.

____ 5 If I could live my life over, I would change almost nothing.

Scoring description

▲ 31-35   Extremely satisfied

▲ 26-30   Satisfied

▲ 21-25   Slightly satisfied

▲ 20   Neutral

▲ 15-19   Slightly dissatisfied

▲ 10-14   Dissatisfied

▲ 5-9   Extremely dissatisfied

Each group then reports the findings to the class. The whole class discuss the similarities and differences between the findings.

Dealing with unfamiliar words

Do you feel anxious or even frustrated when you hear some unfamiliar words in a lecture? How do you deal with those words? Here are some tips for you.

- If the words don't hinder your understanding of the major points, just skip them over.
- Use contextual information, common sense and background information to guess the meaning of the word. Sometimes, the speaker might use paraphrase or definition to explain the new word.
- If you fail to figure out the meaning of an important word, just move on and listen attentively to the speaker. Never let any new word distract your attention from the lecture.

Word bank

equivalent /ɪˈkwɪvələnt/ *a.* 等同于……的

affective /əˈfektɪv/ *a.* 表达情感的

hedonistic /ˌhiːdəˈnɪstɪk/ *a.* 享乐主义的

thereof /ˌðeərˈɒv/ *ad.* 在其中

Task 1 Read the following terms. Watch a video clip and pay attention to how you deal with these terms when you hear them: *Human Development Index*, *hedonistic evaluation*, *Experience Sampling method*, *cognitive conception*.

Task 2 Watch the video clip again and complete the following sentences.

1 The Human Development Index is certain factors which were presumed to be equivalent to _____. In its simplest form, it suggests that societies with greater economic development, higher levels of education, and higher life expectancy _____.

2 Hedonistic evaluations of well-being emphasize the feeling of _____. In this approach, a person's well-being is _____ of all momentary feelings of good or bad affect.

3 The Experience Sampling method samples _____ and taking instantaneous measures of a person's level of affect in those moments, to _____.

4 Cognitive conceptions of well-being tend to ask people directly how _____ with their life overall or with particular domain thereof. They emphasize not the _____ but the person's _____ of their situation.

Body: Making an argument

Making an argument is an essential part of academic speaking. An argument consists of two parts: 1) thesis statement or claim; 2) evidence that supports the statement or claim. The thesis statement or claim should be clear and concise, while the evidence should be convincing and reliable.

Language patterns

Making an argument	As far as I'm able to judge, … My belief / interpretation is … From what I understand, … As I understand it, … A good case in point is … Consider the case of … An example can be seen … As evidenced in …
Paraphrasing and clarifying	Simply put, … In other words, … So what I'm saying is … To put it more simply, … To put it another way, …

Task   Work in groups and do the following activity.

Step 1: Answer the following question.

Can money buy happiness?

e.g. *Money can never buy you love because …*

Psychologists have found that wealth increases human happiness when it lifts people out of poverty …

Step 2: Form two teams according to the answers. One team takes the pro position and the other one the con position. Each team come up with evidence to support their argument.

Step 3: Read the arguments of the other team and brainstorm counterarguments to get ready for a debate.

Macro structure: Discussion

The discussion section of a research paper seems to be the most difficult part to write because you need to interpret the results, not just summarize them. The discussion is much more than a summary of results. In this part of a paper, you need to connect the findings of your research with those of existing research. Ultimately, you should argue how your findings can, and cannot, illustrate the issue in focus.

A general structure of the discussion may look like the following. Please note that this is a rough sketch. You do not have to include all of them and you may present them in a different order.

- Recap the purpose or focus of the study
- Summarize the findings of your research
- Analyze the findings
- Discuss the issues arising from the findings, relating to literature

Micro skills: Quoting and paraphrasing (1)

Reliable sources of evidence that are normally used in academic papers include: journal articles, books, databases, government documents, reports and statistics by authoritative institutions. In your writing, you need to cite them by acknowledging the author(s) and sources.

There are two methods of making citations:

1 Quotation: Directly use the original words from the source in your own text. The quoted content is put between quotation marks.

For example:
Andersen (2010) claimed that "from the point of view of a US-based food company the EU rules may appear to be trade protectionism rather than reasonable consumer protection" (p. 141). [APA style]

2 Paraphrase: Use your own words to represent the meaning of the source materials.

For example:
Source text: Shankar and Bolton (2004) note that "what is most striking, however, is that the competitor factors are the most dominant determinants of retailer pricing in a broad framework that included several other factors" (p. 43). [APA style]

Paraphrase: Shankar and Bolton (2004) highlight the dominant role of competitor factors in retailer pricing among other factors. [APA style]

Language patterns

As Carnoy (2004) states: "…" (p. 215).

As Smith (2000) argues: "…" (p. 150).

Yin (1992) concludes: "…" (p. 129).

Harmer (2001) states that …

Yang (2015) pointed out that …

Lee (2015) claimed that …

Smith (2013) discusses / mentions / defines …

Numerous studies have attempted to explain … (for example, Smith, 1995; Romi, 1998; Johnson, 2002).

Surveys such as the one conducted by Smith (1988) have shown that …

The findings / results suggest / show / reveal that …

A number of studies have found that … (Smith, 2003; Jones, 2004).

It has been demonstrated that … (Smith, 1995).

Sample

4 Discussion

The aim of the current study was to explore Iranian students' perspective toward their EFL teachers' classroom discipline strategy use. The results suggest that Iranian EFL teachers use recognition and rewarding most often when dealing with misbehavior to maintain discipline in their classes. They use punishment and aggression less frequently. Harmer (2001) states that discipline does not mean a series of punishments applied to misbehaving students but refers to a contract which binds a teacher and a group of students together so that learning can be more effective. In doing so, an effective style of classroom discipline minimizes problems and disruptions in the classroom (Daloğlu, 2002). There are a number of researchers who recommend that teachers should recognize students' appropriate behavior (Buisson, Murdock, Reynolds, & Cronin, 1995; Cavalier, Ferretti, & Hodges, 1997). In other words, the most useful techniques for generating positive reactions are recognition and reward for responsible behavior, and discussions with students where a negotiated outcome is achieved (Lewis, Romi, Quic, & Katz, 2005).

This finding shows that in Iranian context, teachers are less authoritarian (punitive and aggressive) and they appear to be more supportive of students and as they have less legitimate power, they may try to use more reward power (Tauber, 1999). This strategy and minimizing the usage of aggressive discipline strategies while increasing the frequency with which teachers recognize students' responsible behavior can foster quality relationship (Lewis, Romi, Quic, & Katz, 2005). While most research findings have criticized EFL programs in Iran due to problems with regard to methodology and teaching materials

(Rahimi & Nabilou, 2009), it seems that this finding is a promising result and shows that at least with regard to class management and discipline Iranian EFL teachers do not face many problems.

Also, the study revealed that male and female teachers were different with regard to the amount of the punishment, discussion and aggression strategy application. Female teachers use these strategies more than their male counterparts. This finding is in agreement with what has been found in other Asian countries (Dong, 2001) and can be related to greater stress levels experienced by female teachers (Zhou & Zhao, 1998).

Moreover, public school teachers use aggression strategy more than teachers in private schools. This is a proof for the fact that the aspects and climate of a school affects classroom and classroom management (Brown, 2001). It has been found that teaching effectiveness in private education can be attributed to the "way of funding (and the incentives which result from it), its difference in scale, its pupil characteristics (due to the non-random selection of pupils) and its potentially more efficient educational system (thanks to ideological background and better teacher selection)" (Cherchye, Witte, Ooghe, & Nicaise, 2010, p. 564). Moreover, it is also believed that in public schools disciplinary problems, including talking, leaving seats without permission, passing notes, poking and hitting other students, making sarcastic and hostile remarks and so forth are still annoying problems (Elam & Rose, 1995). Respectively the mentioned issue may be the result of larger average class size in public schools (Chen, 2007) that causes more disciplinary problems there.

Source: Rahimi, M. & Hosseini, F. (2012). EFL teachers' classroom discipline strategies: The students' perspective. *Social and Behavioral Sciences*, 31, 309-314.

Task Outline the discussion section of your paper.

The purpose / focus of your study: _____

The results: _____

Issues: _____

Main arguments: _____

Now you can go on writing up the discussion section, paying attention to how to quote and paraphrase sources.

Key terms for further study

demographic factor	人口因素
embodied cognition	具身认知
incongruent trials	不一致试次
mood	心境
motive	动机
priming effect	启动效应
questionnaire	调查问卷
Satisfaction with Life Scale	生活满意度量表
selective attention	选择性注意
self-esteem	自尊
self-report	自我报告法
social psychology	社会心理学
social relationship	社会关系
sustained attention	持续性注意
subjective well-being	主观幸福感

ACADEMIC ENGLISH
for Medicine

学术英语 第二版

医学

主 编

孙庆祥　季佩英

编 者

蔡和兵　孙庆祥
唐　伟　季佩英

Map of the book

VIEWING	SPEAKING	WRITING
Prediction	Analyzing your audience	Choosing a topic
Finding major points	Having clear objectives	Writing a title
Note-taking forms	Having a clear structure and a sense of timing	Writing an introduction
Note-taking symbols (1)	Introduction	Writing a methods section
Note-taking symbols (2)	Body: Linking the points	Writing a findings / results section
Dealing with unfamiliar words	Body: Making an argument	Writing a discussion / comment section
Listening for evidence	Body: Making a counterargument	Writing a conclusion
Cornell note-taking system	Conclusion	Creating a reference list
Writing out notes in full	Visual aids	Writing an abstract
Integrated exercises	Rehearsal and delivery	Providing author information

UNIT

7

Doctor-patient Relationship

Life can be hard. Relationships are often difficult. In an era of fast advancing medical technology, rapidly changing medical ethics, and ever-increasing malpractice lawsuits, a good doctor-patient relationship is critically important for effective health care delivery. This unit sheds some light on how to build such a relationship.

Text A

Lead-in

Task   Read the title of Text A and imagine three different situations in which doctors may be asked to make "tough decisions" for their patients. Then write them down.

1   _____

2   _____

3   _____

Now read Text A and find out what doctors are supposed to do in dealing with tough situations.

Letting Doctors Make the Tough Decisions[1]

Pauline W. Chen[2]

1   Soon after I finished my surgical training, I worked with a young doctor who was impressive not only for his clinical skills but also for his devotion to patients. He was large and powerfully built but never seemed to loom over his patients, miraculously shrinking down to their eye level whenever he spoke with them. He listened intently to every detail of their travails and always ended the visits by asking if they still had any unanswered questions.

2   One afternoon I was surprised to see him at a nursing station, his massive arms gesticulating as he complained to a nurse about one patient's family. The patient was dying, and the young doctor had organized a meeting with the family to talk about withdrawing life-support machines[3] and medications and starting comfort measures. The family had spent the entire meeting asking questions but then refused to make any decisions or withdraw any treatments.

3   "I spent all this time telling them we could continue to inflict pain on their loved one

---

1   The text was retrieved on Dec. 2, 2011 from https://well.blogs.nytimes.com.

2   Pauline W. Chen: 陈葆琳（外科医生，《纽约时报》专栏作家）

3   life-support machine: a piece of equipment that keeps a person alive when he / she is extremely ill and cannot breathe without help 呼吸机

or we could make him comfortable," he said, his hands still moving. "I told them suffering or comfort — it was their decision. But in the end, they made no decision and just walked right out of the room."

4 The way doctors and patients approach medical decisions has changed sharply over the last 50 years. For generations, these decisions were the exclusive purview of doctors; and patients, if they participated, often had little say in the final choice. But that paternalistic decision-making process began to change in the late 1960s and 1970s, as movements calling for patient empowerment grew and medical ethicists began articulating principles regarding the ethical care of patients.

5 One tenet that gained particular traction among clinicians was respect for the person. Applied to the work done in wards, clinics and operating rooms, this ethical principle led to a new clinical ideal: patient-centered care.

6 But a second ethical principle, one closely linked to the first, also played an increasingly important role in the patient-doctor relationship: the notion of respect for a person's autonomy. With time, autonomy would mean letting patients make their own decisions; and that interpretation would work its way into the teaching programs of medical schools and into state laws that mandated discussion of treatment options with patients.

7 For the next 40 years, young doctors, myself included, would be trained to restrain ourselves from making anything but emergency or mundane decisions for patients.

8 But a new study reveals that too much physician restraint may not be all that good for the patient — and perhaps may even be unethical. While doctors might equate letting patients make their own decisions with respect, a large number of patients don't see it that way. In fact, it appears that a majority of patients are being left to make decisions that they never wanted to in the first place.

9 Researchers interviewed more than 8,000 hospitalized patients at the University of Chicago. When it came to medical decisions, almost all the respondents wanted their doctors to offer choices and consider their opinions. But a majority of patients — two out of three — also preferred that their doctors make the final decisions regarding their medical care.

10 "The data says decisively that most patients don't want to make these decisions on their own," said Dr. Farr A. Curlin, an associate professor of medicine at the University of Chicago and one of the authors of the study.

11 The challenges appear to arise not when the medical choices are obvious, but when the best option for a patient is uncertain. In these situations, when doctors pass the burden of decision-making to a patient or family, it can exacerbate an already stressful situation. "If a physician with all

of his or her clinical experience is feeling that much uncertainty," Dr. Curlin said, "imagine what kind of serious anxiety and confusion the patient and family may be feeling."

12　Patients and their families also often don't realize that their doctors may be grappling with their own set of worries. "Doctors may think, 'Who am I to presume to know what my patients need?'" Dr. Curlin noted, and may be hesitant to assert their own opinions for fear that they might commit some kind of ethical transgression. Some will resort to veiling their own opinions in a half-hearted attempt to direct the decision. While the doctors might be convinced that they are being objective and dispassionate, more often than not they are sending mixed messages.

13　A doctor may, for example, tell relatives that it is their choice to withdraw life support from a dying patient. But that doctor may also use value-laden language to describe the options. One alternative may be described to the family as "reasonable" or "comforting," while the other is depicted as "invasive," "aggressive" or "painful."

14　"This creates a kind of bizarre dishonesty in how we communicate," Dr. Curlin said. "Patients end up feeling manipulated and will resist making any decision at all."

15　For doctors, then, the key to preserving patient autonomy — and patient-centered care — lies not in letting patients make the final decisions alone but in respecting their opinions and shouldering the responsibility together. And while patients will need to be more explicit and ask for that help, doctors, like my young colleague and, I admit, myself, will need to be more mindful of whether patients want them to share information, be directive or hand over the responsibility of the decision.

16　"We have to stop drawing a circle around patients and their families," Dr. Curlin said. "We have to stop subjecting them to the loneliness and burden of autonomy and instead begin standing in that circle with them."

