# ERAL ACADEMIC PURPOSES

# 通用学术英语

总主编 张敬源

主 编 张敬源 王 娜

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编 者 王 娜 梁雅梦 陈娟文

秦晓惠 张丹丹 满海霞

杜 娟 李金玉

审 订 [英] Ricky Hancock

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# 前言

"互联网+教育"时代,我国教育信息化进程迅猛发展。着力推进信息技术与外语教育教学深度融合,致力于以学为本的课程体系重塑、课程内容改革,实施基于课堂和在线课程的线上线下混合式教学,推进以学生为中心的教与学方式变革已经成为当前大学英语教学改革的趋势和共识。

《通用学术英语》系列教材在"互联网+教育"时代应运而生,是一套纸质教程、在线课程与课堂教学同步设计、整体研发的新形态一体化教材。本套教材共三册,第一、二册依据《大学英语教学指南》,致力于培养我国大学生用英语进行各学科专业学习的最基本的、通用的核心学术英语能力。第三册是对前两册涵盖技能的整合应用,致力于帮助学生有效阅读和写作与专业相关的英语科技论文,主要使用对象为硕士、博士研究生和本科阶段高年级有需求的学生。

本教材力图体现以下特色:

### 1. 理念先进, 内容新实

本教材体现了学术用途英语领域的最新教学研究成果。基于牛津大学出版社最新出版的教师培训用书English for Academic Purposes中提出的通用学术英语技能要素,结合我国学生英语学习的实际情况,在综合深入分析的基础上,把通用学术英语能力分解成16项微技能,并依据Bloom的认知领域教育目标分类系统,将这些微技能按照由易到难、从低阶能力到高阶能力发展的原则编排到16个主题单元中。根据每项微技能的单元内容和教学需求进行整体设计,将与核心技能相关的知识、概念、应用、典型范例(主题相关学术文章与学术讲座)进行模块化结构(思辨、阅读、听说、写作、词汇与结构)拆分,针对微技能精讲精练,引导学生在"做中学"(learning by doing)"学中做"(doing by learning),循序渐进地建构通用学术英语知识、培养通用学术英语技能。

### 2. 任务驱动, 以学为本

本教材突破传统教材以课文为主的知识编排方式, 注重以学为本的学习方式的重塑。

通过一系列相互关联、循序渐进的启发式任务统领整个学习过程, 任务设计紧扣单元学习目 标,可操作性强,完成任务即可习得相关技能。每单元各模块均有一个微课视频(mini-lecture video), 呈现相关核心知识点。任务设计与微课视频的教学目标相呼应。任务形式丰富多样, 既有限制性任务,也有开放性任务;既有学习型任务,也有自我检测/评价型任务。任务设计 中还有一些学习小贴士(study tips),为学生补充完成任务所需的相关知识,并与微课视频形 成互补。任务中的典型范例多取自于不同学科的学术期刊、学术语料库及学术网站,与单元主 题相关,并服务于任务设计需求。所有阅读材料除了标注专业相关词汇外,未经任何改编,以 保证素材的可靠性、真实性与地道性。

### 3. 一体设计,混合教学

本教材采用纸质教程、在线课程与课堂教学三位一体同步设计、整体研发,支持线上线下 混合式教学。一体化研发的设计思路是以通用学术英语能力培养目标为核心,以教学设计为主 导,把教材的精华从不同角度、以不同形式、通过不同资源类型呈现给师生。以纸质教程为主 线和纽带,联结在线课程学习与课堂教学,三者交叉互补、相互配合。在线课程资源在高等教 育出版社iSmart在线课程平台开发建设(电脑端和移动端并行发布),为学生创设支持自主学 习与协作学习的在线学习社区 (online learning community), 主要呈现微课视频,记录学生在 线自主学习和协作学习轨迹及数据,辅助学术文章阅读和学术讲座视听。基于在线微技能相关 知识的获取与学习,师生在课堂面授环节可根据实际教学需求灵活选用纸质教程中各单元模块 的开放性任务, 促进学生应用和内化所学技能与知识。此外, 为了帮助学生深入理解文章内 容,在线课程提供了内容丰富、学习便捷、交互性强的重点词汇、短语释义、难句解析等资 源,在培养学术英语技能的同时夯实语言基础。纸质教程与在线课程通过二维码关联,扫描 二维码即可关联在线课程,观看微课视频,获取课文详解。