(938 words)

New words and expressions

miraculously /məˈrækjʊləsli/ *ad.* in a way that is very surprising or difficult to believe 令人惊奇地；不可思议地

travail /ˈtræveɪl/ *n.* (*usually pl.*) difficult and bad situations or experiences 困境；痛苦经历

gesticulate /dʒeˈstɪkjʊˌleɪt/ *vi.* make movements with your arms and hands, usually while speaking, because you are excited, angry, etc.（讲话时）做手势

inflict /ɪnˈflɪkt/ *vt.* make sb. suffer sth. unpleasant 使遭受

purview /ˈpɜːvjuː/ *n.* the extent or range of function, power, or competence 范围；权限

paternalistic /pəˌtɜːnəˈlɪstɪk/ *a.* advising and helping people but also controlling them by not letting them make their own decisions and choices 家长式作风的

empowerment /ɪmˈpaʊəmənt/ *n.* the process of giving a person or group of people power and status in a particular situation 许可；授权

ethicist /ˈeθɪsɪst/ *n.* a specialist in ethics 伦理学家

tenet /ˈtenɪt/ *n.* a belief or principle 信条；原则

traction /ˈtrækʃn/ *n.* pulling power, as of a draft animal or engine 牵引力

autonomy /ɔːˈtɒnəmi/ *n.* the ability or opportunity to make your own decisions without being controlled by anyone else 自主能力；自主

mandate /mænˈdeɪt/ *vt.* give an official command that sth. must be done 命令；指示

mundane /ˌmʌnˈdeɪn/ *a.* ordinary and not interesting or exciting 普通的；平凡的

unethical /ʌnˈeθɪkl/ *a.* morally unacceptable 不道德的

equate /ɪˈkweɪt/ *vt.* consider or treat as equal or equivalent 同等对待；等同

respondent /rɪˈspɒndənt/ *n.* sb. who answers questions, especially in a survey（尤指调查中）回答问题的人

grapple /ˈgræpl/ *vi.* struggle or work hard to deal with sth. 尽力解决；努力解决

presume /prɪˈzjuːm/ *vi.* decide to do sth. without permission 擅作主张；越权行事

hesitant /ˈhezɪtənt/ *a.* slow to do sth. because of nervousness or uncertainty 迟疑的；踌躇的

transgression /trænzˈgreʃn/ *n.* doing sth. that is not allowed by a law, custom, or religion（对法律、习俗或宗教的）违反

half-hearted /ˌhɑːf ˈhɑːtɪd/ *a.* done with no real interest or enthusiasm 兴趣不大的；不热心的

dispassionate /dɪsˈpæʃnət/ *a.* not influenced by personal feelings 不带感情的

value-laden /ˈvæljuː ˈleɪdn/ *a.* presupposing the acceptance of a particular set of values 价值观负载的；带有观点的

bizarre /bɪˈzɑː/ *a.* very unusual and strange 极其怪诞的；异乎寻常的

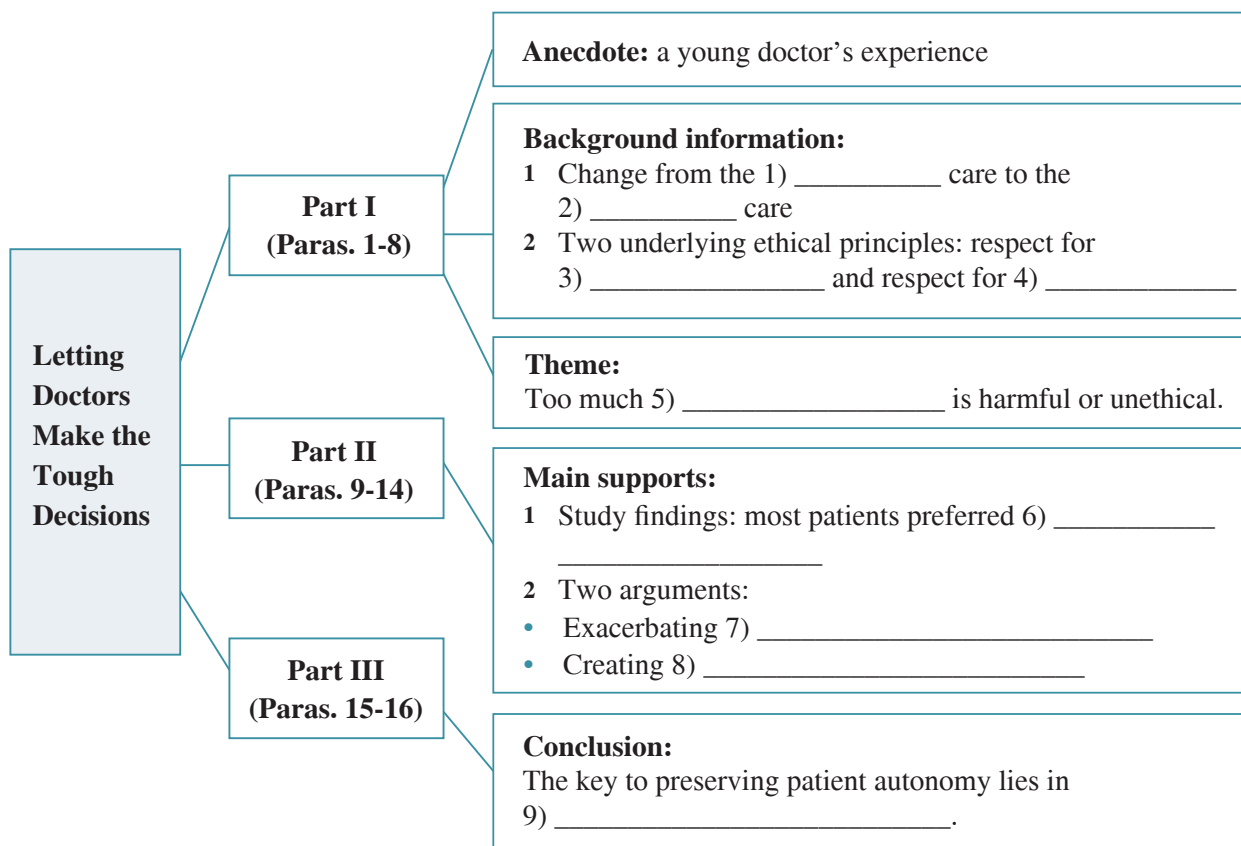**explicit** /ɪkˈsplɪsɪt/ *a.* fully and clearly expressed, leaving nothing implied 明确的；清晰的

manipulate /məˈnɪpjʊˌleɪt/ *vt.* influence sb. or control sth. in a clever or dishonest way（以巧妙或不诚实的方式）影响，操纵

mindful /ˈmaɪndfl/ *a.* conscious or aware of sth. 留心的；警觉的

Critical reading and thinking

Task 1 / **Overview**

This text can be briefly divided into three parts: introduction to the theme, argumentation for the theme, and conclusion. Read the text and complete the following diagram.

Letting Doctors Make the Tough Decisions

Part I (Paras. 1-8)

Anecdote: a young doctor's experience

Background information:
1 Change from the 1) _____ care to the 2) _____ care
2 Two underlying ethical principles: respect for 3) _____ and respect for 4) _____

Theme:
Too much 5) _____ is harmful or unethical.

Part II (Paras. 9-14)

Main supports:
1 Study findings: most patients preferred 6) _____ _____
2 Two arguments:
• Exacerbating 7) _____
• Creating 8) _____

Part III (Paras. 15-16)

Conclusion:
The key to preserving patient autonomy lies in 9) _____.

Task 2 / **Topics for presentation**

Prepare a brief presentation on one of the following topics before class and get ready to deliver it to the class.

1 What difficult situation is the young doctor facing?

2 What is paternalistic decision-making in medicine?

3 In what way can patient empowerment be good for the patient?

4 Why does the author say too much physician restraint may not be all that good for the patient?

5 What kind of considerations may have prevented doctors from making decisions for their patients?

6 What should doctors do to build a good doctor-patient relationship?

Language building-up

/ **Medical terminology**

1 Study the word formation of medical terms listed in the box.

Building block	Meaning	Example
-ful	full of（充满……的；具有……的）	stressful, painful
-ian	a person who specializes or is expert in（专事……的人）	physician, clinician
-ize	make, cause to become, engage in；subject to（变得；成为；置于……）	hospitalize
physi(o)-	physical（身体的；生理的）	physician
-y	condition；state；quality（状态；性质）	autonomy

2 Match each of the definitions with its corresponding English term and Chinese equivalent.

clinical	autolysis	painful	ethicist
unethical	clinician	hospice	autonomy
psychiatry	surgical	physician	hospitalize
meditation	medication	physiologist	
安养院	自主能力；自主	生理学家	伦理学家
不道德的	让（某人）住院治疗	疼痛的	临床的
外科的；手术的	医生；内科医生	自溶	精神病学
临床医生	沉思；冥想	药物	

	English	Chinese	Definition
1	_____	_____	medicine or drugs given to people who are ill
2	_____	_____	the condition or quality of being autonomous; independence
3	_____	_____	a physician or other qualified person who is involved in the treatment and observation of patients, as distinguished from one engaged in research
4	_____	_____	of, pertaining to, or correctable by surgery
5	_____	_____	causing pain; full of pain
6	_____	_____	involving working with people who are ill, rather than in laboratory
7	_____	_____	a specialist in ethics
8	_____	_____	not ethical
9	_____	_____	a person licensed to practice medicine; a medical doctor
10	_____	_____	admit or send a person into a hospital for treatment

> **Tips** **Word formation in medical terminology: Clipping**
>
> Clipping, also called shortening, refers to the process whereby a word is shortened by clipping off part of the word without change in its meaning and word class. For example, *exam* is a shortened form of *examination*, *flu* of *influenza*, *specs* of *spectacles*, and *polio* of *poliomyelitis*.

Task 2 / Signpost language

Starting a paragraph

In many cases, the first sentence of a paragraph introduces the main topic that is going to be focused on and meanwhile provides a smooth shift from the previous paragraph. This natural shift can be achieved by repeating certain words in the previous paragraph or using transitional markers such as *to begin with*, *firstly*, *on the one hand*.

Underline the first sentences of paragraphs 4, 5, 6, 8, 11 and 12, analyze how the author manages to bring in a new topic and maintain coherence, and complete the following table.

Para.	Key word(s) repeated to achieve smooth transition	Key word(s) used to introduce a new topic
4		
5		
6		
8		
11		
12		

Task 3 / Formal English

The following sentences are taken from Text A. Replace the underlined formal words with less formal ones.

_____ 1 For generations, these decisions were the exclusive <u>purview</u> of doctors … (Para. 4)

_____ 2 One <u>tenet</u> that gained particular traction among clinicians was respect for the person. (Para. 5)

_____ 3 … and that interpretation would work its way into the teaching programs of medical schools and into state laws that <u>mandated</u> discussion of treatment options with patients. (Para. 6)

_____ 4 When it came to medical decisions, almost all the <u>respondents</u> wanted their doctors to offer choices and consider their opinions. (Para. 9)

_____ 5 But a majority of patients — two out of three — also preferred that their doctors make the final decisions <u>regarding</u> their medical care. (Para. 9)

_____ 6 Doctors … may be hesitant to assert their own opinions for fear that they might commit some kind of ethical <u>transgression</u>. (Para. 12)

_____ 7 … doctors, like my young colleague and, I admit, myself, will need to be more <u>mindful</u> of whether patients want them to share information … (Para. 15)

Text B

Relationships between doctors and patients, as shown in Text A, can be really difficult, and this is especially the case when doctors make mistakes. The author of Text B shows how effective communication and mutual understanding, as embodied by the "nine words," can help bridge the distance between doctors and patients in the wake of tragedy or the face of death.

Nine Words[1]

Cynthia Haq[2]

I'm sorry.

1   As I reviewed the small mountain of reports on my desk, one gave me pause. I had just returned to my small-town family practice[3] after an extended leave of absence. Pat had lung cancer.

2   Pat was a 78-year-old beloved patient for whom I had cared for more than a decade. She was a dairy farmer, mother of six, interior designer, and one of the best pie bakers in the county. Reports from the hospital and oncologist confirmed widespread metastases. Pat had declined aggressive treatment. She was receiving palliative care from hospice under the supervision of an oncologist. I called Pat to express my concern. Her response was lukewarm. I offered help if she desired.

3   A few days later I spoke with the oncologist. He provided details and added, "You might want to check the records. The primary lesion was detected years ago, but there was no follow-up. Someone dropped the ball."

4   What had happened? I reviewed Pat's electronic record, including reports from a hospital stay more than 3 years ago for pulmonary emboli following knee surgery. The computerized tomography (CT) report described extensive bilateral infiltrates and a possible small nodule in the base of the left lung. Follow-up was recommended, but no follow-up was obtained. A chest X-ray report from a visit more than a year ago with one of my partners revealed a left lower-lobe pneumonia and suggested follow-up to ensure resolution; no follow-up was obtained. Pat presented infrequently for care and usually only if something was wrong. There was no indication in any of the notes that the abnormality was noted. Pat had not been informed of the findings.

5   Who was responsible for identifying, discussing, and following these issues — the hospital team, my partners, or the radiologists? None of these was to blame.

---

1   The text is taken from *Family Medicine* (2006), 38(9).

2   Cynthia Haq: 辛西娅·哈克（医学教授）

3   family practice:（为一般家庭和个人服务的）家庭医疗

6 As Pat's family physician, it was my responsibility to follow up abnormal tests. I had made a serious mistake.

7 I was afraid, ashamed, and confused. Had Pat rejected me because of this mistake? Was she angry? Would she sue me? What was wrong with me? Was I a bad doctor? Could I be trusted? Had I made other serious mistakes? What was wrong with our health care system? Was the mistake due to pressure to see more patients more quickly? Did the conversion from a paper chart to an electronic medical record contribute to the error? Would early detection and treatment have changed the outcome? What should I do?

Forgive me.

8 Discussion with a trusted colleague helped me sort out my thoughts. Yes, I had missed a finding. No, we will never know if early detection would have changed the outcome. Yes, I should share this information with the patient and apologize.

9 I took a deep breath, called the patient, and asked permission to visit her at home. She agreed.

10 It was a quiet, bright, sunny day. Pat was lying in bed in a darkened room with mildly labored breathing[4]. I kneeled at the bedside and took Pat's hand. She wept when she saw me. She said she had no pain but was very tired. She was worried about her husband of nearly 60 years, who had also been ill, and distraught about conflicts with many family members who were not on speaking terms. I listened.

11 Finally I shared what I had come to disclose. I had made a mistake. I did not note the possible nodule on the CT scan. I was sorry that Pat had cancer. I was sorry that I had not fulfilled my responsibility to provide her with as much information as possible so that she might have taken action sooner. I did not know if this would have made a difference in the outcome.

12 Pat's immediate response was, "It's not your fault that I have cancer. If you had found this earlier, I might have had 4 terrible years, instead I had 4 good ones. You did nothing wrong."

13 I emphasized that yes, I was indeed responsible for not noting the nodule on the report, for not discussing it with her, for not providing options for further evaluation and management. She repeated that no, I was not to blame.

14 I was forgiven.

15 A tremendous load was lifted from my shoulders. Since Pat had forgiven me, perhaps I could forgive myself and continue as her doctor through the end of her life.

I love you.

16 I took another deep breath and continued. "Pat, I have known you and your family for many years. I care about you. May I continue to be your doctor?" I wondered if Pat could trust me with my imperfections. Pat immediately responded, "Of course.

---

4   labored breathing: an abnormal respiration characterized by evidence of increased effort to breathe 呼吸困难

You're my doctor. You know me. I want you to care for me. The oncologist is fine, but he doesn't know me."

17 One week later we conducted a family meeting in Pat's home with her husband, children, and the hospice team. Another deep breath: "We are here because we love Pat. None of us is perfect. There are no perfect families. Yet because of Pat's love, forgiveness, and courage, we have this precious gift of time together." We discussed Ira Byock's four things[5] that matter most at the end of life. Pat expressed her love and hopes: for the

family to be at peace, to celebrate the good times, and to support one another in the difficult times to come. Pat died less than 2 days later.

Thank you.

18 In her quiet and simple way, Pat taught us profound lessons about accepting the unexpected, forgiving, celebrating, hoping, and living and dying with courage and dignity.

19 I'm sorry. Forgive me. I love you. Thank you.

(934 words)

New words and expressions

leave of absence *n.* time permitted away from work for a certain period 休假

interior designer *n.* 室内设计师

oncologist /ɒŋˈkɒlədʒɪst/ *n.* a specialist who specializes in the treatment of tumors 肿瘤学家；肿瘤医师

metastasis /meˈtæstəsɪs/ *n.* (*pl.* metastases) the spread of a disease, especially cancer cells, from one part of the body to another 转移

supervision /ˌsuːpəˈvɪʒn/ *n.* the act of watching a person or activity and making certain that everything is done correctly, safely, etc. 监督；管理

lukewarm /ˌluːkˈwɔːm/ *a.* not showing much interest or excitement 不热心的；冷淡的

lesion /ˈliːʒn/ *n.* any structural change in a

bodily part resulting from injury or disease 损害；损伤；病灶

follow-up /ˈfɒləʊʌp/ *n.* sth. that is done to make sure that earlier actions have been successful or effective 后续行动；跟进行动；随访

embolus /ˈembələs/ *n.* (*pl.* emboli) sth. such as a hard mass of blood or a small amount of air that blocks a vessel carrying blood through the body（血管的）栓塞，血栓

bilateral /baɪˈlæt(ə)rəl/ *a.* having or involving two sides 双边的；双侧的

infiltrate /ˈɪnfɪlˌtreɪt/ *n.* 浸润物；渗透物

nodule /ˈnɒdjuːl/ *n.* a small round lump 小结节；小瘤

lower-lobe /ləʊə ˈləʊb/ *n.* （肺）下叶

---

5 Ira Byock's four things: Ira Byock is a physician specializing in palliative care. He authored *Dying Well* in 1997 and *The Four Things That Matter Most* in 2004. In the latter, he teaches how to practice the four most important phrases in life, that is, "Please forgive me," "I forgive you," "Thank you," and "I love you." 艾拉·比奥克的四句心灵告白

abnormality /ˌæbnɔːˈmæləti/ *n.* an abnormal feature, especially sth. that is wrong with part of sb.'s body 变异；变态

radiologist /ˌreɪdiˈɒlədʒɪst/ *n.* 放射科医师

sue /sjuː/ *vt.* make a legal claim against sb., especially for money, because they have harmed you in some way （尤指为要求赔偿金而）起诉，控告

conversion /kənˈvɜːʃn/ *n.* a change or an adaptation in form, character, or function 转换；变换

sort out put in order; clarify 整理；厘清

distraught /dɪˈstrɔːt/ *a.* extremely anxious or upset 心烦意乱的

not on speaking terms not feeling friendly toward sb. （与某人）关系不好，不相往来

disclose /dɪsˈkləʊz/ *vt.* make known 公开；揭露

profound /prəˈfaʊnd/ *a.* important and having a strong influence or effect 深刻的；意义深远的

Critical reading and thinking

Task / **Comprehension**

1 Choose the best answer to each of the following questions.

1 Why did the author review Pat's electronic record?

A. To confirm Pat's diagnosis.

B. To know what tests had been done for Pat.

C. To understand how Pat's disease developed.

D. To find out who was to blame for Pat's condition.

2 What was Pat's response to the author's confession?

A. She blamed the author for the fault.

B. She rejected the author's apology.

C. She neglected the author.

D. She forgave the author.

3 Who does the author think should be responsible for the medical mistake on Pat?

A. One of the author's partners.

B. The author herself.

C. The oncologist.

D. Pat's family.

4 What did the author feel she should have done?

A. Suggesting aggressive treatment for Pat.

B. Offering help when Pat required.

C. Ordering a CT scan for Pat.

D. Doing follow-up for Pat.

5 What did Pat value when saying the author could continue to be her doctor?

A. The author's honesty with Pat.

B. The author's medical expertise.

C. The author's knowledge about Pat.

D. The author's sincerity with Pat's family.

6. Which of the following best describes the author as a doctor?

A. Conscientious.

B. Hard-working.

C. Competent.

D. Careful.

2 Work in groups of 4-5 to complete the summary outline of each topic covered in the text.

1 Pat's personal status

• A 78-year-old woman suffering from _____ and receiving

   _____

• A dairy farmer

• Mother of six

• Interior designer

• One of the best _____

2 Pat's electronic record

• The computerized tomography (CT): extensive bilateral infiltrates and a possible small nodule in the base of the left lung, with follow-up recommended but not obtained

• A chest X-ray more than a year ago: _____

• The abnormality not noted

• Frequent visits to doctors but _____

3 the author's self-reflection

• Who to blame? _____.

• As Pat's family physician, the author had responsibility to _____; the author made a serious mistake.

• All sorts of questions running through the author's mind: Pat's response, possibilities of other mistakes, problems with health care system, causes of medical mistakes or errors, what-ifs, and next actions.

4 the author's visit to Pat

• Pat lying in bed in a darkened room with mildly labored breathing

• The author kneeling at the bedside listening to Pat's story

• The author apologizing for _____

• Pat's forgiveness for _____

5 the lesson the author learned from Pat

• Accepting the unexpected

• Forgiving

• Celebrating

• Hoping

• _____

Researching

Task Medical malpractice counts as one of the most important issues in medical practice. Work in groups of 4-5 to explore relevant information about this subject in the following aspects:

- definition of medical malpractice
- liabilities of medical malpractice
- avoidance of medical malpractice

Now report your findings to the class.

VIEWING   Interview

Listening for evidence

The speaker usually provides essential evidence to support the main opinion. Such evidence, consisting of details, helps the audience to understand his / her opinion more fully. While listening, you should try to distinguish the supporting details from the opinion. You may ask: What evidence does the speaker resort to? What does the speaker want me to believe with such evidence?

Details commonly used by the speaker can be facts, examples, anecdotes, explanations, elaborations, exceptions, and authoritative opinions. Most often no signal words follow the main point to indicate supporting details, but sometimes expressions are used to indicate that the speaker is shifting from a main point to a supporting detail.

Useful expressions for introducing a detail

Type of detail	Signaling expression
Example	*for example, for instance, such as*
Anecdote	*That reminds me …, I remember once …, This is exactly what I experienced …*
Explanation	*this means that, that is, in other words, that is to say, what I mean is, meaning*
Elaboration	*in addition, moreover, furthermore, also*
Exception	*except for, apart from, other than*
Opinion	*in his / her opinion, from his / her point of view, from his / her perspective*

Word bank

conceptual /kənˈseptʃuəl/ *a.* 概念上的   deliberate /dɪˈlɪbəˌreɪt/ *vi.* 仔细考虑

deliberation /dɪˌlɪbəˈreɪʃn/ *n.* 深思熟虑   empower /ɪmˈpaʊə/ *vt.* 授权

transparency /trænsˈpærənsi/ *n.* 透明度   accountability /əˌkaʊntəˈbɪləti/ *n.* 义务；责任

commitment /kəˈmɪtmənt/ *n.* 承诺

Task 1 Watch a video clip and complete the following sentences.

1   The shared decision-making refers to a conversation between the clinician, traditionally considered _____, and the patient, traditionally considered _____.

2   Now patients become experts in their own lives and have knowledge. Whether correct or incorrect, knowledge that they have and bring in should be _____. Sharing their own knowledge / information, both the patients and the clinicians deliberate and consider _____ of options in relation to _____. From that process, the option set narrows down to _____.

3   The process of information sharing with the family about the options was _____ for informed consent. In terms of deliberation, it all happened behind closed doors among the doctors. The patient had _____.

4   The study includes _____. On average, certain decision-making interventions extend the consultation by about 10 percent.

5   Anything that enhances transparency and accountability in health care can begin to reduce _____. Shared decision-making is one strategy in which _____ and the patients are empowered to _____ and to _____. Clinicians have a moral obligation to actually do everything they can to provide that level of transparency to the decision-making process and to feel that they are _____.

Task 2 Watch the video clip again and determine what evidence the speaker uses to support the main opinion.

Type of detail	YES / NO	Details
fact		
example		
anecdote		
explanation		
elaboration		
exception		
opinion		

Body: Making a counterargument

A counterargument is an argument offered in opposition to another argument. It involves an opinion or a fact that challenges the reasoning behind someone's proposal and shows that there are grounds for taking an opposite view. Sometimes you can build counterarguments by asking yourself how someone who disagrees with you might respond to each of the points you have made and what your response would be.

Language patterns

Making a counterargument	This approach is not likely to work. I wouldn't go along with sb. on that. I'm not really sure if I would go along with sb. there. I doubt / wonder whether the argument bears close examination. To assume that … is to miss the point. … seem to overlook / ignore an important / a fundamental fact. It is true that …, but it doesn't follow that … You claim that … Unfortunately,…
Emphasizing a point	I want to stress / highlight … I'd like to emphasize / put emphasis on … It's important to remember that … We should bear in mind that … Don't forget that … The crucial / essential / fundamental point is …

Task   Work in pairs to practice the above language patterns. One of you is going to make an assertion about the following points and the other expresses a counterargument.

Example

Student A：As I see it, traditional Chinese medicine is a lot safer than the mainstream Western medicine.

Student B：I wouldn't go along with you on that. The fact is people simply don't know much about the side effects of many traditional therapies.

1　doctors as the sole medical decision-maker
2　traditional Chinese medicine (TCM)
3　self-experimental treatment
4　dietary effects on health

5   patient autonomy

6   herbal therapies

7   acupuncture

8   euthanasia (安乐死)

9   hospice

Research paper | WRITING

Writing a conclusion

In the conclusion section, you summarize the research and highlight the importance and contributions of your ideas.

The length of the conclusion section can vary from one paragraph to two or three paragraphs. However, it should basically cover the following points:

- Refer back to your research question or hypothesis.
- Restate the thesis.
- Explain the significance of your findings.
- Offer recommendations for future action.

If the conclusion drawn from the study is universal, the present simple tense is used to state the conclusion. However, the past simple tense should be employed to discuss the conclusion that is true only in a specific study.

Sample

Conclusion

In this study, we found that a substantial number of ICDs were implanted in patients who were similar to those who either were excluded from major clinical trials of primary prevention ICDs or shown not to benefit from ICD therapy in other trials. Such patients not only have more comorbidities than patients receiving an evidence-based device, but they are at a higher risk of in-hospital death and any post-procedure complication. We observed considerable variation in non-evidence-based ICD implants by site. The rate of non-evidence-based ICD implants was significantly higher for nonelectrophysiologists than electrophysiologists. There was no clear decrease in the overall number of non-evidence-based ICD implants over time. As such, more efforts should focus on enhancing adherence to evidence-based practice.

Source:

Al-Khatib SM, Hellkamp A, Curtis J, et al. Non-evidence-based ICD implantations in the United States. *JAMA*. 2011; 305(1): 43-49.

Task   Search medical journals for a research paper and make an analysis of its conclusion section.

Vocabulary tests

/ **Academic words**

Complete the following sentences with the words from the box. Change the form where necessary.

communicate	obvious	equate	commit	presume
devotion	colleague	exclusive	explicit	interpretation
final	unethical	manipulate	challenge	participate
author	respondent	restrain	reveal	ethical

1 The _____ of the paper agree to it being submitted to the journal for publication.

2 Graduates of the program will be equipped with the knowledge and skills to meet the _____ in the globally growing broad spectrum of biomedical and healthcare opportunities.

3 The scientist and his _____ are working on the idea of using T cells to target cancer cells and destroy tumors.

4 Deeply _____ to the welfare of his patients, Dr. Drake specializes in minimally invasive treatment options and believes in a conservative, minimalistic approach to surgery.

5 Nurses need to _____ effectively with the patients and the caregivers to achieve positive client outcomes.

6 Hard work is not always about the hours that are put in; it is more often about the dedication and _____ to the craft.

7 Many people _____ cancer with death, not realizing that with prompt, proper care and a positive outlook many cancers can be cured.

8 Currently, pharmaceutical companies have the _____ right to sell the drugs they develop for 20 years.

9 This section provides a more _____ illustration of the concepts related to protein synthesis.

10 When parents disagree with doctors on a child's treatment, who should have the _____ say?

11 The scientific basis has been re-assessed, resulting in a new _____ of the test results.

12 The importance of analyzing routine chemistries in living genetically _____ mice is increasingly clear.

13 The conduct of biomedical research involving the participation of human beings implicates a variety of _____ concerns pertaining to such values as dignity, bodily integrity, autonomy, and privacy.

14 We of course grow older, rather than younger, and must pay the price by putting up with a great number of _____ physiological changes.

15 College students who _____ in the current study exhibited fairly high knowledge of autism and low stigma toward people with autism.

16 Stroke was _____ to be the cause of death of some Serbian medieval rulers without much solid evidence.

17 The number of _____ you need depends on your survey goals and how confident you want to be in your results.

18 If you are under a(n) _____ diet related to any health issues, we strongly recommend that you check with your doctor to see if this medication is right for you.

19 The results of the recent study _____ that sugar adds stress to the heart by decreasing the functionality of the heart's muscles.

20 It is _____ to conduct experiments that would lead to the death of the animals although animal testing has contributed to many life-saving treatments.

Task 2 / Collocations

Complete the following lexical chunks taken from Texts A and B according to the Chinese given in brackets.

1 nursing _____（护士站）

2 _____ machine（呼吸机）

3 comfort _____（舒适护理措施）

4 _____ treatment（停止治疗）

5 _____ decision-making process（家长式决策程序）

6 patient _____（病人授权）

7 medical _____（医学伦理学家）

8 ethical _____（伦理准则）

9 clinical _____（临床理念）

10 _____ care（以病人为中心的护理）

11 patient _____（病人自主权）

12 treatment _____（治疗选择）

13 _____ purview（专属领域）

14 _____ decision（紧急状况下做的决定）

15 physician _____（对医生的限制）

16 _____ and confusion（焦虑与困惑）

17　ethical _____（违背伦理）

18　family _____（家庭医疗）

19　widespread _____（广泛转移）

20　_____ treatment（积极治疗）

21　_____ lesion（原发病灶）

22　recommend _____（建议随访）

23　electronic _____（电子病历）

24　pulmonary _____（肺栓塞）

25　computerized _____（CT，计算机断层扫描）

26　bilateral _____（双侧浸润）

27　_____ X-ray（X线胸片）

28　left _____ pneumonia（左下肺叶肺炎）

29　_____ breathing（呼吸困难）

30　hospice _____（临终关怀团队）

第二版

学术英语

蔡基刚 编

理工

ACADEMIC ENGLISH
for **SCIENCE AND ENGINEERING**

EAP

目 录

1 Choosing a Topic

In this unit, you will learn how to:

- ask probing questions in critical thinking;
- have a better understanding of basic elements of research papers;
- choose a particular topic for your research;
- formulate research questions;
- write a working title (暂定标题);
- avoid plagiarism;
- use citations;
- use sources by quoting and summarizing.

1 Critical Reading

Understanding the text

TASK 1 Skim the text and complete the table below.

Key words	
Objective	
Methods used	

Laypeople's Understanding of Radioactivity[1] and Radiation

E. K. Henriksen

1 **radioactivity** *n.* 放射性

Introduction

1 Since the discovery of X rays in 1895, ionising radiation[2] has been a part of our life and consciousness. From the very beginning, radiation has been shrouded in myths—of exaggerated expectations as well as excessive fear[(1)]. Radiation has been characterised partly as a life force, partly as a doomsday power destined to cause the ultimate destruction of mankind. In our own time, fear seems to be the prevalent characteristic of the public perception of radiation phenomena, and the treatment in the media of incidents like the Chernobyl accident[3] has greatly contributed to the spreading of uneasiness and fear.

2 Why should we expect the public to know something about radioactivity and radiation? There may be many answers to this question; three of the most evident are the following:
1) The pragmatic reason
People should be capable of protecting themselves from the harmful effects of radiation as well as avoiding excessive fear.
2) The democratic reason
People should be capable of informed judgments in political matters involving radiation phenomena, nuclear energy, waste disposal, exposure limits etc.
3) The educational reason
The individual derives pleasure and fulfilment from knowing something about the world around him / her.

3 How can knowledge about radiation phenomena be effectively communicated to laypeople? In the constructivist approach[4] to learning, the learner is viewed as actively creating his / her own understanding in an interaction between the notions he / she already holds and the input provided by external sources such as the teacher, peers or the mass media. Within this understanding of learning, the learner's ideas and conceptions prior to instruction are seen as important factors in the learning process. This principle also holds true in the field of radiation, and a number of publications have dealt with pupils' and laypeople's conceptions of radiation phenomena. For instance, Lijnse et al.[(2)] described concepts of radioactivity and radiation held by 15- and 16-year-old pupils in the Netherlands, and Eijkelhof and Millar[(3)] analysed British newspaper reports of the Chernobyl accident to identify features of the lay understanding of radiation phenomena.