本教材由北京科技大学张敬源教授任总主编,北京科技大学外国语学院中外教师团队合作 编写, 教学材料经过了教学实践检验、补充和完善。北京科技大学外教、英国利兹大学Ricky Hancock审阅了书稿,并提出了宝贵的意见和建议。北京科技大学外教Ricky Hancock和Hannah Campbell为教材编写及微课视频制作做出了突出贡献。教材中选用的阅读材料均已标注出处,

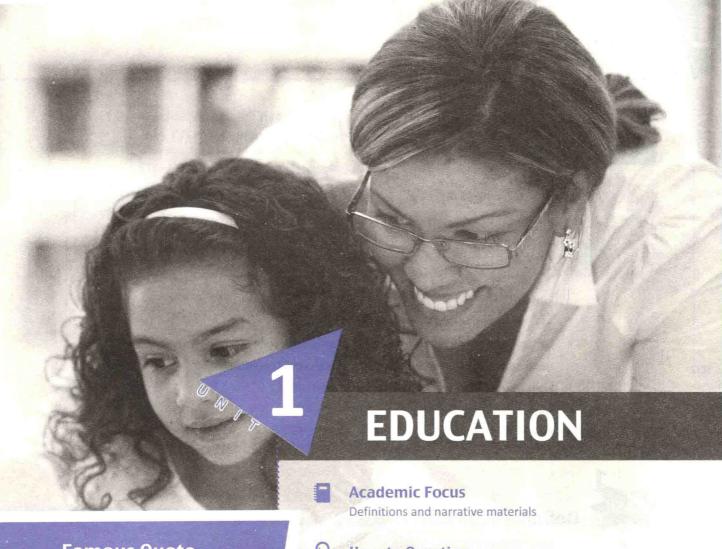
但受篇幅所限,阅读材料文内引用文献无法一一标注出处,特此说明并致谢。高等教育出版社外语出版事业部的领导和编辑在本教材的策划编写、版式设计、题图设计、插图选配等方面做了大量工作,付出了辛勤的劳动。本教材编写还得到了北京科技大学2017年度"十三五"规划教材项目资助,谨此一并致谢。

《通用学术英语》是在"互联网+教育"时代,我们在以学为本的课程体系重塑和课程内容改革方面做出的一次尝试与探索,不当和疏漏之处难免,敬请使用者批评指正。

编 者 2017年5月

	CRITICAL THINKING	DEADING
		READING
Academic focus: Definitions and narrative materials How-to question: How to define	Defining a term in an effective way Using narrative materials to extend a definition Considering the audience in presenting narrative materials	Identifying a definition as you read Using narrative materials to infer meaning
Unit 2 SYSTEM 027 Academic focus: Contextualising and describing How-to question: How to contextualise	Understanding contextualisation and its importance in academic writing Contextualising in the introduction using descriptive writing	Reading for the context of a topic Identifying knowledge gaps
Academic focus: Classification, comparison and contrast How-to question: How to classify, compare and contrast	Determining the criteria for classification Analysing and evaluating aspects of multiple items using appropriate criteria Comparing, selecting, and evaluating different published definitions	Identifying, understanding and noting a classification Recognising and categorising similarities and differences Identifying and using connectors in comparison and contrast
Academic focus: Explanation How-to question: How to explain a notion	Identifying relationships of notions Critically evaluating analogies and their appropriateness	Reading explanations of notions Reading for analogical explanations
Unit 5 NATURE 113 Academic focus: Summary How-to question: How to summarise	Identifying summaries in research articles Understanding and evaluating assumptions	Identifying topic and main points Understanding relationships between main points Understanding explicit and implicit meanings
Unit 6 ENVIRONMENT 141 Academic focus: Synthesis and concessions How-to question: How to synthesise	Understanding and dissecting synthesis Synthesising for limitations of different kinds	Forming logical connections and links between sources Identifying limitations and gaps in sources
Unit 7 SOCIAL LIFE 175 Academic focus: Literature review How-to question: How to review literature	Understanding literature review and its importance in academic contexts Identifying characteristics of an effective literature review	Ordering the events of a literature review Using a literature review to identify knowledge gaps
Unit 8 TECHNOLOGY 207  Academic focus: Report and logical connections How-to question: How to report effectively	Understanding the features of a report Understanding connections between ideas	Understanding the structure of a report Identifying connections within and between paragraphs