4 The present survey was conducted to investigate the understanding of radiation phenomena and risk among Norwegians with a reasonable level of general education, but lacking specialisation in physical science.

---

2 **ionising radiation** 电离辐射
3 **Chernobyl accident** 切尔诺贝利核事故
4 **constructivist approach** 建构主义方法

Methods

Respondents

5 The survey was administered in the form of a questionnaire given to 270 students in an elementary physics course at the University of Oslo[5]. This group was chosen for two main reasons: 1) The group was fairly large and easily accessible; and 2) the group mainly consisted of first-year students who had completed secondary education, but had not received formal instruction on radiation since leaving school. This student group can in no way be said to represent the general public. Nonetheless, it can be assumed that the results are indicative of conceptions and attitudes found among those with a general, secondary education in the direction of natural sciences, but no specialisation.

6 Of the 270 students 191 (71%) completed the questionnaire. Of the respondents 53% were women, 45% were men and 2% did not state sex. It cannot be excluded that the 29% who did not respond differed from the respondents in relevant respects. Since this survey does not aim to establish percentages of persons holding this or that conception, but rather aims to identify a few commonly held conceptions of radiation phenomena among non-specialists, the possible bias from non-respondents should not render the results irrelevant.

The questionnaire

7 The questionnaire consisted of 13 questions. Two of these gave background information about gender and background in secondary school, seven measured knowledge and understanding of radioactivity and radiation, and four were designed to give information about radiation fear and attitudes. Most questions were connected to real-life examples that the students might know from the media coverage of current issues related to radiation. The questions which are referred to in the paper are presented in Table 1 on the next page.

Coding and analysis

8 The answers to the open-ended questions in most cases fell into one of 5-10 categories, defined after reading the answers from about 20% of the respondents. All answers were then assigned to the appropriate categories and coded.

9 To obtain a measure of each respondent's level of understanding, a point system was developed. Each of the questions concerning knowledge and understanding was appointed a maximum number of points, adjusted to the presumed difficulty of the question. For each question, points ranging from zero to maximum were awarded to respondents according to their degree of understanding as judged by the investigator.

5　**Oslo** 奥斯陆（挪威首都）

Table 1 Questions and point assignments

No.	Questions and Max No. of Points
1	(a) Are you afraid of being exposed to radiation in your daily life? *If yes:* (b) Where do you think this radiation comes from?
2	(a) Do you think there are radiation sources (radioactive substances[6]) in the house where you live? *If yes:* (b) Which ones?
3	Radiation from radioactive substances may be divided into three main types. (a) What are they called? (2 points) (b) What constitutes the radiation in each case? (4 points)
4	After the reactor accident in Chernobyl in 1986, radiation could be detected from a range of Norwegian foodstuffs, particularly mutton and reindeer[7] meat. How had the food become radioactive? (2 points)
5	After the Chernobyl accident, restrictions were imposed on the sale of mutton meat with radioactivity exceeding 600 Bq / kg. Radioactivity is measured in becquerel[8] (Bq). What is the definition of 1 Bq? (3 points)
6	The radioactive substance caesium-137[9], which was found in mutton after the Chernobyl accident, has a half-life[10] of 30 years. What is meant by this? (3 points)
7	Many types of spice are irradiated in order to kill bacteria. We say that the radiation is absorbed in the spice. What do you think happens in the spice when radiation is absorbed? (3 points)
8	What sorts of injuries can be found in the people who have been exposed to radiation from radioactive substances? (See below*)
9	In Sweden, more than half the electric energy is supplied by nuclear power. Do you think this should continue? Give a reason for your answer.
10	The Russian submarine *Komsomolets* sank near the island of Bjørnøya in 1989. Many people think that the sub should be raised. (a) Do you think that the *Komsomolets* is a threat to the environment in the northern seas? *If yes*: (b) In what way?

*   *Points were awarded according to the number of radiation injuries mentioned; 1 point for each type of injury listed (when correct). Exception: 2 points were awarded for mentioning mutations[11] when these were explicitly connected with the initiation of cancer.*

---

6   **radioactive substance** 放射性物质
7   **reindeer** *n*. 驯鹿
8   **becquerel** 贝克（勒尔）（放射性活度单位）
9   **caesium-137** 铯–137（铯的放射性同位素, 简写为[137]Cs）
10   **half-life** *n*. 半衰期
11   **mutation** *n*. 突变

The sum of the points from all knowledge questions was taken as a measure of each respondent's level of understanding. The maximum number of points obtainable for each question is presented in Table 1. To find out whether the level of understanding influenced respondents' attitudes and level of radiation fear, the respondents were divided into two groups: those who scored lower than median on the knowledge questions (the low-score group), and those who scored higher than median (the high-score group). The data were analysed using SPSS[12] Version 6.1 for Windows. A significance level of 95% was applied.

Results and discussion
Knowledge of the radiation process

10 A major aim in the survey was to get an overview of the respondents' understanding of central concepts concerning radioactivity and radiation phenomena. From the answers to Question 3, it appeared that 89% of the respondents knew of the three radiation types (alpha[13], beta[14] and gamma[15]), whereas only 34% could correctly state what the radiation consisted of in each case. The definition of one becquerel (Question 5) was known to 25%. It should not be regarded as very alarming that most respondents were unable to define particular concepts such as the becquerel or α, β and γ radiation. These concise definitions are for expert use. More important, in view of the reasons for knowing stated in the introduction (the pragmatic, the democratic and the educational reason), is the lack of understanding of central features and processes related to radioactive decay and absorption of radiation.

11 A prevalent tendency among the respondents was the lack of differentiation between the concept of radioactive material and that of radiation, most apparent in the answers to Question 4:

> "Radiation from the ruined reactor in Chernobyl had gone into the lichen on which the sheep and reindeer grazed."

It has previously been observed that laypeople have difficulties distinguishing the concept of radiation from that of radioactive material[2][4]. The difficulty is a serious obstacle to understanding the nature of radiation hazards and the appropriateness of countermeasures.

12 When asked about the concept of the half-life (Question 6), 74% of the respondents gave a definition which might be called correct. However, some of the acceptable answers might conceal a misunderstanding:

---

12 **SPSS (Statistical Product and Service Solutions)** 统计产品与服务解决方案软件
13 **alpha** 希腊字母表中第一个字母 α
14 **beta** 希腊字母表中第二个字母 β
15 **gamma** 希腊字母表中第三个字母 γ

"It [a half-life of 30 years] means that it takes 30 years for 1 kg of ^{137}Cs to be reduced to 1/2 kg. The mass decreases because the substance gives away alpha irradiation, which is particles."

The answer betrays a lack of understanding that disintegration of a radioactive atom involves the creation of a new nucleus[16]. Many answers of the type "The amount of radioactive material is halved" might conceal a similar misunderstanding.

13　To find out if the respondents knew what was meant by "absorption of radiation", an example was used concerning the absorption of radiation in spice which is irradiated to kill bacteria (Question 7). The question appeared to be difficult—only 55% attempted an answer. Ten percent of the respondents answered that "the radiation is taken up by the spice", and some of these added that the radiation was "stored" in the spice, which gave reason to suspect that they really meant that the radiation made the spice radioactive. Twelve percent said explicitly that the radiation made the spice radioactive. This concept is probably a consequence of the lack of differentiation between radiation and radioactive material.

14　The survey also dealt with the radiation sources to which we are exposed in our daily lives and the health consequences of exposure to ionising radiation. When asked whether they believed that there were radiation sources in their home (Question 2), 62% answered in the affirmative. It appeared from the answers that there was considerable confusion concerning what a source of radiation is. Many seemed to regard this as an expression for almost any undesirable agent[17] in buildings: electric and magnetic fields[18], asbestos[19], toxic chemicals[20] in building materials etc. Confusion between sources of radiation and other environmental hazards has also been described in the literature. For instance, Durant et al.[5] found that almost 50% of the respondents in a survey of public understanding of science believed that nuclear power stations could cause acid rain.

15　The respondents had clear perceptions of the kinds of change that ionising radiation can cause to the human body, and a wide variety of answers was given to the question concerning this (Question 8). The most frequent answer was cancer (mentioned by 75%), whereas mutations were mentioned by 49% and genetic damage[21] by 36%. Other effects mentioned included birth defects, damage to cells and organs, death, sterility[22] or decreased reproductive capacity[23], skin damage, hair loss and burns. The results gave no information about the extent to which the respondents imagined these effects to appear (or after what kind of doses). It is worth mentioning that the most important effect, from an expert point of view, is cancer, presumed to be initiated by mutations. Genetic effects have so far been detectable in animal experiments, not in humans.

16　**nucleus** *n.* 原子核
17　**agent** *n.* 能因；使然力
18　**magnetic field** 磁场
19　**asbestos** *n.* 石棉
20　**toxic chemical** 有毒化学品
21　**genetic damage** 基因损伤
22　**sterility** *n.* 不孕不育
23　**reproductive capacity** 生殖能力

16 No significant difference was found between women's and men's level of understanding as measured by the total score on the knowledge questions. This is in contrast to Lucas'[6] finding that significantly more men than women were able to give acceptable answers to radiation questions in a survey of the British public. The contrast may be due to differences in the populations examined: Whereas all respondents in the present survey had completed secondary school and begun university studies in natural sciences, Lucas' respondents were a sample of the general population where it may be assumed that women on the average had a lower level of education than men.

17 To sum up, the investigation revealed an incomplete understanding of some central concepts concerning radiation phenomena. However, knowledge of the biological effects of radiation was reasonably good.

Radiation fear and attitudes

18 Central aims in this survey were to detect whether respondents feared radiation and to investigate their attitudes to the applications of radiation. It appeared that whereas 62% believed that there were sources of radiation in their home (Question 2), only 16% were afraid of being exposed to radiation in their daily life (Question 1). Significantly more women than men were afraid ($\chi^2 = 5.37$; $p = 0.02$), whereas no significant difference was found between the high- and low-score group in the proportion of respondents who were afraid of radiation. Those who were afraid regarded nuclear power and nuclear submarines as the greatest hazards.

19 There was a small majority of antagonists to Swedish nuclear power among the respondents: When asked whether Sweden should continue its production of nuclear power (Question 9), 36% answered "yes" and 43% "no", whereas 14% were uncertain and 7% failed to answer. A significantly higher proportion of women than men were negative to nuclear power ($\chi^2 = 17.08$; $p = 0.00004$). A small, but significant difference was found between the high-score group and the low-score group in their attitude to Swedish nuclear power, the high-scorers being the more positive ($\chi^2 = 4.76$; $p = 0.03$). Half of the protagonists (50%) gave as a reason that the control of plants in Sweden was so good that the risk of accidents was minimal, whereas 26% claimed that nuclear power was an environment friendly alternative. Of the antagonists, 69% gave the risk for accidents as a reason for their standpoint, whereas 21% mentioned problems concerning storage of nuclear wastes. The risk of leakages was also mentioned. It was evident that whereas Swedish nuclear power was regarded as relatively safe, the attitude to nuclear energy in general was sceptical, and it was often presented as a necessary evil.

20 Atomic energy[24] resistance in the Scandinavian population has been reported by Löfstedt and Ringius[7] and by Skjåk and Bøyum[8], who showed that 50% of the Norwegian population regarded nuclear power as "extremely or very dangerous to themselves and

---

24 **atomic energy** 原子能

their families". Radiation and radioactivity are, for many people, associated with danger and fear, and surveys have shown that atomic energy and radioactive contamination rank high among people's conceptions of risks[8][9]. This is probably closely connected to earlier observations that it is the aspects of uncontrollability, catastrophic potential and involuntary exposure which give radiation its aura of dread. These characteristics of radiation are especially prevalent in connection with nuclear power[9].

21 Another matter of interest was the respondents' attitudes to radioactive wastes, exemplified by the Russian submarine *Komsomolets* which sank in the Barents Sea in 1989 (Question 10). The respondents were asked whether they personally believed the sub to be a threat to the environment in the northern seas; 57% answered "yes" and 17% "no", whereas 13% were uncertain and 13% failed to answer. There were significantly more women than men who believed that the *Komsomolets* was a threat ($\chi^2 = 8.64$; $p = 0.034$), whereas no difference was found between the high- and low-score groups. Of those who answered "no", some stated that the amount of radioactive material was too small to be a real threat; others thought that the contamination around the sub would be very localised, making a very small contribution to the overall state of the area. Of those who did judge the sub to be a threat, 34% stated that it was a danger to the marine flora and fauna[25] in the area. "Contamination / Irradiation of the environment" was given by 27% as a reason for fearing *Komsomolets*, whereas 15% thought the radioactivity would contaminate fish and thereby constitute a health hazard to people and 8% said simply that the fish would become radioactive.

22 In the present investigation of attitudes to radiation and its applications, women tended to be more worried about radiation and more sceptical about nuclear power than were men. This tendency has also been demonstrated in similar studies[7][8][10], and seems to represent a general difference in women's and men's cautiousness towards a range of perceived risks such as electromagnetic fields[11], car exhaust[26] and chemicals used in food production[8].

Implications for improving public understanding of radioactivity and radiation

23 It is evident from the above discussion that the lay model of radiation phenomena differs significantly from the expert model. How has the lay model of radioactivity and radiation arisen? Lucas[12] has reviewed literature indicating that the informal mass media are important sources of scientific knowledge for the public. A comparison between the mass media's treatment of radiation phenomena after the Chernobyl accident and pupils' conceptions about such phenomena seemed to indicate that the press played a considerable role in forming non-experts' understanding of such phenomena[2]. Indications of the role of the media were found also in the present study, for instance in statements such as "becquerel is radioactivity per kilogram of meat" (clearly related to the press treatment of the sales limits for contaminated meat after the Chernobyl accident).

---

25 **marine flora and fauna** 海洋动植物群落
26 **car exhaust** 汽车尾气

Also, typical wording from newspaper headlines, such as "the threat from the East" (referring to nuclear reactors in Russia), appeared in the respondents' answers.

24 In the constructivist approach to learning, the learner's ideas and conceptions prior to instruction are seen as important prerequisites for learning. A typical example from mechanics is the notion that an object will come to rest unless it is kept in motion by a force. This is contrary to Newton's first law and the scientific view of motion—but it works in daily life! With reference to this theory of "everyday conceptions", Lijnse et al.[2], after studying lay conceptions of radiation, claimed that in areas where satisfactory "everyday conceptions" exist (often conveyed through the mass media), people do not feel the need to apply "school knowledge" to phenomena they encounter in real life. Thus, formal knowledge about radiation phenomena, acquired in a classroom context, will not be applied in order to understand the situations arising in the "real world", as for example after the Chernobyl accident.

25 This tendency could also be observed in the answers given in the present survey. For instance, one of the respondents was able to give excellent "classroom" definitions of becquerel, but nevertheless stated in a subsequent question that meat became radioactive after the Chernobyl disaster "because the animals ate food which had been irradiated", thereby betraying that the confusion between radiation sources and radiation was still present. Thus, the answers to the questions concerning real-life situations which had been treated in the media might not measure what the school education had taught the students, but rather what the media had taught them. The gap between the "real world" and the realm of school knowledge could also be identified in answers to the questions regarding the sources of radiation exposure in everyday life. When asked which sources of radiation the respondents feared, they mostly mentioned sources that are frequently highlighted in mass media and by environmentalists and that have a threatening ring in most people's ears: nuclear power plants, nuclear submarines, radiation through a depleted ozone layer[27] and so forth.

26 How can the gap be bridged between the lay and the expert models of radioactivity, radiation and risk? How can the desired level of knowledge in the population (refer to the reasons for knowing stated in the introduction) be attained? As already mentioned, lay ideas are amazingly persistent, even after formal instruction. Thus, Eijkelhof[13] reported that a number of lay ideas concerning radiation were maintained by secondary school pupils in the Netherlands after a course unit on radioactivity. The lack of success of school courses and information campaigns in the past may have been partly due to lack of consideration for the preconceptions of the learners. Millar et al.[4] developed a teaching unit on radioactivity and ionising radiation that explicitly took into account the pupils' preconceptions in the field. Hopefully, this and similar programmes may in the future contribute to improving the public understanding of such phenomena.

---

27 **ozone layer** 臭氧层

27 According to the reasons stated in the introduction, to educate the public on radiation issues, a sufficient level of knowledge should ensure democratic decisions and personal safety. Is there any evidence that an individual's level of knowledge actually has an effect on his / her political considerations and judgments? The findings from the present survey do not lend much support to such a hypothesis. There was no significant difference between the high-score group and the low-score group with respect to the degree of radiation fear or the attitude to the submarine *Komsomolets*; however, a small, but significant difference was found between the two groups in the proportion who were positive about Swedish nuclear power. Lucas[6] found that there was little relationship between knowledge about the nature of radioactivity and attitudes to nuclear power policy.

28 In view of these findings, the prospects for attaining the objective presented in the introduction seem gloomy indeed. If information and knowledge don't have the power to influence attitudes, how can rational decisions and personal well-being then be secured? The way out of this impasse may lie in taking the lay conceptions into account and increasing the integration between factual information and practical / political considerations when designing teaching and information materials for use in schools, seminars and mass media, so that the connection between factual knowledge and the "real world" is clarified. Within school curriculum development, this is called the STS (Science, Technology and Society) approach. The unit developed by Millar et al.[4] and similar approaches in the teaching of radiation topics show some promise. However, further research is needed to establish the best ways of presenting information on radiation topics in various seminars and to various parts of the population.

References

(1) Weart, S. R. *Nuclear Fear: A History of Images.* Cambridge, MA: Harvard University Press (1988).

(2) Lijnse, P. L., Eijkelhof, H. M. C., Klaassen, C. W. J. M. and Scholte, R. L. J. *Pupils' and Mass-media Ideas About Radioactivity*. Int. J. Sci. Educ. **12**, 67-78 (1990).

(3) Eijkelhof, H. M. C. and Millar, R. *Reading About Chernobyl: The Public Understanding of Radiation and Radioactivity*. School Sci. Rev. **70**, 35-41 (1988).

(4) Millar, R., Klaassen. K. and Eijkelhof, H. M. C. *Teaching About Radioactivity and Ionising Radiation: An Alternative Approach*. Phys. Educ. **25**, 338-342 (1990).

(5) Durant, J. R., Evans, G. A. and Thomas, G. P. *The Public Understanding of Science*. Nature **340**, 11-14 (1989).

(6) Lucas, A. M. *Public Knowledge of Radiation*. Biologist **34**, 125-129 (1987).

(7) Löfstedt, R. E. and Ringius, L. *Danish Perspectives on Transboundary Environmental Risks: An Example from Copenhagen*. Working Paper 1994: 10 from Center for International Climate and Environmental Research, Oslo (CICERO) (1994).

(8) Skjåk, K. K. and Bøyum, B. *Undersøking om verdier, natur og miljø 1993*. Report no 100 from "Norsk samfunnsvitenskapelig datatjeneste" (1994).

(9) Slovic, P. *Perception of Risk*. Science **236**, 280-285 (1987).

(10) Larsen, A. K. *Atominformasjon i Finnmark*. StrålevernRapport 1994: 8 Norwegian Radiation Protection Authority (1994).

(11) Mærli, M. B. *Opplevelse av risiko i forbindelse med elektromagnetiske felt*. LMK-rapport no 15, University of Oslo (1995).

(12) Lucas, A. M. *Scientific Literacy and Informing Learning*. Stud. Sci. Educ. **10**, 1-36 (1983).

(13) Eijkelhof, H. M. C. *Radiation and Risk in Physics Education*. Doctoral Dissertation at the University of Utrecht (1990).

Read the text and answer the following questions.

1 How much do the respondents know about radiation?
2 What is their attitude to nuclear power?
3 What is the major reason for their lack of correct understanding of radiation?
4 How can laypeople's understanding of radiation be improved?

TASK 3 **Match the following academic words with their definitions or synonyms.**

Paras. 1-2

_____	1	shroud	**a** direct toward a given destination
_____	2	exaggerate	**b** end of the world
_____	3	doomsday	**c** existing very commonly or happening frequently
_____	4	destine	**d** the act of getting rid of sth. useless or used up
_____	5	prevalent	**e** hide information or keep it secret and mysterious
_____	6	perception	**f** overstate
_____	7	pragmatic	**g** solving problems in a realistic way
_____	8	disposal	**h** insight

Paras. 3-6

_____	1	laypeople	**a** sb. who answers questions, esp. in a survey
_____	2	interaction	**b** manage; organize
_____	3	external	**c** coming from the outside
_____	4	prior	**d** before a particular time or event
_____	5	respondent	**e** easy to obtain or use
_____	6	administer	**f** showing or suggesting sth.
_____	7	accessible	**g** cause to become
_____	8	assume	**h** mutual effect
_____	9	indicative	**i** non-objective consideration of an issue or a situation
_____	10	bias	**j** suppose
_____	11	render	**k** nonprofessional

Para. 7

_____	1	coverage	**a** groceries; food product
_____	2	refer	**b** the reporting of news
_____	3	constitute	**c** mention
_____	4	foodstuff	**d** seasoning
_____	5	spice	**e** a ship which can travel under water
_____	6	bacteria	**f** microscopic single-celled organisms
_____	7	submarine	**g** clearly and exactly
_____	8	explicitly	**h** form; establish

Paras. 8-11

_____	1	assign	**a** give; designate
_____	2	appoint	**b** (cause animals to) eat grass
_____	3	maximum	**c** distinction

	4	presume	**d**	danger
	5	overview	**e**	counteraction
	6	decay	**f**	allocate
	7	differentiation	**g**	the process of becoming gradually damaged, worse or less
	8	lichen	**h**	a general view
	9	graze	**i**	the largest amount allowed or possible
	10	hazard	**j**	a grey, green or yellow plant-like organism that grows esp. on rocks, walls and trees
	11	countermeasure	**k**	suppose

Paras. 12-18

	1	irradiation	**a**	the word "yes" or a sign that you agree with sth.
	2	betray	**b**	substance that produces an effect or a change
	3	disintegration	**c**	start; lead off
	4	absorption	**d**	exposure to a large amount of radioactivity
	5	affirmative	**e**	a part of the whole
	6	agent	**f**	the process of some substance being taken in
	7	initiate	**g**	the state of losing unity as if by breaking into parts
	8	proportion	**h**	unveil

Paras. 19-20

	1	antagonist	**a**	choice; option
	2	protagonist	**b**	viewpoint; stance
	3	alternative	**c**	supporter
	4	standpoint	**d**	be good, bad, important, unimportant etc. compared with other similar things
	5	leakage	**e**	not done by choice; unconscious
	6	rank	**f**	atmosphere
	7	catastrophic	**g**	opponent
	8	involuntary	**h**	extremely harmful; destructive
	9	aura	**i**	gas, water etc. escaping from a hole or crack

Paras. 21-28

	1	exemplify	**a**	carefulness
	2	localize	**b**	a sound like a bell
	3	cautiousness	**c**	use up (resources or materials)
	4	prerequisite	**d**	having reason or understanding
	5	realm	**e**	a difficult situation of which there is no way out
	6	ring	**f**	the act of combining things to work together
	7	deplete	**g**	without much hope of success
	8	gloomy	**h**	requirement for sth. to happen or exist
	9	rational	**i**	illustrate
	10	impasse	**j**	limit sth. to a particular area
	11	integration	**k**	domain

TASK 4 Match each of the following main ideas (summarized from Paras. 1-28) with the appropriate paragraph number of the text.

No.	Main Ideas	Para.
1-5	The survey has been conducted for three reasons.	
	The students in an elementary physics course are chosen as subjects for two reasons.	
	The objective is to study the understanding of radiation and risk among general Norwegians.	
	Radiation has been viewed as a serious threat to health and hence a source of fear.	
	People's prior knowledge of radiation has a big effect on how well they learn about radiation.	
6-10	The respondents' level of understanding is measured in a scientific way.	
	Most questions were open-ended and connected to real-life examples.	
	Most respondents knew of the radiation types but failed to understand the key information about radioactive decay and absorption of radiation.	
	Some respondents' failure to answer the questionnaire will not affect the results.	
	The answers were categorized and coded.	
11-15	There was a lack of knowledge about "absorption of radiation" among respondents.	
	Respondents were aware of the effect of radiation on health.	
	Respondents had difficulties distinguishing between radiation and radioactive materials.	
	There was confusion about the source of radiation among respondents.	
	There was some misunderstanding about the concept of the half-life.	
16-20	Fear of radiation from nuclear power was still popular in Norwegians.	
	There was a bigger proportion of respondents who don't support Swedish nuclear power.	
	Only a small number of respondents feared the exposure to radiation.	
	Although respondents knew the harmful health effects of radiation, they had a limited understanding of some central concepts of radiation.	
	Men and women had almost the same knowledge of radiation.	
21-25	Mass media tend to influence people's judgment and conception of radiation.	
	Mass media play a very important role in the misunderstanding of radiation.	
	Most respondents feared the contamination of nuclear wastes.	
	Everyday conceptions are more influential than school education.	
	Women were more worried than men about radiation and nuclear power.	
26-28	Sufficient knowledge of radiation has little to do with one's political considerations and judgments.	
	Taking the lay conceptions into account and integrating factual knowledge and practical / political considerations may be a solution to the problem.	
	Analyzing preconceptions about radiation may improve the public understanding of radiation phenomena.	

Paraphrase the following sentences. Read the model carefully before the exercise.

> ### *Model*
>
> From the very beginning, radiation has been shrouded in myths—of exaggerated expectations as well as excessive fear.
>
> **Key:** <u>From the start, there has been a myth about radiation, which has generated overstated anticipation and extreme fear.</u>

1 The answer betrays a lack of understanding that disintegration of a radioactive atom involves the creation of a new nucleus.

_____

_____

2 In the constructivist approach to learning, the learner's ideas and conceptions prior to instruction are seen as important prerequisites for learning.

_____

_____

3 The way out of this impasse may lie in taking the lay conceptions into account and increasing the integration between factual information and practical / political considerations…

_____

_____

TASK 6 **Summarize the main idea of the following paragraph closely related to the text in theme, using one sentence only. Read the model carefully before the exercise.**

> ### *Model*
>
> One of the possible acute effects of exposure to high levels of radiation over a small period of time is Acute Radiation Syndrome (ARS) or radiation sickness. For an exposed individual to develop ARS, the radiation must be penetrating and cover the whole body. The radiation doses that lead to ARS hover around one sievert (Sv)—about 300 times the average annual dose (three millisieverts) of background radiation. ARS is associated with damage to the bone marrow, and at higher doses (>10 Sv) other organs may be affected. Other acute health problems that can result from high exposure to radiation include premature aging, male sterility, birth defects, and possible death.
>
> **Key:** <u>Exposure to high doses of radiation can lead to a broad range of acute health problems such as the impairment of the organs.</u>

Iodine-131, plutonium-239, caesium-137, and strontium-90 are the four most harmful radioactive elements involved in the Japanese nuclear disaster. Iodine-131 has a half-life of eight days—meaning that it is half as radioactive after eight days, thus making its effects relatively short-lived. Exposure to iodine-131 can cause thyroid cancer. With half-lives of 30

and 29 years, respectively, caesium-137 and strontium-90 both stay in the environment for longer periods of time. Caesium-137 can travel through the food chain in milk or vegetables and can increase the risk of various cancers; strontium-90 is absorbed into bones and teeth and can increase the risk of leukemia or bone cancer. Plutonium-239 is toxic if inhaled.

_____

_____

TASK 7   Write a paragraph of about 120 words to summarize the main idea of the text.

Enhancing language ability

TASK 1   Read the words and phrase below, paying attention to the pronunciation. Use the scale to give yourself a score for each word or phrase.

1	I still don't understand this word or phrase after learning the text.
2	Now I understand this word or phrase when I see it or hear it, but I don't know how to use it.
3	I know this word or phrase and can use it in my own speaking and writing.

<table>
<tr><td colspan="4" align="center">Academic Words and Phrase</td></tr>
<tr><td>○ prevalent</td><td>○ characterize</td><td>○ proportion</td><td>○ prerequisite</td></tr>
<tr><td>○ constitute</td><td>○ hazard</td><td>○ betray</td><td>○ exaggerate</td></tr>
<tr><td>○ derive</td><td>○ expectation</td><td>○ characteristic</td><td>○ render</td></tr>
<tr><td>○ perception</td><td>○ external</td><td>○ indicative</td><td>○ administer</td></tr>
<tr><td>○ accessible</td><td>○ initiate</td><td>○ assign</td><td>○ maximum</td></tr>
<tr><td>○ minimal</td><td>○ overview</td><td>○ presume</td><td>○ perceive</td></tr>
<tr><td>○ assume</td><td>○ alternative</td><td>○ standpoint</td><td>○ rank</td></tr>
<tr><td>○ exemplify</td><td>○ gloomy</td><td>○ integration</td><td>○ preconception</td></tr>
<tr><td>○ objective</td><td>○ secure</td><td>○ prior to</td><td>○ attempt</td></tr>
<tr><td>○ rational</td><td>○ conception</td><td></td><td></td></tr>
</table>

TASK 2   Replace the underlined words or phrases with the academic words or phrase in the above box. Change their forms where necessary.

1   The answer <u>shows</u> a commonly held <u>belief</u> of radiation.
2   Although the questionnaires were given to over 200 students, the poor sampling <u>makes</u> the survey invalid.

3 The fear could be <u>illustrated</u> by the public <u>understanding</u> of the accident of the Japanese power plant.

4 The <u>widespread</u> tendency among students is to <u>find</u> profitable jobs.

5 Children's knowledge <u>before</u> formal education has a big influence on their judgment.

6 A larger <u>number</u> of students try to speak good English, but the prospects for a marked improvement seem <u>sad</u>.

7 Their failure to act suggests that there is no <u>other means</u> at present.

8 The event is <u>featured</u> by violence which <u>is considered</u> a health <u>danger</u> to people.

9 <u>According to</u> the doctors, smoking <u>is placed</u> high among the leading preventable causes of death.

10 Correct citation of <u>outside</u> sources is <u>required as a condition</u> for academic writing.

TASK 3 Group the words and phrases in the box according to their similarity in meaning to the words in bold. Pay attention to the variety of expressions in writing.

comprise	credible	weighty	fundamental	peril	spotlight
illuminate	embrace	threat	accentuate	incompatible	various
consist of	rationalize	explicate	emphasize	conflicting	explain
attach importance to	spur	represent	give prominence to	
move	justify	essential	accent	evoke	narrate
inconsistent	well-grounded		underlying	contradictory	elucidate
incongruous	feature	portray	underline	discrepant	item
rational	induce	ingredient	inspire	motivate	element
jeopardy	characterize	stimulate	impel	instigate	stress
account for	depict	sensible	be composed of		prime
give priority to		diverse	prompt	primary	constituent
outline	encompass	well-founded		viable	cogent
urge	plausible	hazard	menace	convincing	contributor
risk	contain	contrary	clear up	underscore	component
powerful	root				

1 **include:** _____

2 **valid:** _____

3 **basic:** _____

4 **danger:** _____

5 **describe:** _____

6 **different:** _____

7 **cause:** _____

8 **clarify:** _____

9 **highlight:** _____

10 **factor:** _____

TASK 4   Read the academic sentence patterns in the box below, paying attention to the parts in bold. Use the scale to give yourself a score for each sentence pattern.