LISTENING & SPEAKING	WRITING	VOCABULARY & STRUCTURE
Taking notes of definitions as you listen Producing an extended definition based on your notes	Defining a concept or thing by following logical patterns Extending a definition by using narrative materials with the audience considered	Using noun phrases in academic contexts
Listening for context in an academic talk Taking notes of descriptions Contextualising from notes Describing from notes	Contextualising a topic through descriptive writing Writing in a formal and academic manner	Using prepositions and prepositional phrases to indicate relationships
Taking notes of classification and comparison and contrast Comparing and contrasting a subject based on your notes	Generating ideas for a comparison essay Organising ideas for a comparison essay	Using connectives to achieve cohesion
Taking notes of explanations and analogies Explaining analogically based on your notes	Writing to explain a notional meaning Writing to explain analogically	Knowing academic vocabulary ar using nominalisation
Listening for main ideas and supporting details Taking notes to summarise Summarising from notes	Writing a summary following a five-step guide Summarising a research article Evaluating a summary	Using reporting words in a summary
Organising lecture materials while listening Constructing oral synthesis with your own examples	Conceding a fact/ idea with appropriate concession words Constructing a concession-rebuttal with supporting details/facts	Using adverbs and phrases to show concession
Taking notes of a literature review Citing sources in an oral presentation	Reviewing literature in a five-step approach Avoiding plagiarism by paraphrasing, summarising and quoting properly	Using <mark>signal phrases to present a</mark> literature review
Identifying the main points of a presentation Giving presentations based on the notes	Preparing and writing an effective report Making connections in writing	Using language strategies to achieve objectivity



### **Famous Quote**

Education is the kindling of flame, not the filling of a vessel.

-Socrates

### How-to Question

How to define



### **Learning Objectives**

### **CRITICAL THINKING**

- · Defining a term in an effective way
- Using narrative materials to extend a definition
- Considering the audience in presenting narrative materials

### READING

- · Identifying a definition as you read
- · Using narrative materials to infer meaning

### LISTENING & SPEAKING

- · Taking notes of definitions as you listen
- · Producing an extended definition based on your notes

### WRITING

- Defining a concept or thing by following logical patterns
- Extending a definition by using narrative materials with the audience considered

### **VOCABULARY & STRUCTURE**

• Using noun phrases in academic contexts

# CRITICAL THINKING



### Mini-lecture 1





### This mini-lecture covers:

- understanding what a definition is
- recognising the importance of definitions
- understanding when a definition is necessary and should be given
- understanding the paradigm pattern of a definition
- recognising good and bad definitions



### Defining in an effective way

A formal definition consists of three parts. Analyse each of the following definitions, and match the italicised words with the parts in the box.

> class differentia/differentiating features term

- ① A university is a high-level educational institution in which students study for degrees and academic research is done. 1
- 2 Materials science is the branch of science that deals with the structure, properties, and processing of materials, especially with regard to their potential usefulness.
- 3 Astronomy is a branch of scientific study primarily concerned with celestial objects inside and outside of the earth's atmosphere. 2
- 4 A library is a building or room containing collections of books, periodicals, and sometimes films and recorded music for use or borrowing by the public or the members of an institution. 1

These two definitions are from Oxford Dictionaries.

This definition is adapted from the website http://owl.english.purdue.edu/owl/ owlprint/622/.

1.2 Decide when you need to include definitions in your speaking or writing. Tick ( $\sqrt{\ }$ ) the appropriate column.

1	when a term is unfamiliar but key to audience understanding
2	when a commonly used word or phrase is given a different meaning in your work
3	when a term will help expand upon a point in your writing or speaking
4	when there might be confusion over a thing or a concept if you do not make it clear
(5)	when you want your readers or audience to have a new way of understanding a term

- 1.3 A good and clear definition requires critical thinking. Go over the definitions below and discuss which are good ones and which are poor ones. Rephrase the poor definitions so that they follow a logical pattern. Present your evaluation to the class.
  - ① Patriotism is the quality of being a patriot.
  - ② Critical thinking is a mode of thinking in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing information. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism.
  - 3 Education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life. 4
  - 4 A definition is a statement which captures the meaning, the use, the function and the essence of a term, a thing or a concept.
  - ⑤ Rhyming poetry consists of lines that contain end rhymes.
  - 6 A computer virus is where you get your files spoiled or even lost.