1	I still don't understand this sentence pattern.
2	I can memorize this sentence pattern, but I don't know how to use it.
3	I can now apply this sentence pattern to my writing.

Academic Sentence Patterns

1 … **has been a part of** our life and consciousness.
2 … radiation **has been shrouded in myths—of exaggerated expectations**…
3 Radiation **has been characterised partly as a life force**…
4 … has greatly **contributed to the spreading of uneasiness and fear**.
5 The individual **derives pleasure and fulfilment from** knowing something about the world around him / her.
6 This principle also **holds true** in the field of radiation…
7 **The survey was administered in the form of** a questionnaire given to 270 students…
8 … **identify a few commonly held conceptions** of radiation phenomena…
9 … the possible bias from non-respondents should not **render the results irrelevant**.
10 **A prevalent tendency among** the respondents **was**…
11 The difficulty is **a serious obstacle to** understanding the nature of radiation hazards and the appropriateness of countermeasures.
12 The answer **betrays a lack of understanding**…
13 … there was **considerable confusion concerning**…
14 … **rank high among people's conceptions of risks.**
15 … **exemplified by** the Russian submarine…
16 … **constitute a health hazard** to people…
17 … **differs significantly from** the expert model.
18 … seemed to indicate that the press **played a considerable role in** forming non-experts' understanding…
19 How **can the gap be bridged between**… **and**…?
20 The lack of success… and… **have been partly due to** lack of consideration…
21 The findings from the present survey **do not lend much support to** such a hypothesis…
22 … a small, but significant **difference was found between** the two groups…
23 … the prospects for attaining the objective… **seem gloomy indeed**.
24 … **how can** rational decisions and personal well-being then **be secured**?
25 **The way out of this impasse may lie in** taking the lay conceptions into account…

Critical thinking (asking questions)

Critical thinking (CT) is essentially a questioning or challenging approach to knowledge and perceived wisdom. It involves conceptualizing, applying, analyzing, synthesizing, and evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication. To be a critical reader, you have to read between the lines and make inferences about the author's attitude which might be hidden in the passage. Asking probing questions is the most effective way to get to know and follow the author's train of thought in academic reading. Read the objectives and corresponding questions you may ask.

Objectives	Questions
Identifying the author's motives or the purpose of writing	What is the theme / main argument of…? Is the author trying to persuade the readers or merely providing information? Might the author have a hidden purpose? What are the author's presumptions and bias? Does the author support one side of a controversy or appear impartial? Does the author's attitude lie implicit in the text?
Identifying the author's stance and tone	What is the author's stance and how do you work it out? What language (such as wording) is used? Is the author being serious or playful, humorous or somber? Is the author angry or tranquil, ironical or sincere? Does the author appeal to the readers' emotion (through the use of emotion-arousing words, slogans, rhetorical questions and parallel structures)? Does the author merely appeal to the readers' reasoning by using facts and statistical evidence instead of propaganda? What particular evidence and example does the author select?
Finding evidence and checking whether it is relevant and reliable	Is there sufficient evidence for an argument or a claim? Has any evidence been missed out if a reliable argument is to be formed? How is evidence (such as examples and statistics) used and interpreted? Are the sources of information reliable? Does the author intentionally hide some facts or information which fails to support his / her arguments? Are there any gaps or inconsistencies in the argument? Could the argument be better or differently supported? How does the author reach his / her conclusion?
Reaching your own conclusion about the issue or the article	Do you agree with the outcomes? What is your opinion of…? Do you agree with the position the author is presenting? Why or why not? How would you prove / disprove…? Could the conclusion be different if different facts or methods are used? Would it be better if…? What would happen if…? Can you propose an alternative…?

TASK 1 Read the Critical Reading text and raise as many questions as possible about: 1) the purpose of the study; 2) the methods used; and 3) the main ideas and findings. Then compare your questions with the questions below and try to answer them.

1   What is the author's purpose in carrying out the survey? Do you think the three reasons the author offered are valid?

2   Do you think that the methods are appropriate to the objective of the study? And can you suggest better alternatives?

3   The survey was conducted among students in Norway. Would the same conclusion be reached if you should conduct the same survey in your university, using the same 10 questions?

4   Do you agree with the author that our misconception of radiation is often derived from the mass media? What do you think of the role the mass media plays in our knowledge?

5   Do you believe the knowledge of science like radiation and genetically modified foods will influence the citizens' political considerations and judgments?

TASK 2 Read the final section (Paras. 23-28) of the Critical Reading text and raise as many questions as possible about the validity and reliability of: 1) the conclusion of the study; 2) the reasons and evidence behind; 3) the methods and approaches used; 4) the explanations offered for the results; and 5) the suggestions made. Then compare your questions with the questions below and try to answer them.

1   What is the conclusion of the author?

2   What reason does the author offer to support the conclusion?

3   What is the evidence underlying the reason?

4   Do you think the reason is valid and the evidence is sufficient?

5   Do you think the constructivist approach can adequately explain the inconsistency between the lay model and the expert model?

6   What explanations would you offer for the gap mentioned above?

7   Why did the past efforts to bridge the gap tend to fail?

8   Does the present study prove that a sufficient level of knowledge has an effect on one's political considerations and judgments? What is the evidence?

9   What would happen if you change the method of the study (questionnaires and interviews) or the samples (the students)?

10   How can rational decisions and personal well-being be secured in your opinion?

11   What suggestions does the author offer? Do you agree that schools and universities should offer the course STS (Science, Technology and Society)?

12   Is the proposal reasonable that factual information and political considerations should be combined into the curriculum and classroom?

13   Have you mastered the skills of critical questioning listed on Page 20 and can you apply them when you read and evaluate an article?

Doing research projects

TASK 1 Watch Lecture 1 and answer the questions.

1 What agents are mentioned in the lecture that could attack the DNA?
2 How do the cells repair themselves after the DNA damage?
3 What is the difference between determinist effects and stochastic effects?
4 Why would the radiotherapy cause a second cancer?
5 What principle is the radiation protection based on?

TASK 2 Watch Lecture 1 again. Search for more lectures and articles about radioactivity and radiation and brainstorm some research questions which you can answer by doing research (e.g., reading more reference articles or conducting surveys using questionnaires or interviews).

TASK 3 Divide the class into five or six groups. Each group is to choose one of the research topics listed below. Search for a minimum of three related articles about radioactivity and radiation and write a short report (using as many patterns from the Academic Sentence Patterns as possible). Present your report in class with the help of PPT.

1 A survey of the knowledge of Chinese university students as laypeople about radioactivity and radiation. Use the same questionnaires as that in the Critical Reading text.
2 A survey of laypeople's understanding of radioactivity and radiation, or a study of laypeople's attitude toward building nuclear power plants.
3 An investigation of the accident of the Fukushima Daiichi nuclear power plant. What happened? What are the serious effects?
4 An investigation of the Chernobyl accident. What happened and what effects has it produced, both physically and psychologically?
5 A study of the advantages of building nuclear power plants.
6 A study of the potential dangers to health or environment a nuclear power plant may produce.
7 A study of iodine-131, plutonium-239, caesium-137, and strontium-90. How do they produce harmful effects on health?

Academic Writing 2

Understanding a research report or paper

Research can be done by both children and scientists. While a child may carry out a simple experiment to understand the nature of gravity, a scientist may take years of systematic investigation to advance the understanding of radiation. According to its definition, research is "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications".

In short, scientific research is a systematic way of gathering data, aiming at increasing or revising current knowledge or explaining the nature and the properties of the world by discovering new facts, developing new theories, or reaffirming the results of previous work, solving new or existing problems.

In academic studies, students are often required to do project work and write a project-based report or a research paper. Writing a research report or paper is to turn the results or findings of your research into written work.

TASK 1 **Read the Critical Reading text and discuss the following questions.**

1 What are the differences between research papers / reports and college essays which you have written in the past in terms of purpose, content, organization and language? List as many of them as possible.
2 How many sections does a research paper contain? What are they? Why should it be divided into "Introduction", "Methods" and other sections?
3 How many articles or research papers does the author cite?
4 What are the characteristics of the language of a research paper? Is it formal and objective or informal and subjective?
5 Do you think it is necessary to learn how to read and even write research papers? Why?

TASK 2 **Read the following article and answer the following questions.**

1 How many basic elements are there in a research report or paper? What are they?
2 Why is a good knowledge of previous studies of the topic necessary?
3 Why is the procedures section important?

4   What are the contents of the discussion section?

5   What are the major requirements of a research paper in terms of style?

Research Reports for Technical Writing

Wayne Losano

Introduction

1   A surprising amount of one's time as a student and professional is spent reporting the results of one's research projects for presentation to teachers, managers and clients. Indeed, without basic research skills and the ability to present research results clearly and completely, an individual will encounter many obstacles in school and on the job. The need for some ability is felt nearly equally by college students in all fields, engineering and science as well as the humanities. Graduate study often makes great demands on the student's research-writing skills, and most professions continue the demand; education, advertising and marketing, economics and accounting, science and engineering, psychology, anthropology, the arts and agriculture may all require regular reporting of research data.

Elements of a research report

2   A standard research report, regardless of the field or the intended reader, contains four major sections. These sections may be broken down into a variety of subsections, and they may be arranged in a variety of ways, but they regularly make up the core of the report.

3   Problem Section. The first required section of a research report is the statement of the problem with which the research project is concerned. This section requires a precise statement of the underlying question which the researcher has set out to answer. In this section there should be an explanation of the significance—social, economic, medical, psychological, educational, etc.—of the question; in other words, why the investigation was worth conducting. Thus, if we set out, for example, to answer the question "What is the effect of regular consumption of fast foods on the health of the American teenager?" we must explain that the question is thought to have significant relevance to the health of this segment of the population and might lead to some sort of regulations on such foods.

4   A frequent subsection of this problem section is a review of past research on the topic being investigated. This would consist of summaries of the contributions of previous researchers to the question under consideration with some assessment of the value of these contributions. This subsection has rhetorical usefulness in that it enhances the credibility of the researcher by indicating that the data presented is based on a thorough knowledge of what has been done in the field and, possibly, grows out of some investigative tradition.

5   Procedures Section. The second major section of a research report details, with as much data as possible, exactly how the study was carried out. This section includes description of any necessary equipment, how the subjects were selected if subjects were used, what statistical

technique was used to evaluate the significance of the findings, how many observations were made and when, etc. An investigation of the relative effectiveness of various swimming strokes would have to detail the number of swimmers tested, the nature of the tests conducted, the experience of the swimmers, the weather conditions at the time of the tests, and any other factors that contributed to the overall experiment. The goal of the procedures section is to allow the reader to duplicate the experiment if such were desired to confirm, or refute, your findings.

6   Results Section. The third, and perhaps the most important, section of a research report is the presentation of the results obtained from the investigation. The basic rule in this section is to give all data relevant to the research question initially asked. Although, of course, one's natural tendency might be to suppress any findings which do not in some way support one's hypothesis, such dishonesty is antithetical to good research reporting in any field. If the experiments undertaken fail to prove anything, if the data was inadequate or contrary to expectations, the report should be honestly written and be as complete as possible, just as it would be if the hypothesis was totally proven by the research.

7   Discussion Section. The final required section of a research report is a discussion of the results obtained and a statement of any conclusions which may be drawn from those results. Of primary interest in technical research reports is the validity of the results as the bases for company decisions: Will our planned construction project meet federal environmental guidelines and be approved for building? Will this new program attract skilled personnel to our company? Will this new oil recovery technique be financially feasible? Thus, the discussion section of the research report must evaluate the research results fully: Were they validly obtained? Are they complete or limited? Are they applicable in a wide range of circumstances? The discussion section should also point out what questions remain unanswered and perhaps suggest directions for further research.

Style of research reports

8   Research reports are considered formal professional communication. As such, there is little emphasis on a lively style, although, of course, there is no objection to writing that is pleasing and interesting. The primary goals of professional communication are accuracy, clarity, and completeness. The rough draft of any research report should be edited to ensure that all data is correctly presented, that all equipment is listed, that all results are properly detailed. As an aid to the reader, headings indicating at least the major sections of the report should be used, and all data should be presented under the proper headings. In addition to their function of suggesting to the reader the contents of each section, headings enhance the formal appearance and professional quality of the report, increase to some degree the writer's credibility by reflecting a logical and methodical approach to the reporting process, and eliminate the need for wordy transitional devices between sections.

9   Research data should be presented in a way that places proper emphasis on major aspects of the project. For different readers different aspects will take on different degrees of importance, and some consideration should be given to structuring research reports differently for different audiences. Management, for example, will be most concerned with the results of a

research project, and thus the results section should be emphasized, probably by presenting it immediately after the problem section and before the procedures section. Other researchers would be most interested in the procedures section, and this should be highlighted in writing up research projects for publication in professional journals or for presentation at professional conferences. For non-technical readers, the implications of the results might be the most important consideration, and emphasis should be placed on the discussion of the results for this readership.

10   For additional clarity and emphasis, major results should be presented in a visual format—tables, charts, graphs, diagrams—as well as in a written one.

11   Beyond checking the report for clarity and accuracy in the presentation of technical data, the writer of a research report reviews for basic grammatical and mechanical accuracy. Short sentences are preferable to long ones in the presentation of complex information. Listings should be used to break up long passages of prose and to emphasize information. The research writer should try to use the simplest possible language without sacrificing the professional quality of the report. Although specialized terms can be used, pretentious jargon should be avoided. A finished research report should be a readable and useful document prepared with the reader in mind.

Conclusion

12   Although we struggle with research reports in high school, dread them in college, and are often burdened by them in our professional lives, learning to live comfortably with them is a relatively easy task. A positive attitude (i.e., one that sees the oral or written presentation of research results as of equal importance to the data-gathering process), an orderly approach which includes prewriting (i.e., before any actual research is done, the researcher should try to get down on paper as much about the subject under investigation as possible), a formal research report structure as the framework for the investigation, and a reasonable approach to the actual writing process including editing for accuracy and clarity, will help one to produce effective research reports efficiently.

Deciding on a topic

The first step of working on a project or writing a research paper is to decide on an appropriate topic. Choosing a topic, however, is not easy and it requires careful consideration and even investigation. A topic that is too general or too specialized may bring many problems in terms of the time you can devote to the research or the sources of information available on the topic. How to choose a topic which is possible to research? There are three principles to achieve "AIM".

1) Adequate. You may ask the question: Has the topic I am going to choose been researched in previous studies? Investigate the related literature and make sure that there are adequate source materials available on the topic. Avoid a topic that has very limited information, for it is difficult to carry out your research without previous studies.

2) Important. You also have to consider the value of the topic you are likely to choose, both academic and social. That is, the topic you are addressing should be problem-orientated, aiming to solve a particular problem. A research paper without practical or theoretical value will be of little importance.

3) Manageable. Narrow your topic down to make your paper manageable. For example, if you want to discuss the history of a disease, it may be impossible for you to cover all the important ideas in a short report, or a literature review of about 1,500 words.

TASK 1 Skim the Critical Reading text and discuss whether the topic is appropriate according to the "AIM" principles.

TASK 2 Narrow down the following topics step by step and tell the feasibility of each topic. Read the model carefully before the exercise.

> ### *Model*
> Radiation→The Effects of Radiation→Radiation and Its Effects on Health→ Laypeople's Knowledge of Radiation and Its Effects on Health
>
> A study of radiation's effects, even its effects on health, takes a long time and needs humans or animals as its subjects in experiments. It is impossible to finish the project within six months or a year without adequate time or money. But an investigation of laypeople's knowledge entails only questionnaires and interviews.

1   Genetic Engineering →
2   Breast-feeding Practice →
3   Internet Technology →

TASK 3 Choose one of the following topic areas and narrow it down to three or four appropriate topics. Then discuss with your partner. Read the model carefully before the exercise.

> ### *Model*
> **Academic Dishonesty**
> My narrower topics:
> 1) Factors Influencing College Students' Decisions to Cheat
> 2) Academic Dishonesty: A Plague on Our Profession
> 3) Academic Dishonesty: Zero Tolerance in USA
> 4) Faculty Perceptions of Students' Academic Dishonesty in China

1   **Global Warming**
    My narrower topics:
    1) _____
    2) _____
    3) _____
    4) _____

2   **Genetically Modified Foods**
    My narrower topics:
    1) _____
    2) _____
    3) _____
    4) _____

3   **Nuclear Energy**
    My narrower topics:
    1) _____
    2) _____
    3) _____
    4) _____

4   **Science Fraud**
    My narrower topics:
    1) _____
    2) _____
    3) _____
    4) _____

Formulating research questions

An appropriate, specific topic is determined by your research questions. A research question is a statement that identifies the focus of your topic. Only a clear, focused and specific question could form the basis of a research paper.

It is the question that your project or your paper wants to answer. For example, you may develop it into the following research questions if your topic is "Threats of Building a Nuclear Power Plant":

1)   What kind of threat may human beings face when building a nuclear power plant?
2)   What are the advantages and disadvantages of building a nuclear power plant?
3)   How can we reduce the potential dangers and harmful effects of nuclear power plants?

A research question, therefore, serves two purposes:
1) It identifies the specific objectives your project or your paper will address. You can check whether you answer it completely when you finish your project or your paper.
2) It determines the size of your research or the length of your paper. Obviously your paper will be shorter if you answer only the third question (How can we reduce the potential dangers and harmful effects of nuclear power plants?).

Hence raising research questions will make your topic more specific, more tangible and more focused. (Note that the research question should be answered by doing research rather than by simply consulting dictionaries.)

TASK 1   Turn the following topics into more specific ones by asking yourself some wh-questions such as Why, What, How, Who. Then share your topics with your partner and discuss which questions are worth researching and can be researched. Read the model carefully before the exercise.

> *Model*
> **Academic Dishonesty**
> 1) Why is academic dishonesty prevalent on Chinese campuses?
> 2) What are potential effects of academic dishonesty on students: academic or ethical?
> 3) How to fight against academic dishonesty on Chinese campuses?
> 4) Who should be responsible for academic dishonesty on Chinese campuses?

1   Nuclear Wastes
1) _____
2) _____
3) _____
4) _____

2   Threats of Artificial Intelligence
1) _____
2) _____
3) _____
4) _____

3   Global Warming and Its Effects
1) _____
2) _____
3) _____
4) _____

4   Genetically Modified Foods
1) _____
2) _____
3) _____
4) _____

TASK 2 Brainstorm in groups for a potential topic you are going to research in your project in this course and then answer the following questions.

1) Why do you choose the topic? For example, is it adequate, important, or manageable in source materials?
2) What research questions do you want to answer in your research?

Complete the following table.

My Topic	
My Reasons	1 2 3
Research Questions	1 2 3

Writing a working title

Aworking title refers to the title you think of initially for the project or paper which you are going to write. It may be changed as you carry out research and become more involved in the subject of your project.

A successful title should meet the following requirements:

1) It should indicate the topic of the study by using the key words about contents and methods.
2) It should indicate the scope of the study (e.g., "Laypeople's Understanding of Radioactivity and Radiation").
3) It should be self-explanatory to readers in the chosen area.
4) Sometimes it summarizes the results (e.g., "Students Who Smoke Get Lower Grades").

Two things are normally included in the title: method and content. The former has key words like *comparison*, *analysis*, *contrast*, *investigation*, *discussion*, *explanation*, *study* and *assessment*, key words which tell the readers the research task. The latter includes key words which tell the reader what the topic is, such as *health risks*, *smokers*, *research report*, *computer hackers*, *lung cancer*, *nuclear power plant* and *energy*.

A good title may also include two variables. A variable is any characteristics that can be measured or influenced. For example, a variable such as age, sex, education, family background or traits may influence another variable such as your academic or career success. The more variables you study, the more complex your research paper will be. The limiting words like *causes*, *effects*, *advantages*, *benefits* or *effectiveness* will limit the size of the topic and make the topic workable. Hence a typical title is composed of:

method words + content words + limiting words

As English titles tend to use phrases instead of sentences, we will have such titles as:
- A Survey of Laypeople's Understanding of Radioactivity and Radiation
- A Study of Factors Influencing College Students' Decision to Cheat in the Examination
- A Study of the Environmental Impact of Pollution on Urban Areas
- An Analysis of Psychological Motivation of Computer Hackers
- A Comparison of the Effectiveness of Two Approaches to Lung Cancer
- An Analysis of Environmental Effects of Nuclear Power Plants

In most cases, however, key words about the method could be omitted for conciseness. The following, therefore, are appropriate titles:
- Laypeople's Understanding of Radioactivity and Radiation
- Factors Influencing College Students' Decision to Cheat in the Examination
- The Environmental Impact of Pollution on Urban Areas
- Psychological Motivation of Computer Hackers
- The Effectiveness of Two Approaches to Lung Cancer
- Environmental Effects of Nuclear Power Plants

TASK 1 **Read the three titles in the box and discuss the questions below.**

Title 1 Laypeople's Understanding of Radioactivity and Radiation

Title 2 Using Interactive Technology to Support Students' Understanding of the Greenhouse Effect and Global Warming

Title 3 The Impact of Urbanization and Socioeconomic Status on Infant-feeding Practices in Lagos, Nigeria

1 Are the titles phrases or sentences?
2 Can the titles inform the readers of the main topics and the problems to be addressed?
3 Does each of them contain two or more variables? What are they?
4 What is the relationship between the two variables? Can the relationship be studied?
5 Why do the titles of research papers tend to become a little long?

TASK 2 **Suppose that you are going to write a research article about climate change. Now discuss with your partner the following titles and decide on the most appropriate ones you will choose. Read the model carefully before the exercise.**

> *Model*
> A Study of Causes and Effects of Climate Change
> (*No, because one can write a whole book on this topic.*)

1 What Are the Economic Effects of Climate Change?
2 The Melting Poles: the Greatest Danger from Global Warming
3 Three Effects of Global Warming on China
4 A Study of Socioeconomic Effects of Global Warming on Agriculture
5 Global Warming Effects on Mental Health
6 A Possible Role of Ozone Depletion in Climate Change
7 Potential Impact of Climate Change on World Food Supply

TASK 3 **Divide the class into five groups. Each group chooses two of the titles to do the following tasks.**

1) Analyze the titles and their research questions.
2) Discuss whether they are appropriate according to the methods to be used.
3) Write down your improved titles and research questions.

Remember: A qualified university student should be able not only to raise research questions when faced with a topic or project, but to design appropriate methods to address the questions.

Titles	Research Questions	Methods to Be Used
A Study of the Public's Attitude Toward Garbage Classification in Shanghai	1) What are the public's attitudes toward garbage classification? 2) Why can't garbage classification be effectively implemented? 3) What are suggestions for improvement?	Surveys (questionnaires and interviews) conducted among residents and sanitation workers
A Study of Pedestrian Winds Around Tall Buildings	1) What are the characteristics of the pedestrian winds around tall buildings? 2) What are their effects on pedestrians nearby? 3) What are the causes of their formation?	Experiment conducted, using a smoke visualization test to simulate the wind environment around tall buildings
Water Pollution near Some Chemistry Factories and Its Impacts	1) What is the situation of water resources near some chemistry factories? 2) What are the characteristics of polluted water resources? 3) In what ways do the pollutants disseminate and finally affect health?	Experiments (four parallel tests) conducted with 78 fish divided into six groups and raised in different solutions from the rivers near some chemistry factories
A Study of Domestic Use of Solar Energy in Shanghai	1) What is the current situation of the domestic use of solar energy in big cities? 2) What factors lead to the difficulties in promoting the use of solar energy?	Survey conducted: a) questionnaires distributed in residential areas; b) interviews with families with different incomes and related factories
Approaches to Extending Battery Life of Hand-held Devices	1) What are the main consumption patterns of battery energy? 2) What is the relationship between the way people use hand-held devices and energy consumption? 3) What are the energy-saving strategies in the use of hand-held devices?	Survey (questionnaires) conducted among the users of hand-held devices; Experiment conducted to test different patterns in terms of energy-saving

TASK 4 **Write a working title and its research questions according to the topic you have chosen for your paper, and discuss with your partner whether it is appropriate.**

The working title for my paper: _____

The research questions: _____

_____

Literacy Skills 3

Avoiding plagiarism

In research writing you may use the data obtained by performing an experiment, taking a survey, or having an interview. But most probably you may use sources by researching your topic in a library or on the Internet. Look at the books and articles the authors listed in the reference list of the text in Critical Reading and you will find the paper could not have been written without them. However, you should be careful when using sources. If you do not deal with it correctly, it is easy to fall into the trap of plagiarism, intentionally or unintentionally. Plagiarism is a kind of theft, referring to the use of others' findings, arguments, data, and words without appropriate citation or referencing a published or unpublished source. Hence, a better understanding of academic conventions is extremely critical to university students.

TASK 1 Consider the following situations and decide if they are plagiarism or bad citation. Mark "Y" (Yes) or "N" (No) in the box.

1   I use another person's ideas without referencing or acknowledging the source. ☐
2   I follow another person's example in terms of design and method without referencing. ☐
3   I use another person's manner of expression or research methods without referencing. ☐
4   I copy a few sentences but change several words without referencing. ☐
5   I take ideas, materials and pictures from the Internet without referencing. ☐
6   I copy a few sentences with referencing, but no quotation marks. ☐
7   The idea is what I have learned in class or textbooks without referencing. ☐
8   I use another person's line of thinking, not exact words or sentences without referencing. ☐
9   I use another person's sentences but change them significantly without referencing. ☐
10   I use what the teachers said in class without referencing. ☐

TASK 2 Read the following definitions of plagiarism and discuss your answers to the questions in TASK 1.

1   Plagiarism is the "wrongful appropriation" and "stealing and publication" of another author's "language, thoughts, ideas, or expressions" and the representation of them as one's own original work. —Wikipedia

2 Basically plagiarism means taking ideas or words from a source without giving credit (acknowledgement) to the author. It is seen as a kind of theft, and is considered to be an academic crime. —*Academic Writing: A Handbook for International Students*

3 Plagiarism is theft. If you use another person's ideas, words, manner of expression, or research and pass that material off as your own, you are guilty of plagiarism. Whether intentionally or unintentionally, plagiarism can result in serious penalties, including failing an assignment, a course, or expulsion. —*Patterns for a Purpose: A Rhetorical Reader*

TASK 3 **Discuss and decide which of the following is not common knowledge and needs referencing.**

1 Generally, there are two kinds of light pollution: ecological pollution and astronomical light pollution.
2 The negative effects of GM crops have been shown on animals in many studies.
3 Nanorobots can be programed to attack cancer cells and reconstruct the molecular structure.
4 There have been about 400 cancer deaths among 100,000 Japanese nuclear bomb survivors.
5 The Academic Motivation Scale is used to measure students' motivation for attending college.

Citation

To provide evidence and exemplification from sources to support an argument is citation. Citation plays a very important role in the writing of research articles as it is often used to give definitions, introduce theories and models, describe the previous studies, give examples, synthesize sources, establish the links between sources, borrow the research methods and compare one's own findings or interpretations with other sources. Hence, it mainly occurs in the introduction section, the methods section and the discussion section. Citations are ethical because they are forms of acknowledging intellectual property and therefore expected conventions of academic discourse. There are three citation methods: **paraphrasing** (rewriting what the writer said in your own words), **quoting** (copying exactly the same as the original text) and **summarizing** (using only the most important ideas).

Coupled with citations are referencing skills. There are two components to referencing: the in-text reference and the end-of-text reference. The combination of both the in-text reference and the bibliographic entry constitutes what is commonly thought of as a citation or reference.

In-text referencing is a brief parenthetical acknowledgement in the text. The formats are often discipline specific. For example, the in-text references of the text in Critical Reading of this unit are different from those in the rest of the book. Footnotes or endnotes are not frequently used in scientific writing as they are in the humanities and the social sciences. Natural scientists most often use the name-year system. That is, in-text references with the author(s) and the date of publication are placed immediately after the borrowed information, usually at the end of a

sentence, before the final period. Look at the following examples:

- Two methods of measuring unemployment are emphasized by Sloman (2006).
- According to Wang (2001), education is the key aspect underlying the successful economic development in a society.
- Indeed attempts should be made to reproduce such environments to promote consumption and economic development (Mitchell, 2011).
- It is important to debate local history and cultures and engage in neighborhood improvement projects (Evans, 2001; Borrup, 2006; Grodach, 2008).

Generally, in some referencing styles, if there are up to three authors in a source, list the last names of all the authors; if there are more than three authors in a single source, simply use the first author's last name, followed by et al., Latin for "and others":

- There is growing concern over the use of psychological testing in elementary schools (Albright & Glennon, 1982).
- The popularity of the book is "due to its focus on the issue of animal rights" (Clinton et al., 1999).

When the cited information comes from different sources, the in-text reference should include all the sources:

- Cheating is more prevalent in online than face-to-face classes (Grijalva, Nowell & Kerkvliet, 2003; Heberling, 2002; Kennedy et al., 2001).

When sources do not have an author, use the key words of the title of the article you are going to cite. The complete information of the sources will appear in the full references at the end of your paper:

- "Ethiopia has addressed this issue by implementing price control over a wide range of daily necessities."("Enhancing", 2008)
  Reference: "Enhancing Pan-continental Aid Efficiency in the 21st Century". Aid Initiative Foundation. Global Recovery Initiative, Apr. 2008. Retrieved 10 June 2011 from http://www.imf.org/external/publicdomaindocuments/eng/doc.html

TASK **Identify the citations and in-text references used in the following paragraph. Discuss the role of citations in developing the topic sentence at the beginning of the paragraph.**

Numerous research studies demonstrate consistently that content-based second language teaching promotes both language acquisition and academic success (Grabe & Stoller, 1997; Kasper, 1994; Krueger & Ryan, 1993; Snow & Brinton, 1997; Stryker & Leaver, 1997; Wesche, 1993). Students receiving linked instruction perform better in language courses than those not receiving such instruction (Kasper, 1997). They reap the benefits of significant gains in the second language, e.g., in the receptive skills of listening and reading (Burger et al., 1997; Ready & Wesche, 1992) and in the productive skills of writing (Burger, 1989) and speaking (Burger & Chrétien, 2001). They also achieve comparable or even better mastery of disciplinary content than ESL students or native English-speaking students not receiving content-based language instruction (Andrade & Makaafi, 2001; Babbitt, 2001; Kasper, 1994; Winter, 2004).

Quoting

Among the three citation methods—paraphrasing, quoting and summarizing, the most convenient way is to quote words, sentences and paragraphs directly from the original texts. The general convention in academic writing, however, is that direct quotations should be used as little as possible. Whenever possible, use your own words to express the idea you are going to use. The exception is when the source is so eloquent or so peculiar that you really need to share the original language with your readers, such as strongly stated definitions or opinions.

There are two versions of quoting: author-focused and information-focused. Author-focused quoting places emphasis on the author's name, showing more authority. Information-focused quoting is used, however, when you want to focus on the information cited instead of the author. The former uses the author's name at the beginning of the quote, while the latter puts the reference at the end of the quote. For example, based on the following original text, we can have two ways of quoting.

> **The original text**
>
> Cheating is seeking to gain unfair advantage or breaking a regulation; plagiarism is one form of cheating. Students often reverse this relationship, using the word "plagiarism" to describe all academic dishonesty, so time spent clarifying definitions is usually time well spent.
>
> Carroll, J. (2002). *A Handbook for Deterring Plagiarism in Higher Education.* Oxford, UK: Oxford Centre for Staff and Learning Development.