This definition is adapted from the website http://www.criticalthinking.org/pages/our-concept-and-definition-of-critical-thinking/411.

<sup>&</sup>lt;sup>4</sup> This definition is adapted from http://www.dictionary.com/browse/education?s=t.



# Using narrative materials to extend a definition

### STUDYTIP

In academic contexts, narrative materials cover a broad scope. In addition to stories and descriptions, book reports, proposals, presentation of data, explanation of ideas, illustration of evidence and examples may be used as narrative material. When defining things or concepts, you may use narrative materials to extend the formal definition, presenting further information about the characteristics of the things or concepts to clarify the understanding of the audience.

2.1 Find an extended definition of a term in your field of study.

Example: constructivism

Identify the three essential elements of the definition: term, class, differentiating features.

Term in your field	Class	Differentiating features
and the later of t		programme the figure programme

2.2 Locate and make notes on any narrative materials used to extend the definition of that term.



# Considering the audience in presenting narrative materials

3.1 Any piece of written or spoken communication will have an audience. The audience of your text or presentation may have various needs, values and expectations. It is a good idea to profile your audience to better present your narrative materials. Some key questions you can ask about your reader may

help you identify a potential target audience. Will you consider the following questions in investigating your audience? Why? Tick  $(\sqrt{})$  the appropriate column.

1	Who are likely to be the audience? (professionals, non-professionals, young or old, etc.)	
2	What information do the potential audience need? (a simple version, or a more detailed one?)	
3	When will they read or listen?	
4	Where will they read or listen?	
(5)	Why will they read or listen?	
6	How will they read or listen?	

3.2 It is important to consider the audience every time you use academic English, particularly when you provide a definition. The audience should be determined and addressed as early as possible in your writing. Imagine you are going to give a speech or write a paper on one of the key concepts in your field of study. In preparation, ask yourself and answer the following questions concerning your target audience.

The selected key concept in your field of study:
<ul> <li>Identifying the primary audience.</li> <li>Are they professionals, experts, academics,?</li> <li>Are they researchers, fellow students,?</li> <li>Is it a broad and general audience?</li> <li>Will they understand academic terms and concepts? To what extent?</li> </ul>
<ul> <li>Analyzing the prior knowledge of the primary audience.</li> <li>Are they knowledgeable in the particular field you are writing or speaking about?</li> <li>Do they have (no) prior knowledge in the particular field?</li> </ul>
<ul> <li>3 Predicting the purposes for which the audience is reading or listening.</li> <li>Are they aiming to learn from your writing or speaking?</li> <li>Are they researching their own academic writing or speaking?</li> <li>Are they reading the piece or listening to your talk as an introduction to the field?</li> </ul>





### Mini-lecture 2





### Reading definitions for information

### This mini-lecture covers:

- understanding definitions of different lengths
- reading in a prediction-confirmation pattern
- reading definitions in literature
- defining by referring to literature

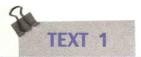


# Identifying the definition of a thing

As part of a course on education, you have been given the essay title The advantages of E-learning. You must define E-learning before you start presenting its advantages. First of all, it is necessary to gather basic information about E-learning. Which of the following aspects do you think you should know about E-learning? Tick ( $\sqrt{}$ ) the appropriate column.

1	What is the full form of E-learning?
2	What are the various definitions of E-learning? (since it can be defined from different perspectives by different professionals)
3	How is E-learning realised?
4	Who need E-learning?
5	What are the differentiating characteristics of E-learning?
6	What are the applications of E-learning?

- 1.2 Text 1 is an extract from a book about E-learning. The eight sentences that define E-learning are in the wrong order. Restore the definitions of E-learning to a logical structure, and then discuss with your partner the following questions.
  - ① How many formal definitions by different researchers are given in this extract?
  - 2) Which verbs are used in the formal definitions?
  - 3 Does Luther Tai present personal viewpoints? What are his views?
  - 4 Do you think it is more convincing to base a definition of a thing on previous research?
  - (5) How did Luther Tai do this in his definition?