Author-focused version:

- Carroll (2002) claims that it is necessary to spend time clarifying the definition of plagiarism because it is often wrongly used by students "to describe all academic dishonesty."
- According to Carroll (2002), the word "plagiarism" is often wrongly used by students "to describe all academic dishonesty," so "time spent clarifying definitions is usually time well spent."

Information-focused version:

- It is necessary to spend time clarifying the definition of plagiarism, because it is often wrongly used by students "to describe all academic dishonesty" (Carroll, 2002) .
- We all agree that "time spent clarifying definitions is usually time well spent," because the word "plagiarism" is often wrongly used by students "to describe all academic dishonesty" (Carroll, 2002).

When you want to quote, you must precisely indicate the copied words by placing quotation marks around the text if it is less than three lines long, or indent the text as a block if it is over three lines long. Look at the following example:

- Plagiarism is increasingly popular on campuses. Cheating especially draws the attention of many scholars. Carroll (2002, p. 11) claims:

  > *Cheating is seeking to gain unfair advantage or breaking a regulation; plagiarism is one form of cheating. Students often reverse this relationship, using the word "plagiarism" to describe all academic dishonesty, so time spent clarifying definitions is usually time well spent.*

Use the author-focused and information-focused versions to quote the following original text. Read the model carefully before the exercise.

> ### *Model*
>
> **The original text:** Despite potential benefits of such techniques, serious concerns have been raised concerning the potential environmental and medical consequences of GMOs. In May 1999, the British Medical Association published a statement on GMOs addressing three areas over potential health effects of genetically modified (GM) foods (BMA Science Department, 1999).
>
> Lack, G. Clinical Risk Assessment of GM Foods, *Toxicology Letters* **127**: 337-340 (2002)
>
> **Author-focused version:** Lack (2002) claimed that "serious concerns have been raised concerning the potential environmental and medical consequences of GMOs" though people enjoy their benefits.
>
> **Information-focused version:** Although GMOs are gaining popularity in many countries, "serious concerns have been raised concerning the potential environmental and medical consequences" (Lack, 2002).

1 **The original text:** For most Nigerians, urban existence is synonymous with extreme individual and community poverty. Implicit in this is a great pressure on mothers to spend more time trying to augment the family income at the expense of caring adequately for their children.

   Rosemary, C. et al. The Impact of Urbanization and Socioeconomic Status on Infant-feeding Practices in Lagos, Nigeria. (1983) http://archive.unu.edu/unupress/food/8F071e/8F071E05.htm

   Author-focused version: _____

   _____

   Information-focused version: _____

   _____

2 **The original text:** Perhaps more lasting benefits will be achieved by emphasizing the education of mothers on how to prepare and use hygienically acceptable supplementary foods from relatively inexpensive but nutritious, locally available staple foods.

   Rosemary, C. et al. The Impact of Urbanization and Socioeconomic Status on Infant-feeding Practices in Lagos, Nigeria. (1983) http://archive.unu.edu/unupress/food/8F071e/8F071E05.htm

   Author-focused version: _____

   _____

   Information-focused version: _____

   _____

1   The very first lines of Chapter I in The Charter of the United Nations are "To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of the threats to the peace, and for the suppression of acts of aggression or other breaches of the peace" (United Nations, 1945. p. 3).

2   The very first lines of Chapter I in The Charter of the United Nations clearly state that sometimes any means can be used to achieve a higher ideal: "To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of the threats to the peace, and for the suppression of acts of aggression or other breaches of the peace." (United Nations, 1945. p. 3)

3   "To maintain international peace and security" are the first words of Chapter I in The Charter of the United Nations, but the text immediately continues, "and to that end: to take effective collective measures for the prevention and removal of the threats to the peace, and for the suppression of acts of aggression or other breaches of the peace" (United Nations, 1945. p. 3).

Summarizing

Direct quotations are not encouraged because this is the most superficial integration of someone else's ideas into your writing. Although it is difficult to decide plagiarism according to similarity index (http://www.turnitin.com.cn), longer quotations should be avoided and summarizing will be used. Summarizing is a mixture of reducing a long text to a short one and selecting the most important information. In short, it restates briefly the main points of the original source in your own words.

Summarizing is useful because it helps you:
1)   have a better understanding of the text, especially in identifying the main ideas;
2)   cite the ideas of previous studies in your literature review and support your own view.

There are two kinds of summaries: global (to summarize the whole text) and specific (to summarize the parts). The following steps may be useful for a successful summary:
1)   Read what you want to summarize carefully and make sure you understand it.
2)   Highlight topic sentences and concluding sentences if any.
3)   Identify the key points or main ideas if there are no topic sentences.
4)   Make notes by paraphrasing those main ideas.
5)   Organize the notes according to the importance of the ideas and your purpose of using them.
6)   Write up them by using accurate reporting verbs to show the author's attitude such as *argue*, *claim*, *assert*, *explain*, *suggest*, *analyze*, *examine* and so on.
7)   Go back to the text and check your work. Make sure that the meaning is the same and your summary doesn't include your personal comments.
8)   Provide a reference and document other people's work.

The following are some rules of summarizing:
1) Focus: Include the main idea and important ideas only.
2) Paraphrasing: Make sure no more than four words in a row taken directly from the original text.
3) Language: Maintain the same style as the original text and avoid grammar errors.

TASK 1　**Read each of the following summaries of the original text and decide: a) which one retains the main idea with vocabulary and structure changed; b) which one is too similar compared with the original text in sentence structure and vocabulary choice; c) which one includes unnecessary details; and d) which one summarizes wrong ideas. Then exchange your answers with your partner. Read the model carefully before the exercise.**

> *Model*
>
> Art does not evolve by itself. The ideas of people change, and art changes in order to express these ideas. If an artist changes his way of expressing himself, it means that his way of thinking and seeing reality has changed. If the change is consistent with the changing ideas of his time, then his work has improved; if not, then it has deteriorated or failed.
>
> [a] An artist's work will be accepted only if it expresses the changing ideas of his society.
> [c] Art should change with the change of people's ideas. If the change corresponds to the changing ideas, the artists' work has been considered good, otherwise it has failed to be accepted by people.
> [d] Art develops with the passage of time. Therefore artists should adapt their work.
> [b] If the artists' work is consistent with the changing ideas of people in their time, their work has been welcomed.

1　The number of overweight children is predicted to rise significantly around the world by the end of the decade. Research conducted in 25 countries has concluded that almost every country showed significant increases in childhood obesity. Almost 50% of children in the US, Canada and Latin America will be overweight by 2020; in China, this figure is estimated to be one in five. Scientists believe this will mean that health care services will be seriously affected in the future. Many obese children will become obese adults, which will result in many of them suffering from heart disease, stroke, and other weight-related ailments.

　　☐　A survey conducted in 25 countries has showed that the number of overweight children will increase greatly worldwide by 2020. Scientists fear that this will affect health care services in the near future because many obese children will suffer weight-related problems when they become adults.

　　☐　Since the number of overweight children will increase around the world, health care services will be seriously affected in the future.

　　☐　The increasing number of obese children worldwide will cause serious problems to medical services.

　　☐　There will be a significant rise in the number of obese children around the world by the end of the decade.

2　The need for sophisticated equipment is not the only obstacle limiting the use of modern medical science. Traditional medicine, which uses a wide variety of inexpensive, easily accessible, and familiar natural ingredients and techniques, is preferable for many people.

Traditional medicines are normally created from local plants, animals, and minerals. Techniques often include socially bonding physical contact between patient and healer like rubbing or massaging, and spiritual experiences which may involve trances, music, and scents. In Africa, for instance, an estimated 80% of people rely on traditional medicine for almost all their health care. Similarly, in many other parts of the world, particularly in Asia and Latin America where modern facilities are available, this approach to medicine is still highly valued because it is effective, inexpensive, and culturally significant.

- ☐ Many people around the world prefer traditional medicine because it is effective, inexpensive and culturally significant.
- ☐ Traditional medicine enjoys more popularity in the world because of its effectiveness, low cost and cultural value.
- ☐ In Africa, Asia and Latin America, traditional medicine is considered better than modern medical science because the former is considered effective, easily accessible and uses familiar natural ingredients and involves physical contact between the doctor and the patient such as rubbing and massaging.
- ☐ Traditional medicine is less expensive, easily accessible, and culturally significant.

3 In every corner of the globe, aboriginal and traditional cultures are slowly disappearing. From the 18th century onward, the process of industrialization and the settlement of new people have had a dramatic effect on aboriginal groups such as the Australian Aborigines, the Teleut people of Siberia and the Ainu of Japan. These traditional cultures have survived for hundreds, sometimes thousands of years and their languages, music and other customs display a rich and wide variety of human culture. Yet these cultures risk being lost forever, as the old ways gradually die out and are replaced by more modern, industrialized lifestyles.

- ☐ The twin processes of industrialization and migration have led to the demise of traditional cultures around the world, with many languages and customs potentially vanishing forever.
- ☐ Aboriginal cultures, such as those in Australia or Japan, are valuable because they represent a wealth of musical, linguistic and ceremonial traditions.
- ☐ Today the cultures of indigenous groups such as the Teleut in Siberia or the Ainu in Japan are under threat. For around the last 200 years, industrialization and migration have weakened the cultures and customs of these groups. As a consequence, the survival of many different lifestyles is uncertain and the world risks losing forever its valuable diversity.
- ☐ Because of the process of industrialization and the settlement of new people, aboriginal and traditional cultures are slowly disappearing.

TASK 2 Summarize each of the following paragraphs into one sentence. Read the model carefully before the exercise.

> *Model*
>
> The climatic conditions prevailing in the British Isles show a pattern of alternating and unpredictable periods of dry and wet weather, accompanied by a similarly irregular cycle of temperature changes.
>
> **Key:** The weather is changeable in the British Isles.

1   One of the most noticeable phenomena in Chinese big cities, such as Beijing and Shanghai, is the steadily increasing number of vehicles, some in private ownership, others belonging to the public transport system, which congest the roads and render rapid mobility more difficult year by year.

    _____

    _____

2   It is not uncommon to encounter sentences which, though they contain a great number of words and are constructed in a highly complex way, nonetheless turn out on inspection to convey very little meaning of any kind.

    _____

    _____

3   The constructivist theory rests on the assumption that knowledge is constructed by learners as they attempt to make sense of their experiences. Learners, therefore, are not empty vessels waiting to be filled, but rather active organisms seeking meaning.

    _____

    _____

4   Some educators maintain that choosing a major is the most crucial decision for students entering college, whereas others argue it is not especially important. Paul Harrington, Neeta Fogg, and Thomas Harrington argue in *College Majors Handbook* that as the world becomes more competitive, those students with a clear path on entering college have an obvious advantage over those who do not. Those who want to pursue high-paying careers such as medicine or engineering ought to focus on their career goal as early as possible. It is a mistake for students to start college with the aim of working out what they want to do for the rest of their lives, the authors argue. However, Donald Asher in his book, *How to Get a Job with Any Major*, disagrees. The choice of major often does not limit a student's career options. Although there are certain majors that clearly prepare students for particular careers, most students ultimately pursue careers unrelated to their chosen major. Asher believes that students can best spend their time in university finding their true interests because, on average, people switch careers, often to something completely unrelated, three to five times in their working lives.

    _____

    _____

5   What is becoming clearer is the disjuncture between advancing technology and our ability to manage its wider repercussions. Social networking services (SNS) like Facebook and LinkedIn increasingly dominate people's time online. Data shows that 66% of the 80% of Americans who use the Internet use SNS; and of the 95% of teenagers in the U.S. on the Internet, 80% of them use SNS. Social networks have started to supplement, even replace, face-to-face relationships. For many of Facebook's 901 million monthly worldwide users, the role of SNS in friendship goes beyond simply getting in touch and keeping in touch. Social networking online involves a level of public display and self-promotion entirely new to the majority of people. SNS leave the nuances of emotion unexplored or

unarticulated, and the gradual process of getting to know someone—the true beauty of friendship—is fast-tracked, as everything, quite literally, is on their SNS profile.

_____

_____

6   In their theory about the nature and origin of crime, Travis Hirschi and Michael Gottfredson dismiss the older notion of "indirect control," the "psychological presence" parents possessed in the minds of their children, to explain the inherent barriers to deviancy. Instead, the centrality of "self-control" in explaining the propensity to commit or refrain from crime is advanced. The authors maintain that this accounts for all factors— whether age, culture, sex, or circumstances—in determining whether someone commits a crime or not. A child develops self-control through direct parenting, when the parent closely monitors the child's behavior and punishes deviancy when it occurs. Without it, lack of self-control develops naturally. People who develop low self-control in childhood are more likely to act on an urge to break laws, should the opportunity exist. Crucially, an individual's tendency to commit crime is shaped by his / her lack of self-control, not the ease and availability of opportunities to engage in crime. Further, low self-control promotes an outlook on life as a "permanent present" in which immediate gratification is central. To such people, crime supplies immediate risks, thrills, and rewards.

_____

_____

TASK 3   **Summarize each of the following paragraphs into one or two sentences. Then exchange your answers with your partner. Read the model carefully before the exercise.**

> *Model*
>
> In times past, it was possible to leave a stressful workplace, go home, and relax. Since less work was mental and more was physical, it was relatively easy to remove oneself— physically and mentally—from it. The sophisticated communication technology available today was not yet developed. In contrast to "the good old days," it is no longer possible for busy men and women to go home or go on vacation and truly "get away from it all." It becomes difficult to relax when you are carrying a mobile phone that may go off any minute. The result is higher levels of stress in men and women because technology enables others to "find them anywhere." (Hockfield, 2001)
>
> **Key:** Hockfield (2001) argues that modern technology makes it more difficult to truly separate oneself from work.

1   For most people, writing is an extremely difficult task if they are trying to grapple in their language with new ideas and new ways of looking at them. Sitting down to write can be an agonizing experience, which doesn't necessarily get easier with the passage of time and the accumulation of experience. For this reason you need to reflect upon and analyze your own reactions to the task of writing. That is to say, the task will become more manageable

if you learn how to cope with your own particular ways avoiding putting off the moment when you must put pen to paper. (Gordon & Taylor, 1989)

_____

_____

2   Technology has significantly transformed education at several major turning points in our history. In the broadest sense, the first technology was the primitive modes of communication used by prehistoric people before the development of spoken language. Mime, gestures, grunts, and drawing of figures in the sand with a stick were methods used to communicate—yes, even to educate. Even without speech, these prehistoric people were able to teach their young how to catch animals for food, what animals to avoid, which vegetation was good to eat and which was poisonous. (Frick, 1991)

_____

_____

3   Teachers will not know what the students do not understand if there are elements of cheating among the students. It will be difficult for the teachers to regulate their approaches of instruction as they will assume the students are all doing fine, which might not be true. Cheating hurts the students and prevents teachers from providing the necessary and relevant feedback to their students in the learning process. This should be true to all the teachers who may be interested in providing useful information on what the students are doing or who want to make use of the information they receive from their students to prepare for classroom intervention programs. (Hewitt, 1996)

_____

_____

4   Why are the citizens of some nations rich while the inhabitants of others are poor? It is surely true that ample energy, timber, and fertile land all help raise wealth. However, it turns out that natural resources are only a very small part of the answer. Far more important in determining the wealth of the people are the fundamental political and legal institutions of a nation. Institutions such as political stability, secure private property rights, and legal systems based on the rule of law create the incentives that encourage people to make investments in improving land, and other forms of physical and human capital. These investments raise the capital stock, which in turn provides for more growth long into the future. The cumulative effects of this growth over time eventually yield much higher standards of living: They make the citizens rich. (Edelso, 2002)

_____

_____