### What Is E-Learning?

- It is a Web-based, personalised learning experience and provides measurable results (Rich 2001).
- E-learning, which is short for electronic learning, is defined broadly by Web technology professionals as education and training delivered by an instructor or self-paced from a curriculum database stored on the enterprise local area network (Berry 2000).
- 3 The broadest definition refers to any distance-learning mode other than a correspondence course with printed material (Mantyla 2001).
- 4 It refers to anything delivered, enabled, or mediated by electronic technology for the explicit purpose of learning (Hicks 2000).
- (5) E-learning applications include self-study, instructor-led, Web-based training, knowledge-management, and performance support (Broadbent 2000).
- 6 It offers the possibility of learning from information delivered to us electronically (Honey 2001).
- The clearest definition is found in the book E-learning: Strategies for Delivering Knowledge in the Digital Age, where the author says E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance.
- Solutions are networked, which means instant updating, retrieval, distribution, and delivery to computer users at standard Internet technology (Rosenberg 2001, 28–29).

SOURCES: Tai, L. (2007). Corporate E-Learning: An Inside View of IBM's Solutions. Oxford: Oxford University

Press. Available at: Oxford Scholarship Online. (Accessed: 16 December 2016).



# Identifying the definition of a concept

2.1 You have been given an essay with the title Knowledge is better acquired by implicit learning. "Implicit learning" is one of the many concepts in the field of education, and usually it goes along with the term "explicit learning". Discuss which of the following two statements about the essay question is more accurate.

Implicit learning helps learners acquire knowledge more effectively.

 Learners should acquire knowledge through implicit learning.

2.2 Do you know the meaning of "implicit learning" in the essay title? Read the following definition and example of the word "implicit", and try to predict what "implicit learning" means. Share with another student your prediction and discuss examples of implicit learning in everyday life.

implicit: suggested without being directly expressed;
e.g. Implicit in his speech was the assumption that they were guilty.

(Oxford Advanced Learners' Dictionary, 8th Edition, Oxford University Press, 2010.)

2.3 Read Text 2, an extract from a book about implicit learning, to check your prediction in 2.2. Identify the three essential elements of a definition: term, class, differentiating features. What are the narrative materials that Reber provides in his definition of implicit learning?

The three essential elements in the definition		
Term	Class	Differentiating features
Implicit learning		

Narrative materials used in definit	ng "implicit learning"
Does the author use any facts? Give evidence.	
Does the author use any examples? Give evidence.	
Does the author use any analogies? Give evidence.	
Does the author use any comparisons or contrasts? Give evidence.	





### **Implicit Learning**

Implicit learning is learning that takes place independently of both the process and products of learning. It occurs without the intention to learn and largely without awareness of the nature of what has been learned. The process is "bottom-up"; information is acquired automatically when individuals focus attention on complex displays; and the knowledge base is "tacit" and largely opaque to introspection. Examples abound in everyday life, notably natural language learning and the acquisition of the mores of social behavior.

SOURCE: Arthur S. Reber. (1996). Implicit learning and tacit knowledge: An essay on the cognitive unconscious.

Oxford: Oxford Scholarship Online. (Accessed: 16 December 2016).



# Indentifying the definition of a problem

### STUDY TIP

An important aspect of academic life is problem-solving. A simple way to define the word "problem" is: a situation that requires a resolution. In whichever subject you are studying, you will encounter problems that need tackling. A good definition of a problem will help you solve that problem at the initial stage of problem-solving.

- 3.1 The definition of a problem will be the focal point of all problem-solving efforts. As part of a course on education, you have been given a published article to read: *Do learners' characteristics matter? An exploration of mobile learning adoption in self-directed learning.* Which of the following aspects do you think you should know about the problem before you start to read about the solution? Tick (√) the appropriate column.
  - ① What is mobile learning?
  - 2) What do learners' characteristics cover?
  - What is the specific situation from which the problem arises?
  - 4 Has this problem been investigated in others' research? If yes, to what degree has it been solved and what are the findings?